

Be Inspired.
#BeWSCC



2020-2021

COURSE CATALOG



WASHINGTON STATE
COMMUNITY COLLEGE

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Foreword

The college catalog is published by Washington State Community College every year. This volume contains official information for the academic years 2020-21. The contents are presented for information only and are neither a contract nor an offer to contract.

Students are governed by the rules and regulations set forth in the college policy and procedures manual and published in the catalog and student handbook, including amendments, which are in effect at the time of the student's enrollment. Washington State reserves the right to repeal, change or amend rules, regulations and fees, as well as withdraw, add to or modify programs described herein without notice. Students are advised to consult with the academic advisor or appropriate college official for current official requirements and program requirements.

Statement of Non-Discrimination

Washington State Community College embraces human diversity and is committed to equal employment opportunities, affirmative action, and eliminating discrimination. Discrimination against any individual based upon protected status, which is defined as age, color, disability, gender identity or expression, national origin, race, religion, sex, sexual orientation, or veteran status, is prohibited. Equal access to employment opportunities, admission, educational programs, and all other university activities is extended to all persons.

2020-2021 WSCC CATALOG

MISSION

Washington State Community College responds to the education and workforce needs of our community by providing dynamic and affordable associate degree and certificate programs in an atmosphere that promotes student success.

VISION

Our vision is to inspire individual excellence and success.

WE VALUE

In creating an environment of trust and respect for faculty, staff, and students, the WSCC community strives to live by a set of values to be practiced each day and in each encounter.

- **Respect** - To acknowledge the humanity of all individuals through compassionate action.
- **Ethics** - To demonstrate honesty, integrity, responsibility, and accountability.
- **Inspiration** - To provide an atmosphere that encourages our campus community to develop, grow, and succeed as lifelong learners.
- **Inclusion** - To provide an atmosphere that fosters respect and acknowledges, explores, and embraces the diversity and uniqueness of all regional and global cultures.
- **Success** - To enable all students, faculty, and staff to be successful academically, personally, and professionally.
- **Excellence** - To reach our maximum potential as a community college through continuous improvement, institutional growth, excellence in teaching, and community engagement.
- **Teamwork** - To foster a culture of collaboration within the campus community that supports our mission, our students, our employees, and the surrounding area.
- **Stewardship** - To be responsible stewards of college resources: human, fiscal, natural, physical, and virtual.

SENIOR ADMINISTRATION

Vicky Wood, Ph.D.
President

Jess N. Raines, CPA
Vice President, Finance & Operations

Sarah Parker-Clever
Vice President, Academic Affairs

Amanda K. Herb, MBA
Vice President, Institutional Advancement

Terry Rataiczak
*Chief Information Officer
(Kinetic Networking)*

DEANS

Heather Kincaid, Ph.D.
Dean of Health & Sciences

Kathy Temple-Miller, M.S.
Dean of Student Success

BOARD OF TRUSTEES

David E. Vandenberg - *Vice Chair*

Bernie Anderson

Randall T. Barengo

Dr. Bradley D. Carman

Daniel L. Pennock

Susan L. Vessels

Bernita Watson

2020-2021 WSCC ACADEMIC CALENDAR

FALL SEMESTER 2020

| | | |
|---|-----------------------|--------------------------|
| Fall Semester Classes begin | August 17 | Monday |
| First 8 weeks begins | August 17 | Monday |
| Last day to register for courses | August 19 | Wednesday |
| <i>Labor Day - Campus closed</i> | <i>September 7</i> | <i>Monday</i> |
| Mid-term exams | October 5-9 | Monday - Friday |
| First 8 weeks ends | October 9 | Friday |
| Second 8 weeks begins | October 12 | Monday |
| Winter Intercession/Spring Advisement/Registration begins | October 26 | Monday |
| <i>Veteran's Day observed - Campus closed</i> | <i>November 11</i> | <i>Wednesday</i> |
| Last day to withdraw from Fall Semester | November 23 | Monday |
| <i>Thanksgiving Break - Campus closed</i> | <i>November 26-27</i> | <i>Thursday - Friday</i> |
| Final Exam period | December 1-7 | Tuesday - Monday |
| Second 8 weeks ends | December 7 | Monday |
| Fall Semester ends | December 7 | Monday |
| Final Grades Due | December 9 | Wednesday |

ONLINE WINTER INTERSESSION 2021

| | | |
|---|-------------|----------|
| Winter Intercession Classes begin | December 15 | Tuesday |
| Last day to register for Winter Intercession | December 15 | Tuesday |
| Last Day to withdraw from Winter Intercession | January 4 | Monday |
| Winter Intercession ends | January 7 | Thursday |
| Final Grades Due | January 8 | Friday |

SPRING SEMESTER 2021

| | | |
|---|--------------------|-----------------|
| Spring Semester Classes begin | January 11 | Monday |
| First 8 weeks begins | January 11 | Monday |
| Last day to register for courses | January 13 | Wednesday |
| <i>Martin Luther King Day - Campus closed</i> | <i>January 18</i> | <i>Monday</i> |
| <i>President's Day Observed - Campus closed</i> | <i>February 12</i> | <i>Friday</i> |
| Mid-term exams | March 1-5 | Monday - Friday |
| First 8 weeks ends | March 5 | Friday |
| Spring Break - no classes | March 8-12 | Monday - Friday |
| Second 8 weeks begins | March 15 | Monday |
| Summer/Fall Advisement/Registration begins | April 5 | Monday |
| Last day to withdraw from Spring Semester | April 23 | Friday |
| Final Exam period | May 3-7 | Monday - Friday |
| Second 8 weeks ends | May 7 | Friday |
| Spring Semester ends | May 7 | Friday |
| Final Grades Due | May 11 | Tuesday |
| College Commencement Ceremony | May 15 | Saturday |

An up-to-date Academic Calendar can always be found online at wscc.edu/academics/academic-calendar/

PROGRAM LISTING

AUTO/DIESEL

- Automotive Technology
- Automotive Service
- Automotive Technician *(1-Year Certificate)**
- Diesel Truck Systems
- Truck Maintenance *(1-Year Certificate)**

BUSINESS & IT

- Accounting Technology
 - Accounting
 - Accounting *(1-Year Certificate)**
- Business Management
 - On Campus
 - Online
- Digital Technology
 - Cyber Security & Investigation
 - Computer Support Technician
 - Computer Systems *(1-Year Certificate)**
- Office Administrative Services
 - Executive Administrative Assistant
 - Executive Office Support *(1-Year Certificate)**
 - Medical Administrative Assistant
 - Medical Coding *(1-Year Certificate)**

ENGINEERING AND INDUSTRIAL TECHNOLOGIES

- Electrical Engineering Technology -
 - Instrumentation Control & Electrical
- Industrial Technology
 - Chemical Operator Online *(1-Year Certificate)**
 - Industrial Technology
 - MultiCraft *(1-Year Certificate)**
 - Process Technician Online
 - Welding
 - Welding *(1-Year Certificate)**
- Robotics & Mechatronics Technology

HEALTH

- Health & Wellness Technology
 - Associate Degree Nursing
 - Massage Therapy *(1-Year Certificate)**
 - Medical Laboratory Technology
 - Physical Therapist Assistant Technology
 - Practical Nursing *(1-Year Certificate)**
 - Radiologic Technology
 - Respiratory Therapy Technology

LAW & PUBLIC SAFETY

- Chemical Dependency
- Criminal Justice Technology
 - Criminal Justice
- Peace Officer Basic Academy
 - Peace Officer Basic Academy *(1-Year Certificate)**
- Social Services Technology

TRANSFER

Designed to transfer to a four-year college or university as the first two years of a baccalaureate degree.

- Biological Science Transfer
- Business Administration Transfer
- Education Transfer
 - Early Childhood
 - Middle Childhood
 - Young Adult
- General Sciences Transfer
- Liberal Arts Transfer
- Social Services Transfer
- Associate of Individualized Studies

Programs lead to an Associates Degree unless otherwise noted.

A variety of certificates of completion (4 to 14 classes in a related area) can be earned – see details in the online catalog.

**Indicates a certificate program*

ASSOCIATE DEGREE REQUIREMENTS

WHAT IS THE ASSOCIATE DEGREE?

Students who complete two-year academic programs at Washington State are awarded an associate degree.

- Associate of Applied Business (A.A.B.) is awarded to Business & IT Technologies graduates.
- Associate of Applied Science degree (A.A.S.) is awarded to graduates in Auto/Diesel Technologies, Law & Public Safety, Health, Engineering, and Industrial Technologies.
- Associate of Arts (A.A.) or Associate of Science (A.S.) is awarded to graduates planning to transfer to baccalaureate degree programs.
- Associate of Individualized Studies (A.I.S.) is awarded to graduates of a two-year program tailored to specific educational needs not met by other standard programs.
- Associate of Technical Studies (A.T.S.) is awarded to graduates of a two-year program tailored to an individually planned technical education to respond to needs for specialized technical education not available in the formal degree programs.

The A.A.S. and A.A.B. degrees are designed specifically to lead to career entry or advancement. Applied Degree programs offer courses directly related to the technology major. Students become quickly involved in technical courses and continue to receive advanced education in upper level courses throughout the second year.

New opportunities for transfer with A.A.S and A.A.B are constantly evolving. See an advisor in the Admissions Office for current information.

The A.A. and A.S. degrees are designed specifically for transfer to a four-year college or university. Degree programs are composed of courses normally required during the freshman and sophomore years of a baccalaureate program. Students complete most of the general education requirements during two years at Washington State, adding some program-specific courses during the second year.

The Associate of Individualized Studies (A.I.S.) allows students to tailor their studies to specific educational needs not met by standard programs. In this way, the student can gain up to 40 credit hours of the 60 required by using transfer college credit and life experience credit. Individuals who wish to develop an individualized program of study should contact the appropriate academic division for assistance.

The Associate of Technical Studies (A.T.S.) allows students to tailor their studies to respond to needs for specialized technical education not available in the formal degree programs. The program leading to an A.T.S. must have an area of concentration which is equivalent to 30 semester credit hours in technical studies and clearly identifiable with a career objective. Individuals who wish to develop an individualized technical program of study should contact the appropriate academic division for assistance.

COLLEGE-WIDE ASSOCIATE DEGREE GRADUATION REQUIREMENTS

A candidate for an associate degree from Washington State Community College must have satisfied the following requirements, as well as have earned a minimum of 60 semester hours of credit together with at least a 2.0 grade point average:

- A. Residency requirement: A student who wishes to apply credits earned at other colleges toward the degree must successfully complete a total of at least 20 semester hours of credit in graded courses (A,B,C,D) under the supervision of the college, with at least a 2.00 ("C") GPA.
- B. Have completed the requirements of one of the degree program as outlined in the catalog, and its addenda in effect at the time of the beginning of the student's most recent period of continuous enrollment.
- C. The Associate of Arts and Associate of Science degrees require completion of the Transfer Module resulting in a substantial number of additional general education courses.
- D. Graduating students are expected to attend commencement exercises. Degrees may be conferred in absentia.

ASSOCIATE DEGREE REQUIREMENTS

GENERAL EDUCATION GOALS

In addition to preparing graduates for careers or additional education, Washington State seeks to ensure a breadth of knowledge and promote intellectual inquiry for all students. Upon completion of an associate degree program, a Washington State graduate will demonstrate knowledge and skills in five key areas.

1. **Communication:** Use various forms of communication effectively as a communicator and as an observer.
2. **Critical Thinking:** Select and use effective approaches to solving a wide variety of problems as demonstrated by the ability to think critically, draw reasonable conclusions, and defend those conclusions rationally.
3. **Independent Life-Long Learning:** Continue as an independent learner engaged in a lifelong process of discovery.
4. **Science and Technology:** Use current technology and scientific principles to adapt to a changing world.
5. **Understanding Values and Cultures:** Demonstrate an awareness of the similarities and differences which express the human experience globally.

CATALOG IN EFFECT

The curriculum requirements for graduation are those in effect at the time the student enrolls. Those requirements will govern the student's eligibility to graduate as long as the student remains in continuous enrollment. If the student does not attend class for one semester (excluding summer), the curriculum requirements in effect at the time of re-admission will govern graduation.

Students should save a .PDF copy of this catalog as a reference and guide while enrolled at Washington State Community College.

These general education goals are integrated into the degree requirements of each associate degree program and achieved through completion of general education courses and courses in the technical major or major concentration.

GENERAL EDUCATION COURSE REQUIREMENTS FOR APPLIED DEGREES (A.A.B., A.A.S., A.I.S., & A.T.S.)

The AAB, AAS, AIS and ATS will be composed of not less than 30 credit hours of general education and non-technical (basic) studies and not more than 35 hours of technical courses. None of these degrees will exceed a total of 65 semester hours unless approved by the college's Vice President for Academic Affairs in order to meet a special requirement of the program's professional accrediting agency.

Non-Technical studies will include a component of general education with the following minimum requirements.

ENGLISH COMPOSITION AND MATHEMATICS (minimum of 6 credit hours):

- | | |
|-----------------------|---------|
| • English Composition | 3 hours |
| • Mathematics | 3 hours |

SIX CREDIT HOURS IN TWO OF THE THREE AREAS:

- | | |
|--|---------|
| • Social and Behavioral Sciences (<i>economics, geography, history, political science, psychology, sociology</i>) | 3 hours |
| • Arts and Humanities (<i>art, foreign language, literature, philosophy, humanities, music, theater</i>) | 3 hours |
| • Natural Sciences (<i>biology, chemistry, geology, physics, astronomy</i>) | 3 hours |

The same course cannot count toward both the social and behavioral sciences requirement and the arts and humanities requirement. Courses meeting the requirement in the arts or humanities may include studio courses and special topics courses.

NON-TECHNICAL (BASIC):

- Remaining additional credit hours in basic and related coursework appropriate to the degree.

ASSOCIATE DEGREE REQUIREMENTS

ASSOCIATE OF APPLIED BUSINESS COURSE DISTRIBUTION REQUIREMENTS

The Associate of Applied Business (A.A.B.) is awarded to students who successfully complete one of the prescribed curricula in business & IT technologies. The degree is designed to prepare technicians and para-professionals for immediate entry into the workforce upon graduation. Both technical and non-technical courses are required for the A.A.B.

A.A.B. Non-technical Course Requirements

The A.A.B. degree requires 30 semester credits of non-technical studies. Courses may be in two categories:

1. General education requirements consisting of courses in written communication, oral communication, social and behavioral sciences, and arts and humanities. These requirements also include courses in the natural sciences and in mathematics.
2. Basic related courses include a core of courses basic to the technical field and closely related to the specialty.

Since the non-technical course requirements vary with each program, the student should check the courses required in each program or major.

A.A.B. Technical Course Requirements

For graduation, 30-35 credit hours in technical courses clearly identified with the technical skills, proficiency, and knowledge required for career competency, as prescribed by the academic program. A minimum of 60 up to a maximum of 65 total credit hours is required for graduation depending upon the specific requirements of each degree program.

ASSOCIATE OF APPLIED SCIENCE COURSE DISTRIBUTION REQUIREMENTS

The Associate of Applied Science (A.A.S.) is awarded to students who successfully complete one of the prescribed curricula in auto/diesel, industrial, engineering, health or law & public safety. The degree is designed to prepare technicians and para-professionals for immediate entry into the workforce upon graduation. Both technical and non-technical courses are required for the A.A.S.

A.A.S. Non-technical Course Requirements

The A.A.S. requires a minimum 30 semester credits of non-technical studies. Courses may be in two categories:

1. General Education requirements consisting of courses in written communication, oral communication, social and behavioral sciences, and arts and humanities. These requirements also include courses in the natural sciences and in mathematics.

2. Basic Related Courses include a core of courses basic to the technical field and closely related to the specialty.

Since the non-technical course requirements vary with each program, the student should check the courses required in each program or major.

A.A.S. Technical Course Requirements

For graduation, 30-35 credit hours is required in technical courses clearly identified with the technical skills, proficiency, and knowledge required for career competency, as prescribed by the academic program. A minimum of 60 up to a maximum of 65 total credit hours is required for graduation depending upon the specific requirements of each degree program.

ASSOCIATE OF ARTS DEGREE COURSE DISTRIBUTION REQUIREMENTS

The Associate of Arts (A.A.) degree is awarded to students who successfully complete the requirements for the degree with a concentration in arts, humanities, business or education, or other areas. The degree is designed for students wishing to complete the first two years of a Bachelor of Arts degree, as well as those desiring two years of a general education with emphasis in the arts, social sciences or humanities. To earn an A.A., a total of 60-65 credit hours of work must be completed, including the 36-40 hours earned in the Transfer Module.

General Education Course Requirements for the A.A. (includes Transfer Module)

- **Communication Skills:** Two Transfer Module courses in English composition, plus a minimum of one course in speech communication for a total of 9 semester hours.
- **Mathematics Statistics, and Logic:** At least one course in mathematics that meets Transfer Module criteria of building on three years of college preparatory or equivalent mathematics, for a total at least 3 semester hours
- **Natural Sciences:** A minimum of 6 Transfer Module credit hours, including at least one laboratory course.
- **Social and Behavioral Sciences:** A minimum of 6 Transfer Module credit hours.
- **Arts and Humanities:** A minimum of 6 Transfer Module credit hours.
- **Additional electives** to make up 36-40 total hours of Transfer Module Courses based on chosen curriculum, Ohio Guided Pathway Transfer, and/or Ohio Transfer Module using transfer approved courses.

ASSOCIATE DEGREE REQUIREMENTS

ASSOCIATE OF ARTS DEGREE COURSE DISTRIBUTION REQUIREMENTS (CONTINUED)

Major Concentration Requirement for the A.A.

Students in an A.A. program must take at least 12 credit hours in an area of major concentration other than science, engineering, or mathematics, as prescribed by the chosen curriculum and approved by the student's academic advisor.

Recommended Electives for the A.A. Degree

The remaining courses to meet the 60-65 credit hours required for the degree should be selected based on the chosen curriculum, the academic requirements of the institution to which the student plans to transfer, and the approval of the academic advisor. One to three credits in physical activity/recreation courses may be applied to the degree.

Based on foreign language courses completed in high school and requirements of the chosen program at the transfer institution, students may choose to complete one year of foreign language at Washington State.

ASSOCIATE OF INDIVIDUALIZED STUDIES COURSE DISTRIBUTION REQUIREMENTS

The Associate of Individualized Study (A.I.S.) is awarded to students who successfully complete an individually designed curricula prescribed to meet specific career goals. Students must satisfactorily complete a minimum of 60 semester credit hours in a well-planned, unique program to serve an educational objective that could not be served through another degree program at the college.

General Education Requirements for the A.I.S.

The five general education goals will be included in each individually-designed curriculum, for a minimum of 30 semester credits of general and basic related course work including the general education course requirements.

Major Concentration Requirement for the A.I.S.

The program leading to the A.I.S. must contain an area of concentration consisting of a minimum of 30 up to a maximum of 35 semester credit hours formed either by:

1. An intra-college, interdisciplinary, but coherent combination of courses drawn from a minimum of two and a maximum of four instructional areas of study; or
2. Up to 45 semester credit hours awarded by the college for documentable educational experiences or courses completed at another college judged by Washington State to be of college level.

Upon petitioning for acceptance into the A.I.S. program, a representative of Enrollment Management, the student's committee, and the student will determine the remaining required courses. Once students are accepted into the program, they must complete at least 20 credit hours within the approved A.I.S. program with at least half in the area of the approved concentration. Students with less than 30 credit hours remaining toward a degree must have the approval of the Vice President for Academic Affairs to enroll in the program.

ASSOCIATE DEGREE REQUIREMENTS

ASSOCIATE OF SCIENCE DEGREE COURSE DISTRIBUTION REQUIREMENTS

The Associate of Science (A.S.) degree is awarded to students who successfully complete the requirements for the degree with a concentration in mathematics, science or engineering. The degree is designed for students wishing to complete the first two years of a Bachelor of Science degree, as well as those desiring two years of a general education with emphasis in natural science or mathematics. For a student to earn an A.S. degree, a total of 60-65 credit hours of work must be completed, including the 36-40 hours earned in the Transfer Module. Total course requirements for the A.S. degree are described below.

General Education Course Requirements for the A.S. Degree (includes Transfer Module)

- Communication Skills: Two Transfer Module courses in English composition, plus a minimum of one course in speech communication for a total of 9 semester hours.
- Mathematics Statistics, and Logic: At least one course in mathematics that meets Transfer Module criteria of building on three years of college preparatory or equivalent mathematics, for a total of at least 3 semester hours
- Natural Sciences: A minimum of 6 Transfer Module credit hours, including at least one laboratory course.
- Social and Behavioral Sciences: A minimum of 6 Transfer Module credit hours.
- Arts and Humanities: A minimum of 6 Transfer Module credit hours.
- Additional electives to make up 36-40 total hours of Transfer Module Courses based on chosen curriculum, Ohio Guided Pathway Transfer, and/or Ohio Transfer Module using transfer approved courses.

Major Concentration Requirement for the A.S. Degree

Students in an A.S. program must take at least 12 credit hours in an area of major concentration in science, engineering, or mathematics, as prescribed by the chosen curriculum and approved by the student's academic advisor.

Recommended Electives for the A.S. Degree

The remaining courses to meet the 60-65 credit hours required for the degree should be selected based on the chosen curriculum, the academic requirements of the institution to which the student plans to transfer, and the approval of the academic advisor. One to three credits in physical activity/recreation courses may be applied to the degree.

Based on foreign language courses completed in high school and requirements of the chosen program at the transfer institution, students may choose to complete one year of foreign language at Washington State.

ASSOCIATE OF TECHNICAL STUDIES COURSE DISTRIBUTION REQUIREMENTS

The Associate of Technical Studies (A.T.S.) is awarded to students who successfully complete a minimum of 60 semester credit hours of an individually planned technical education program designed to respond to needs for specialized technical education not currently available in the formal degree programs available at the college. The program leading to an Associate of Technical Studies must have an area of concentration which is equivalent to 30 semester credit hours in technical studies and clearly identifiable with a career objective. The actual degree awarded must contain the name of the area of concentration, e.g., Associate of Technical Studies in Cyber Security and Investigation. Both technical and non-technical courses are required for the A.T.S.

A.T.S. Non-technical Course Requirements

The A.T.S. degree requires 30 semester credits of non-technical studies. Courses may be in two categories:

1. General education requirements consisting of courses in written communication, oral communication, social and behavioral sciences, and arts and humanities. These requirements also include courses in the natural sciences and in mathematics.
2. Basic related courses include a core of courses basic to the technical field and closely related to the specialty.

A.T.S. Technical Course Requirements

For graduation, 30-35 credit hours in two or more areas of technical studies clearly identified with skills, proficiency, and knowledge required for career competency, as prescribed by the academic program. A minimum of 60 up to a maximum of 65 total credit hours is required for graduation depending upon the specific requirements of each degree program.

Graduates of the A.T.S. program who wish to extend their studies to baccalaureate-level programs may need to complete a substantial amount of lower division coursework at the transfer institution. Students satisfactorily completing this degree must assume that four-year institutions may evaluate their credits on a course-by-course basis.

ASSOCIATE DEGREE REQUIREMENTS

ADVANCED PLACEMENT

The State of Ohio, working through the University System of Ohio, has initiated policies to facilitate the ease of transition from high school to college as well as between and among Ohio's Public colleges and universities.

1. Students obtaining an Advanced Placement (AP) exam score of 3 or above will be awarded the aligned course(s) and credit(s) for the AP exam area(s) successfully completed.
2. General Education courses and credits received will be applied towards graduation and will satisfy a general education requirement if the course(s) to which the AP area is equivalent fulfill a requirement.
3. If an equivalent course is not available for the AP exam area completed, elective or area credit will be awarded in the appropriate academic discipline and will be applied towards graduation where such elective credit options exist within the academic major.
4. Additional courses or credits may be available when a score of 4 or 5 is obtained. Award of credit for higher score values varies depending on the institution and academic discipline.
5. In academic disciplines containing highly dependent sequences (Mathematics, Sciences, etc.) students are strongly advised to confer with the college/university advising staff to ensure they have the appropriate foundation to be successful in advanced coursework within the sequence.

A complete listing of credit awarded for an AP score of 3 or above for all University System of Ohio colleges and universities can be found at www.ohiohighered.org/transfer/ap

PRIOR LEARNING ASSESSMENT

CREDIT ALTERNATIVES

College Level Examination Program

Washington State Community College participates in the nationally recognized College Level Examination Program (CLEP), offered by the College Entrance Examination Board, a testing program which permits students to earn college credits by demonstrating knowledge equal to a particular college-level course. CLEP alignments may be viewed by visiting www.ohiohighered.org/transfer/clep

Proficiency Testing

The faculty of the College offer proficiency credit by examination for some courses. Through testing, students may demonstrate proficiency in a course and receive appropriate credit. Specific information about proficiency credit can be obtained through the academic divisions of the College.

There are a number of procedures that should be followed when seeking proficiency credit.

1. The student must show evidence of successful completion of all prerequisites to the course for which the proficiency examination is being requested.
2. Proficiency examinations are conducted during the first five days of any academic term. An "Application for Proficiency," the proficiency fee according to the schedule of fees, and the examination must be completed and results submitted to the records office by the end of the fifth day in the academic term.
3. A proficiency examination can be administered only by departmental faculty specifically responsible for the course subject area requested for proficiency.

4. Failed proficiency exams may not be repeated.
5. A student may not request a proficiency examination for any course in which they have received an F or from which he or she has withdrawn.
6. A student who has taken a lower numbered course in a sequential series of courses will not be permitted to take a proficiency examination in a higher numbered course in that same series of courses.
7. A student who has received credit for a higher numbered course in a sequential series of courses will not be permitted to take a proficiency examination in a lower numbered course in that same series.

To apply for proficiency examination, the following procedures need to be followed.

1. Request proficiency examination from the academic department.
2. Obtain the Application for Proficiency form from the records office, fill out the form, and pay all fees.
3. Present the completed form to the academic department and arrange for a testing date. A score of 85 percent or more is required for successful proficiency.

Successful proficiency will result in transcript credit for the course, and the course will apply toward degree requirements. The records office will notify the student of the results. Students earning proficiency credit should be aware that credits earned by means of proficiency are seldom transferable to any other institution.

Assessment of Credit for Life/Work Experience

Students can receive credit for prior relevant college-level learning acquired either through formal schooling or some

OTHER PROGRAM REQUIREMENTS

types of occupational experience. Each student works with an advisor to define his or her program of study, giving careful consideration to high school background, test results, interests, talents, attitudes and goals.

Credit may be granted for satisfactory performance on examinations, and appropriate work experience. The student contacts the student services office, then meets with an advisor to determine if the life experience evaluation is appropriate to his or her educational program.

The student must submit a portfolio which consists of all documentation he or she considers relevant.

Required are:

1. A cover letter stating the number of credits requested, the areas in which the credit is being requested, and names, titles, addresses and phone numbers of persons to be consulted regarding each experience;
2. A detailed description of each experience for which credit is requested; and
3. A letter from on-site supervisors or employers confirming the nature, duration and quality of the work.
4. The student then has a personal interview with a committee of faculty/staff members consisting of the

appropriate academic dean and faculty appropriate to the subject area, if needed.

As documentation, the applicant may be asked to:

1. Complete written and/or performance tests; up to 40 credit hours may be from outside sources such as National Auto Mechanics Tests, CLEP Examinations, or College Board Advanced Placement tests which can be utilized to demonstrate an appropriate level of ability or knowledge.
2. Complete in-house tests such as placement and/or proficiency examinations prepared by faculty members at WSCC.

In summary, the primary assessment techniques for life experience credit are documents, reports and testimony from external sources along with faculty evaluation at WSCC.

The committee will decide how many credits will be awarded and in what particular areas the credit will be granted. The student will be notified of the committee's decision as soon as possible; however, the credit is not actually awarded until the student has successfully completed a minimum of 12 semester hours at WSCC.

The cost to the student includes the cost of any tests from outside sources.

The transfer of Life Experience Credit to another college is determined by the receiving institution. Each college has a policy which determines the transfer of credit.

CERTIFICATE OF COMPLETION REQUIREMENTS

A candidate for a Certificate of Completion must have satisfactorily completed all courses required for the certificate with a C or better. At least 75% of the courses must be taken at Washington State.

ONE-YEAR CERTIFICATE REQUIREMENTS

A candidate for a one-year certificate from Washington State must have earned 30 credit hours or more based on the requirements listed in the student's certificate program. A transfer student must have earned at least 10 semester hours of credit with at least 2.00 (C) cumulative grade point average under the supervision of the college, and have been officially registered in the college during the final semester. One-year certificates that are Federal Financial Aid eligible are considered Gainful Employment Programs; and WSCC is required to disclose program information to all prospective students of these programs by visiting wscc.edu/academics/certificates.

REQUIREMENTS FOR A SECOND MAJOR

Students who wish to pursue more than one major in a degree program must consult with the appropriate department chair or dean and must meet the following requirements:

1. All degree requirements for both majors must be met.
2. A minimum of 12 semester hours of credit must be earned in addition to the requirements for the first major.

REQUIREMENTS FOR A SECOND DEGREE

Students who have earned an associate degree from Washington State and wish to earn an associate degree in a second program must consult with the appropriate department chair or dean and must meet the following requirements:

1. A minimum of 18 semester hours of credit must be earned in addition to the total compiled for the first degree.
2. All requirements for the second degree must be met.
3. An additional degree will not be granted in the same program in which the first degree was earned, but an additional major may be earned in the same degree program.

WEST VIRGINIA RECIPROCITY AGREEMENT

Washington State and West Virginia University at Parkersburg have an agreement that permits some West Virginia residents to pay Ohio resident tuition fees, instead of the out-of-state charge. Residents of Jackson, Pleasants, Ritchie, Roane, Tyler, Wirt and Wood Counties are eligible for this low in-state tuition when they enroll at Washington State in any associate degree or one-year certificate program.

OTHER PROGRAM REQUIREMENTS

COLLEGE TECH PREP

College Tech Prep is a nationally recognized program that partners two-year colleges with area high schools to prepare young people for the technical jobs of the future. College Tech Prep high school students:

1. Learn college preparatory academics in applied, real-world contexts that make the content more meaningful and accessible to them;
2. Develop technological literacy, including the basics of computer usage; and,
3. In grades 11 and 12, immerse themselves in the occupational skills needed to enter and succeed in a two-year college technical program.

At the end of high school, College Tech Prep graduates are ready to enter an advanced skills College Tech Prep associate degree program at a community or technical college. They also can enter the world of work with an array of stronger basic and occupational skills than graduates of general education programs.

Others who wish to enroll in a College Tech Prep associate degree program, but who did not participate in the high school program, may be required to complete several bridge courses first.

In our area, the Washington-Morgan-Meigs College Tech Prep Consortium works with the Washington County Career Center, Meigs High School, Morgan High School and their associate schools to prepare students for College Tech Prep associate degree programs at Washington State.

Current College Tech Prep associate degree programs at Washington State:

- Nursing: Associate Degree Nursing
- Automotive and Diesel Truck Systems
- Business Management Technology
- Digital Technology - Computer Graphics
- Electrical Engineering Technology
- Medical Laboratory Technology
- Digital Tech. - Computer Support Technician
- Physical Therapist Assistant Technology
- Nursing: Practical Nursing
- Radiologic Technology
- Respiratory Therapy Technology

Additional programs may be implemented. For information contact the college's Outreach Center or local high school counselors.

THE WSCC HONORS PROGRAM

The WSCC Honors Program nurtures the talents of our most academically gifted and motivated students. With emphasis placed on collaboration with faculty and peers, intellectual advancement, and service learning, the students develop as creative and critical thinkers in the 21st Century, and prepare to become leaders in this community and beyond.

Acceptance into the WSCC Honor's Program involves a competitive admissions process.

Initially, interested students submit the WSCC Honors application packet, which includes a completed application form (with an essay component), ACT scores, two letters of recommendation, and transcripts.

The Honors Committee will then review each application packet, and students selected for the final phase of the admission process will be invited to campus for an interview with the committee. Those chosen for admission into the Honors Program will be notified within two weeks of the interview.

Minimum requirements for admission include a 3.0 GPA and an ACT score of 18.

Minimum requirements to become a WSCC Honors Program graduate include the following:

- Students who begin the program in their second year at WSCC must take 2 – 4 Honors courses (6 – 12 credit hours)
- Students who begin the program in their first year at WSCC must take 4 – 6 Honors courses (12 – 18 credit hours)

Other requirements include service learning and attendance at special Honors lectures.

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BACCALAUREATE TRANSFER PROGRAMS

In many cases, the career needs of Washington State students can only be met by a four-year bachelor's degree. For these, the college offers transfer programs in addition to its career-oriented technical education programs. The transfer programs at Washington State enable the student to complete the majority of freshman and sophomore college course requirements close to home.

Degree programs designed for transfer to a baccalaureate program fall into two categories: Associate of Arts (AA) degree and Associate of Science (AS) degree.

ARTICULATION AGREEMENTS

To assist students in transfer, articulation agreements continue to be developed with nearby public and private colleges and universities. The articulation agreements clearly indicate which courses offered by Washington State will be accepted by the receiving institution.

INSTITUTIONAL TRANSFER

The Ohio Department of Higher Education in 1990, following a directive of the 118th Ohio General Assembly, developed the Ohio Articulation and Transfer Policy to facilitate students' ability to transfer credits from one Ohio public college or university to another in order to avoid duplication of course requirements. A subsequent policy review and recommendations produced by the Articulation and Transfer Advisory Council in 2004, together with mandates from the 125th Ohio General Assembly in the form of Amended Substitute House Bill 95, have prompted improvements of the original policy. Additional legislation from the 125th Ohio General Assembly also initiated the development of a statewide system for articulation agreements among state institutions of higher education for transfer students pursuing teacher education programs.

Action by the 126th Ohio General Assembly led to the establishment of criteria, policies, and procedures for the transfer of technical courses completed through a career-technical education institution; and standards for the awarding of college credit based on Advanced Placement (AP) test scores.

Legislation from the 130th Ohio General Assembly required public institutions of higher education to: use baseline standards and procedures in the granting of college credit for military training, experience, and coursework; establish an appeals process for

resolving disputes over the awarding of credit for military experience; provide specific assistance and support to veterans and service members; adopt a common definition of a *service member* and *veteran*; and establish a credit articulation system in which adult graduates of public career-technical institutions who complete a 900 clock-hour program of study and obtain an industry-recognized credential approved by the Chancellor shall receive 30 college technical credit hours toward a technical degree upon enrollment.

While all public colleges and universities are required to follow the Ohio Articulation and Transfer Policy, independent colleges and universities in Ohio may or may not participate in the Transfer Policy. Therefore, students interested in transferring to independent institutions are encouraged to check with the college or university of their choice regarding transfer agreements. In support of improved articulation and transfer processes, the Ohio Department of Higher Education has established an articulation and transfer clearinghouse to receive, annotate, and convey transcripts among public colleges and universities. This system is designed to provide standardized information and help colleges and universities reduce undesirable variability in the transfer credit evaluation process.

ACCEPTANCE OF TRANSFER AND ARTICULATED CREDIT

To recognize courses appropriately and provide equity in the treatment of incoming transfer students and students native to the receiving institution, transfer credit will be accepted for all successfully completed college-level courses completed in or after Fall 2005 from Ohio public institutions of higher education. Students who successfully completed Associate of Arts (AA) or Associate of Science (AS) degrees prior to Fall 2005 with a 2.0 or better overall grade-point average would also receive credit for all college-level courses they have passed. While this reflects the baseline policy requirement, individual institutions may set equitable institutional policies that are more accepting.

Pass/Fail courses, credit-by-examination credits, experiential learning courses, and other non-traditional credit courses that meet these conditions will also be accepted and posted to the student record.

APPLICATION OF TRANSFER AND ARTICULATED CREDIT

Application of credit is the decision process performed by the receiving institution to determine how the credits

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it has accepted and recorded on the student's official academic transcript will or will not apply toward program and degree requirements. While the receiving institution makes this decision, it will do so within the parameters of this Policy.

The following guidelines and requirements shall govern the application of transfer and articulated credit:

OHIO TRANSFER MODULE

The Ohio Department of Higher Education's Articulation and Transfer Policy established the Ohio Transfer Module, which may be a subset or the entire set of a public higher education institution's general education curriculum in Associate of Arts (AA), Associate of Science (AS) and baccalaureate degree programs. Students in applied associate degree programs may complete some individual Ohio Transfer Module courses within their degree program or continue beyond the degree program to complete the entire Transfer Module. The Ohio Transfer Module contains 36-40 semester or 54-60 quarter hours of course credit in English composition (minimum of 3 semester or 5 quarter hours); mathematics, statistics and logic (minimum of 3 semester or 3 quarter hours); arts and humanities (minimum of 6 semester or 9 quarter hours); social and behavioral sciences (minimum of 6 semester or 9 quarter hours); and natural sciences (minimum of 6 semester or 9 quarter hours). Oral communication and interdisciplinary areas may be included as additional options. Additional elective hours from among these areas make up the total hours for a completed Ohio Transfer Module. Courses for the Ohio Transfer Module should be 100- and 200-level general education courses commonly completed in the first two years of a student's course of study. Each public university and technical and community college is required to establish and maintain an approved Ohio Transfer Module.

Ohio Transfer Module course(s) or the full module completed at one college or university will automatically meet the requirements of individual Ohio Transfer Module course(s) or the full Ohio Transfer Module at another college or university once the student is admitted. Students may be required, however, to meet additional general education requirements at the institution to which they transfer. For example, a student who completes the Ohio Transfer Module at Institution S (sending institution) and then transfers to Institution R (receiving institution) is said to have completed the Ohio Transfer Module portion of Institution R's general education program. Institution R, however, may have general education courses that go beyond its Ohio

Transfer Module. State policy initially required that all courses in the Ohio Transfer Module be completed to receive its benefit in transfer. However, subsequent policy revisions have extended this benefit to the completion of individual Ohio Transfer Module courses on a course-by-course basis.

TRANSFER ASSURANCE GUIDES

Transfer Assurance Guides (TAGs) comprise Ohio Transfer Module courses and additional courses required for an academic major called TAG courses. A TAG is an advising tool to assist Ohio university and community and technical college students in planning for specific majors and making course selections that will ensure comparable, compatible, and equivalent learning experiences across Ohio's public higher education system. A number of area-specific TAG pathways in meta-majors including the arts, humanities, business, communication, education, health, mathematics, sciences, engineering, engineering technologies, social sciences, and foreign languages have been developed by faculty teams.

TAGs empower students to make informed course selection decisions and plans for their future transfer. Advisors at the institution to which a student wishes to transfer should also be consulted during the transfer process. Students may elect to complete the full TAG or any subset of courses from the TAG. Because of specific major requirements, early identification of a student's intended major is encouraged.

CAREER-TECHNICAL ASSURANCE GUIDES

Collaboration among the Ohio Department of Higher Education, the Ohio Department of Education, and other key stakeholders led to the development of policies and procedures to create statewide career-technical discipline specific articulation agreements and further ensure that students completing coursework at an adult or secondary career-technical institution can articulate and transfer agreed-upon technical courses/programs to any Ohio public institution of higher education and among Ohio public institutions of higher education "without unnecessary duplication or institutional barriers."

Career-Technical Assurance Guides (CTAGs) are statewide articulation agreements that guarantee the recognition of learning which occurs at public adult and secondary career-technical institutions and have the opportunity for the award of college credit toward technical courses/programs at any public higher education institution. CTAGs serve as advising

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tools, identifying the statewide content guarantee and describing other conditions or obligations (e.g., program accreditation or industry credential) associated with the guarantee.

MILITARY TRANSFER ASSURANCE GUIDES

In response to the legislative requirement (Ohio Revised Code 3333.164) to create a military articulation and transfer assurance guide for college-level learning that took place through military training, experience, and coursework, college credit will be granted to students with military training, experience, and/or coursework that is recognized by the American Council on Education (ACE) or a regionally accredited military institution, such as Community College of the Air Force.

In order to streamline the awarding, transferability, and applicability of college credit, service members and veterans are guaranteed to earn certain types of credit(s) or course(s) as specified in the Military Transfer Assurance Guides (MTAGs), which are based on the endorsed baseline standards and procedures by the Chancellor. Equivalent course(s), credits for courses, or block of credit is to be awarded and applied towards general education and/or major course requirements at the receiving institution in accordance with the MTAG guarantee. There is some training, experience, and coursework that the receiving institution may be able to award college credit only toward general or free electives.

In addition, public institutions of higher education shall ensure that appropriate equivalent credit is awarded for military training, experience, and coursework that meet the baseline standards and procedures according to the Ohio Revised Code 3333.164. This requirement goes beyond credit/course awarded based on the MTAG alignment process.

APPRENTICESHIP PATHWAY PROGRAMS

The Apprenticeship Pathways initiative advocates for individuals completing apprenticeships by incorporating their learning into academic credit, thereby saving them time and money and encouraging them to advance their academic credentials to contribute to a strong, educated workforce.

Ohio apprenticeship programs partner with public two-year institutions to provide technology-specific statewide articulation agreements that recognize non-traditional prior learning. College credit is awarded toward a technical associate degree. Each agreement simplifies student advising by outlining how apprenticeship training

in a certain pathway applies to an applied associate degree and lists remaining courses required to complete the degree. The application of the credit toward a technical associate degree in these agreements is guaranteed at the participating receiving institutions.

ADVANCED PLACEMENT (AP) EXAMS

The State of Ohio, working with public institutions of higher education, has initiated policies to facilitate the ease of transition from high school to college, as well as between and among Ohio's public colleges and universities.

Beginning in the Fall term 2009:

1. Students obtaining an Advanced Placement (AP) exam score of 3 or above will be awarded the aligned course(s) and credits for the AP exam area(s) successfully completed.
2. General Education courses and credits received will be applied towards graduation and will satisfy a general education requirement if the course(s) to which the AP area is equivalent fulfill(s) a requirement.
3. If an equivalent course is not available for the AP exam area completed, elective or area credit will be awarded in the appropriate academic discipline and will be applied towards graduation where such elective credit options exist within the academic major.
4. Additional courses or credits may be available when a score of 4 or 5 is obtained. Award of credit for higher score values varies depending on the institution and academic discipline.

In academic disciplines containing highly dependent sequences (Sciences, Technology, Engineering and Mathematics – STEM) students are strongly advised to confer with the college/university advising staff to ensure they have the appropriate foundation to be successful in advanced coursework within the sequence.

ONE-YEAR OPTION CREDIT AWARD

The One-Year Option builds upon Ohio's articulation and transfer system to help more adults accelerate their preparation for work by earning a technical associate degree. Consistent with the philosophy of the Career-Technical Assurance Guides (CTAGs), the One-Year Option guarantees that college credit will be awarded for college-level learning that occurs through adult programs at public career-technical institutions.

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Adults who complete a career-technical education program of study consisting of a minimum of 900 clock-hours and achieve an industry-recognized credential approved by the Chancellor shall receive thirty (30) semester hours of technical course credit toward a standardized Associate of Technical Study Degree (ATS) upon matriculation at a public institution of higher education that confers such a degree. The 30 semester hours will be awarded as a block of credit rather than credit for specific courses. Proportional credit is to be awarded toward the ATS degree for adults who complete a program of study between 600 and 899 clock hours and achieved an industry-recognized credential approved by the Chancellor.

The credit earned through the One-Year Option will be applied to ATS degrees bearing the following standardized degree titles:

1. Associate of Technical Study in Building and Industrial Technology
2. Associate of Technical Study in Business Technology
3. Associate of Technical Study in Health and Allied Health Technology
4. Associate of Technical Study in Information Technology
5. Associate of Technical Study in Services Technology

CONDITIONS FOR TRANSFER ADMISSION

1. Graduates with associate degrees from Ohio's public institutions of higher education and a completed, approved Ohio Transfer Module shall be admitted to a public institution of higher education in Ohio, provided their cumulative grade-point average is at least 2.0 for all previous college-level courses. Further, these students shall have admission priority over graduates with an out-of-state associate degree and other transfer students with transferable and/or articulated college credit.
2. Associate degree holders who have not completed the Ohio Transfer Module from an Ohio public institution of higher education will be eligible for preferential consideration for admission as transfer students as long as the institution's admission criteria, such as the minimum academic standards, space availability, adherence to deadlines, and payment of fees, are fairly and equally applied to all undergraduate students.

3. In order to encourage completion of the baccalaureate degree, students who are not enrolled in or who have not earned an degree but have earned 60 semester/90 quarter hours or more of credit toward a baccalaureate degree with a cumulative grade-point average of at least a 2.0 for all previous college-level courses will be eligible for preferential consideration for admission as transfer students as long as the institution's admission criteria, such as the minimum academic standards, space availability, adherence to deadlines, and payment of fees, are fairly and equally applied to all undergraduate students.
4. Students who have not earned an associate degree or who have not earned 60 semester/90 quarter hours of credit with a grade-point average of at least a 2.0 for all previous college-level courses will be eligible for admission as transfer students on a competitive basis.
5. Incoming transfer students admitted to a college or university shall compete for admission to selective programs, majors, and units on an equal basis with students native to the receiving institution.

The admission of transfer students by an institution, however, does not guarantee admission to any majors, minors, or fields of concentration at the institution. Some programs have additional academic and non-academic requirements beyond those for general admission to the institution (e.g., background check, a grade-point average higher than a 2.0, or a grade-point average higher than the average required for admission to the institution). Once admitted, transfer students shall be subject to the same regulations governing applicability of catalog requirements as native students. Furthermore, transfer students shall be accorded the same class standing and other privileges as native students on the basis of the number of credits earned. All residency requirements must be completed at the receiving institution.

Responsibilities of Students

To maximize transfer credit application, prospective transfer students must take responsibility for planning their course of study to meet both the academic and non-academic requirements of the institution to which they desire to articulate or transfer credit as early as possible. The student is responsible to investigate and use the information, advising, and other available resources to develop such a plan. Students should actively seek program, degree, and transfer information; meet with an advisor from both the current and receiving institutions to assist them in preparing a course of study that meets the academic requirements for the program/degree to which they plan to transfer; use the various electronic course/program transfer and

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applicability database systems, including Ohio Transfer to Degree Guarantee web resources; and select courses/programs at their current institution that satisfy requirements at the receiving institution to maximize the application of transfer credit. Specifically, students should identify early in their collegiate studies an institution and major to which they desire to transfer. Furthermore, students should determine if there are foreign language requirements or any special course requirements that can be met during the freshman or sophomore year. This will enable students to plan and pursue a course of study that will better articulate with the receiving institution's major.

APPEALS PROCESS

Following the evaluation of a student transcript from another institution, the receiving college institution will provide the student with a Statement of Transfer and Articulated Credit Applicability (Degree Audit Report). A student disagreeing with the application of transfer and/or articulated credit by the receiving institution must file his/her appeal in writing within ninety (90) days of receipt of the Statement of Transfer and Articulated Credit Applicability. The institution shall respond to the appeal within thirty (30) days of the receipt of the appeal at each appeal level.

STUDENT COMPLAINTS FOLLOWING TRANSFER APPEALS AT THE RECEIVING INSTITUTION

After a student exhausts the appeals process at the receiving institution and chooses to pursue further action, the Ohio Department of Higher Education (ODHE) responds to formal written complaints related to Ohio Articulation and Transfer Policy against public, independent non-profit, and proprietary institutions of higher education in Ohio. While the ODHE has limited authority over colleges and universities and cannot offer legal advice or initiate civil court cases, staff will review written complaints submitted through its established process and work with student complainants and institutions.

REVERSE TRANSFER

Reverse Transfer is a process to award associate degrees to students who earned credits that satisfied residency and graduation requirements at Washington State Community College, did not earn their associate degree, and transferred to a four-year institution where they are currently enrolled, regardless if the four-year institution is public, private, or across state lines. Eligible students can receive a first associate degree that accurately reflects their educational attainment and allows them to

compete more successfully in higher education and the workforce. The process is standardized, streamlined, and technologically enhanced to enable four and two-year institutions to transfer student credits more efficiently, securely, and successfully through the National Student Clearinghouse. For more information on Reverse Transfer, visit studentclearinghouse.org/colleges/reverse-transfer/.

WASHINGTON STATE TRANSFER MODULE

The Washington State transfer curricula are designed around the Ohio Transfer Module (OTM). This module provides the foundation of the Ohio Articulation and Transfer Policy adopted by the Ohio Department of Higher Education. All colleges and universities have a general education requirement which comprises much of the freshman and sophomore years. The college's Transfer Module contains courses which satisfy many of these requirements at any state university in Ohio.

The purpose of this module is to ease transfer to any of Ohio's state universities if the student takes the courses as prescribed in the module. The OTM at Washington State consists of a core of 36-40 credit hours in English composition, mathematics, natural sciences, arts and humanities, and social and behavioral sciences.

Responsibilities of Students

Washington State offers the courses to fulfill the requirements of the Transfer Module. It is the responsibility of the student to be familiar with the requirements of the module and to follow them exactly. Any deviation from the requirements of the Transfer Module will require that the student's transfer take place on a course-by-course basis at the discretion of the receiving institution.

It is also the responsibility of the student to make choices about baccalaureate majors and four-year institutions to which he or she wishes to transfer.

Academic advising decisions concerning course selections are made based on the student's anticipated major and the institution he or she will attend. Therefore, it is important that the student make these decisions and communicate them to his or her academic advisor as early as possible.

The following distribution of courses will fulfill the requirements of the Transfer Module. Descriptions, including credit hours and prerequisites, are included in the course descriptions section of this catalog.

- **English Composition** – a minimum of 6 credit hours is required in English composition.
- **Mathematics** – a minimum of 3 credit hours is required in mathematics.
- **Natural Sciences** – a minimum of 6 credit hours is

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required in biology, geology, chemistry, or physics. One course must include a lab component.

- **Arts and Humanities** – a minimum of 6 credit hours is required in art, music, literature, philosophy, humanities, or theatre.
- **Social and Behavioral Sciences** – a minimum of 6 credit hours is required in anthropology, geography, sociology, political science, psychology, economics, or specified history courses.
- **Transfer Module Electives** – additional semester hours based on chosen curriculum, Ohio Guided Pathway Transfer, and/or Ohio Transfer Module using transfer approved courses.

Each of these requirements is detailed in the following sections. Credit hours for each course are in parentheses.

ARTS AND HUMANITIES

Six credit hours are required in Arts and Humanities.

Art

- ARTS 1000 Art Appreciation (3)
- ARTS 2010 Art History I (3)
- ARTS 2020 Art History II (3)
- ARTS 2050 American Art (3)

Humanities

- HUMN 1200 Introduction to Film (3)
- HUMN 1300 Survey of Mythology (3)
- HUMN 2480 Science of Science Fiction (3)
- HUMN 120H Introduction to Film Honors (3)
- HUMN 1500 Introduction to Morality (3)
- HUMN 1510 Introduction to World Religion and Tolerance (3)

Literature

- LITR 2010 Introduction to Fiction (3)
- LITR 2020 Introduction to Poetry (3)
- LITR 2030 Introduction to Drama (3)
- LITR 2040 Introduction to World Literature I (3)
- LITR 2050 Introduction to World Literature II (3)
- LITR 2100 Survey of American Literature I (3)
- LITR 2110 Survey of American Literature II (3)
- LITR 2200 Survey of British Literature I (3)
- LITR 2210 Survey of British Literature II (3)
- LITR 2620 Adolescent Literature (3)
- LITR 2700 Introduction to Shakespeare (3)
- LITR 2720 Survey of Women's Literature (3)

Music

- MUSC 1200 Music Appreciation (3)
- MUSC 1250 Survey of American Music (3)

Philosophy

- PHIL 1010 Introduction to Philosophy (3)
- PHIL 1200 Principles of Reasoning (3)
- PHIL 1300 Introduction to Ethics (3)

Theatre

- THEA 1200 Introduction to the Theatre (3)

COMMUNICATION SKILLS

The student should place an emphasis on written composition. At a minimum, a student must complete English Composition I plus one course from the approved list. Speech (SPCH 1510) may not count as a written communication course but may serve as a Transfer Module elective.

- ENGL 1515 Technical Writing (3)
- ENGL 1510 English Composition I (3)
- ENGL 1520 English Composition II (3)
- ENGL 1530 English Composition III (3)
- SPCH 1510 Speech (3)
- ENGL 151H English Composition I Honors (3)
- ENGL 152H English Composition II Honors (3)

MATHEMATICS

At least one course in mathematics must be taken. Mathematics courses for the Transfer Module build on three years of college preparatory mathematics or the equivalent.

- MATH 2110 Principles of Statistics (3)
- MATH 2120 Trigonometry (3)
- MATH 2130 College Algebra (4)
- MATH 2150 Precalculus (5)
- MATH 2173 Survey of Math I (4)
- MATH 2175 Survey of Math II (3)
- MATH 2250 Elementary Linear Algebra (3)
- MATH 2260 Introduction to Calculus (3)
- MATH 2263 Analytic Geometry and Calculus I (4)
- MATH 2264 Analytic Geometry and Calculus II (4)
- MATH 2265 Analytic Geometry and Calculus III (4)
- MATH 2270 Differential Equations (3)
- MATH 2140 Quantitative Reasoning (3)

Six credits or more should be taken in the natural sciences. One course must be a laboratory course which includes at least one laboratory meeting per week.

NATURAL SCIENCES

Biology

- BIOL 1010 Principles of Biology (3)
- BIOL 101L Principles of Biology Lab (1)
- BIOL 1100 General Biology I (3)
- BIOL 110L General Biology I Lab (1)
- BIOL 1110 General Biology II (3)
- BIOL 111L General Biology II Lab (1)
- BIOL 1310 Anatomy and Physiology I * (2)
- BIOL 131L Anatomy and Physiology I Lab* (1)
- BIOL 1320 Anatomy and Physiology II * (2)
- BIOL 132L Anatomy and Physiology II Lab * (1)
- BIOL 2010 Basic Microbiology (2)
- BIOL 201L Basic Microbiology Lab (1)

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- BIOL 2110 Environmental Biology (3)
- BIOL 211L Environmental Biology Lab (1)
- BIOL 2310 Human Anatomy & Physiology I** (3)
- BIOL 231L Human Anatomy & Physiology I Lab** (1)
- BIOL 2320 Human Anatomy & Physiology II** (3)
- BIOL 232L Human Anatomy & Physiology II Lab** (1)
- BIOL 2600 Introduction to Ecology (3)
- BIOL 260L Introduction to Ecology Lab (1)
- BIOL 110H General Biology I Honors (3)

**This anatomy and physiology series is recommended for non-science majors and students in Practical Nursing.*

***This human anatomy and physiology series is recommended for health and science majors only.*

Chemistry

- CHEM 1210 Principles of Chemistry I* (3)
- CHEM 121L Principles of Chemistry I Lab* (1)
- CHEM 1220 Principles of Chemistry II (3)
- CHEM 122L Principles of Chemistry II Lab* (1)
- CHEM 1510 Fundamentals of Chemistry I** (3)
- CHEM 151L Fundamentals of Chemistry I Lab** (1)
- CHEM 1520 Fundamentals of Chemistry II (3)
- CHEM 152L Fundamentals of Chemistry II Lab (1)

**This principles of chemistry is for technical education students and others pursuing programs requiring only one year of chemistry.*

***This fundamentals of chemistry series is for students planning to pursue a major in biological sciences, chemistry, physics, pre-professional studies, or mechanical and chemical engineering.*

Geology

- GEOL 2310 Environmental Geology (3)
- GEOL 231L Environmental Geology Lab (1)

Physics/Astronomy

- PHYS 1100 Principles of Physical Science I (3)
- PHYS 110L Principles of Physical Science I Lab (1)
- PHYS 1200 Principles of Physical Science II (3)
- PHYS 120L Principles of Physical Science II Lab (1)
- PHYS 1210 Survey of Astronomy (3)
- PHYS 121L Survey of Astronomy Lab (1)
- PHYS 2010 Introduction to Physics I* (3)
- PHYS 201L Introduction to Physics I Lab* (1)
- PHYS 2030 Introduction to Physics II (3)

- PHYS 203L Introduction to Physics II Lab (1)
- PHYS 2510 General Physics I** (4)
- PHYS 251L General Physics I Lab** (1)
- PHYS 2530 General Physics II (4)
- PHYS 253L General Physics II Lab (1)
- PHYS 251H General Physics I Honors (3)

**This introduction to physics series is for arts, humanities, social sciences, and technology majors.*

***This general physics series is for science & engineering majors.*

SOCIAL AND BEHAVIORAL SCIENCE

Six credit hours are required in the social and behavioral sciences.

Economics

- ECON 2120 Principles of Macroeconomics (3)
- ECON 2130 Principles of Microeconomics (3)

Geography

- GEOG 1210 Cultural Geography (3)

History

- HIST 1010 Civilization I Early World Culture (3)
- HIST 1020 Civilization II Early Modern Period (3)
- HIST 2110 American History to 1828 (3)
- HIST 2120 American History 1828 to Present (3)

Political Science

- POLS 1020 American National Government (3)
- POLS 1030 State and Local Government (3)

Psychology

- PSYC 1010 General Psychology (3)
- PSYC 2100 Social Psychology (3)
- PSYC 2320 Abnormal Psychology (3)
- PSYC 2700 Developmental Psychology (3)
- PSYC 2750 Educational Psychology (3)

Sociology

- SOCI 1010 Sociology (3)
- SOCI 2010 Social Problems (3)
- SOCI 2200 Sociology of the Family (3)
- SOCI 2250 The Sociology of Race and Ethnicity in America (3)
- SOCI 101H Introduction to Sociology Honors (3)



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| AUTO 1100 | Vehicle Service & Maintenance | 3 |
| AUTO 1110 | Electronic Circuitry | 3 |
| AUTO 1120 | Automotive Brakes | 3 |
| AUTO 1130 | Electrical Components | 3 |
| ENGL 1510 | English Composition I | 3 |
| BUSM 1710 | Auto/Diesel Business Computer Apps | 3 |
| Credit Hours | | 18 |

SECOND SEMESTER

| | | |
|--------------|-------------------------------|----|
| AUTO 1140 | Automotive Chassis | 3 |
| AUTO 1150 | Manual Drive Trains | 3 |
| AUTO 1160 | Fuel & Emission Controls | 3 |
| AUTO 1170 | Upper Engine Design & Service | 3 |
| ENGL 1515 | Technical Writing | 3 |
| MATH 1104 | Technical Math | 3 |
| Credit Hours | | 18 |

THIRD SEMESTER

| | | |
|--------------|-------------------------------|----|
| AUTO 2100 | Automatic Drive Trains | 3 |
| AUTO 2110 | Computerized Engine Controls | 3 |
| AUTO 2130 | Cylinder Block & Lower Engine | 3 |
| HUMN 1300 | Survey of Mythology | 3 |
| Credit Hours | | 12 |

FOURTH SEMESTER

| | | |
|--------------|--------------------------------|----|
| TRCK 2140 | Practicum AUTO/TRCK | 2 |
| AUTO 2150 | Principles of Air Conditioning | 3 |
| TRCK 2150 | ASE Technician Preparation | 3 |
| POLS 2050 | Global Issues | 3 |
| BUSM 1550 | Business Management | 3 |
| Credit Hours | | 14 |

Total Credit Hours **62**

*Prerequisites are required for some courses.
Evening and/or online courses may be
required to complete this program.*

ASSOCIATE OF APPLIED SCIENCE DEGREE FOR DIRECT EMPLOYMENT

Today's automotive technicians are skilled in all aspects of vehicle service and maintenance, as well as the business operations of current service facilities. Employers in the automotive field are looking for well-trained employees with management, mechanical, and people skills.

Job opportunities in automotive technology include automotive technician, repair and maintenance of natural gas compressor stations and electrical generator sets, service technician, parts manager, service manager, or technical trainer. There are even possibilities in sales for qualified technicians.

Washington State's Automotive Service Excellence (ASE) certified Automotive Service major features a large laboratory for practical, hands-on experience. The entire program is reinforced with business management skills, including the use of the microcomputer in the service and parts area. The program follows the task list in the ASE certification manual. The curriculum leads to the Associate of Applied Science degree.

Graduates of the program will be able to:

- Demonstrate professional work habits such as punctuality, productivity, verbal and written communication skills, cooperation with coworkers and customers, and perform operations in a safe manner.
- Diagnose and repair electrical and mechanical problems using the appropriate service information.
- Diagnose, repair, and rebuild automatic transmissions, manual transmissions, and drive lines with a live chassis dyno.
- Measure engine parts using proper measuring instruments.
- Perform complete brake service, including anti lock brake systems.
- Diagnose and repair steering and suspension problems, including alignment procedures.
- Perform duties of a service writer and service technician.
- Disassemble, inspect, and rebuild gas engines using the appropriate service information.
- Adapt to new technology and pass Student Automotive Service Excellence (ASE) Certification tests.
- Perform duties in a 100-hour practicum experience.

AUTOMOTIVE TECHNOLOGY—DIESEL TRUCK SYSTEMS

FIRST SEMESTER

| | | |
|--------------|------------------------------------|----|
| TRCK 1100 | Introduction to Truck Systems | 3 |
| AUTO 1110 | Electrical Circuitry | 3 |
| TRCK 1120 | Medium & Heavy Brakes | 3 |
| AUTO 1130 | Electrical Components | 3 |
| ENGL 1510 | English Composition I | 3 |
| BUSM 1710 | Auto/Diesel Business Computer Apps | 3 |
| Credit Hours | | 18 |

SECOND SEMESTER

| | | |
|--------------|--------------------------------|----|
| TRCK 1130 | Medium & Heavy Truck Chassis | 3 |
| TRCK 1140 | Diesel Engine Design & Service | 3 |
| AUTO 1170 | Upper Engine Design & Service | 3 |
| ENGL 1515 | Technical Writing | 3 |
| MATH 1104 | Technical Math | 3 |
| BUSM 1550 | Business Management | 3 |
| Credit Hours | | 18 |

THIRD SEMESTER

| | | |
|--------------|-------------------------------------|----|
| TRCK 2100 | Diesel Engine Tune Up & Maintenance | 3 |
| TRCK 2110 | Diesel Fuel Systems & Hydraulics | 3 |
| TRCK 2120 | Diesel Truck Drive Trains | 3 |
| HUMN 1300 | Survey of Mythology | 3 |
| Credit Hours | | 12 |

FOURTH SEMESTER

| | | |
|--------------|--------------------------------|----|
| TRCK 2130 | Electronic Diesel Engines | 3 |
| TRCK 2140 | Practicum TRCK/AUTO | 2 |
| TRCK 2150 | ASE Technician Preparation | 3 |
| AUTO 2150 | Principles of Air Conditioning | 3 |
| POLS 2050 | Global Issues | 3 |
| Credit Hours | | 14 |

Total Credit Hours **62**

*Prerequisites are required for some courses.
Evening and/or online courses may be
required to complete this program.*

ASSOCIATE OF APPLIED SCIENCE DEGREE FOR DIRECT EMPLOYMENT

Today's diesel truck technicians are skilled in all aspects of vehicle service and maintenance as well as the business operations of current service facilities. Employers in the automotive and diesel truck fields are looking for well trained employees with management, mechanical, and people skills.

Job opportunities in diesel technology include diesel technician, field-test technician, repair and maintenance of natural gas compressor stations and electrical generator sets, service technician, parts manager, service manager, or technical trainer. There are even possibilities in sales for qualified technicians.

Washington State's Diesel Truck Systems major features a large laboratory with state-of-the-art equipment for practical, hands-on experience. Successful completion of the diesel truck systems program leads to the Associate of Applied Science degree.

Graduates of the program will be able to:

- Demonstrate professional work habits such as: punctuality, productivity, verbal and written communication skills, cooperation with co-workers and customers, and perform operations in a safe manner.
- Diagnose and repair electrical and mechanical problems using the appropriate service information.
- Diagnose and repair manual transmissions and drive lines.
- Measure engine parts using proper measuring instruments.
- Perform complete brake service, including anti-lock brake systems.
- Diagnose and repair steering and suspension problems.
- Perform duties of a service writer and service technician.
- Disassemble and inspect diesel engines using the appropriate service information.
- Adapt to new technology and pass Student Automotive Service Excellence (ASE) Certification tests.
- Perform duties in a 100 hour practicum experience.



BUSINESS & IT

| | | | |
|---|-----------|---|-----------|
| Accounting Technology | 24 | Business Management Technology..... | 27 |
| Administrative Assistant—Executive | 25 | Cyber Security & Investigation | 28 |
| Administrative Assistant—Medical..... | 26 | Digital Technology—Computer Support Technician ... | 29 |

ACCOUNTING TECHNOLOGY

FIRST SEMESTER

| | | |
|--------------|--------------------------------------|----|
| ACCT 1550 | Introduction to Financial Accounting | 4 |
| ACCT 1610 | Payroll Accounting | 3 |
| BUSM 1550 | Business Management | 3 |
| BUSM 1600 | PC Applications | 3 |
| ENGL 1510 | English Composition I | 3 |
| Credit Hours | | 16 |

SECOND SEMESTER

| | | |
|--------------|-------------------------------|----|
| ACCT 2550 | Advanced Financial Accounting | 4 |
| ACCT 2920 | QuickBooks for Accountants | 3 |
| ADMN 2220 | Microsoft Excel | 3 |
| BUSM 1660 | Business Law | 3 |
| MATH 2110 | Principles of Statistics | 4 |
| Credit Hours | | 17 |

THIRD SEMESTER

| | | |
|--------------|----------------------------------|----|
| ACCT 2210 | Cost Accounting | 4 |
| ACCT 2190 | Principles of Federal Income Tax | 3 |
| ACCT 2710 | Intermediate Accounting | 4 |
| ENGL 1520 | English Composition II or | 3 |
| ENGL 1515 | Technical Writing | |
| PHIL 1300 | Introduction to Ethics | 3 |
| Credit Hours | | 17 |

FOURTH SEMESTER

| | | |
|--------------|------------------------------|----|
| ACCT 2320 | Managerial Accounting | 3 |
| ACCT 2730 | Auditing | 3 |
| ECON 2120 | Principles of Macroeconomics | 3 |
| SPCH 1510 | Speech | 3 |
| Credit Hours | | 12 |

Total Credit Hours 62

*Prerequisites are required for some courses.
Evening and/or online courses may be
required to complete this program.*

ASSOCIATE OF APPLIED BUSINESS DEGREE FOR DIRECT EMPLOYMENT

Accounting ranks as one of the top career opportunities in business.

The Accounting Technology curriculum prepares students for various accounting positions such as:

- Junior Financial Analyst
- Payroll Specialist
- Accounts Receivable/Payable Clerk
- Tax Preparer
- Cost Accounting Clerk
- Staff Accountant

Manual and computerized accounting systems are employed in the study of accounting principles.

The Accounting Technology program is designed to provide a concentration of financial and managerial accounting with related business and computer courses, plus general courses to succeed in the accounting profession or transfer to a four-year college. Successful completion of the program leads to the Associate of Applied Business degree.

Proposed Accounting Program Goals:

- Analyze and record business transactions in appropriate journals and ledgers, preparation of trial balance and worksheets with adjustments and the closing process including reversing entries.
- Prepare and analyze financial statements and other supporting accounting documents to provide stakeholders with usable financial information for decision making.
- Calculate and prepare payroll including all federal- and state-mandated payroll reports and accounting records.
- Utilize the Cost Accounting cycle and the concepts of perpetual and periodic inventory methods, and standard costing to determine manufacturing costs, produce manufacturing-specific financial statements, and aid in managerial accounting decision-making.
- Prepare individual, partnership, and corporate federal income tax returns including common types of income, adjustments, deductions, credits and additional taxes.
- Apply Auditing concepts including internal control, risk, audit trail, sampling, tests of controls and substantive processes to determine potential risk.
- Utilize current accounting software to record, analyze, and report financial data.

ADMINISTRATIVE ASSISTANT—EXECUTIVE*

FIRST SEMESTER

| | | |
|--------------|-----------------------|----|
| ADMN 1300 | Records Management | 3 |
| ADMN 1510 | Document Processing | 3 |
| ADMN 2210 | Microsoft Word | 3 |
| BUSM 1550 | Business Management | 3 |
| ENGL 1510 | English Composition I | 3 |
| Credit Hours | | 15 |

SECOND SEMESTER

| | | |
|--------------|----------------------------------|----|
| ADMN 1520 | Advanced Document Processing | 3 |
| ADMN 1760 | Administrative Office Procedures | 3 |
| ADMN 1810 | Administrative Communications | 3 |
| ADMN 2220 | Microsoft Excel | 3 |
| ADMN 2230 | Visual Presentations | 3 |
| Credit Hours | | 15 |

THIRD SEMESTER

| | | |
|--------------|------------------------|----|
| ADMN 2871 | ADMN Practicum I | 1 |
| ADMN 2881 | ADMN Seminar I | 1 |
| BUSM 1660 | Business Law | 3 |
| DTGR 2120 | Social Media Marketing | 3 |
| MATH 1104 | Technical Math | 3 |
| SPCH 1510 | Speech | 3 |
| Credit Hours | | 14 |

FOURTH SEMESTER

| | | |
|--------------|--------------------------------------|----|
| ACCT 1550 | Introduction to Financial Accounting | 4 |
| ADMN 2872 | ADMN Practicum II | 1 |
| ADMN 2882 | ADMN Seminar II | 1 |
| ADMN 2960 | Administrative Capstone | 3 |
| | Arts & Humanities Elective | 3 |
| POLS 2050 | Global Issues | 3 |
| MKTG 2160 | Advertising | 3 |
| Credit Hours | | 18 |

Total Credit Hours **62**

*Prerequisites are required for some courses.
Evening and/or online courses may be
required to complete this program.*

ASSOCIATE OF APPLIED BUSINESS DEGREE FOR DIRECT EMPLOYMENT

Graduates with the skills and poise to cope with the rapid pace of today's office will find careers as administrative executives, administrative assistants, secretaries, receptionists, word processing specialists, or office managers.

Washington State's Administrative Assistant - Executive Administrative Assistant program emphasizes administrative skills essential to any professional office, with a strong emphasis on current software packages, administrative communications, and records management. Students explore the areas of communication and business law to round out their education.

Practicums provide students the opportunity to gain hands-on experiences with local employers. Students will utilize skills and knowledge to build the bridge from classroom to profession. The office setting emphasizes the importance of an administrative assistant as an integral part of the office team.

Successful completion of the Administrative Assistant program leads to an Associate of Applied Business degree. A certificate in Executive Office Support is available to those who complete a one-year program.

Graduates of the program will be able to:

- Demonstrate skills necessary to secure employment in an executive office environment.
- Create and compile documents which demonstrate proficiency in Microsoft Word, Excel, and PowerPoint.
- Adapt to professional work ethic habits such as: attendance, performance, preparedness, and teamwork.
- Discuss job search skills and techniques necessary for employment in an executive office environment.
- Explain awareness of global/cultural issues as related to today's world.

**Not accepting new students into this program for 2020–2021.*

ADMINISTRATIVE ASSISTANT—MEDICAL

FIRST SEMESTER

| | | |
|--------------|----------------------------------|----|
| ADMN 1510 | Document Processing | 3 |
| ADMN 1810 | Administrative Communications | 3 |
| BIOL 1330 | Survey of Anatomy & Physiology I | 2 |
| ENGL 1510 | English Composition I | 3 |
| HLTH 1810 | Medical Terminology | 2 |
| Credit Hours | | 13 |

SECOND SEMESTER

| | | |
|--------------|-----------------------------------|----|
| ADMN 1330 | Medical Office Procedures | 3 |
| ADMN 2210 | Microsoft Word | 3 |
| ADMN 2230 | Visual Presentations | 3 |
| BIOL 1340 | Survey of Anatomy & Physiology II | 2 |
| BUSM 1550 | Business Management | 3 |
| MATH 1104 | Technical Math | 3 |
| Credit Hours | | 17 |

THIRD SEMESTER

| | | |
|--------------|-----------------------------|----|
| ADMN 2220 | Microsoft Excel | 3 |
| ADMN 2871 | ADMN Practicum I | 1 |
| ADMN 2881 | ADMN Seminar I | 1 |
| BUSM 1660 | Business Law | 3 |
| HLTH 1350 | ICD-CM-Coding | 3 |
| HLTH 2310 | Principles of Reimbursement | 3 |
| Credit Hours | | 14 |

FOURTH SEMESTER

| | | |
|--------------|-------------------------|----|
| ADMN 2872 | ADMN Practicum II | 1 |
| ADMN 2882 | ADMN Seminar II | 1 |
| ADMN 2960 | Administrative Capstone | 3 |
| DTGR 2120 | Social Media Marketing | 3 |
| HLTH 1340 | CPT Coding | 3 |
| POLS 2050 | Global Issues | 3 |
| SPCH 1510 | Speech | 3 |
| Credit Hours | | 17 |

Total Credit Hours **61**

*Prerequisites are required for some courses.
Evening courses may be required to
complete this program.*

ASSOCIATE OF APPLIED BUSINESS DEGREE FOR DIRECT EMPLOYMENT

The administrative assistant in a medical setting requires special understanding of medical terminology, medical office procedures, coding, and electronic health records. Emphasis is also placed on current software packages. Program graduates will find careers in a wide variety of medical settings including: physicians' offices, hospitals, rest homes, emergency care facilities, and clinics.

Practicums provide students the opportunity to gain hands-on experiences with local employers. Students will utilize skills and knowledge to build the bridge from classroom to profession. The office setting emphasizes the importance of an administrative assistant as an integral part of the office team.

The Medical Administrative Assistant curriculum leads to the Associate of Applied Business degree. A certificate in Medical Coding is also available to those who complete a one-year program. Consult an advisor for curriculum requirements.

Graduates of the program will be able to:

- Demonstrate skills necessary to secure employment in a medical office environment.
- Create and compile documents which demonstrate proficiency in Microsoft Word and Excel.
- Create and compile a variety of medical documents which include medical terminology, and coding.
- Adapt to professional work ethic habits such as: attendance, performance, preparedness, and teamwork.
- Discuss job search skills and techniques necessary for employment in a medical office environment.
- Explain awareness of global/cultural issues as related to today's world.

BUSINESS MANAGEMENT TECHNOLOGY

FIRST SEMESTER

| | | |
|--------------|------------------------|----|
| ENGL 1510 | English Composition I | 3 |
| BUSM 1550 | Business Management | 3 |
| MKTG 2130 | Sales | 3 |
| BUSM 1600 | PC Applications | 3 |
| PHIL 1300 | Introduction to Ethics | 3 |
| Credit Hours | | 15 |

SECOND SEMESTER

| | | |
|--------------|---------------------------|----|
| PSYC 1010 | General Psychology | 3 |
| BUSM 1660 | Business Law | 3 |
| BUSM 2560 | Human Resource Management | 3 |
| MKTG 2510 | Marketing or | 3 |
| DTGR 2120 | Social Media Marketing | 3 |
| ENGL 1515 | Technical Writing | 3 |
| MATH 2110 | Principles of Statistics | 4 |
| Credit Hours | | 19 |

THIRD SEMESTER

| | | |
|--------------|--------------------------------------|----|
| BUSM 1570 | Small Business Entrepreneurship | 3 |
| ADMN 2220 | Microsoft Excel | 3 |
| ECON 2120 | Principles of Macroeconomics | 3 |
| ACCT 1550 | Introduction to Financial Accounting | 4 |
| MKTG 2160 | Advertising | 3 |
| Credit Hours | | 16 |

FOURTH SEMESTER

| | | |
|--------------|------------------------------|----|
| BUSM 2610 | Business Capstone or | 3 |
| BUSM 1000 | Internship | 3 |
| BUSM 2300 | Introduction to Finance | 3 |
| BUSM 2750 | International Business | 3 |
| SPCH 1510 | Speech | 3 |
| ECON 2130 | Principles of Microeconomics | 3 |
| Credit Hours | | 15 |

Total Credit Hours **65**

*Prerequisites are required for some courses.
Evening and/or online courses may be
required to complete this program.*

ASSOCIATE OF APPLIED BUSINESS DEGREE FOR DIRECT EMPLOYMENT

In business today, the effective manager understands all phases of the company's operation and elicits the performance needed to maintain the organization. In short, managers are key to the survival and growth of business. There are a large number of career opportunities in business management, for the qualified individual. College graduates are prime candidates for management training programs and jobs that lead to middle management.

Washington State Community College's Business Management Technology program provides students with a general business background. They receive instruction in all phases of business operations, including: management, communication, economics, entrepreneurship, business law, marketing, finance, international business and accounting. The curriculum leads to the Associate of Applied Business Degree. The Business Management courses are offered in a variety of formats - day, night, and online.

Graduates of the program will be able to:

- Demonstrate technologies basic to the field of business management including:
 - Management
 - Accounting
 - Computer applications
 - Quantitative methods of analysis
 - Principles of economics
 - Marketing
 - Entrepreneurship
 - Finance
 - Business ethics
- Know applicable federal and state laws.
- Demonstrate, through role play, the ability to take the text and lecture information and apply it to management areas: job selection, interview, discipline, and discharge.
- Write and produce product advertisements and advertisements for company job openings.
- Gather, organize, interpret, write, and present research on a current topic related to marketing.
- Be aware of the importance of confidentiality that is necessary for the field of management.
- Demonstrate effective written, oral, and nonverbal communication with employees, coworkers, and the public.
- Think independently, clarify values, understand fundamental theory, and develop critical thinking skills.
- Interact with coworkers, subordinates, and customers in a manner that provides the desired psychological and social support including the recognition of cultural and socioeconomic differences.
- Demonstrate awareness in the importance of international understanding in an increasingly interdependent global community.

CYBER SECURITY & INVESTIGATION

FIRST SEMESTER

| | | |
|--------------|--|----|
| CYBS 1020 | Operating Systems & Computing Fundamentals | 3 |
| CYBS 1010 | Introduction to Cyber Security | 3 |
| CYBS 1030 | Fundamentals of Hacking & IT Psychology | 3 |
| CRJU 1120 | Criminal Law | 3 |
| ENGL 1510 | English Composition I | 3 |
| Credit Hours | | 15 |

SECOND SEMESTER

| | | |
|--------------|-------------------------------------|----|
| CYBS 1210 | A+ Hardware and Software | 3 |
| CYBS 1220 | Unix/Linux | 3 |
| CYBS 1230 | Network+ | 3 |
| CYBS 1240 | Ethical Protocols of Cyber Security | 3 |
| MATH 1104 | Technical Math | 3 |
| Credit Hours | | 15 |

THIRD SEMESTER

| | | |
|--------------|------------------------------|----|
| ELEC 1950 | Cisco I | 3 |
| DTCS 2100 | Database Management | 3 |
| CRJU 1110 | Criminal Evidence & Protocol | 3 |
| PSYC 1010 | General Psychology | 3 |
| | Arts & Humanities Elective | 3 |
| Credit Hours | | 15 |

FOURTH SEMESTER

| | | |
|--------------|--|----|
| CYBS 2100 | Tactical Perimeter Defense in Cyber Security | 3 |
| ELEC 2050 | Cisco II | 3 |
| CYBS 2800 | Cyber Security Practicum and Capstone | 4 |
| SPCH 1510 | Speech | 3 |
| SOCI 1010 | Introduction to Sociology | 3 |
| Credit Hours | | 16 |

Total Credit Hours **61**

*Prerequisites are required for some courses.
Evening and/or online courses may be
required to complete this program.*

ASSOCIATE OF APPLIED SCIENCE

The Associate of Technical Studies in Cyber Security combines the education and skills training of both criminal investigation and computer support technology to prepare students for entry-level positions in cyber security and investigations, computer network infrastructure and security, managing networks and operating systems, and IT criminal investigation.

The core course work required in the computer support curriculum includes work with operating systems, such as Windows 7, Windows 10, Windows Server 2012, and 2016, Linux, and the Cisco IOS. Students work with networking hardware including copper and fiber optic media, switches, routers, firewalls, and wireless access points. Additional course work directly relates to the Cisco Academy, network security, and computer forensics.

The computer support course work is enhanced by select criminal justice course work in criminal investigation, criminal evidence and procedures, criminal law, and computer forensics training.

Washington State's Cyber Security program features practical hands-on learning in computer diagnostics and networking. These team-based lab exercises will put your skills to work out in the field during practicum or internship assignments.

The goal of this program is to prepare students for entry-level positions in the cybersecurity and information technology fields. Throughout this program, students are encouraged to utilize their knowledge and skills to prepare for the CompTIA A+, CompTIA Network+, CompTIA Linux+, CompTIA Security+, CompTIA Server+, CompTIA PenTest+, and the Cisco Certified Network Associate (CCNA) certifications. Furthermore, students will be able to obtain the IT Fundamentals, PC Professional, Networking Professional, Linux Professional, Security Professional, and Ethical Hacker Professional TestOut certifications during the duration of the program.

Successful completion of the cyber security curriculum leads to an Associate of Technical Studies for pursuit of direct employment or advanced degree studies. The program can be completed in four (4) semesters. High School students in College Tech Prep may complete the program in less time if they have taken equivalent courses.

***Employment of computer and information technology occupations is projected to grow 13 percent from 2016 to 2026, faster than the average for all occupations. These occupations are projected to add about 557,100 new jobs. Demand for these workers will stem from greater emphasis on cloud computing, the collection and storage of big data, and information security.**
Bureau of Labor Statistics, U.S. Department of Labor, on the Internet at <https://www.bls.gov/ooh/computer-and-information-technology/home.htm>

DIGITAL TECHNOLOGY—COMPUTER SUPPORT

FIRST SEMESTER

| | | |
|--------------|----------------------------|----|
| BUSM 1600 | PC Applications | 3 |
| DTCS 1230 | OS Concepts & Customizing | 3 |
| DTCS 2650 | Internet & Web Page Design | 3 |
| ENGL 1510 | English Composition I | 3 |
| DTWP 1200 | Programming Logic | 3 |
| Credit Hours | | 15 |

SECOND SEMESTER

| | | |
|--------------|--------------------------------------|-------|
| ELEC 2410 | Microcomputer Diagnostic Upgrading I | 3 |
| ELEC 1950 | CISCO Semester I—Intro to Networks | 3 |
| MATH 1104 | Technical Math or | 3 |
| MATH 2130 | College Algebra | 4 |
| | Arts & Humanities Elective | 3 |
| BUSM 1660 | Business Law | 3 |
| Credit Hours | | 15–16 |

THIRD SEMESTER

| | | |
|--------------|--|----|
| ELEC 2050 | CISCO Semester II—Routing & Switching Essentials | 3 |
| ELEC 2510 | Microcomputer Diagnostic & Upgrading II | 3 |
| DTCS 2100 | Database Management | 3 |
| ENGL 1520 | English Composition II | 3 |
| SPCH 1510 | Speech or | 3 |
| SPCH 2060 | Interpersonal Communication | |
| Credit Hours | | 15 |

FOURTH SEMESTER

| | | |
|--------------|--|-------|
| DTCS 2550 | Network Administration | 3 |
| ELEC 2610 | Introduction to Linux | 3 |
| ELEC 2450 | Network Security Concepts | 3 |
| POLS 2050 | Global Issues | 3 |
| DTCS 2810 | Capstone Seminar: Computer Support Technician | 1 |
| DTCS 2800 | Computer Repair & Diagnostic Practicum or | 3 |
| DTCS 1005 | Digital Technology Computer Support Internship | 1–3 |
| Credit Hours | | 14–16 |

Total Credit Hours **60–62**

Prerequisites are required for some courses. Evening and/or online courses may be required to complete this program.

ASSOCIATE OF APPLIED BUSINESS DEGREE FOR DIRECT EMPLOYMENT

Do you enjoy working on computers? Are you the “go to” person all your friends and family turn to for help with their computers and home networks? The Computer Support Technician major is your chance to perfect these skills, pursue your interests in working with technology, and begin a new career.

Successful completion of the Computer Support Technician program leads to the Associate of Applied Business degree and prepares the graduate to obtain employment as a PC support technician, a network support technician, or network administrator. Course work prepares students to take the CompTIA A+, Network+, Linux+, and Security+ certification exams, and the Cisco CCENT certification exam.

Computer Support Technician majors complete a 315 hour practicum site placement. Students gain experience working in their chosen field while being mentored by a local IT professional. Internship placements may also be available.

The Computer Support Technician major has articulation agreements with well known colleges and universities to seamlessly allow students to earn a Bachelor’s Degree.

Graduates of the program will be able to:

- Demonstrate effective written, oral, and nonverbal communication with employers, coworkers, and the public.
- Think independently, understand fundamental PC and networking theory and implementation, and develop critical thinking and problem solving skills.
- Prepare for CompTIA A+, Network+, Security +, and Cisco CCENT certification exams.
- Interact with clients and customers in a manner that indicates recognition of cultural, religious, and socioeconomic differences.
- Demonstrate understanding and application of the technologies basic to the field of PC and network support including:
 - Microsoft Office applications
 - Web page design/development
 - Computer diagnostics and upgrading
 - PC operating systems
 - Various network operating systems
 - Network administration
 - Network cabling
 - Network hardware
 - Basic network security

ENGINEERING & INDUSTRIAL



| | | | |
|--|-----------|---|-----------|
| Electrical Engineering Technology (ICE) | 31 | Industrial Technology - Welding. | 34 |
| Industrial Technology | 32 | Robotics & Mechatronics. | 35 |
| Industrial Technology - Process Technician (Online) . . . | 33 | | |

ELECTRICAL ENGINEERING TECHNOLOGY (ICE) INSTRUMENTATION, CONTROL, and ELECTRICAL

FIRST SEMESTER

| | | |
|--------------|-----------------------------|----|
| ELET 1110 | DC Circuits | 3 |
| ELET 1310 | Digital I | 4 |
| ENGR 1010 | Fundamentals of Engineering | 3 |
| MECH 2150 | Instrumentation I | 3 |
| ENGL 1510 | English Composition I | 3 |
| Credit Hours | | 16 |

SECOND SEMESTER

| | | |
|--------------|----------------------------|----|
| ELET 1130 | AC Circuits | 3 |
| ELET 1330 | Digital II | 3 |
| MATH 1104 | Technical Math | 3 |
| MECH 2170 | Instrumentation II | 3 |
| ELET 1360 | Commercial Wiring & Prints | 2 |
| Credit Hours | | 14 |

THIRD SEMESTER

| | | |
|--------------|----------------------------------|----|
| ELET 2210 | Electronics I | 4 |
| ELET 2410 | Programmable Logic Controllers I | 3 |
| ELET 2110 | Rotating Machinery | 3 |
| SPCH 2060 | Interpersonal Communication | 3 |
| POLS 2050 | Global Issues | 3 |
| Credit Hours | | 16 |

FOURTH SEMESTER

| | | |
|--------------|---------------------------|----|
| DRFT 1430 | Advanced CAD | 3 |
| PHYS 1010 | Applied Physics | 2 |
| PHYS 101L | Applied Physics Lab | 1 |
| ELET 2230 | Electronics II | 3 |
| ELET 2130 | Motor Control | 2 |
| MECH 1230 | Hydraulics and Pneumatics | 3 |
| ELET 1000 | Internship | 1 |
| Credit Hours | | 15 |

Total Credit Hours **61**

*Prerequisites are required for some courses.
Evening and/or online courses may be
required to complete this program.*

ASSOCIATE OF APPLIED SCIENCE DEGREE FOR DIRECT EMPLOYMENT

The EET ICE Program

- To design, operate and maintain power and control systems, employers need electrical engineering technicians.
- Persons with an Associate of Applied Science degree in Electrical Engineering Technology, Instrumentation, Control, and Electrical Major, (EET ICE), find careers in instrumentation, power plant operation, quality control, electrical maintenance, and electronic troubleshooting.
- Washington State's EET program prepares students for entry-level positions, to install, operate, or service electrical equipment in the manufacturing, power, polymer, metallurgical, oil & gas, and other industries.
- The job market is wide open for the technician with dedication and initiative!

Graduates of the EET/ICE program will be able to:

- Apply circuit analysis methods to solve D.C. and A.C. networks.
- Use multi meters and oscilloscopes to measure various D.C. and A.C. circuit parameters.
- Design and troubleshoot basic analog and digital electronic devices and circuits.
- Design, test, install, and troubleshoot single phase and three phase motor control circuits.
- Determine A.C. single phase and three phase line characteristics (voltages, current, average, apparent, and reactive power).
- Read, and interpret piping and instrumentation diagrams (P&IDs).
- Read, and create on CAD, the major types of electrical drawings and schematics.
- Describe the major process control instruments and explain their operation.
- Explain the concepts of process dynamics and feedback control.
- Tune simple control loops and document actions and results.
- Set up an instrument calibration and complete a five-point check.
- Apply computer software including word processing, spreadsheet, and presentation applications.
- Produce and present both oral and written technical reports.
- Work and brainstorm in a team environment.
- Appreciate the similarities and differences pertaining to the values and characteristics of various cultures.

INDUSTRIAL TECHNOLOGY

FIRST SEMESTER

| | | |
|--------------|-----------------------------|----|
| ENGR 1010 | Fundamentals of Engineering | 3 |
| INDT 1150 | Machining Processes | 3 |
| INDT 1170 | Computer Numerical Control | 3 |
| INDT 1220 | OSHA Safety or | 2 |
| INDT 1210 | Industrial Safety | |
| INDT 1100 | Industrial Maintenance | 3 |
| WELD 1250 | SMAW I | 3 |
| Credit Hours | | 17 |

SECOND SEMESTER

| | | |
|--------------|------------------------|----|
| DRFT 2530 | Engineering Drafting | 3 |
| ENGL 1510 | English Composition | 3 |
| INDT 1330 | Industrial Electricity | 2 |
| MATH 1104 | Technical Math | 3 |
| WELD 1260 | GMAW I | 3 |
| Credit Hours | | 14 |

THIRD SEMESTER

| | | |
|--------------|--------------------------------|----|
| ELET 2410 | Programmable Logic Controllers | 3 |
| ENGL 1515 | Technical Writing | 3 |
| MECH 2150 | Instrumentation I | 3 |
| PHYS 1010 | Applied Physics | 2 |
| PHYS 101L | Applied Physics Lab | 1 |
| SPCH 1510 | Speech or | 3 |
| SPCH 2060 | Interpersonal Communication | |
| WELD 1260 | GMAW I | 3 |
| Credit Hours | | 18 |

FOURTH SEMESTER

| | | |
|--------------|------------------------------|----|
| INDT 2180 | Manufacturing Processes | 3 |
| INDT 2280 | Management & Supervision | 3 |
| ENGR 2800 | Engineering Capstone Seminar | 3 |
| INDT 1340 | Team Concepts & Practices | 3 |
| POLS 1020 | American National Government | 3 |
| Credit Hours | | 15 |

Total Credit Hours **64**

*Prerequisites are required for some courses.
Evening and/or online courses may be
required to complete this program.*

ASSOCIATE OF APPLIED SCIENCE DEGREE FOR DIRECT EMPLOYMENT

This two-year Industrial Technology program is designed to provide local industries with job applicants who have a solid science background, good problem solving skills, and specific training related to manufacturing. This is the enterprise concerned with converting raw materials into finished products. It also includes classes with up-to-date technology for the worker that is trying to upgrade his/her skills for advancement on the job.

With a mix of "hands-on" and theory classes, this curriculum prepares graduates to work with engineering and production personnel. Team problem solving skills, communication skills, and computer competencies make the industrial technology graduate highly competitive in today's job market.

The Industrial Technology associate degree provides students with a strong foundation of technical skills preparing them for in-demand careers. Graduates report that the mix of classes they took prepared them for the workplace and contributed to their success. Job placement rates are high and salaries reported are above average. Successful completion of the industrial technology program leads to the Associate of Applied Science degree.

Graduates of the program will be able to:

- Follow prescribed strategies to recognize technical problems, identify direct causes, and make corrections when they are indicated.
- Perform appropriate mathematical functions and apply them to technical projects.
- Be accomplished with the use of industrial computerized numerical control (CNC) equipment.
- Apply basic scientific principles in learning new techniques and procedures.
- Utilize a variety of communication skills (verbal, written and graphics) to communicate effectively.
- Work effectively with engineering and production personnel in the operation of a manufacturing facility.
- Work in a team environment to develop a collective hypothesis on the causes and solutions to problems.
- Demonstrate computer literacy and use word processing and presentation applications.

INDUSTRIAL TECHNOLOGY—PROCESS TECHNICIAN (ONLINE)

FIRST SEMESTER

| | | |
|--------------|----------------------------|----|
| INDT 1010 | Intro to Chemical Operator | 3 |
| INDT 1210 | Industrial Safety/Hazmat | 2 |
| INDT 2210 | Process Control | 4 |
| CHEM 1200 | Chemistry Concepts | 3 |
| MATH 1104 | Technical Mathematics | 3 |
| Credit Hours | | 15 |

SECOND SEMESTER

| | | |
|--------------|-----------------------------|----|
| INDT 1340 | Team Concepts and Practices | 3 |
| INDT 1330 | Industrial Electricity | 2 |
| ENGL 1510 | English Composition I | 3 |
| MECH 1100 | Engineering Materials | 4 |
| ELET 2410 | Programmable Logic Controls | 3 |
| PHYS 1010 | Applied Physics | 2 |
| PHYS 101L | Applied Physics Lab | 1 |
| Credit Hours | | 18 |

THIRD SEMESTER

| | | |
|--------------|-------------------------|----|
| INDT 2300 | Process Troubleshooting | 3 |
| BUSM 1600 | PC Applications | 3 |
| POLS 2050 | Global Issues | 3 |
| SPCH 1510 | Speech | 3 |
| Credit Hours | | 12 |

FOURTH SEMESTER

| | | |
|--------------|------------------------------|----|
| INDT 2180 | Manufacturing Processes | 3 |
| INDT 2280 | Management & Supervision | 3 |
| ENGR 2800 | Engineering Capstone Seminar | 3 |
| ENGL 1515 | Technical Writing | 3 |
| HUMN 1500 | Introduction to Morality | 3 |
| Credit Hours | | 15 |

Total Credit Hours **60**

*Prerequisites are required for some courses.
Evening and/or online courses may be
required to complete this program.*

ASSOCIATE OF APPLIED SCIENCE DEGREE FOR DIRECT EMPLOYMENT

If using science, engineering and mathematics to solve technical problems sounds exciting, then Washington State's Process Technician program might be the right option for you. This program, designed in conjunction with local industries, will provide you with the skills and education needed to be considered for employment. Training on up-to-date computers with the latest software, and training on modern machine tools, will help you succeed in the workplace.

Process technicians inspect and maintain equipment, take samples, record, troubleshoot problems and analyze products on a routine basis, as well as maintain regulatory and environmental standards. Chemical operators work in control rooms to monitor and maintain the safe manufacture of all kinds of products. Plants may use batch and/or the continuous manufacture process. Process technicians and chemical operators may find jobs in many industries including, but not limited to: plastics, pharmaceutical, petroleum, paint, electrical power plants, cosmetics, etc.

Successful completion of the Process Technician program leads to an Associate of Applied Science degree. A Chemical Operator one-year certificate is also available through a two-semester program. All courses are offered online.

Graduates of the program will be able to:

- Work effectively with engineering and production personnel in the operation of a chemical plant.
- Work in a team environment to develop a collective hypothesis on the causes of problems and meet project deadlines.
- Assist in the design and implementation of a comprehensive Safety Program.
- Be computer literate and accomplished on word processing and PowerPoint programs to produce technical reports and present results.

INDUSTRIAL TECHNOLOGY—WELDING

FIRST SEMESTER

| | | |
|--------------|---------------------------------------|----|
| ENGL 1510 | English Composition I | 3 |
| WELD 1220 | OSHA Safety | 2 |
| WELD 1230 | Introduction Welding Safety & Cutting | 3 |
| WELD 1240 | Basic Oxy/Acetylene Cutting & Welding | 3 |
| WELD 1250 | SMAW I | 3 |
| WELD 1260 | GMAW I | 3 |
| Credit Hours | | 17 |

SECOND SEMESTER

| | | |
|--------------|-------------------|----|
| BUSM 1600 | PC Applications | 3 |
| ENGL 1515 | Technical Writing | 3 |
| MATH 1104 | Technical Math | 3 |
| WELD 1251 | SMAW II | 3 |
| WELD 1270 | FCAW I | 3 |
| WELD 2250 | GTAW I | 3 |
| Credit Hours | | 18 |

THIRD SEMESTER

| | | |
|--------------|-------------------|----|
| DRFT 1510 | Design Drafting | 3 |
| PHYS — | Physics Elective | 3 |
| WELD 1231 | Metal Fabrication | 3 |
| WELD 1261 | GMAW II | 3 |
| WELD 1271 | FCAW II | 3 |
| Credit Hours | | 15 |

FOURTH SEMESTER

| | | |
|--------------|------------------------------------|----|
| SPCH 1510 | Speech or | 3 |
| SPCH 2060 | Interpersonal Communication | |
| — | Social/Behavioral Science Elective | 3 |
| WELD 2241 | Weld Inspection Practices | 3 |
| WELD 2260 | Pipe & V-Groove Welding | 3 |
| WELD 2261 | Downhill Pipe Welding | 3 |
| Credit Hours | | 15 |

Total Credit Hours **65**

*Prerequisites are required for some courses.
Evening and/or online courses may be
required to complete this program.*

ASSOCIATE OF APPLIED SCIENCE DEGREE FOR DIRECT EMPLOYMENT

This two-year Welding program is designed to provide local companies with job applicants who have a solid welding background, SMAW, GTAW, GMAW, and FCAW training as well as other advanced welding on plate and pipe. The students complete the OSHA 30-hour construction industry training as part of the program.

The Welding Associates Degree provides a suitable facility where students can demonstrate the skills and techniques involved with becoming a competent welder.

Graduates of the program will be able to:

- Work effectively with others and possess the knowledge and skill level as defined by American Welding Society QC-10, QC-11, ASME Section IX, API 1104 and AWS D1.1.
- Utilize a variety of foundation skills such as reading, writing, math, communication, science and computation.
- Demonstrate a fundamental understanding of layout and fit-up practices, joint design and preparation material selection, and weld symbol interpretation.
- Set up SMAW, GMAW, GTAW, and FCAW equipment and perform all position fillet and groove welds on plate and pipe.
- Engage in safe work practices and promote safety in the work environment through completion of OSHA 30 certification.
- Pass workmanship or performance qualification welding tests with multiple welding processes.
- Attain certificate leading to AWS Level I Entry Level Welder and AWS Level II Advanced Welder.

ROBOTICS & MECHATRONICS TECHNOLOGY

FIRST SEMESTER

| | | |
|--------------|-----------------------------|----|
| ENGR 1010 | Fund Engineering | 3 |
| ENGL 1510 | English Comp I | 3 |
| INDT 1150 | Machining Processes | 3 |
| INDT 1170 | Computer Numerical Controls | 3 |
| ROBT 1500 | Robotics I | 3 |
| Credit Hours | | 15 |

SECOND SEMESTER

| | | |
|--------------|---------------------------|----|
| MECH 1230 | Hydraulics and Pneumatics | 3 |
| MATH 1104 | Technical Math | 3 |
| INDT 1330 | Industrial Electricity | 2 |
| DRFT 2530 | Engineering Drafting | 3 |
| MECH 1100 | Engineering Materials | 4 |
| Credit Hours | | 15 |

THIRD SEMESTER

| | | |
|--------------|-------------------------------|----|
| ENGR 2210 | Statics | 4 |
| INDT 1100 | Industrial Maintenance | 2 |
| MECH 2150 | Instrumentation I | 3 |
| PHYS 2010 | Introduction to Physics I | 3 |
| PHYS 201L | Introduction to Physics I Lab | 1 |
| ROBT 2500 | Robotics II | 3 |
| Credit Hours | | 16 |

FOURTH SEMESTER

| | | |
|--------------|--------------------------------|----|
| SPCH 1510 | Speech | 3 |
| MECH 1000 | Internship or | 2 |
| ROBT 2800 | Robotics Capstone Seminar | |
| POLS 1020 | American National Government | 3 |
| ELET 2110 | Rotating Machinery | 3 |
| ELET 2410 | Programmable Logic Controllers | 3 |
| Credit Hours | | 14 |

Total Credit Hours 60

*Prerequisites are required for some courses.
Evening and/or online courses may be
required to complete this program.*

ASSOCIATE OF APPLIED SCIENCE DEGREE FOR DIRECT EMPLOYMENT

WSCC's robotics/mechatronics/industrial/electrical classes will produce skilled students ready for work. It is our main goal to improve the local economy by building a skilled workforce and partnering with local industries to put qualified workers in automated and advanced manufacturing jobs. The WSCC Robotics and Mechatronics program will train students on the same equipment and machines used in industry allowing exposure and hands-on education to help ensure employment in local industries.

Field trips to local industries related to engineering will also be incorporated so students can picture a career in their chosen field of study.

Students will become versed in mechanical, electrical and computer engineering, otherwise known as mechatronics. These 3 fields of study play an ever-increasing role in today's technology related to almost every aspect of everyday life.

Graduates of the program will be able to:

- Visualize and construct 3D models and assemblies using computer-aided design software (CAD) and print prototypes and final parts.
- Use advanced computer-controlled technology for process control and robot simulation.
- Program and operate industrial robots.
- Prepare and interpret mechanical drawings using AutoCAD and SolidWorks.
- Solve structural engineering problems.
- Understand and operate CAM software to program CNC machines.

HEALTH



| | | | |
|---|-----------|--|-----------|
| Health and Wellness Technology | 38 | Nursing - Practical Nursing Evening | 44 |
| Massage Therapy | 39 | Physical Therapist Assistant Technology | 45 |
| Medical Laboratory Technology | 40 | Radiologic Technology | 46 |
| Nursing - Associate Degree Nursing | 41 | Respiratory Therapy Technology | 47 |
| Nursing - Practical Nursing Day | 43 | | |

ADMISSIONS REQUIREMENTS

Because of the accreditation and licensing requirements and limited enrollment capacities, admission to health science programs at Washington State Community College is on a selective basis. Prospective students are encouraged to review all admissions requirements to the program they are interested in and apply early for acceptance.

Always contact the Admissions Office at 740.568.1900 for the most up-to-date and detailed information for applying to WSCC Health Sciences programs.

PROGRAM ACCREDITATIONS

The Medical Laboratory Technology program is fully accredited by:

National Accrediting Agency
for Clinical Laboratory Sciences
(NAACLS)
5600 N. River Road
Suite 720
Rosemont, IL 60018-5119
PHONE: 773.714.8880

The Radiologic Technology program is fully accredited by:

Joint Review Committee on
Education in Radiologic
Technology
(JRCERT)
20 North Wacker Drive
Suite 2850
Chicago, IL 60606-3182
PHONE: 312.704.5300
mail@jrcert.org
www.jrcert.org

The Respiratory Therapy Technology program is fully accredited by:

Commission on Accreditation for
Respiratory Care
PO Box 54876
Hurst, TX 76054-4876
PHONE: 817.283.2835
www.coarc.com
WSCC Program Data:
www.coarc.com/Students/
Programmatic-Outcome-Data.aspx

The Physical Therapist Assistant Technology program is fully accredited by:

Commission on Accreditation
in Physical Therapy Education
(CAPTE)
1111 North Fairfax Street
Alexandria, VA 22314
PHONE: 703.706.3245
www.captionline.org

The Associate Degree Nursing program has been granted full approval by:

Ohio Board of Nursing
17 South High Street, Suite 660
Columbus, OH 43215-3466
PHONE: 614.466.3947

The Practical Nursing Program has been granted full approval by:

Ohio Board of Nursing
17 South High Street, Suite 660
Columbus, OH 43215-3466
PHONE: 614.466.3947

The Massage Therapy program is recognized by the State of Ohio and a "school of good standing" with the Ohio Medical Board.

Ohio State Medical Board
30 East Broad St., 3rd Floor
Columbus, OH 43215
PHONE: 614.466.3934

HEALTH & WELLNESS TECHNOLOGY

FIRST SEMESTER

| | | |
|--------------|--|-------|
| ENGL 1510 | English Composition I | 3 |
| _____ | Natural Science I (Options BIOL131/1360/2310) | 3–4 |
| PSYC 1010 | General Psychology | 3 |
| _____ | Major Concentration Elective | 3 |
| _____ | Major Concentration Elective | 3 |
| Credit Hours | | 15–16 |

SECOND SEMESTER

| | | |
|--------------|---|-------|
| _____ | English Composition Elective | 3 |
| _____ | Natural Science II (Options BIOL1320/2320) | 3–4 |
| MATH 1104 | Technical Math or | 3 |
| MATH 2110 | Principles of Statistics or | 4 |
| MATH 2130 | College Algebra | 4 |
| _____ | Major Concentration Elective | 3 |
| _____ | Major Concentration Elective | 3 |
| _____ | Major Concentration Elective | 3 |
| Credit Hours | | 18–19 |

THIRD SEMESTER

| | | |
|--------------|------------------------------|----|
| SPCH 1510 | Speech or | 3 |
| SPCH 2060 | Interpersonal Communication | |
| _____ | Major Concentration Elective | 3 |
| _____ | Major Concentration Elective | 3 |
| _____ | Major Concentration Elective | 3 |
| _____ | Natural Science | 3 |
| Credit Hours | | 15 |

FOURTH SEMESTER

| | | |
|--------------|------------------------------|----|
| BUSM 1600 | PC Applications | 3 |
| _____ | Major Concentration Elective | 3 |
| _____ | Major Concentration Elective | 3 |
| _____ | Major Concentration Elective | 3 |
| _____ | Arts & Humanities Elective | 3 |
| Credit Hours | | 15 |

Total Credit Hours **63–65**

*Prerequisites are required for some courses.
Evening courses may be required to
complete this program.*

ASSOCIATE OF APPLIED SCIENCE DEGREE FOR DIRECT EMPLOYMENT

The Health and Wellness Technology program provides a broad knowledge in health and wellness and its effects on health, first aid and emergency procedures, as well as a specialization in one or more health care skills.

Students are required to select one or more specialization areas (Fitness & Exercise, Massage Therapy, Nursing, Radiologic Technology, Respiratory Therapy, Physical Therapist Assistant, Medical Laboratory Technology) in addition to the general education and health major courses.

Many of the specialization areas have national certification or state licensure. Students who complete these specialization area requirements will be eligible to sit for the appropriate certification or licensure examination. Successful completion of the Health and Wellness Technology program leads to an Associate of Applied Science degree.

Graduates of the program will be able to:

- Demonstrate knowledge of the structure and function of the human body.
- Use appropriate medical terminology.
- Describe how nutrients are utilized by the body for proper body functioning.
- Provide first aid and CPR for injuries or sudden illness.
- Demonstrate a knowledge of basic computer functions and applications.
- Use various forms of communication more effectively as a communicator and an observer.
- Use appropriate and effective problem-solving tools.
- Think critically by evaluating information from multiple perspectives, drawing reasonable conclusions, and defending them rationally.
- Show competency in a selected area of specialization.

MASSAGE THERAPY

FIRST SEMESTER

| | | |
|--------------|--|----|
| BIOL 1360 | Anatomy & Physiology I for Massage Therapists or | 4 |
| BIOL 2310 | Human Anatomy & Physiology I | 3 |
| BIOL 231L | Human Anatomy & Physiology I Lab | 1 |
| HLTH 1120 | First Aid & Personal Safety | 2 |
| HLTH 1515 | Myology & Kinesiology | 4 |
| HLTH 1510 | Massage Techniques I | 3 |
| HLTH 2850 | Building an Ethical Massage Therapy Practice | 2 |
| HLTH 1520 | Massage Techniques II | 3 |
| Credit Hours | | 18 |

SECOND SEMESTER

| | | |
|--------------|---|----|
| BIOL 1370 | Anatomy & Physiology II for Massage Therapists | 3 |
| BIOL 137L | Anatomy & Physiology II for Massage Therapists Lab or | 1 |
| BIOL 2320 | Human Anatomy & Physiology II | 3 |
| BIOL 232L | Human Anatomy & Physiology II Lab | 1 |
| BIOL 2450 | Pathophysiology or | 3 |
| HLTH 1420 | Introduction to Human Disease | |
| HLTH 1516 | Business for Massage Therapists | 2 |
| HLTH 2480 | Orthopedic Assessment & Documentation | 3 |
| HLTH 2550 | Massage Therapy Directed Practice I | 2 |
| Credit Hours | | 14 |

THIRD SEMESTER

| | | |
|--------------|--------------------------------------|---|
| BIOL 1380 | Advanced Anatomy & Kinesiology | 4 |
| HLTH 2560 | Massage Therapy Directed Practice II | 2 |
| HLTH 2800 | Massage Therapy Seminar | 2 |
| Credit Hours | | 8 |

Total Credit Hours 40

*Prerequisites are required for some courses.
Evening courses may be required to complete this program.*

ONE-YEAR FULL-TIME CERTIFICATE FOR DIRECT EMPLOYMENT

Massage Therapy is a one-year, three semester education program. All of the courses listed in the curriculum must be successfully completed in order to earn a Massage Therapy certificate and to be eligible to take the Massage & Bodywork Licensing Examination (MBLEx).

Graduation and passing the test will then allow the student to apply for an Ohio, and/or West Virginia license. Massage therapists licensed in Ohio are able to practice in accordance with the Ohio Medical Board rules and regulations for massage therapists.

The Massage Therapy program is in good standing with the Ohio Medical Board. For gainful employment disclosure information, go online to www.wscc.edu/academics/certificates

Graduates of the program will be able to:

- Provide safe, competent, intentional and systematic manipulation of the soft tissues of the human body to treat disorders as deemed in the Ohio Practice Act for Massage Therapy, and to promote a more holistic, rounded approach to wellness.
- Demonstrate appropriate and effective written, verbal and non-verbal communication, which will reflect your sensitivity to your patient's individual and cultural differences.
- Perform data collection techniques including health history, observation and palpation of soft tissues of the human body, to provide a basis for soft tissue mobilization of the human body.
- Demonstrate personal and professional development, reflecting competencies and conduct expectations as outlined by the American Massage Therapy Association (AMTA) and the Ohio Medical Board's Code of Ethics.

MEDICAL LABORATORY TECHNOLOGY

FIRST SEMESTER

| | | |
|--------------|----------------------------------|----|
| BIOL 1100 | General Biology I | 3 |
| BIOL 110L | General Biology I Lab or | 1 |
| BIOL 2310 | Human Anatomy & Physiology I | |
| BIOL 231L | Human Anatomy & Physiology I Lab | |
| CHEM 1510 | Fundamentals of Chemistry I | 3 |
| CHEM 151L | Fundamentals of Chemistry I Lab | 1 |
| MMLT 1010 | MLT Orientation | 2 |
| MMLT 1210 | Urinalysis & Body Fluid Analysis | 2 |
| MMLT 1310 | Hematology I | 3 |
| Credit Hours | | 15 |

SECOND SEMESTER

| | | |
|--------------|-----------------------------------|----|
| BIOL 1110 | General Biology II | 3 |
| BIOL 111L | General Biology II Lab or | 1 |
| BIOL 2320 | Human Anatomy & Physiology II | |
| BIOL 232L | Human Anatomy & Physiology II Lab | |
| CHEM 1520 | Fundamentals of Chemistry II | 3 |
| CHEM 152L | Fundamentals of Chemistry II Lab | 1 |
| MMLT 1320 | Hematology II | 2 |
| MMLT 1510 | Diagnostic Microbiology | 5 |
| Credit Hours | | 15 |

THIRD SEMESTER

| | | |
|--------------|------------------------------------|----|
| ENGL 1510 | English Composition I | 3 |
| MMLT 1410 | Immunology and Serology | 3 |
| MMLT 1420 | Immunohematology | 3 |
| | Social/Behavioral Science Elective | 3 |
| Credit Hours | | 12 |

FOURTH SEMESTER

| | | |
|--------------|------------------------------|----|
| HUMN 1200 | Introduction to Film | 3 |
| MATH 2110 | Principles of Statistics | 4 |
| MMLT 1610 | Clinical Chemistry | 4 |
| MMLT 2210 | Instrumentation & Lab Skills | 2 |
| Credit Hours | | 13 |

FIFTH SEMESTER

| | | |
|--------------|-----------------------------|----|
| MMLT 2310 | MLT Seminar | 1 |
| MMLT 2410 | MLT Directed Practice | 6 |
| SPCH 1510 | Speech or | 3 |
| SPCH 2060 | Interpersonal Communication | |
| Credit Hours | | 10 |

Total Credit Hours **65**

*Prerequisites are required for some courses.
Evening courses may be required to
complete this program.*

ASSOCIATE OF APPLIED SCIENCE DEGREE FOR DIRECT EMPLOYMENT

Graduates of the Medical Laboratory Technology (MLT) program are eligible to take the American Society for Clinical Pathology (ASCP) Board of Certification examination. They find careers in hospital laboratories, clinics, independent labs, industrial and environmental labs, and with manufacturers of medical and laboratory products.

The MLT program will prepare entry-level medical laboratory technicians who have the ability to provide accurate results of diagnostic laboratory tests in accordance with established laboratory procedures and professional standards of practice.

The program curriculum leads to the Associate of Applied Science degree. The Medical Laboratory Technology program is fully accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), which can be contacted at 5600 North River Road, Suite 720, Rosemont, IL 60018, phone number 773.714.8880.

Graduates of the program will be able to:

- Apply their knowledge in laboratory medicine to real-life situations.
- Completely perform diagnostic laboratory tests according to established procedures.
- Accept and react appropriately to the responsibilities of their profession.
- Effectively use various forms of communication with patients, laboratory personnel, other health care professionals, and with the public.
- Think critically as demonstrated by evaluating information from multiple perspectives, drawing reasonable conclusions, and defending them rationally.
- Behave in a manner which reflects positively upon their profession.

NURSING—ASSOCIATE DEGREE NURSING

FIRST SEMESTER

| | | |
|--------------|-------------------------------------|----|
| BIOL 2310 | Human Anatomy & Physiology I | 3 |
| BIOL 231L | Human Anatomy & Physiology I Lab | 1 |
| ENGL 1510 | English Composition I | 3 |
| NADN 1100 | Introduction to Nursing | 1 |
| NADN 1110 | Foundations of Med/Surgical Nursing | 4 |
| NADN 1115 | Foundations of Clinical NP | 2 |
| PSYC 1010 | General Psychology | 3 |
| Credit Hours | | 17 |

SECOND SEMESTER

| | | |
|--------------|-----------------------------------|----|
| BIOL 2320 | Human Anatomy & Physiology II | 3 |
| BIOL 232L | Human Anatomy & Physiology II Lab | 1 |
| NADN 2120 | Applying NP Across the Lifespan | 8 |
| NADN 2150 | NP in Pharmacology | 3 |
| PSYC 2700 | Developmental Psychology | 3 |
| Credit Hours | | 18 |

THIRD SEMESTER

| | | |
|--------------|--|-----|
| NADN 2240 | Applying NP Patterns of Emotional Distress | 3 |
| NADN 2320 | Applying NP Mat-Newborn Clients | 3.5 |
| Credit Hours | | 6.5 |

FOURTH SEMESTER

| | | |
|--------------|-----------------------------|----|
| BIOL 1510 | Introduction to Nutrition | 3 |
| MATH 2130 | College Algebra or | 4 |
| MATH 2110 | Principles of Statistics | |
| NADN 2350 | Applying NP Complex Clients | 7 |
| Credit Hours | | 14 |

FIFTH SEMESTER

| | | |
|--------------|-------------------------------|-----|
| NADN 2330 | Applying NP Pediatric Clients | 3.5 |
| NADN 2400 | Applying NP Groups & Clients | 5 |
| Credit Hours | | 8.5 |

Total Credit Hours **64**

*Prerequisites are required for some courses.
Evening courses may be required to complete this program.*

ASSOCIATE OF APPLIED SCIENCE DEGREE FOR DIRECT EMPLOYMENT

After earning the Associate of Applied Science degree, graduates are eligible to take the National Council Licensure Examination for Registered Nurses (NCLEX-RN), which can lead to licensure as a registered nurse (RN). Once licensed, graduates may practice in a wide variety of nursing positions. The Associate Degree Nursing program provides an excellent foundation for a Bachelor of Science in Nursing degree.

Associate Degree Nursing program graduates are known for their competence and caring in providing safe, effective nursing services in a variety of health care settings. Students value their small classes, highly-prepared faculty, and strong preparation in the sciences. The program also provides a rich variety of clinical settings, including acute care hospitals, long-term care facilities, clinics or selected community health settings.

The capstone (preceptor) clinical experience is designed to ease the transition in juggling the multiple responsibilities of a registered nurse, and involves final semester students pairing with a registered nurse in clinical practice.

The program may be completed in four semesters by licensed practical nurses (LPN) who have met all advanced placement requirements*, or in five semesters for traditional students. All students have the option of completing most non-nursing courses prior to admission to the program, in consultation with their pre-ADN program advisor.

EDUCATION AND ADVANCEMENT TO REGISTERED NURSE (EARN)

EARN is a nursing pathway to help students transition through the Practical Nursing and Associate Degree Nursing programs while working in healthcare. EARN students will have the advantage of a dedicated faculty success coach who will provide tutoring and mentoring throughout the entire program.

The EARN pathway may be completed in 7 semesters. The first 2 semesters allow the student to concentrate on completing all general education courses needed for the nursing cohorts. The student will then concentrate their studies on 2 semesters (32 weeks) of practical nursing curriculum. All of the courses in the licensed practical

Continued on next page.

NURSING—ASSOCIATE DEGREE NURSING (CONT.)

nursing program must be successfully completed in order to earn the practical nursing certificate and to be eligible to take the licensing exam. After successfully passing the NCLEX-PN, graduates will complete 3 semesters of associate degree nursing curriculum, to earn an Associate of Applied Science Degree in Nursing (ADN).

The Associate Degree Nursing program operates under full approval of the Ohio Board of Nursing, 17 South High Street, Suite 400, Columbus Ohio, 43215, phone number 614.466.3947.

Graduates of the program will be able to:

- Utilizing the nursing process, incorporate health patterns to promote, maintain, and restore client health.
- Make decisions concerning nursing care based upon client values, as well as cultural and spiritual beliefs.
- Demonstrate legal and ethical accountability for nursing care given by self and/or delegated to others.
- Exercise clinical judgment, using evidence-based practice, to integrate increasingly complex knowledge, skills, and technologies as they relate to the client.
- Use critical thinking to prioritize nursing interventions.
- Plan and deliver nursing care to a group of clients in collaboration with another registered nurse.
- Demonstrate caring behavior towards the client, families, significant others, support person(s), peers, and other members of the health care team.
- Apply principles of therapeutic communication to develop effective relationships with clients, peers, families, others, and agencies within the community.
- Develop, implement, evaluate, and modify teaching plans that are specific to the client's level of development, knowledge, learning needs, and resources.
- Practice nursing within the parameters of individual knowledge and experience, while enlarging practice with continuing education and discovery learning.
- Utilize the role of the nurse as manager of nursing care, including delegating aspects of client care to assistive personnel.
- Serve as a positive role model within health care settings and the community at large.
- Participate in life long learning to enhance professional development.
- Utilize awareness of global patterns of illness and related implications in promoting, maintaining and restoring clients' health.

NURSING—PRACTICAL NURSING DAY

ONE-YEAR FULL TIME DAY CERTIFICATE FOR DIRECT EMPLOYMENT

The health care industry is growing, and along with it is the need for qualified Practical Nurses. Whether in a hospital, extended care facility, or home health, employers look for skilled, compassionate people to handle one of the most important aspects of client care – bedside nursing. As a Practical Nurse, your primary role will be bedside nursing, as well as assisting physicians and Registered Nurses in client care. You are an important part of the health care team and your skills have a direct effect on the client's health and well-being.

During the program, your studies will include both classroom and clinical experiences. Your classroom instruction will be enhanced by concurrent clinical experiences at Marietta Memorial Hospital, Selby General Hospital, and Harmar Place Rehabilitation & Extended Care and will culminate with a preceptorship as the student is paired with a nurse in the clinical setting. You will also gain experience through observational time at nursery schools, and physicians' offices. Upon successful completion of the program, the graduate will be eligible to sit for the National Council Licensure Examination for Practical Nurses (NCLEX-PN) and become a licensed nurse.

The Practical Nursing - Day education curriculum is a 12-month, full-time day course of study. All of the courses listed in the curriculum must be successfully completed in order to earn the practical nursing certificate and to be eligible to take the licensing examination. After successfully passing the NCLEX-PN, graduates of Washington State's Practical Nursing education program may consider enrolling in an Associate of Applied Science degree in Nursing (ADN) program. For gainful employment disclosure information, go online to www.wscc.edu/academics/certificates/

The Practical Nursing education program is fully approved by the Ohio Board of Nursing and accredited by the Commission on Institutions of Higher Education of the North Central Association of Colleges and Schools.

For gainful employment disclosure information, go online to www.wscc.edu/academics/certificates

Graduates of the program will be able to:

- Recognize optimal health and normal function for self and individuals across the lifespan, practicing and teaching this knowledge to family and community members.
- Collect and record objective and subjective data.
- Perform basic nursing skills with dexterity, competency, insight and safety.
- Develop communication and listening skills which can assist clients across the lifespan to cope with problems which affect health and rehabilitation.
- Contribute to the evaluation of the effectiveness of nursing actions and to establishing a new nursing approach as needed.
- Communicate effectively with clients and co-workers both orally and in writing.
- Develop skills which promote appropriate interpersonal relationships, effective communication and mental health.

FIRST SEMESTER

| | | |
|--------------|-----------------------------------|----|
| BIOL 2550 | Nutrition I or | 3 |
| BIOL 1510 | Introduction to Nutrition | |
| ENGL 1510 | English Composition I | 3 |
| NPNT 1610 | Introduction to Practical Nursing | 2 |
| NPNT 1720 | Pharmacology I | 1 |
| PSYC 1010 | General Psychology | 3 |
| Credit Hours | | 12 |

SECOND SEMESTER

| | | |
|--------------|----------------------------------|-------|
| BIOL 1310** | Anatomy & Physiology I | 2-3 |
| BIOL 131L** | Anatomy & Physiology I Lab or | 1 |
| BIOL 2310** | Human Anatomy & Physiology I | |
| BIOL 231L** | Human Anatomy & Physiology I Lab | |
| NPNT 1410 | Nursing Fundamentals | 6 |
| NPNT 1620 | Practical Nursing I | 3 |
| NPNT 1730 | Pharmacology II | 3 |
| Credit Hours | | 15-16 |

THIRD SEMESTER

| | | |
|--------------|--|-------|
| BIOL 1320** | Anatomy & Physiology II | 2-3 |
| BIOL 132L** | Anatomy & Physiology II Lab or | 1 |
| BIOL 2320** | Human Anatomy & Physiology II | |
| BIOL 232L** | Human Anatomy & Physiology II Lab | |
| NPNT 1420 | Nursing Fundamentals II | 5 |
| NPNT 1510 | PN Trends & Ethics | 2 |
| NPNT 1630 | Practical Nursing II | 3 |
| NPNT 1910 | Maternal Child Health | 5 |
| NPNT 2240 | Apply Nurs Process of Emotional Distress | 3 |
| Credit Hours | | 21-22 |

Total Credit Hours

48-50

****Must take BIOL 1310/131L & BIOL 1320/132L OR BIOL 2310/231L & BIOL 2320/232L**

Prerequisites are required for some courses. Evening courses may be required to complete this program.

- Develop an appreciation for the dignity and integrity of human beings which leads to respect for the individuality of the client and other health team members.
- Demonstrate a code of behavior based on ethical principles and an understanding of the legal scope for the practical nurse.
- Demonstrate motivation to learn through involvement in assignments, participation in conferences, and self evaluation.

NURSING—PRACTICAL NURSING EVENING

FIRST SEMESTER

| | | |
|--------------|-----------------------------------|------|
| BIOL 1310** | Anatomy & Physiology I | 2-3 |
| BIOL 131L** | Anatomy & Physiology I Lab or | 1 |
| BIOL 2310** | Human Anatomy & Physiology I | |
| BIOL 231L** | Human Anatomy & Physiology I Lab | |
| NPNT 1610 | Introduction to Practical Nursing | 2 |
| BIOL 1510 | Introduction to Nutrition or | 3 |
| BIOL 2550 | Nutrition | |
| NPNT 1720 | Pharmacology I | 1 |
| Credit Hours | | 9-10 |

SECOND SEMESTER

| | | |
|--------------|-----------------------------------|------|
| BIOL 1320** | Anatomy & Physiology II | 2-3 |
| BIOL 132L** | Anatomy & Physiology II Lab or | 1 |
| BIOL 2320** | Human Anatomy & Physiology II | |
| BIOL 232L** | Human Anatomy & Physiology II Lab | |
| NPNT 1620 | Practical Nursing I | 3 |
| NPNT 1730 | Pharmacology II | 3 |
| Credit Hours | | 9-10 |

THIRD SEMESTER

| | | |
|--------------|--------------------|---|
| PSYC 1010 | General Psychology | 3 |
| Credit Hours | | 3 |

FOURTH SEMESTER

| | | |
|--------------|------------------------|----|
| ENGL 1510 | English Composition I | 3 |
| NPNT 1410 | Nursing Fundamentals I | 6 |
| NPNT 1630 | Practical Nursing II | 3 |
| Credit Hours | | 12 |

FIFTH SEMESTER

| | | |
|--------------|-------------------------|----|
| NPNT 1420 | Nursing Fundamentals II | 5 |
| NPNT 1910 | Maternal Child Health | 5 |
| Credit Hours | | 10 |

SIXTH SEMESTER

| | | |
|--------------|---|---|
| NPNT 1510 | PN Trends & Ethics | 2 |
| NPNT 2240 | Apply Nurs Patterns in Emotional Distress | 3 |
| Credit Hours | | 5 |

Total Credit Hours **48-51**

***Must take BIOL 1310/131L & BIOL 1320/132L OR BIOL 2310/231L & BIOL 2320/232L
Prerequisites are required for some courses. Evening courses may be required to complete this program.*

TWO-YEAR PART-TIME EVENING CERTIFICATE FOR DIRECT EMPLOYMENT

The health care industry is growing, and along with it is the need for qualified Practical Nurses. Whether in a hospital, extended care facility, or home health, employers look for skilled, compassionate people to handle one of the most important aspects of client care – bedside nursing. As a Practical Nurse, your primary role will be bedside nursing, as well as assisting physicians and Registered Nurses in client care. You are an important part of the health care team and your skills have a direct effect on the client's health and well-being.

During the program, your studies will include both classroom and clinical experiences. Your classroom instruction will be enhanced by concurrent clinical experiences at Marietta Memorial Hospital, Selby General Hospital, and Harmar Place Rehabilitation & Extended Care, and will culminate with a preceptorship as the student is paired with a nurse in the clinical setting. You will also gain experience through observational time at nursery schools, and physicians' offices. Upon successful completion of the program, the graduate will be eligible to sit for the National Council Licensure Examination for Practical Nurses (NCLEX-PN) and become a licensed nurse.

The Practical Nursing - Evening education curriculum is a 24-month, part-time evening course of study. All of the courses listed in the curriculum must be successfully completed in order to earn the practical nursing certificate, and to be eligible to take the licensing examination. After successfully passing the NCLEX-PN, graduates of Washington State's Practical Nursing education program may consider enrolling in an Associate of Applied Science degree in nursing (ADN) program. For gainful employment disclosure information, go online to www.wscc.edu/academics/certificates.

The Practical Nursing education program is fully approved by the Ohio Board of Nursing and accredited by the Commission on Institutions of Higher Education of the North Central Association of Colleges and Schools.

PHYSICAL THERAPIST ASSISTANT TECHNOLOGY

FIRST SEMESTER

| | | |
|--------------|----------------------------------|----|
| BIOL 2310 | Human Anatomy & Physiology I | 3 |
| BIOL 231L | Human Anatomy & Physiology I Lab | 1 |
| ENGL 1510 | English Composition I | 3 |
| HLTH 1810 | Medical Terminology | 2 |
| MATH 2110 | Principles of Statistics or | 4 |
| MATH 2130 | College Algebra | |
| PTAT 1010 | Introduction to Physical Therapy | 2 |
| Credit Hours | | 15 |

SECOND SEMESTER

| | | |
|--------------|-----------------------------------|----|
| BIOL 2320 | Human Anatomy & Physiology II | 3 |
| BIOL 232L | Human Anatomy & Physiology II Lab | 1 |
| PSYC 1010 | General Psychology | 3 |
| PTAT 2210 | Physical Therapy Procedures | 4 |
| PTAT 2400 | Functional Anatomy & Kinesiology | 4 |
| Credit Hours | | 15 |

THIRD SEMESTER

| | | |
|--------------|--|----|
| BIOL 2450 | Pathophysiology or | 3 |
| HLTH 1420 | Introduction to Human Disease | |
| PSYC 2700 | Developmental Psychology | 3 |
| PTAT 2250 | Introduction to Clinical Setting | 2 |
| PTAT 2320 | Prins & Apps of Therapeutic Exercise I | 2 |
| Credit Hours | | 10 |

FOURTH SEMESTER

| | | |
|--------------|---|----|
| PTAT 2340 | Prins & Apps of Therapeutic Exercise II | 3 |
| PTAT 2460 | Directed Practice I | 3 |
| PTAT 2470 | PTA Seminar | 1 |
| PTAT 2420 | Neurological Conditions in PT I | 2 |
| PTAT 2520 | Geriatric Conditions in PT I | 2 |
| PTAT 2610 | Advanced Rehab Concepts in PT I | 2 |
| Credit Hours | | 13 |

FIFTH SEMESTER

| | | |
|--------------|----------------------------------|----|
| PTAT 2440 | Neurological Conditions in PT II | 2 |
| PTAT 2720 | Pediatric Conditions in PT | 2 |
| PTAT 2660 | Advanced Rehab Concepts in PT II | 2 |
| PTAT 2820 | Directed Practice II | 4 |
| PTAT 2900 | PTA Capstone | 2 |
| Credit Hours | | 12 |

Total Credit Hours **65**

*Prerequisites are required for some courses.
Evening courses may be required to complete this program.*

ASSOCIATE OF APPLIED SCIENCE DEGREE FOR DIRECT EMPLOYMENT

Physical therapist assistants are specially trained health care professionals who contribute to the welfare of patients under the supervision of a licensed physical therapist. While under this supervision, physical therapist assistants (PTAs) assist with pain relieving modalities, therapeutic exercise, and assist in the daily assessment of a patient's progress. PTAs interact daily with not only patients and patients' families, but also with other professionals including, but not limited to, physicians, nurses, and respiratory therapists.

Excellent communication skills are essential to becoming a successful physical therapist assistant. Having the desire to help people regain their previous function as well as having empathy for their conditions are characteristics that will allow one to succeed in this profession. Further, these characteristics will provide job satisfaction and ensure a long career as a physical therapist assistant.

The two-year Physical Therapist Assistant (PTA) program at Washington State begins each fall and consists of five consecutive semesters of study. Students complete the program in May of their second year, with successful completion leading to an Associate of Applied Science Degree. Graduates of the program must sit for the National Board Exam. If the student decides to work in Ohio, a state law exam also must be taken to be eligible for employment.

The Physical Therapist Assistant program at Washington State Community College is accredited by the Commission of Accreditation in Physical Therapy Education (CAPTE), 1111 North Fairfax Street, Alexandria, WV 22314; phone number: 703.706.3245; e-mail: accreditation@apta.org; website: www.capteonline.org. Currently, most states require licensure and the student must have graduated from a CAPTE accredited program to be eligible to sit for the board exam.

Graduates of the program will be able to:

- Gain written and verbal communication skills.
- Utilize skills, through practice, to perform the following:
 - Ultrasound
 - Hot pack, cold pack application
 - Electrical stimulation
 - Traction
 - Ultraviolet light and laser
 - Whirlpool and wound care
 - Intermittent compression
- Gain gait training skills and use of assistive ambulation devices.
- Know joint range of motion and manual muscle testing.
- Understand physiologic conditions associated with certain populations.
- Understand neurological and musculoskeletal dysfunctions.
- Gain detailed knowledge of anatomy.
- Utilize critical thinking skills.

RADIOLOGIC TECHNOLOGY

FIRST SEMESTER

| | | |
|--------------|----------------------------------|----|
| BIOL 2310 | Human Anatomy & Physiology I | 3 |
| BIOL 231L | Human Anatomy & Physiology I Lab | 1 |
| HLTH 1810 | Medical Terminology I | 2 |
| RADT 1010 | Intro to Rad Tech Procedures I | 2 |
| RADT 1110 | Radiographic Exposure I | 3 |
| RADT 1310 | Applied Radiography I | 2 |
| Credit Hours | | 13 |

SECOND SEMESTER

| | | |
|--------------|-----------------------------------|----|
| BIOL 2320 | Human Anatomy & Physiology II | 3 |
| BIOL 232L | Human Anatomy & Physiology II Lab | 1 |
| RADT 1120 | Radiographic Exposure II | 3 |
| RADT 1220 | Radiographic Procedures II | 3 |
| RADT 1320 | Applied Radiography II | 2 |
| Credit Hours | | 12 |

THIRD SEMESTER

| | | |
|--------------|-----------------------------|---|
| MATH 1104 | Technical Math | 3 |
| RADT 1330 | Applied Radiography III | 2 |
| RADT 1230 | Radiographic Procedures III | 2 |
| Credit Hours | | 7 |

FOURTH SEMESTER

| | | |
|--------------|----------------------------|----|
| ENGL 1510 | English Composition I | 3 |
| RADT 2170 | Radiographic Physics | 4 |
| RADT 2190 | Special Procedures/Imaging | 2 |
| RADT 2310 | Applied Radiography IV | 3 |
| Credit Hours | | 12 |

FIFTH SEMESTER

| | | |
|--------------|------------------------------------|----|
| ENGL 1515 | Technical Writing | 3 |
| RADT 2320 | Applied Radiography V | 3 |
| RADT 2510 | Radiobiology/Rad. Prot./Pathology | 3 |
| SPCH 2060 | Interpersonal Communication | 3 |
| | Social/Behavioral Science Elective | 3 |
| Credit Hours | | 15 |

SIXTH SEMESTER

| | | |
|--------------|------------------------|---|
| RADT 2330 | Applied Radiography VI | 3 |
| RADT 2420 | Selected Topics | 3 |
| Credit Hours | | 6 |

Total Credit Hours **65**

*Prerequisites are required for some courses.
Evening courses may be required to
complete this program.*

ASSOCIATE OF APPLIED SCIENCE DEGREE FOR DIRECT EMPLOYMENT

In articulation with Marietta Memorial Hospital's School of Radiologic Technology, Washington State offers an Associate of Applied Science degree in radiologic technology. The School of Radiologic Technology is sponsored by Marietta Memorial Hospital and holds accreditation with the Joint Review Committee on Education in Radiologic Technology (J.R.C.E.R.T.). To contact J.R.C.E.R.T., write to 20 N. Wacker Drive, Suite 2850, Chicago IL 60606-3182, phone number 312.704.5300, or email: mail@jrcert.org, or visit their website at www.jrcert.org.

Radiologic Technology program graduates earn a certificate award from the sponsoring institution (Marietta Memorial Hospital) and the Associate of Applied Science degree concurrently during the two year program.

Graduates are eligible to sit for the American Registry of Radiologic Technology's (ARRT) national certification exam, and possess the knowledge and skills to enter the profession. Students in radiologic technology will be fully admitted to the college, and entitled to participate in all activities of the college with equal access to all college services. Admission to the program is selective, with student selection to the program made in March.

Graduates of the program will be able to:

- Apply positioning skills.
- Select technical factors.
- Utilize radiation protection.
- Demonstrate written and oral communication skills.
- Adapt standard procedures for non-routine patients.
- Critique images to determine diagnostic quality.
- Demonstrate work ethics.
- Demonstrate "Soft Skills."

RESPIRATORY THERAPY TECHNOLOGY

FIRST SEMESTER

| | | |
|-----------|------------------------------------|---|
| BIOL 1310 | Anatomy & Physiology I | 2 |
| BIOL 131L | Anatomy & Physiology I Lab | 1 |
| BIOL 1320 | Anatomy & Physiology II | 2 |
| BIOL 132L | Anatomy & Physiology II Lab | 1 |
| ENGL 1510 | English Composition I | 3 |
| HLTH 1020 | Basic Health Science | 2 |
| MATH 1050 | Math for Health Science | 2 |
| | Social/Behavioral Science Elective | 3 |

Credit Hours 16

SECOND SEMESTER

| | | |
|-----------|---|---|
| RESP 1100 | Introduction to Respiratory Care | 2 |
| RESP 1210 | Cardiopulmonary Pharmacology | 2 |
| RESP 1250 | Medical Gas Administration & Therapeutics | 4 |
| RESP 1330 | Cardiopulmonary Anatomy & Physiology | 2 |
| RESP 1350 | Clinical Practice I | 1 |
| ENGL 1515 | Technical Writing | 3 |

Credit Hours 14

THIRD SEMESTER

| | | |
|-----------|--------------------------------------|---|
| HLTH 2400 | EKG/Cardiovascular Technician | 2 |
| RESP 2450 | Clinical Practice II | 1 |
| RESP 2500 | Respiratory Critical Care I | 2 |
| RESP 2610 | Respiratory Pediatrics & Neonatology | 2 |

Credit Hours 7

FOURTH SEMESTER

| | | |
|-----------|---|---|
| MATH 1101 | Respiratory Math | 1 |
| RESP 1360 | Adv. Cardiopulmonary Resuscitation | 1 |
| RESP 2510 | Cardiopulmonary Pathology I | 3 |
| RESP 2550 | Clinical Practice III | 2 |
| RESP 2600 | Respiratory Critical Care II | 3 |
| RESP 2620 | Respiratory Pediatrics & Neonatology II | 2 |
| BIOL 2010 | Basic Microbiology | 2 |
| BIOL 201L | Basic Microbiology Lab | 1 |
| RESP 2460 | Arterial Blood Gases | 1 |

Credit Hours 16

FIFTH SEMESTER

| | | |
|-----------|-------------------------------------|---|
| RESP 2520 | Cardiopulmonary Pathology II | 1 |
| RESP 2700 | Assessment of Pul. Functions | 2 |
| RESP 2730 | Pulmonary Rehab & Subspecialties | 2 |
| RESP 2750 | Clinical Practice IV | 2 |
| RESP 2800 | Cardiology & Hemodynamic Monitoring | 2 |
| RESP 2850 | Polysomnography (elective) | 2 |
| RESP 2990 | Respiratory Capstone | 3 |

Credit Hours 12

Total Credit Hours 65

Prerequisites are required for some courses. Evening courses may be required to complete this program.

PREREQUISITES ("C" OR HIGHER)

| | | |
|--------------------------|-----------------------------|---|
| HIGH SCHOOL CHEMISTRY OR | | |
| CHEM 0955 | Basic Chemistry | 3 |
| CHEM 095L | Basic Chemistry Lab | 1 |
| HIGH SCHOOL BIOLOGY OR | | |
| BIOL 0955 | Introduction to Biology | 3 |
| BIOL 095L | Introduction to Biology Lab | 1 |
| HIGH SCHOOL ALGEBRA OR | | |
| EQUIVALENT OR HIGHER | | |

ASSOCIATE OF APPLIED SCIENCE DEGREE FOR DIRECT EMPLOYMENT

Respiratory therapists are an important part of the health care team. Their crucial role in treating and caring for a variety of cardiopulmonary illnesses continues to become more specialized and technical, while demand for their services is increasing. Respiratory therapists perform important life support functions, in consultation with physicians.

The Respiratory Therapy program, (CoArc #200436), awards a two-year Associate of Applied Science from Washington State Community College, 710 Colegate Drive, Marietta, OH, 45750, and is accredited by the Commission on Accreditation for Respiratory Care (www.coarc.com), PO Box 54876, Hurst, TX 76054-4876, Ph. # (817) 283-2835. For program outcome data: www.coarc.com/Students/Programmatic-Outcome-Data.aspx

Upon successful completion of the program, graduates are eligible for the "Entry" level Therapist Multiple Choice (TMC) exam. The "Entry" level exam has two "cut scores". If the student passes the lower "cut score", they will be a Certified Respiratory Therapist (CRT). If they achieve the higher "cut score", they will also be eligible to take the Registry Clinical Simulation Exam. If they pass the second exam, they will be a Registered Respiratory Therapist (RRT).

The program goal is to graduate competent advanced-level Respiratory Therapists as demonstrated by their 1. Professional behavior, 2. Knowledge and 3. Clinical skills.

Continued on next page.

RESPIRATORY THERAPY TECHNOLOGY (CONT.)

Graduates of the program will be able to:

- Communicate with patients, physicians, and health care workers.
- Continue as an independent learner.
- Demonstrate knowledge of Respiratory Therapy management.
- Demonstrate a knowledge of human behavior, value systems, ethics & Cultural awareness.
- Demonstrate the knowledge of the fundamentals of cardiopulmonary Anatomy & physiology and pathology and the use of critical thinking.
- Demonstrate the knowledge of respiratory therapy and problem solving in Respiratory Therapy.
- Demonstrate a knowledge and understanding of the following procedures and demonstrate clinical skills with the ability to assess patients' response to therapy, which includes, but is not limited to the following procedures: Medical gas therapy, Humidification therapy, Deep breathing and other hyperinflation therapy, Aerosol therapy, Medications, Coughing techniques and other bronchopulmonary hygiene, Cardiopulmonary resuscitation and Advance Life Support Therapy, Airway management, Heart and lung function, Blood gas analysis, Mechanical ventilation management, Other vital physiological monitoring.

Clinical Sites:

Arbors at Marietta; Camden Clark Medical Center; Genesis Health Care Systems; Jackson General; Marietta Memorial Hospitals—Marietta, Selby & Belpre; Medical Services Company; Nationwide Children's Hospital Rainbow Babies, Cleveland; Southeastern Ohio Regional Medical Center

Employment Opportunities

- Work with all ages, from newborns to geriatric patients
- Routine care, critical care, intensive care, or emergency department settings
- Work in Hospitals, Skilled Nursing Facilities, Medical Sales (DME), Nursing Homes, Home Care, and Sleep Labs
- Other employment opportunities: Sub-specialties, including exercise testing, pulmonary rehabilitation, pulmonary function tests, sleep studies and assisting physicians with procedures—such as bronchoscopies.

Rob Kinker, Ph.D., RRT - *Respiratory Therapy Director*; email: rkinker@wscc.edu

Kathy Baker, BA, RRT, CPFT, ACCS - *Director Clinical Education*

Dr. McKinley, MD - Medical Director



LAW & PUBLIC SAFETY

| | | | |
|---|-----------|---|-----------|
| Chemical Dependency | 50 | Criminal Justice—Peace Officer Basic Academy | 52 |
| Criminal Justice Technology..... | 51 | Social Services Technology | 53 |

CHEMICAL DEPENDENCY COUNSELING

FIRST SEMESTER

| | | |
|--------------|---------------------------------------|----|
| SOSV 1005 | First Year Experience Seminar | 1 |
| SOSV 1110 | Introduction to Social Work | 3 |
| SOSV 1140 | American Social Welfare Institution | 3 |
| SOSV 1150 | Introduction to Theories of Addiction | 3 |
| ENGL 1510 | English Composition I | 3 |
| Credit Hours | | 13 |

SECOND SEMESTER

| | | |
|--------------|-----------------------|----|
| SOSV 2320 | Theories of Addiction | 3 |
| SOSV 1130 | Generalist Practice | 3 |
| SOSV 2150 | Domestic Violence | 3 |
| SOSV 2120 | Gerontology | 3 |
| Credit Hours | | 12 |

THIRD SEMESTER

| | | |
|--------------|--------------------------|---|
| MATH 2110 | Principles of Statistics | 4 |
| PSYC 1010 | General Psychology | 3 |
| Credit Hours | | 7 |

FOURTH SEMESTER

| | | |
|--------------|---|----|
| SOSV 2100 | Crisis Intervention | 3 |
| SOSV 2240 | Chemical Dependency Seminar I | 1 |
| SOSV 2250 | Chemical Dependency Practicum I | 2 |
| SOSV 2130 | Issues and Ethics in the Helping Profession | 3 |
| BIOL 1310 | Anatomy and Physiology I | 2 |
| BIOL 131L | Anatomy and Physiology I Lab | 1 |
| Credit Hours | | 12 |

FIFTH SEMESTER

| | | |
|--------------|----------------------------------|----|
| SOSV 2110 | Family Interventions | 3 |
| SOSV 2260 | Chemical Dependency Seminar II | 1 |
| SOSV 2270 | Chemical Dependency Practicum II | 2 |
| SOSV 2330 | Advanced Theories of Addiction | 3 |
| SOSV 2340 | Substance Abuse Counseling | 3 |
| BIOL 1320 | Anatomy and Physiology II | 2 |
| BIOL 132L | Anatomy and Physiology II Lab | 1 |
| Credit Hours | | 15 |

SIXTH SEMESTER

| | | |
|--------------|---------------------------|---|
| SOCI 1010 | Introduction to Sociology | 3 |
| ENGL 1520 | English Composition II or | 3 |
| ENGL 1530 | English Composition III | |
| Credit Hours | | 6 |

Total Credit Hours **65**

*Prerequisites are required for some courses.
Evening courses may be required to complete this program.*

ASSOCIATE OF APPLIED SCIENCE DEGREE FOR DIRECT EMPLOYMENT

The Associate of Applied Science in Chemical Dependency Counseling Program is designed to blend classroom instruction with real-world learning experiences. Students examine matters of professional ethics, major counseling theories and principles, psychopharmacology and chemical dependency in individuals, families, groups and communities. Graduates of this program will emerge fully prepared to pursue licensure and work opportunities in various settings including the following:

- Inpatient addiction treatment facilities
- Outpatient treatment programs
- Jails, prisons and juvenile detention centers
- Social work agencies
- Human services organizations

Graduates of the program will be able to:

- Demonstrate and implement knowledge of counseling theories and techniques to diverse populations
- Demonstrate and apply addiction theories to the clinical setting
- Maintain professional standards and ethical boundaries
- Gather clinical information to assess and support diagnosis and ongoing treatment
- Practice respectful communication and interpersonal awareness
- Collaborate with community support and prevention services

CRIMINAL JUSTICE TECHNOLOGY

FIRST SEMESTER

| | | |
|--------------|----------------------------------|----|
| ENGL 1510 | English Composition I | 3 |
| MATH 1104 | Technical Math | 3 |
| BUSM 1600 | PC Applications | 3 |
| CRJU 1010 | Introduction to Criminal Justice | 3 |
| CRJU 1120 | Criminal Law | 3 |
| Credit Hours | | 15 |

SECOND SEMESTER

| | | |
|--------------|--------------------------------|----|
| ENGL 1515 | Technical Writing | 3 |
| SPCH 1510 | Speech or | 3 |
| SPCH 2060 | Interpersonal Communication | |
| CRJU 1110 | Criminal Evidence & Procedures | 3 |
| CRJU 1310 | Police Operations | 3 |
| SOCI 1010 | Introduction to Sociology or | 3 |
| PSYC 1010 | General Psychology | |
| Credit Hours | | 15 |

THIRD SEMESTER

| | | |
|--------------|-----------------------------|----|
| PHIL 1300 | Introduction to Ethics | 3 |
| BIOL 1010 | Principles of Biology | 3 |
| BIOL 101L | Principles of Biology I Lab | 1 |
| CRJU 1210 | Criminal Investigation | 3 |
| CRJU 2550 | Juvenile Justice Procedures | 3 |
| CRJU 2850 | Criminal Justice Careers | 3 |
| Credit Hours | | 16 |

FOURTH SEMESTER

| | | |
|--------------|---------------------------------|----|
| CRJU 2570 | Crisis & Incident Response | 4 |
| HLTH 1120 | First Aid and Personal Safety | 2 |
| SOCI 2300 | Introduction to Criminology | 3 |
| CRJU 2530 | Criminal Justice Administration | 3 |
| CRJU 2580 | Criminal Justice Practicum | 1 |
| CRJU 2590 | Criminal Justice Seminar | 1 |
| Credit Hours | | 14 |

Total Credit Hours **60**

*Prerequisites are required for some courses.
Evening courses may be required to
complete this program.*

ASSOCIATE OF APPLIED SCIENCE DEGREE FOR DIRECT EMPLOYMENT

The Criminal Justice associate degree provides preparation for a variety of careers in state or local law enforcement agencies. The program provides the necessary background for positions with police, private security, and other related criminal justice work, or for transfer to a baccalaureate program. The curriculum leads to the Associate of Applied Science degree.

Federal, state and local law enforcement and correctional agencies generally have requirements and/or guidelines for individuals seeking employment. These may include, but not be limited to: physical fitness standards, medical, and/or psychological requirements. In addition, individuals seeking employment in the law enforcement or correctional fields are subjected to a thorough background and criminal records check prior to being considered for employment.

Graduates of the program will be able to:

- Develop a knowledge base of the three elements of the criminal justice system (courts, corrections, and law enforcement) and the ability to effectively collaborate with each of the respective elements for society's benefit.
- Apply issues of criminal law and constitutional law to situations and events in employment to ensure that the civil and constitutional rights of citizens are preserved.
- Effectively communicate with individuals from various racial, cultural, ethnic, and socioeconomic groups.
- Recognize emergency situations that necessitate law enforcement intervention, medical intervention, or intervention by social services agencies.
- Analyze information, evidence, or clues received from various sources and develop theories for the prevention or solving of crimes.
- Maximize the effectiveness of the criminal justice agency through the use of technological advances (i.e. computers/forensic science).

FIRST SEMESTER

| | | |
|--------------|----------------------------------|----|
| ENGL 1510 | English Composition I | 3 |
| MATH 2110 | Principles of Statistics | 4 |
| BUSM 1600 | PC Applications | 3 |
| CRJU 1010 | Introduction to Criminal Justice | 3 |
| PHIL 1300 | Introduction to Ethics | 3 |
| Credit Hours | | 16 |

SECOND SEMESTER

| | | |
|--------------|-----------------------------|----|
| ENGL 1520 | English Composition II | 3 |
| SPCH 1510 | Speech or | 3 |
| SPCH 2060 | Interpersonal Communication | |
| SOCI 2300 | Introduction to Criminology | 3 |
| CRJU 1310 | Police Operations | 3 |
| PSYC 1010 | General Psychology or | 3 |
| SOCI 1010 | Introduction to Sociology | |
| Credit Hours | | 15 |

THIRD SEMESTER

| | | |
|--------------|--------------------------------------|----|
| CRJU 2140 | Peace Officer Basic Academy I (POBA) | 13 |
| CRJU 1110 | Criminal Evidence and Procedures | 3 |
| Credit Hours | | 16 |

FOURTH SEMESTER

| | | |
|--------------|---------------------------------------|----|
| CRJU 2150 | Peace Officer Basic Academy II (POBA) | 13 |
| CRJU 2530 | Criminal Justice Administration | 3 |
| Credit Hours | | 16 |

Total Credit Hours **63**

*Prerequisites are required for some courses.
Evening courses may be required to
complete this program.*

OHIO PEACE OFFICER BASIC ACADEMY

The Peace Officer Basic Academy (POBA) major, under the associate degree in Criminal Justice, provides preparation for careers in law enforcement. POBA also helps students prepare for the Ohio Peace Officer Training Commission (OPOTC) examination. All certified law enforcement officers in the State of Ohio are required to possess an OPOTC certification.

Washington State's POBA program is sanctioned and governed under the Office of the Ohio Attorney General and the Ohio Peace Officer Training Commission (OPOTC). The commission establishes uniform courses of training for law enforcement officers and private security throughout Ohio, and regulates the basic training curriculum for prospective officers.

All individuals seeking to participate as cadets in the Academy must apply and pay tuition and fees four weeks prior to the beginning of the Academy and pass a criminal background investigation to the satisfaction of the Ohio Attorney General's office. In addition to the background check, all cadets must take and pass the Pre-Academy Physical Training test based on the "Cooper Standard." Cadets must also pass a 16-panel drug screen and physical. Failure to pass any of these prerequisites will disqualify you from the academy.

Graduates of the program will be able to:

- Successfully complete the Ohio Peace Officer Basic Academy and be awarded certification as a law enforcement officer from the Ohio Attorney General's Office.
- Develop a knowledge base of the three elements of the criminal justice system (courts, corrections and law enforcement) and the ability to effectively collaborate with each of the respective elements for the benefit of society.
- Apply issues of criminal law and constitutional law to situations and events in employment to ensure that the civil and constitutional rights of citizens are preserved.
- Effectively communicate with individuals from various racial, cultural, ethnic and socioeconomic groups.
- Recognize emergency situations that necessitate law enforcement intervention by social services agencies.
- Analyze information, evidence or clues received from various sources and develop theories for the prevention or solving of crimes.
- Maximize effectiveness for the criminal justice agency through the use of technological advances (i.e. computers/forensic science).

SOCIAL SERVICES TECHNOLOGY

FIRST SEMESTER

| | | |
|--------------|---------------------------------------|----|
| SOSV 1005 | SOSV First Year Experience Seminar | 1 |
| ENGL 1510 | English Composition I | 3 |
| SOSV 1110 | Intro to Social Work & Social Welfare | 3 |
| SOSV 1140 | American Social Welfare Institution | 3 |
| SOSV 1150 | Introduction to Theories of Addiction | 3 |
| PSYC 1010 | General Psychology | 3 |
| Credit Hours | | 16 |

SECOND SEMESTER

| | | |
|--------------|--|----|
| ENGL 1520 | English Composition II or | 3 |
| ENGL 1530 | English Composition III | |
| SOSV 1130 | Generalist Practice | 3 |
| SOSV 2150 | Domestic Violence | 3 |
| BUSM 1600 | PC Applications | 3 |
| _____ | Social/Behavioral Science Elective from Organizations and Policies | 3 |
| Credit Hours | | 15 |

THIRD SEMESTER

| | | |
|--------------|---|----|
| MATH 2110 | Principles of Statistics | 4 |
| SOSV 2200 | Social Services Practicum I | 1 |
| SOSV 2210 | Social Services Seminar I | 1 |
| SOSV 2100 | Crisis Intervention | 3 |
| SOSV 1680 | Social Service and Law | 3 |
| _____ | Social/Behavioral Science Elective from Human, Natural & Econ Resources | 3 |
| _____ | Natural Science Elective from Biological or Physical Sciences | 4 |
| Credit Hours | | 19 |

FOURTH SEMESTER

| | | |
|--------------|--|----|
| SOSV 2110 | Family Intervention | 3 |
| SOSV 2120 | Gerontology | 3 |
| SOSV 2220 | Social Services Practicum II | 1 |
| SOSV 2230 | Social Services Seminar II | 1 |
| _____ | Natural Science Elective from Biological or Physical Sciences | 3 |
| _____ | Social/Behavioral Science Elective from Individuals and Groups | 3 |
| Credit Hours | | 15 |

Total Credit Hours **65**

*Prerequisites are required for some courses.
Evening courses may be required to complete this program.*

ASSOCIATE OF APPLIED SCIENCE DEGREE FOR DIRECT EMPLOYMENT

Social Work Assistants work with social workers, counselors, and other health and human services professionals to provide support to individuals, groups, families, organizations, and communities. Students that graduate this program may hold the title of Social Work Assistant, Counselor Assistant, Case Work Aide, Social Services Assistant, or Human Services Worker. The job duties of a Social Work Assistant vary according to the setting in which they work, but commonly these professionals are responsible for assisting clients in finding and accessing mental health and community resources.

Washington State's Social Services Technology program combines classroom theory with actual field experience. Part of the second year will be spent with various local agencies, applying what has been learned to client populations. Successful completion of the program leads to the Associate of Applied Science degree.

Graduates of the program will be able to:

- Distinguish oneself as a professional social worker and conduct oneself accordingly.
- Engage diversity and multiculturalism in practice.
- Combat human rights and social and economic injustice.
- Apply knowledge of human behavior and the social environment.
- Engage in policy practice to advance social and economic well-being and to deliver effective social work services.
- Engage, assess, intervene, and evaluate with individuals, families, groups, organizations, and communities.
- Consistently perform work habits such as: punctuality, productivity, verbal and written communication skills, cooperation with staff and clients and working within the policies, structures, and functions of social service agencies.
- Apply the National Association of Social Workers (NASW) Code of Ethics and values consistent with the profession, to ethical situations.
- Demonstrate effective interpersonal communication skills needed as a helping professional such as active listening, critical thinking, appropriate verbal and non-verbal responses and written communication.
- Collect, organize and prioritize client assessment information needed to develop progress reports, social histories, case treatment plans and closing summaries.
- Identify client needs and link them to available community resources.
- Monitor and evaluate clients' success toward individualized goal attainment.
- Identify historical and current social welfare policy issues that impact professional agencies.



TRANSFER

| | | | |
|--|-----------|--|-----------|
| Biological Sciences Transfer | 55 | General Sciences Transfer | 60 |
| Business Administration Transfer | 56 | Associate of Individualized Studies | 61 |
| Education Transfer—Early Childhood | 57 | Liberal Arts Transfer | 62 |
| Education Transfer—Middle Childhood | 58 | Social Services Transfer | 63 |
| Education Transfer—Young Adult | 59 | | |

BIOLOGICAL SCIENCES TRANSFER

FIRST SEMESTER

| | | |
|--------------|----------------------------|----|
| ENGL 1510 | English Composition I | 3 |
| MATH 2130 | College Algebra | 4 |
| BIOL 1100 | General Biology I | 3 |
| BIOL 110L | General Biology I Lab | 1 |
| PSYC 1010 | General Psychology or | 3 |
| SOCI 1010 | Introduction to Sociology | |
| _____ | Arts & Humanities Elective | 3 |
| Credit Hours | | 17 |

SECOND SEMESTER

| | | |
|--------------|--------------------------------------|----|
| ENGL 1520 | English Composition II or | 3 |
| ENGL 1530 | English Composition III | |
| BIOL 1110 | General Biology II | 3 |
| BIOL 111L | General Biology II Lab | 1 |
| BIOL 2010 | Basic Microbiology | 2 |
| BIOL 201L | Basic Microbiology Lab | 1 |
| _____ | Social & Behavioral Science Elective | 3 |
| _____ | Social & Behavioral Science Elective | 3 |
| Credit Hours | | 16 |

THIRD SEMESTER

| | | |
|--------------|---------------------------------|----|
| CHEM 1510 | Fundamentals of Chemistry I | 3 |
| CHEM 151L | Fundamentals of Chemistry I Lab | 1 |
| _____ | Arts & Humanities Elective | 3 |
| SPCH 1510 | Speech | 3 |
| BIOL 2600 | Introduction to Ecology | 3 |
| BIOL 260L | Introduction to Ecology Lab | 1 |
| Credit Hours | | 14 |

FOURTH SEMESTER

| | | |
|--------------|--------------------------------------|----|
| CHEM 1520 | Fundamentals of Chemistry II | 3 |
| CHEM 152L | Fundamentals of Chemistry II Lab | 1 |
| BIOL 2110 | Environmental Biology | 3 |
| BIOL 211L | Environmental Biology Lab | 1 |
| _____ | Arts & Humanities Elective | 3 |
| _____ | Social & Behavioral Science Elective | 3 |
| Credit Hours | | 14 |

Total Credit Hours **61**

*Prerequisites are required for some courses.
Evening courses may be required to
complete this program.*

ASSOCIATE OF SCIENCE DEGREE FOR TRANSFER

The Biological Sciences Transfer program provides the foundation courses needed to transfer into four-year science-related programs in fields such as biological sciences, environmental sciences, medicine, microbiology, and pharmacy.

The Biological Sciences Transfer curriculum leads to the Associate of Science degree, and meets the transfer module requirements for transfer to Ohio state colleges and universities.

If prerequisite courses in mathematics and science are not already completed, the necessary courses may be taken at Washington State, but more time may be required to complete the degree.

Graduates of the program will be able to:

- Transfer to four-year bachelor's degree programs with junior status.
- Demonstrate knowledge and understanding regarding the structure and function of cells, the molecular basis of heredity, biological evolution, interdependence among organisms, energy and the organization of living things, and the behavior of organisms.
- Construct full-scale scientific investigations, including: formulate questions to be answered; design approaches that incorporate appropriate variables and controls; implement solutions; and collect and record qualitative and quantitative data.
- Problem solve, think critically, and communicate effectively using both written and oral form.
- Develop a working knowledge of the relationships among sciences and society.

BUSINESS ADMINISTRATION TRANSFER

FIRST SEMESTER

| | | |
|--------------|------------------------------|----|
| ENGL 1510 | English Composition I | 3 |
| BUSM 1600 | PC Applications | 3 |
| PHIL 1300 | Introduction to Ethics | 3 |
| ECON 2120 | Principles of Macroeconomics | 3 |
| BUSM 1660 | Business Law | 3 |
| Credit Hours | | 15 |

SECOND SEMESTER

| | | |
|--------------|------------------------------|----|
| ECON 2130 | Principles of Microeconomics | 3 |
| ENGL 1515 | Technical Writing or | 3 |
| ENGL 1520 | English Composition II | |
| PSYC 1010 | General Psychology | 3 |
| MATH 2110 | Principles of Statistics or | 4 |
| MATH 2130 | College Algebra | |
| SPCH 1510 | Speech | 3 |
| Credit Hours | | 16 |

THIRD SEMESTER

| | | |
|--------------|--------------------------------------|----|
| ACCT 1550 | Introduction to Financial Accounting | 4 |
| _____ | Arts & Humanities Elective | 3 |
| _____ | Business or General Elective | 3 |
| _____ | Natural Science Elective | 3 |
| Credit Hours | | 14 |

FOURTH SEMESTER

| | | |
|--------------|------------------------------|----|
| ACCT 2320 | Managerial Accounting | 3 |
| MKTG 2510 | Marketing | 3 |
| _____ | Natural Science Elective | 4 |
| _____ | Business or General Elective | 3 |
| _____ | Business or General Elective | 3 |
| Credit Hours | | 16 |

Total Credit Hours **61**

*Prerequisites are required for some courses.
Evening courses may be required to
complete this program.*

ASSOCIATE OF ARTS DEGREE FOR TRANSFER

The Business Administration Transfer program is designed to provide basic coursework that will enable transfer to baccalaureate programs in business administration, accounting, finance, management, and marketing. The program allows the flexibility needed to transfer into the four-year institution of their choice. The emphasis is on completion of general education requirements and courses in economics, accounting, and mathematics to prepare for work in a chosen major at the four-year institution.

If you plan to transfer to a baccalaureate program in business (including accounting, management, marketing, finance and other related areas) you should be aware of significant differences between course requirements and the application of transfer credits at the various institutions in this region.

Students should work closely with an academic advisor, department chair and/or the director of advising and transfer to tailor the academic programs for transfer to the institution of choice.

The Business Administration Transfer curriculum leads to the Associate of Arts degree and meets the transfer module requirements for transfer to Ohio state colleges and universities.

Graduates of the program will be able to:

- **GOAL 1:** Demonstrate that basic requirements for transferring to a bachelor's program have been met.
- **GOAL 2:** Problem solve, think critically and communicate effectively through the use of accounting practice sets, business simulations, and presentations.
- **GOAL 3:** Communicate an understanding of basic economic events that occurred during US history.
- **GOAL 4:** Analyze business data and forecasts through the use of technology.

EDUCATION TRANSFER—EARLY CHILDHOOD

FIRST SEMESTER

| | | |
|--------------|---------------------------|----|
| ENGL 1510 | English Composition I | 3 |
| EDUC 1000 | Introduction to Education | 3 |
| PSYC 1010 | General Psychology | 3 |
| SPCH 1510 | Speech | 3 |
| ARTS 1000 | Art Appreciation or | 3 |
| MUSC 1200 | Music Appreciation or | |
| THEA 1200 | Introduction to Theatre | |
| Credit Hours | | 15 |

SECOND SEMESTER

| | | |
|--------------|--|----|
| ENGL 1520 | English Composition II or | 3 |
| ENGL 1530 | English Composition III | |
| EDUC 1510 | Early Childhood Education Seminar and Field Work | 1 |
| EDUC 1020 | Early Childhood Development | 3 |
| _____ | Social/Behavioral Sciences Elective | 3 |
| PSYC 2700 | Developmental Psychology | 3 |
| MATH 2110 | Principles of Statistics or | 4 |
| MATH 2130 | College Algebra | |
| Credit Hours | | 17 |

THIRD SEMESTER

| | | |
|--------------|---|----|
| _____ | Natural Sciences Elective | 4 |
| EDUC 2100 | Exceptional Learners | 3 |
| EDUC 2110 | Exceptional Learners Education Seminar and Field Work | 1 |
| LITR 2600 | Children's Literature | 3 |
| _____ | Arts & Humanities Elective | 3 |
| Credit Hours | | 14 |

FOURTH SEMESTER

| | | |
|--------------|-------------------------------------|-------|
| BUSM 1600 | PC Applications or | 3 |
| EDUC 1700 | Educational Technology | |
| PSYC 2750 | Education Psychology | 3 |
| EDUC 2950 | Education Capstone | 1 |
| _____ | Natural Sciences Elective | 4 |
| EDUC 2300 | Families, Communities, & Schools or | 3 |
| _____ | Education Major Elective | 3-4 |
| Credit Hours | | 14-15 |

Total Credit Hours 60-61

Electives should be selected with help from your advisor to ensure it will transfer to the school you plan to attend. Prerequisites are required for some courses. Evening courses may be required to complete this program.

ASSOCIATE OF ARTS DEGREE FOR TRANSFER

The Education Transfer - Early Childhood curriculum provides for a major concentration in early childhood (preschool to 5th grade) that will transfer to a variety of institutions offering four- and five-year degree programs that lead to teacher licensure. Graduates of Washington State's education transfer program have successfully transferred to Marietta College, West Virginia University-Parkersburg, Ohio University, Ohio Valley University, The Ohio State University, Muskingum University, and many other institutions. To increase the likelihood that smooth transfer occurs, students should work closely with their academic advisors to select specific courses which meet the requirements of the teacher education program they intend to pursue.

To complete degree and/or certification requirements in middle school, adolescent/young adult, or K-12 art, music, physical education, or special education, consult with an academic advisor to meet the requirements of the selected four-year institution. The Education Transfer curriculum leads to the Associate of Arts degree and meets the Transfer Module requirements for transfer to Ohio state colleges and universities. A group of education transfer program courses have been approved to meet the Ohio Transfer Assurance Guide (TAG) for education.

Graduates of the program will be able to:

- **GOAL 1:** Meet the general education requirements of the college in preparation for the Praxis CORE exam.
- **GOAL 2:** Gain knowledge of the historical and philosophical foundations of education, and of school structure, government, and effective school operation in a pluralistic society.
- **GOAL 3:** Investigate career expectations and current educational issues.
- **GOAL 4:** Successfully complete in-school practicum experiences with typical, exceptional, and diverse learners to gain experience developing and executing instructional plans, working effectively with students, developing collaborative relationships and exploring the appropriateness of a career in education.
- **GOAL 5:** Demonstrate the ability to develop and execute a detailed lesson plan.
- **GOAL 6:** Gain knowledge about the characteristics, identification, and needs of exceptional individuals and how to adapt instruction to meet their needs.
- **GOAL 7:** Effectively utilize technology both with students in the classroom as well as in instructional planning.

EDUCATION TRANSFER—MIDDLE CHILDHOOD

FIRST SEMESTER

| | | |
|--------------|---------------------------|----|
| ENGL 1510 | English Composition I | 3 |
| EDUC 1000 | Introduction to Education | 3 |
| PSYC 1010 | General Psychology | 3 |
| SPCH 1510 | Speech | 3 |
| ARTS 1000 | Art Appreciation or | 3 |
| MUSC 1200 | Music Appreciation or | |
| THEA 1200 | Introduction to Theatre | |
| Credit Hours | | 15 |

SECOND SEMESTER

| | | |
|--------------|---|-------|
| ENGL 1520 | English Composition II or | 3 |
| ENGL 1530 | English Composition III | |
| EDUC 1530 | Middle Childhood Education Seminar and Field Work | 1 |
| PSYC 2700 | Developmental Psychology | 3 |
| _____ | Arts and Humanities Elective | 3 |
| MATH 2110 | Principles of Statistics or | 4 |
| MATH 2130 | College Algebra | |
| _____ | Course in Area Concentration | 3-4 |
| Credit Hours | | 17-18 |

THIRD SEMESTER

| | | |
|--------------|---|----|
| EDUC 2100 | Exceptional Learners | 3 |
| EDUC 2110 | Exceptional Learners Education Seminar and Field Work | 1 |
| _____ | Course in Area Concentration | 3 |
| _____ | Arts & Humanities Elective | 3 |
| _____ | Natural Science Elective | 4 |
| Credit Hours | | 14 |

FOURTH SEMESTER

| | | |
|--------------|---|-------|
| BUSM 1600 | PC Applications or | 3 |
| EDUC 1700 | Educational Technology | |
| _____ | Natural Science Elective | 4 |
| _____ | Social & Behavioral Sciences Elective | 3 |
| PSYC 2750 | Education Psychology | 3 |
| EDUC 2950 | Education Capstone: Foundations of the Profession | 1 |
| EDUC 2400 | Multicultural Education or | 3-4 |
| _____ | Course in Area Concentration | |
| Credit Hours | | 17-18 |

Total Credit Hours **63-65**

Electives should be selected with help from your advisor to ensure it will transfer to the school you plan to attend. Prerequisites are required for some courses. Evening courses may be required to complete this program.

ASSOCIATE OF ARTS DEGREE FOR TRANSFER

The Education Transfer program is designed to provide the general education courses needed to transfer into four and five-year programs in teacher education. The Middle Years program prepares you to teach children in 4th through 9th grades. In addition to general education courses and a core of professional education courses, students enrolled in this program should begin taking courses in two areas of concentration chosen from language arts, sciences, mathematics, and/or social studies.

The goals of the Education Transfer program at Washington State focus on providing instruction and experience that will allow graduates to successfully transfer to four- and five-year institutions offering degrees that lead to teacher licensure at the early years, middle years, or young adult levels. Graduates of Washington State's Education Transfer program have successfully transferred to Marietta College, West Virginia University at Parkersburg, Ohio University, Ohio Valley University, The Ohio State University, Muskingum University, and many other institutions. To increase the likelihood that smooth transfer occurs, students should work closely with their academic advisors to select specific courses which meet the requirements of the teacher education program they intend to pursue.

To complete degree and/or certification requirements in middle school, adolescent/young adult, or K-12 art, music, physical education, or special education, consult with an academic advisor to meet the requirements of the selected four-year institution. The Education Transfer curriculum leads to the Associate of Arts degree and meets the Transfer Module requirements for transfer to Ohio state colleges and universities. A group of education transfer program courses have been approved to meet the Ohio Transfer Assurance Guide (TAG) for education.

Graduates of the program will be able to:

- **GOAL 1:** Meet the general education requirements of the college in preparation for the Praxis CORE exam.
- **GOAL 2:** Gain knowledge of the historical and philosophical foundations of education, and of school structure, government, and effective school operation in a pluralistic society.
- **GOAL 3:** Investigate career expectations and current educational issues.
- **GOAL 4:** Successfully complete in-school practicum experiences with typical, exceptional, and diverse learners to gain experience developing and executing instructional plans, working effectively with students, developing collaborative relationships and exploring the appropriateness of a career in education.
- **GOAL 5:** Demonstrate the ability to develop and execute a detailed lesson plan.
- **GOAL 6:** Gain knowledge about the characteristics, identification, and needs of exceptional individuals and how to adapt instruction to meet their needs.
- **GOAL 7:** Effectively utilize technology both with students in the classroom as well as in instructional planning.
- **GOAL 8:** Middle Years and Young Adult majors will enroll in and complete a minimum of two courses in their area of concentration.

EDUCATION TRANSFER—YOUNG ADULT

FIRST SEMESTER

| | | |
|--------------|---------------------------|----|
| ENGL 1510 | English Composition I | 3 |
| EDUC 1000 | Introduction to Education | 3 |
| PSYC 1010 | General Psychology | 3 |
| SPCH 1510 | Speech | 3 |
| ARTS 1000 | Art Appreciation or | 3 |
| MUSC 1200 | Music Appreciation or | |
| THEA 1200 | Introduction to Theatre | |
| Credit Hours | | 15 |

SECOND SEMESTER

| | | |
|--------------|------------------------------|-------|
| ENGL 1520 | English Composition II or | 3 |
| ENGL 1530 | English Composition III | |
| EDUC 1550 | Young Adult Education | 1 |
| | Seminar and Field Work | |
| | Course Area of Concentration | 3-4 |
| PSYC 2700 | Developmental Psychology | 3 |
| | Arts & Humanities Elective | 3 |
| MATH 2110 | Principles of Statistics or | 4 |
| MATH 2130 | College Algebra | |
| Credit Hours | | 17-18 |

THIRD SEMESTER

| | | |
|--------------|-------------------------------------|----|
| EDUC 2100 | Exceptional Learners | 3 |
| EDUC 2110 | Exceptional Learners Education | 1 |
| | Seminar and Field Work | |
| | Course in Area of Concentration | 3 |
| | Arts & Humanities Elective | 3 |
| | Natural Science Elective | 4 |
| | Social/Behavioral Sciences Elective | 3 |
| Credit Hours | | 17 |

FOURTH SEMESTER

| | | |
|--------------|---------------------------------|-------|
| BUSM 1600 | PC Applications or | 3 |
| EDUC 1700 | Educational Technology | |
| | Natural Science Elective | 4 |
| PSYC 2750 | Education Psychology | 3 |
| EDUC 2950 | Education Capstone: | 1 |
| | Foundations of the Profession | |
| EDUC 2400 | Multicultural Education or | 3-4 |
| | Course in Area of Concentration | |
| Credit Hours | | 14-15 |

Total Credit Hours **63-65**

Electives should be selected with help from your advisor to ensure it will transfer to the school you plan to attend. Prerequisites are required for some courses. Evening courses may be required to complete this program.

ASSOCIATE OF ARTS DEGREE FOR TRANSFER

The Education Transfer program is designed to provide the general education courses needed to transfer into four- and five-year programs in teacher education. The Adolescent/Young Adult program prepares you to teach grades 7 through 12. In addition to general education courses and a core of professional education courses, students enrolled in this program should begin taking courses in an area of concentration chosen from language arts, sciences, mathematics, or social studies.

The goals of the Education Transfer program at Washington State focus on providing instruction and experience that will allow graduates to successfully transfer to four- and five-year institutions offering degrees that lead to teacher licensure at the early years, middle years, or young adult levels. Graduates of Washington State's Education Transfer program have successfully transferred to Marietta College, West Virginia University-Parkersburg, Ohio University, Ohio Valley University, The Ohio State University, Muskingum University, and many other institutions. To increase the likelihood that smooth transfer occurs, students should work closely with their academic advisors to select specific courses which meet the requirements of the teacher education program they intend to pursue.

To complete degree and/or certification requirements in middle school, adolescent/young adult, or K-12 art, music, physical education, or special education, consult with an academic advisor to meet the requirements of the selected four-year institution. The Education Transfer curriculum leads to the Associate of Arts degree and meets the Transfer Module requirements for transfer to Ohio state colleges and universities. A group of education transfer program courses have been approved to meet the Ohio Transfer Assurance Guide (TAG) for education.

Graduates of the program will be able to:

- **GOAL 1:** Meet the general education requirements of the college in preparation for the Praxis CORE exam.
- **GOAL 2:** Gain knowledge of the historical and philosophical foundations of education, and of school structure, government, and effective school operation in a pluralistic society.
- **GOAL 3:** Investigate career expectations and current educational issues.
- **GOAL 4:** Successfully complete in-school practicum experiences with typical, exceptional, and diverse learners to gain experience developing and executing instructional plans, working effectively with students, developing collaborative relationships and exploring the appropriateness of a career in education.
- **GOAL 5:** Demonstrate the ability to develop and execute a detailed lesson plan.
- **GOAL 6:** Gain knowledge about the characteristics, identification, and needs of exceptional individuals and how to adapt instruction to meet their needs.
- **GOAL 7:** Effectively utilize technology both with students in the classroom as well as in instructional planning.
- **GOAL 8:** Middle Years and Young Adult majors will enroll in and complete a minimum of two courses in their area of concentration.

GENERAL SCIENCES TRANSFER

FIRST SEMESTER

| | | |
|--------------|-------------------------------------|-------|
| ENGL 1510 | English Composition I | 3 |
| PHIL 1200 | Principles of Reasoning or Elective | 3 |
| MATH 2130 | College Algebra or | 4-5 |
| MATH 2150 | Pre-Calculus | |
| | Natural Science Elective | 4 |
| Credit Hours | | 14-15 |

SECOND SEMESTER

| | | |
|--------------|---------------------------|-------|
| ENGL 1520 | English Composition II | 3 |
| PSYC 1010 | General Psychology or | 3 |
| SOCI 1010 | Introduction to Sociology | |
| | Natural Science Elective | 4 |
| | General Science Elective | 3-4 |
| | Natural Science Elective | 4 |
| Credit Hours | | 17-18 |

THIRD SEMESTER

| | | |
|--------------|------------------------------|----|
| SPCH 1510 | Speech | 3 |
| HIST 2110 | American History to 1865 or | 3 |
| POLS 1020 | American National Government | |
| | Natural Science Elective | 4 |
| | General Science Elective | 4 |
| | Arts & Humanities Elective | 3 |
| Credit Hours | | 17 |

FOURTH SEMESTER

| | | |
|--------------|------------------------------------|----|
| | Social/Behavioral Science Elective | 3 |
| | Arts & Humanities Elective | 3 |
| | General Science Elective | 4 |
| | General Science Elective | 4 |
| Credit Hours | | 14 |

Total Credit Hours **62-64**

*Prerequisites are required for some courses.
Evening courses may be required to
complete this program.*

ASSOCIATE OF SCIENCE DEGREE FOR TRANSFER

If a career in medicine, veterinary medicine, dentistry or zoology is in your future, then Washington State's General Sciences Transfer might be the right option for you. This program meets the Transfer Module requirements for transfer to any Ohio state college or university.

If prerequisite courses in mathematics and science are not already completed, the necessary courses may be taken at Washington State, but more time may be required to complete the degree.

The General Sciences Transfer program curriculum leads to the Associate of Science degree and meets the Transfer Module requirements for transfer to Ohio state colleges and universities. This program provides the foundation courses needed to transfer into a four-year program in science and science-related fields such as medicine, dentistry, pharmacy, astronomy, meteorology, and environmental science.

Graduates of the program will be able to:

- Transfer to an accredited college or university with junior status.
- Propose, consider, analyze, and evaluate alternative explanation to scientific phenomena.
- Conduct scientific investigations, formulate questions, and design approaches that incorporate appropriate variables and controls.
- Implement solutions, collect and record qualitative and quantitative data, and communicate the results.
- Know and apply the concepts, principles, and processes of technological design.

ASSOCIATE OF INDIVIDUALIZED STUDIES

GENERAL & BASIC COURSES

| | | |
|--------------|------------------------------------|----|
| _____ | English Elective | 3 |
| _____ | English Elective | 3 |
| _____ | Speech Elective | 3 |
| _____ | Social/Behavioral Science Elective | 3 |
| _____ | Arts & Humanities Elective | 3 |
| _____ | Computer Applications Elective | 3 |
| _____ | Math Elective | 3 |
| _____ | Natural Science Elective | 3 |
| _____ | General Education Elective | 3 |
| _____ | General Education Elective | 3 |
| Credit Hours | | 30 |

MAJOR CONCENTRATION COURSES

| | | |
|--------------|------------------------------|----|
| _____ | Major Concentration Elective | 3 |
| _____ | Major Concentration Elective | 3 |
| _____ | Major Concentration Elective | 3 |
| _____ | Major Concentration Elective | 3 |
| _____ | Major Concentration Elective | 3 |
| _____ | Major Concentration Elective | 3 |
| _____ | Major Concentration Elective | 3 |
| _____ | Major Concentration Elective | 3 |
| _____ | Major Concentration Elective | 3 |
| _____ | Major Concentration Elective | 3 |
| Credit Hours | | 30 |

Total Credit Hours **60-65**

*Prerequisites are required for some courses.
Evening courses may be required to
complete this program.*

The Associate of Individualized Studies (A.I.S.) is awarded to students who successfully complete an individually designed curricula prescribed to meet specific career goals.

Students must satisfactorily complete a minimum of 60 semester credit hours in a well-planned, unique program to serve an educational objective that could not be served through another degree program at the college.

Five general education goals will be included in each individually-designed curricula, for a minimum of 30 semester credits of general and basic related course requirements.

The program leading to the A.I.S. must contain an area of concentration consisting of a minimum of 30 to maximum of 35 semester credit hours formed either by:

- An intra-college, interdisciplinary, but coherent combination of courses drawn from a minimum of two and maximum of four instructional areas of study; or
- Up to 35 semester credit hours awarded by the college for documentable educational experiences or courses completed at another college judged by WSCC to be of college level; or
- An unusual but academically coherent combination of technical and general studies courses.

Upon petitioning for acceptance into the A.I.S. program, a representative of Enrollment Management, the student's committee, and the student will determine the remaining required courses. Once students are accepted into the program, they must complete at least 20 credit hours within the approved A.I.S. program with at least half in the area of the approved concentration. Students with less than 30 credit hours remaining toward a degree must have the approval of the Dean of Business, Engineering, Public Service, and Liberal Arts to enroll in the program.

LIBERAL ARTS TRANSFER

FIRST SEMESTER

| | | |
|--------------|-----------------------|-------|
| | Math TM Elective | 3-4 |
| ENGL 1510 | English Composition I | 3 |
| PSYC 1010 | General Psychology | 3 |
| SPCH 1510 | Speech | 3 |
| | Focused Elective | 3 |
| Credit Hours | | 15-16 |

SECOND SEMESTER

| | | |
|--------------|---------------------------------------|----|
| ENGL 1520 | English Composition II or | 3 |
| ENGL 1530 | English Composition III | |
| CHEM 1210 | Principles of Chemistry I | 3 |
| CHEM 121L | Principles of Chemistry I Lab | 1 |
| PHIL 1300 | Introduction to Ethics or | 3 |
| HUMN 1300 | Survey of Mythology | |
| POLS 1020 | American National Government or | 3 |
| HIST 2120 | American History from 1865 to present | |
| | Focused Elective | 3 |
| Credit Hours | | 16 |

THIRD SEMESTER

| | | |
|--------------|----------------------------------|----|
| | Natural Science Elective (TM) | 3 |
| | Arts & Humanities Elective (TM) | 3 |
| | TM Elective | 3 |
| | TM Major Elective | 3 |
| | Elective (Recommended TAG or TM) | 3 |
| Credit Hours | | 15 |

FOURTH SEMESTER

| | | |
|--------------|----------------------------------|----|
| | Elective (Recommended TAG or TM) | 3 |
| | Elective (Recommended TAG or TM) | 3 |
| | Elective (Recommended TAG or TM) | 3 |
| | Elective (Recommended TAG or TM) | 3 |
| | Elective (Recommended TAG or TM) | 3 |
| Credit Hours | | 15 |

Total Credit Hours **61-62**

*Prerequisites are required for some courses.
Evening courses may be required to
complete this program.*

ASSOCIATE OF ARTS DEGREE FOR TRANSFER

Employers today demand workers who can integrate knowledge from a variety of areas and communicate complex ideas effectively. As a result they are looking more and more for candidates with strong liberal arts backgrounds. Businesses, industries, and public and private agencies are hiring liberal arts graduates because these graduates learn quickly, think critically and independently, communicate effectively, and easily adapt to the global workplace. A Liberal Arts Transfer degree is so diverse that graduates can fill positions from finance to public administration, government to recreation, administration to education and beyond.

The Liberal Arts Transfer program leads to the Associate of Arts degree in Liberal Arts with pathways specializing in Fine Arts, English, Math, Social Humanities. Washington State Liberal Arts graduates have successfully transferred to Marietta College, West Virginia University at Parkersburg, Ohio University, The Ohio State University, Muskingum University, and many other institutions. Visit wscc.edu/transfer for more information about our partners.

You should work closely with an academic advisor to tailor an academic program for transfer to the institution of your choice. For transfer to many bachelors programs, four years of the same foreign language in high school or two semesters of the same foreign language in college is recommended or required for graduation. The liberal arts transfer curriculum meets the Transfer Module requirements for transfer to Ohio state colleges and universities.

Graduates of the program will be able to:

- Meet the general education requirements of Washington State Community College and be prepared to transfer to a four-year institution as a junior.
- Demonstrate specific knowledge of Liberal Arts through analysis, evaluation, and communication of information.
- Demonstrate methods for critically acquiring and evaluating information, drawing conclusions, and defending those conclusions rationally in effective oral and written communications.
- Apply decision-making processes by synthesizing ideas data collection, research, and analysis.
- Demonstrate an understanding of the world beyond their immediate experience.

SOCIAL SERVICES TRANSFER

FIRST SEMESTER

| | | |
|--------------|--|----|
| SOSV 1005 | SOSV First Year Experience Seminar | 1 |
| ENGL 1510 | English Composition I | 3 |
| SOSV 1110 | Introduction to Social Work and Social Welfare | 3 |
| SOSV 1140 | American Social Welfare Institution | 3 |
| SOCI 1010 | Introduction to Sociology | 3 |
| POLS 1020 | American National Government | 3 |
| Credit Hours | | 16 |

SECOND SEMESTER

| | | |
|--------------|----------------------------|----|
| ENGL 1520 | English Composition II or | 3 |
| ENGL 1530 | English Composition III | |
| BUSM 1600 | PC Applications | 3 |
| | Arts & Humanities Elective | 3 |
| SOSV 1130 | Generalist Practice | 3 |
| SOSV 2150 | Domestic Violence | 3 |
| Credit Hours | | 15 |

THIRD SEMESTER

| | | |
|--------------|------------------------------|----|
| | Arts and Humanities Elective | 3 |
| MATH 2110 | Principles of Statistics | 4 |
| BIOL 1310 | Anatomy and Physiology I | 2 |
| BIOL 131L | Anatomy and Physiology I Lab | 1 |
| PSYC 1010 | General Psychology | 3 |
| EDUC 1020 | Early Childhood Development | 3 |
| Credit Hours | | 16 |

FOURTH SEMESTER

| | | |
|--------------|-------------------------------|----|
| BIOL 1320 | Anatomy and Physiology II | 2 |
| BIOL 132L | Anatomy and Physiology II Lab | 1 |
| | Arts and Humanities Elective | 3 |
| SPCH 1510 | Speech | 3 |
| PSYC 2320 | Abnormal Psychology | 3 |
| SOCI 2010 | Social Problems | 3 |
| Credit Hours | | 15 |

Total Credit Hours **62**

*Prerequisites are required for some courses.
Evening courses may be required to complete this program.*

ASSOCIATE OF ARTS DEGREE FOR TRANSFER

The Social Services Transfer program provides students with introductory courses and a foundation for social work practice. Courses include topics like psychology and sociology with 16 credit hours in core social work classes. This degree prepares students for a bachelor's degree in social work and it also helps students obtain employment in line with their career aspirations.

Graduates of the program will be able to:

- Meet the general education requirements of Washington State Community College and be prepared to transfer to a four-year institution.
- Distinguish oneself as a professional social worker and conduct oneself accordingly.
- Engage diversity and multiculturalism in practice.
- Combat human rights and social and economic injustice.
- Apply knowledge of human behavior and the social environment.
- Engage in policy practice to advance social and economic well-being and to deliver effective social work services.
- Engage, assess, intervene, and evaluate with individuals, families, groups, organizations, and communities.
- Consistently perform work habits such as: punctuality, productivity, verbal and written communication skills, cooperation with staff and clients and working within the policies, structures, and functions of social service agencies.
- Apply the National Association of Social Workers (NASW) Code of Ethics and values consistent with the profession, to ethical situations.
- Demonstrate effective interpersonal communication skills needed as a helping professional such as active listening, critical thinking, appropriate verbal and non-verbal responses and written communication.
- Collect, organize and prioritize client assessment information needed to develop progress reports, social histories, case treatment plans and closing summaries.
- Monitor and evaluate clients' success toward individualized goal attainment.
- Identify historical and current social welfare policy issues that impact professional agencies.



PROGRAM INDEX

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CERTIFICATE PROGRAMS

ACCOUNTING CERTIFICATE

FIRST SEMESTER

| | | |
|--------------|--------------------------------------|----|
| ACCT 1550 | Introduction to Financial Accounting | 4 |
| ACCT 1610 | Payroll Accounting | 3 |
| BUSM 1550 | Business Management | 3 |
| BUSM 1600 | PC Applications | 3 |
| ENGL 1510 | English Composition I | 3 |
| Credit Hours | | 16 |

SECOND SEMESTER

| | | |
|--------------|-------------------------------|----|
| ACCT 2550 | Advanced Financial Accounting | 4 |
| ACCT 2920 | QuickBooks | 3 |
| ADMN 2220 | Microsoft Excel | 3 |
| BUSM 1660 | Business Law | 3 |
| MATH 2110 | Principles of Statistics | 4 |
| Credit Hours | | 17 |

Total Credit Hours 33

AUTOMOTIVE TECHNICIAN

FIRST SEMESTER

| | | |
|--------------|-------------------------------|----|
| AUTO 1100 | Vehicle Service & Maintenance | 3 |
| AUTO 1110 | Electrical Circuitry | 3 |
| AUTO 1120 | Automotive Brakes | 3 |
| AUTO 1130 | Electrical Components | 3 |
| AUTO 2100 | Automatic Drive Trains | 3 |
| AUTO 2130 | Cylinder Block & Lower Engine | 3 |
| Credit Hours | | 18 |

SECOND SEMESTER

| | | |
|--------------|-------------------------------|----|
| AUTO 1140 | Automotive Chassis | 3 |
| AUTO 1150 | Manual Drive Trains | 3 |
| AUTO 1160 | Fuel & Emissions Controls | 3 |
| AUTO 1170 | Upper Engine Design & Service | 3 |
| MATH 1104 | Technical Mathematics | 3 |
| ENGL 1510 | English Composition I | 3 |
| Credit Hours | | 18 |

Total Credit Hours 36

COMPUTER SYSTEMS

FIRST SEMESTER

| | | |
|--------------|-------------------------------------|----|
| BUSM 1600 | PC Applications | 3 |
| DTCS 2650 | Internet and Web Page Design | 3 |
| DTCS 1230 | OS Concepts and Customizing | 3 |
| DTGR 1600 | Adobe Illustrator | 3 |
| DTWP 1200 | Programming Logic & Problem Solving | 3 |
| ENGL 1510 | English Composition I | 3 |
| Credit Hours | | 18 |

SECOND SEMESTER

| | | |
|--------------|--|-------|
| ELEC 2410 | Microcomputer Diagnostic and Upgrading I | 3 |
| DTCS 2100 | Database Management | 3 |
| MATH 1104 | Technical Math or | 3-4 |
| MATH 2130 | College Algebra | |
| ENGL 1520 | English Composition II | 3 |
| ELEC 1950 | CISCO Semester I – Network Fundamentals | 3 |
| Credit Hours | | 15-16 |

Total Credit Hours 33

DESIGN DRAFTING

FIRST SEMESTER

| | | |
|--------------|-----------------------------|----|
| DRFT 1510 | Design Drafting I | 3 |
| INDT 1150 | Machining Processes | 3 |
| MATH 1104 | Technical Mathematics | 3 |
| INDT 1220 | OSHA Safety | 2 |
| ENGR 1010 | Fundamentals of Engineering | 3 |
| Credit Hours | | 14 |

SECOND SEMESTER

| | | |
|--------------|----------------------------|----|
| DRFT 1430 | Advanced CAD | 3 |
| DRFT 2530 | Engineering Drafting | 3 |
| INDT 1170 | Computer Numerical Control | 3 |
| PHYS 1010 | Applied Physics | 2 |
| PHYS 101L | Applied Physics Lab | 1 |
| INDT 1000 | Industrial Internship | 2 |
| INDT 2180 | Manufacturing Processes | 3 |
| Credit Hours | | 17 |

Total Credit Hours 31

CERTIFICATE PROGRAMS

EXECUTIVE OFFICE SUPPORT*

FIRST SEMESTER

| | | |
|--------------|-------------------------------|----|
| ADMN 1300 | Records Management | 3 |
| ADMN 1510 | Document Processing | 3 |
| ADMN 1810 | Administrative Communications | 3 |
| ADMN 2210 | Microsoft Word | 3 |
| ENGL 1510 | English Composition I | 3 |
| Credit Hours | | 15 |

SECOND SEMESTER

| | | |
|--------------|----------------------------------|----|
| ADMN 1760 | Administrative Office Procedures | 3 |
| ADMN 2220 | Microsoft Excel | 3 |
| ADMN 2230 | Visual Presentations | 3 |
| BUSM 1550 | Business Management | 3 |
| DTGR 2120 | Social Media Marketing | 3 |
| Credit Hours | | 15 |

Total Credit Hours **30**

**Not accepting new students into this program for 2020–2021.*

INDUSTRIAL TECHNOLOGY - CHEMICAL OPERATOR

FIRST SEMESTER

| | | |
|--------------|-----------------------------------|----|
| INDT 1010 | Introduction to Chemical Operator | 3 |
| INDT 1210 | Industrial Safety/Hazmat | 2 |
| INDT 2210 | Process Control | 4 |
| INDT 1340 | Team Concepts and Practices | 3 |
| MATH 1104 | Technical Mathematics | 3 |
| CHEM 1200 | Chemistry Concepts | 3 |
| Credit Hours | | 18 |

SECOND SEMESTER

| | | |
|--------------|--------------------------------|----|
| PHYS 1010 | Applied Physics | 2 |
| PHYS 101L | Applied Physics Lab | 1 |
| INDT 1330 | Industrial Electricity | 2 |
| ELET 2410 | Programmable Logic Controllers | 3 |
| MECH 1100 | Engineering Materials | 4 |
| Credit Hours | | 12 |

Total Credit Hours **30**

INDUSTRIAL TECHNOLOGY - MULTI-CRAFT FOR INDUSTRY

FIRST SEMESTER

| | | |
|--------------|-----------------------------|----|
| BUSM 1600 | PC Applications | 3 |
| ENGR 1010 | Fundamentals of Engineering | 3 |
| INDT 1100 | Industrial Maintenance | 3 |
| INDT 1150 | Machining Processes | 3 |
| INDT 1220 | OSHA Safety | 2 |
| WELD 1250 | SMAW Welding | 3 |
| Credit Hours | | 17 |

SECOND SEMESTER

| | | |
|--------------|----------------------------|----|
| INDT 1170 | Computer Numerical Control | 3 |
| INDT 1330 | Industrial Electricity | 2 |
| DRFT 2530 | Engineering Drafting | 3 |
| WELD 1260 | GMAW Welding | 3 |
| INDT 1000 | Internship | 2 |
| Credit Hours | | 13 |

Total Credit Hours **30**

INDUSTRIAL TECHNOLOGY - WELDING

FIRST SEMESTER

| | | |
|--------------|--|----|
| WELD 1230 | Intro to Weld Safety & Cutting Practices | 3 |
| WELD 1240 | Basic Oxy/Fuel Cutting and Welding | 3 |
| WELD 1250 | SMAW I | 3 |
| WELD 1260 | GMAW I | 3 |
| WELD 1270 | FCAW I | 3 |
| Credit Hours | | 15 |

SECOND SEMESTER

| | | |
|--------------|---------------------------|----|
| MATH 1104 | Technical Math | 3 |
| WELD 2250 | GTAW I | 3 |
| WELD 1251 | SMAW II | 3 |
| WELD 1261 | GMAW II | 3 |
| WELD 2241 | Weld Inspection Practices | 3 |
| Credit Hours | | 15 |

Total Credit Hours **30**

CERTIFICATE PROGRAMS

MASSAGE THERAPY

FIRST SEMESTER

| | | |
|--------------|---|----|
| BIOL 1360 | Anatomy & Physiology I for Massage Therapists or | 4 |
| BIOL 2310 | Human Anatomy & Physiology I | 3 |
| BIOL 231L | Human Anatomy & Physiology I Lab | 1 |
| HLTH 1120 | First Aid & Personal Safety | 2 |
| HLTH 1515 | Myology & Kinesiology | 4 |
| HLTH 1510 | Massage Techniques I | 3 |
| HLTH 2850 | Building an Ethical Massage Therapy Practice | 2 |
| HLTH 1520 | Massage Techniques II | 3 |
| Credit Hours | | 18 |

SECOND SEMESTER

| | | |
|--------------|--|----|
| BIOL 1370 | Anatomy & Physiology II for Massage Therapists | 3 |
| BIOL 137L | Anatomy & Physiology II for Massage Therapists Lab or | 1 |
| BIOL 2320 | Human Anatomy & Physiology II | 3 |
| BIOL 232L | Human Anatomy & Physiology II Lab | 1 |
| BIOL 2450 | Pathophysiology or | 3 |
| HLTH 1420 | Introduction to Human Disease | |
| HLTH 1516 | Business for Massage Therapists | 2 |
| HLTH 2480 | Orthopedic Assessment & Documentation | 3 |
| HLTH 2550 | Massage Therapy Directed Practice I | 2 |
| Credit Hours | | 14 |

THIRD SEMESTER

| | | |
|--------------|--------------------------------------|---|
| BIOL 1380 | Advanced Anatomy & Kinesiology | 4 |
| HLTH 2560 | Massage Therapy Directed Practice II | 2 |
| HLTH 2800 | Massage Therapy Seminar | 2 |
| Credit Hours | | 8 |

Total Credit Hours 40

MEDICAL CODING

FIRST SEMESTER

| | | |
|--------------|----------------------------------|----|
| ADMN 1510 | Document Processing | 3 |
| ADMN 1810 | Administrative Communications | 3 |
| BIOL 1330 | Survey of Anatomy & Physiology I | 2 |
| HLTH 1810 | Medical Terminology | 2 |
| HLTH 1350 | ICD-10-CM Coding | 3 |
| HLTH 2310 | Principles of Reimbursement | 3 |
| Credit Hours | | 16 |

SECOND SEMESTER

| | | |
|--------------|-----------------------------------|----|
| ADMN 1330 | Medical Office Procedures | 3 |
| ADMN 2210 | Microsoft Word | 3 |
| ADMN 2220 | Microsoft Excel | 3 |
| BIOL 1340 | Survey of Anatomy & Physiology II | 2 |
| HLTH 1340 | CPT Coding | 3 |
| Credit Hours | | 14 |

Total Credit Hours 30

CERTIFICATE PROGRAMS

PRACTICAL NURSING

FIRST SEMESTER

| | | |
|--------------|-----------------------------------|----|
| BIOL 1510 | Introduction to Nutrition or | 3 |
| BIOL 2550 | Nutrition | |
| ENGL 1510 | English Composition I | 3 |
| NPNT 1610 | Introduction to Practical Nursing | 2 |
| NPNT 1720 | Pharmacology I | 1 |
| PSYC 1010 | General Psychology | 3 |
| Credit Hours | | 12 |

SECOND SEMESTER

| | | |
|--------------|----------------------------------|-------|
| BIOL 1310 | Anatomy & Physiology I | 2 |
| BIOL 131L | Anatomy & Physiology I Lab or | 1 |
| BIOL 2310 | Human Anatomy & Physiology I | |
| BIOL 231L | Human Anatomy & Physiology I Lab | |
| NPNT 1410 | Nursing Fundamentals | 6 |
| NPNT 1620 | Practical Nursing I | 3 |
| NPNT 1730 | Pharmacology II | 3 |
| Credit Hours | | 15-16 |

THIRD SEMESTER

| | | |
|--------------|---|-------|
| BIOL 1320 | Anatomy & Physiology II | 2 |
| BIOL 132L | Anatomy & Physiology II Lab or | 1 |
| BIOL 2320 | Human Anatomy & Physiology II | |
| BIOL 232L | Human Anatomy & Physiology II Lab | |
| NPNT 1420 | Nursing Fundamentals II | 5 |
| NPNT 1510 | PN Trends & Ethics | 2 |
| NPNT 1630 | Practical Nursing II | 3 |
| NPNT 1910 | Maternal Child Health | 5 |
| NPNT 2240 | Apply Nurs Patterns of Emotional Distress | 3 |
| Credit Hours | | 21-22 |

Total Credit Hours 48-50

PEACE OFFICER BASIC ACADEMY

FIRST SEMESTER

| | | |
|--------------|-----------------------|----|
| CRJU 2140 | POBA I | 13 |
| ENGL 1510 | English Composition I | 3 |
| Credit Hours | | 16 |

SECOND SEMESTER

| | | |
|--------------|-------------------|----|
| CRJU 2150 | POBA II | 13 |
| ENGL 1515 | Technical Writing | 3 |
| Credit Hours | | 16 |

Total Credit Hours 32

TRUCK MAINTENANCE

FIRST SEMESTER

| | | |
|--------------|-------------------------------|----|
| AUTO 1110 | Electrical Circuitry | 3 |
| AUTO 1130 | Electrical Components | 3 |
| TRCK 1100 | Introduction to Truck Systems | 3 |
| TRCK 1120 | Medium and Heavy Brakes | 3 |
| TRCK 2120 | Diesel Truck Drive Trains | 3 |
| Credit Hours | | 15 |

SECOND SEMESTER

| | | |
|--------------|--------------------------------|----|
| AUTO 2150 | Principles of Air Conditioning | 3 |
| ENGL 1510 | English Composition I | 3 |
| INDT 1150 | Machining Processes | 3 |
| MATH 1104 | Technical Math | 3 |
| TRCK 1130 | Medium and Heavy Truck Chassis | 3 |
| Credit Hours | | 15 |

Total Credit Hours 30

CERTIFICATES OF COMPLETION

The Certificate of Completion is awarded for the successful completion of a series of courses that relate directly to an identifiable area of skills or knowledge. The series can provide individuals who are not available for full-time study an opportunity to gain marketable skills and knowledge. Should an individual decide to enroll in an associate degree program, these courses will apply toward it, if it is in the same area of study.

All courses for a Certificate of Completion must be taken at Washington State. Successful completion means at least a 2.0 GPA for courses counting toward a certificate of completion. Application for a certificate is made to the appropriate academic dean.

Automotive Electricity

| | |
|-----------|-------------------------------|
| AUTO 1100 | Vehicle Service & Maintenance |
| AUTO 1110 | Electrical Circuitry |
| AUTO 1130 | Electrical Components |
| AUTO 2110 | Computerized Engine Controls |

Automotive Service & Maintenance

| | |
|-----------|-------------------------|
| AUTO 1120 | Automotive Brakes |
| AUTO 1140 | Automotive Chassis |
| AUTO 1150 | Manual Drive Trains |
| AUTO 1160 | Fuel & Emission Control |
| AUTO 2100 | Automatic Drive Trains |

Diesel Engines

| | |
|-----------|-------------------------------------|
| TRCK 1140 | Diesel Engine Design & Service |
| TRCK 2100 | Diesel Engine Tune Up & Maintenance |
| TRCK 2130 | Electronic Diesel Engines |
| TRCK 2110 | Diesel Fuel Systems & Hydraulics |

Drafting: Computer-Aided Drafting

| | |
|-----------|-----------------------------|
| ENGR 1010 | Fundamentals of Engineering |
| DRFT 1430 | Advanced CAD |
| DRFT 2530 | Engineering Drafting or |
| DRFT 1560 | Structural Drafting |
| INDT 1170 | Computer Numerical Control |

EKG Technician

| | |
|-----------|-------------------------------|
| HLTH 2400 | EKG Technician |
| HLTH 1810 | Medical Terminology I |
| HLTH 1820 | Medical Terminology II or |
| BIOL 2310 | Human Anatomy & Physiology I |
| BIOL 2320 | Human Anatomy & Physiology II |

Fitness and Exercise

| | |
|-----------|-----------------------------------|
| BIOL 1310 | Anatomy & Physiology I |
| BIOL 131L | Anatomy & Physiology I Lab |
| BIOL 1320 | Anatomy & Physiology II |
| BIOL 132L | Anatomy & Physiology II Lab or |
| BIOL 2310 | Human Anatomy & Physiology I |
| BIOL 231L | Human Anatomy & Physiology I Lab |
| BIOL 2320 | Human Anatomy & Physiology II |
| BIOL 232L | Human Anatomy & Physiology II Lab |
| BIOL 1510 | Introduction to Nutrition or |
| HLTH 1410 | Healthy Eating for a Healthy Life |
| BIOL 2550 | Nutrition |
| HLTH 1120 | First Aid & Personal Safety |
| PTAT 1550 | Basic Exercise Physiology |
| RECR | RECR Elective |
| HLTH 1000 | Personal Fitness Concepts |

Gasoline Engines

| | |
|-----------|-------------------------------|
| AUTO 1100 | Vehicle Service & Maintenance |
| AUTO 1170 | Upper Engine Design & Service |
| AUTO 2130 | Cylinder Block & Lower Engine |

Instrumentation

| | |
|-----------|--------------------------------|
| ELET 2410 | Programmable Logic Controllers |
| MECH 2150 | Instrumentation I |
| MECH 2170 | Instrumentation II |

Machining: Precision Machining

| | |
|-----------|-------------------------------------|
| INDT 1150 | Machining Processes |
| INDT 1170 | Computer Numerical Control |
| DRFT 2530 | Engineering Drafting |
| INDT 2170 | Advanced Computer Numerical Control |

Multi-Craft

| | |
|-----------|-----------------------------|
| BUSM 1600 | PC Applications |
| ENGR 1010 | Fundamentals of Engineering |
| DRFT 2530 | Engineering Drafting |
| INDT 1150 | Machining Processes |
| INDT 1220 | OSHA Safety |
| INDT 1330 | Industrial Electricity |

Network Support

| | |
|-----------|------------------------|
| ELEC 1950 | Cisco Semester I |
| ELEC 2050 | Cisco Semester II |
| ELEC 2610 | Intro to Linux |
| DTCS 2550 | Network Administration |

CERTIFICATES OF COMPLETION

Office Software

| | |
|-----------|--------------------------------|
| ADMN 1510 | Document Processing |
| ADMN 2210 | Microsoft Word |
| ADMN 2220 | Microsoft Excel |
| BUSM 1600 | PC Applications |
| BUSM 2600 | Advanced Computer Applications |

PC Support

| | |
|-----------|--|
| DTCS 1230 | OS Concepts & Customizing |
| ELEC 2410 | Microcomputer Diagnostics & Upgrading I |
| ELEC 2510 | Microcomputer Diagnostics & Upgrading II |
| ELEC 1950 | Cisco Semester I |
| INDT 1310 | Basic Electricity or |
| ELET 1310 | Digital I |

Peace Officer Basic Academy (POBA)

| | |
|-----------|---------|
| CRJU 2140 | POBA I |
| CRJU 2150 | POBA II |

Private Security Academy

| | |
|-----------|-----------------------------|
| CRJU 1600 | Private Security Academy |
| CRJU 1601 | Firearms Academy (optional) |

Programmable Logic Controllers

| | |
|-----------|--------------------------------|
| ELET 1110 | DC Circuits |
| ELET 2410 | Programmable Logic Controllers |
| INDT 2210 | Process Control or |
| MECH 2150 | Instrumentation I |

Small Business Entrepreneurship

| | |
|-----------|--------------------------------------|
| BUSM 1570 | Small Business Entrepreneurship |
| BUSM 1660 | Business Law |
| MKTG 2510 | Marketing |
| ACCT 1550 | Introduction to Financial Accounting |
| ACCT 1610 | Payroll Accounting |

COURSE CATALOG

COURSE NUMBERING SYSTEM

The four-letter course identifier indicates the department and the four numbers indicate the specific course within each department.

The various departments are listed in alphabetical order.

| | | | |
|----------------------------------|------|--------------------------------------|------|
| Accounting | ACCT | Industrial Tech | INDT |
| Administrative Assistant | ADMN | Literature | LITR |
| Art | ARTS | Marketing | MKTG |
| Automotive Service Tech | AUTO | Mathematics | MATH |
| Biology | BIOL | Mechanical Engineering Tech | MECH |
| Business Management | BUSM | Medical Lab Tech | MMLT |
| Chemistry | CHEM | Music | MUSC |
| Criminal Justice | CRJU | Nursing Education - Associate Degree | NADN |
| Cyber Security | CYBS | Nursing Education - Practical | NPNT |
| Design Drafting | DRFT | Personal Development | PERS |
| Diesel Truck Systems | TRCK | Philosophy | PHIL |
| Digital Tech - Computer Graphics | DTGR | Physical Therapist Assistant Tech | PTAT |
| Digital Tech - Computer Support | DTCS | Physics | PHYS |
| Digital Tech - Digital Media | DTME | Political Science | POLS |
| Digital Tech - Web Programming | DTWP | Psychology | PSYC |
| Economics | ECON | Radiologic Tech | RADT |
| Education Transfer | EDUC | Real Estate | REAL |
| Electrical Engineering Tech | ELET | Recreation & Physical Education | RECR |
| Electronics | ELEC | Respiratory Therapy Tech | RESP |
| Engineering, General | ENGR | Robotics & Mechatronics | ROBT |
| English Composition | ENGL | Social Services Tech | SOSV |
| Geography | GEOG | Sociology | SOCI |
| Geology | GEOL | Spanish | SPAN |
| Health Science | HLTH | Speech | SPCH |
| History | HIST | Theatre | THEA |
| Humanities | HUMN | Welding | WELD |

EXPLANATION OF COURSE DESCRIPTION CODES

Day, Eve, Online: indicates which semester or semesters the course is offered during the year and if it is offered day, evening or online. F=Fall; Sp=Spring; Su=Summer; All Terms=All Terms.

Prerequisite: any coursework that must be completed before the student is eligible to enroll for the course.

Co-requisite: any coursework that must be completed during the same semester as the course in which you are enrolling.

cr.: the number of credits to be awarded to students who successfully complete the course.

Lecture: the number of hours per week a particular course meets in a lecture classroom.

Lab: the number of hours per week a particular class meets in a laboratory situation. This is usually in addition to lecture hours.

Fee- ♦: indicates course has additional fees.

TM-*: indicates a course covered by the Ohio Transfer Module. The final letter indicates the section of the Ohio Transfer Module in which the course is included.

TAG: indicates a course covered by the Transfer Assurance Guide.

COURSE CATALOG

ACCOUNTING (ACCT)

ACCT 1550 Introduction to Financial Accounting 4 cr.

This is a course of study that introduces financial accounting and financial reporting for business entities. Students will explore both accounting theory and practice to form a broad foundation upon which to build other accounting principles, processes, and systems. Prerequisite: None. Co-Requisite: None. Day: Fa; Blended: Sp, Su. Lecture: 2, Lab: 4. ♦

ACCT 1610 Payroll Accounting 3 cr.

Study of payroll accounting, the computing of wages, the calculation of deductions, the reporting of data to the respective Federal and State agencies. Prerequisite: None. Co-Requisite: None. Day: Sp; Eve: Sp. Lecture: 2, Lab: 2. ♦

ACCT 2000 Special Topics-Accounting 0.5-6 cr.

By permission only. In-depth study of a specific topic(s) pertinent to accounting technology. May be repeated. Prerequisite: Permission. Co-Requisite: None. Day: On demand; Eve: On demand. Lecture: TBD, Lab: TBD.

ACCT 2190 Principles of Federal Income Tax 3 cr.

Introduces federal taxes on income for individuals and businesses. Emphasizes tax return preparation; limited coverage of partnership and corporate returns. Prerequisite: None. Co-Requisite: None. Day: Fa; Eve: Fa. Lecture: 2, Lab: 2. ♦

ACCT 2210 Cost Accounting 4 cr.

Introduction to cost accounting systems and methods. Covers cost concepts, classification, and measurement techniques in relation to their importance in income determination, planning and control. Emphasis on job order cost, process cost standard cost, and activity based accounting methods. Prerequisite: None. Co-Requisite: None. Day: Sp; Eve: Sp. Lecture: 3, Lab: 2. ♦

ACCT 2320 Managerial Accounting 3 cr.

Advanced application of financial and cost accounting information to problems facing business managers. Emphasis on the nature and role of management control systems, showing the inter-relationships among the processes of strategic planning, management control, operational control, and information handling. Prerequisite: None. Co-Requisite: None. Day: Fa; Eve: Fa. Lecture: 2, Lab: 2. TAG: OBU011. ♦

ACCT 2550 Advanced Financial Accounting 4 cr.

This is a course of study that explores advanced topics and detailed application of financial accounting, recording, and reporting beyond an introductory course. Topics are covered in a framework of the accounting cycle.

Prerequisite: ACCT 1550. Co-Requisite: None. Day: Sp; Blended: Su. Lecture: 2, Lab: 4. ♦

ACCT 2710 Intermediate Accounting 4 cr.

Study of theoretical and practical application of basic accounting principles. Covers Accounting Principles Board and Financial Accounting Standards Board pronouncements and opinions. Prerequisite: None. Co-Requisite: None. Day: Fa; Eve: Fa. Lecture: 3, Lab: 2. ♦

ACCT 2730 Auditing I 3 cr.

Introduction to auditing, professional ethics, legal liability, internal control, working papers, evidential matters, and beginning audit procedures. Prerequisite: None. Co-Requisite: None. Day: Sp; Eve: Sp. Lecture: 2, Lab: 2. ♦

ACCT 2820 Spreadsheet Accounting 3 cr.

Use of spreadsheet software applied to accounting principles and practices. A hands-on approach to learning accounting applications using microcomputer-based spreadsheets. Prerequisite: ACCT 1550 and BUSM 1600. Co-Requisite: None. Day: Sp; Eve: Fa. Lecture: 2, Lab: 2. ♦

ACCT 2920 QuickBooks 3 cr.

This is a course of study that explores the microcomputer accounting environment and accounting information systems through QuickBooks software program. Exploration to efficiently and effectively account for business activity from an accountant's perspective is stressed. Prerequisite: ACCT 1550. Day: Sp. Lecture: 2, Lab: 2. ♦

ADMINISTRATIVE ASSISTANT (ADMN)

ADMN 1300 Records Management 3 cr.

A study of methods and systems for efficient management of office records. Practice with alphabetic, numeric, subject, and geographic filing of material. Records projects enhance manual filing skills. Prerequisite: None. Co-Requisite: None. Day: Fa, Sp; Eve: Fa. Lecture: 3, Lab: 0. ♦

ADMN 1330 Medical Office Procedures 3 cr.

Comprehensive basic knowledge in medical office procedures. Topics include the medical environment, staff, ethics, and law, interacting with patients, telecommunications, scheduling appointments, computers and information processing, and computers and financial management. Prerequisite: None. Co-Requisite: None. Day: Sp. Lecture: 2, Lab: 2. ♦

ADMN 1500 Introduction to Computer Skills 3 cr.

This course provides a study of a graphical user interface (GUI) operation system, Windows. Topics covered will include Introduction to Windows; Managing Files and Folders; Customizing File and Folder Management. A

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course designed for the person who has limited knowledge of the computer and keyboard will include beginning computer skills and function of basic computer parts. The course will develop basic keyboarding skills for alphabetic keys, symbols, and numeric keyboard. Basic formatting features will include margins, spacing, and text alignment. Designed as an overview course to provide open source application skills, creating/managing Google accounts, Gmail, and calendar. Prerequisite: None. Co-Requisite: None. Day: Fa. Lecture: 2, Lab: 2. ♦

ADMN 1510 Document Processing 3 cr.

In this course, students will master the computer keyboard by touch for personal use and in preparation for work in a business setting. Students will learn proper keyboarding technique while keying alphabetic, numeric, and 10-key numeric keypad characters. Students will complete activities online, where drills will facilitate learning the keyboard and developing speed and accuracy. In addition, students will use Microsoft Word to demonstrate basic-level production formatting of emails, memos, business correspondence, tables, business reports, manuscripts, and research papers. Prerequisite: None. Co-Requisite: None. Day: Fa. Lecture: 2, Lab: 2. ♦

ADMN 1520 Advanced Document Processing 3 cr.

Continuation of ADMN 1510 Document Processing. Continued emphasis on developing speed and accuracy in time writings. In basket projects, previewing correspondence, itineraries, agendas, manuals, multipage documents, memo reports, and advanced tables. Prerequisite: ADMN 1510. Co-Requisite: None. Day: Fa, Eve: Sp. Lecture: 2, Lab: 2. ♦

ADMN 1760 Administrative Office Procedures 3 cr.

Designed to give a basic knowledge in general office procedures in the electronic office. Topics include: virtual office, business ethics, telephone etiquette, travel arrangements, planning meetings, and mail responsibilities. Prerequisite: None. Co-Requisite: None. Day: Sp. Lecture: 2, Lab: 2. ♦

ADMN 1810 Administrative Communications 3 cr.

Business-related exercises to improve proofreading and editing skills for business or personal use. Topics covered include grammar, punctuation, format, sentence construction, and editing for content, conciseness and clarity. Prerequisite: None. Co-Requisite: None. Day: Fa. Lecture: 2, Lab: 2. ♦

ADMN 2000 Special Topics-ADMN 0.5-6 cr.

By permission only. In-depth study of a specific topic(s) pertinent to administrative services technology. May be repeated. Prerequisite: Permission. Co-Requisite: None. Day: On demand; Eve: On demand. Lecture: TBD, Lab: TBD.

ADMN 2210 Microsoft Word 3 cr.

Use Microsoft Word to create documents, select and edit text, format characters, use AutoCorrect, move and copy text, find and replace, printing and page formatting, page numbers, headers and footers, footnotes and endnotes. Prerequisite: None. Co-Requisite: None. Day: Fa; Eve: Sp. Lecture: 2, Lab: 2. ♦

ADMN 2220 Microsoft Excel 3 cr.

Use Microsoft Excel to create and enhance simple worksheets, copy data, create named ranges, change fonts, patterns, colors, and formats. Create and use formulas and functions, both basic and advanced. Prerequisite: None. Co-Requisite: None. Day: Fa; Eve: Sp. Lecture: 2, Lab: 2. ♦

ADMN 2230 Visual Presentations 3 cr.

This course teaches students how to build eye-catching presentations that communicate key information to audiences in business, academic, and organizational settings. No prior knowledge of presentation software is required. Prerequisite: ADMN 1510. Co-Requisite: None. Day: Sp. Lecture: 2, Lab: 2. ♦

ADMN 2871 ADMN Practicum I 1 cr.

Practicum provides placement of an individual into an office to observe and participate in its operation. Students will spend 105 hours per semester with respective office. Student will participate in reviews and assessments of work experience. Co-Requisite: ADMN 2881. Day: Fa, Sp. Lecture: 0, Lab: 7. ♦

ADMN 2872 ADMN Practicum II 1 cr.

A second practicum provides placement of an individual into an office to observe and participate in its operation. Students will spend 105 hours per semester with respective office. Students will participate in reviews and assessments of work experience. Prerequisite: ADMN 2871. Co-Requisite: ADMN 2882. Day: Fa, Sp. Lecture: 0, Lab: 7. ♦

ADMN 2881 ADMN Seminar I 1 cr.

Students will participate in reviews and assessments of work experience as related to the practicum. Seminar will include forums. Students will gain knowledge and experience for initial understanding of office concepts and software presented in ADMN technical courses. Co-Requisite: ADMN 2871. Day: Fa, Sp. Lecture: 1, Lab: 0.

ADMN 2882 ADMN Seminar II 1 cr.

Students will participate in reviews and assessments of work experience as related to the practicum. Seminar will include forums. Students will gain knowledge and experience for initial understanding of office concepts and software presented in ADMN technical courses. Prerequisite: ADMN 2881. Co-Requisite: ADMN 2872. Day: Fa, Sp. Lecture: 1, Lab: 0.

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ADMN 2960 Administrative Capstone

3 cr.

Capstone Seminar focuses on job search skills, portfolio development, graduates banquet, and professional development, and discuss certification for administrative assistants. Prerequisite: None. Co-Requisite: None. Day: Sp; Eve: On demand. Lecture: 1, Lab: 2. ♦

ART (ARTS)

ARTS 1000 Art Appreciation

3 cr. TM-H

Introduction to traditional and contemporary visual arts in the context of their social and cultural backgrounds. Prerequisite: None. Co-Requisite: None. Day: Fa; Eve: Sp. Lecture: 3, Lab: 0.

ARTS 1110 Two-Dimensional Design

3 cr.

Introduction to the organization of the formal elements on a two-dimensional surface and color theory. The fundamental design principles of unity, diversity, balance, movement, and focal point will be emphasized through the application of the formal elements in a variety of projects. Prerequisite: None. Co-Requisite: None. Day: Fa; Eve: On demand. Lecture: 1, Lab: 4. TAG: OAH058. ♦

ARTS 1120 Three-Dimensional Design

3 cr.

Introduction to the organization of the formal elements in three-dimensions. Application of the fundamental design principles of unity, diversity, balance, movement, and focal point will be emphasized through the use of the formal elements to create space and form. Focus on the translation of an idea into tangible form using a variety of materials. Prerequisite: None. Co-Requisite: None. Day: On demand; Eve: On demand. Lecture: 1, Lab: 4. ♦

ARTS 1210 Drawing I

4 cr.

An introduction to descriptive drawing with an emphasis on perceptual, conceptual, and critical skills. An emphasis on the application of gesture, shape, value, line, perspective, design, and expression to descriptive drawing. A variety of broad and fine media are explored. Prerequisite: None. Co-Requisite: None. Day: Fa, Sp; Eve: On demand. Lecture: 1, Lab: 6. TAG: OAH001. ♦

ARTS 1810 Digital Photography

3 cr.

A non-darkroom introduction to the art and techniques of digital photography. A focus is placed on the generation of images through the use of the creative controls of the camera. The controls to be covered include an overview of digital cameras, capturing an image with a digital camera, exposure, aperture, shutter speed, lenses, filters, lighting, use of flash, composition, and digital work flow. The language of digital imaging and digital techniques will be discussed. Prerequisite: None. Co-Requisite: None. Day: Fa, Sp; Eve: On demand; Online: Fa, Sp. Lecture: 2, Lab: 2. ♦

ARTS 2010 Art History I

3 cr. TM-H

Survey of art history and the analysis of painting, sculpture, and architecture from prehistory through the Renaissance and the relationship of the visual arts to their social and cultural context. Prerequisite: ENGL 0900 or Accuplacer Score greater than 69. Co-Requisite: None. Day: Fa; Eve: On demand. Lecture: 3, Lab: 0. TAG: OAH005.

ARTS 2020 Art History II

3 cr. TM-H

Survey of art history and the analysis of painting, sculpture, and architecture from Baroque through the 20th Century and the relationship of the visual arts to their social and cultural context. Prerequisite: ENGL 0900 or Accuplacer Score greater than 69. Co-Requisite: None. Day: Sp; Eve: On demand. Lecture: 3, Lab: 0. TAG: OAH005.

ARTS 2410 Painting I

3 cr.

Introduction to descriptive painting with an emphasis on perceptual, conceptual, and critical skills. Emphasis on the application of gesture, shape, value, line, perspective, design, and expression to descriptive painting. Study of the painter's language and modes of expression; color and paint manipulation, illusion and organization of form and space, and surface order. Focused on projects that increase in complexity. Prerequisite: ARTS 1110 and ARTS 1210. Co-Requisite: None. Day: Sp. Lecture: 1, Lab: 4. TAG: OAH048. ♦

ARTS 2610 Graphic Design I

3 cr.

This course provides an introduction to visual communication graphics and design. A focus is placed on the generation and manipulation of image, typography, and sign/symbol/icon through digital and non-digital methods. Prerequisite: ARTS 1110 and ARTS 1210. Co-Requisite: None. Day: Fa; Eve: On demand. Lecture: 1, Lab: 4. ♦

AUTOMOTIVE SERVICE TECHNOLOGY (AUTO)

AUTO 1100 Vehicle Service & Maintenance

3 cr.

Perform minor maintenance and service such as lubrication, minor adjustments, replacing simple components and correcting malfunctions on working vehicles. Includes battery construction, starter servicing, some ASE tasks. Emphasis on shop and trade safety procedures. The course may be offered in a blended format in the evening or summer semester. Prerequisite: None. Co-Requisite: None. Day: Fa; Eve: Fa. Lecture: 2, Lab: 2. ♦

AUTO 1110 Electrical Circuitry

3 cr.

Basic electrical theory with emphasis on operating characteristics of DC series and parallel circuits. Emphasis on the relationship of resistance, voltage, and amperage in an electrical circuit. Circuits will be analyzed using Ohm's Law and verified using electrical meters. Prerequisite:

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None. Co-Requisite: None. Day: Fa; Eve: Fa. Lecture: 2, Lab: 2. ♦

AUTO 1120 Automotive Brakes 3 cr.

A study of hydraulic braking operations, and chassis parts and functions. Laboratory work will consist of brake lathe operation, tire balancing and brake repair. Anti-lock brake concepts are introduced. The course may be offered in a blended format in the evening or summer semester. Prerequisite: None. Co-Requisite: None. Day: Fa; Eve: Fa. Lecture: 2, Lab: 2. ♦

AUTO 1130 Electrical Components 3 cr.

Study of the theory of electricity and electronics as applied in modern automotive & diesel systems. Principles of operation, testing, and repairing all major parts in these systems including the battery, starting, charging, and ignition systems. The use of tools and procedures necessary to test and repair wiring. Prerequisite: None. Co-Requisite: None. Day: Fa; Eve: Fa. Lecture: 2, Lab: 2. ♦

AUTO 1140 Automotive Chassis 3 cr.

Study of steering alignment angles and suspension fundamentals. Laboratory work consists of late model alignments, suspension service, and wheel balancing. Active suspension systems will be introduced. The course may be offered in a blended format in the evening or summer semester. Prerequisite: None. Co-Requisite: None. Day: Sp; Eve: Sp. Lecture: 2, Lab: 2. ♦

AUTO 1150 Manual Drive Trains 3 cr.

The design, construction, and operating principles of the major types of transmissions used today are covered. Actual disassembling, maintenance, and servicing techniques of driveline units such as clutch and differentials are covered. Laboratory work will include disassembly and reassembly of working units. Prerequisite: None. Co-Requisite: None. Day: Sp; Eve: Sp. Lecture: 2, Lab: 2. ♦

AUTO 1160 Fuel & Emissions Controls 3 cr.

Study of carburetor and other fuel system components. Covers exhaust emission control devices. Lab work consists of tune-up procedures, carburetor overhaul, and a continuation of troubleshooting procedures using the various diagnostic analyzers and gauges. Prerequisite: None. Co-Requisite: None. Day: Sp; Eve: Sp. Lecture: 2, Lab: 2. ♦

AUTO 1170 Upper Engine Design & Service 3 cr.

Development of work skills and proficiency in engine rebuilding are emphasized. Stresses disassembly, cleaning, inspection and assembly of gasoline and diesel cylinder heads; identify all of the parts of the engine's upper end and explain the principles of the internal combustion engine operation. Prerequisite: None. Co-Requisite: None. Day: Sp; Eve: Sp. Lecture: 2, Lab: 2. ♦

AUTO 2000 Special Topics-Automotive 0.5-6 cr.

By permission only. In-depth study of a specific topic(s) pertinent to automotive technology. May be repeated. Prerequisite: Permission. Co-Requisite: None. Day: On demand; Eve: On demand. Lecture: TBD, Lab: TBD.

AUTO 2100 Automatic Drive Trains 3 cr.

Covers design, construction, and operating principles of the major types of transmissions used today. Includes actual disassembling, maintenance and servicing techniques of automatic transmissions, final drives and electronics. Lab work includes disassembly and reassembly of working units. Prerequisite: AUTO 1150. Co-Requisite: None. Day: Fa; Eve: Fa. Lecture: 2, Lab: 2. ♦

AUTO 2110 Computerized Engine Controls 3 cr.

Covers the operation and control functions of the automotive computer; use of tools and procedures necessary in testing and repair of the various components of these systems. Emphasis on fundamentals of electricity (circuitry, amperage, voltage and resistance) and basics of solid state electronics and their use in the automobile. Review ignition, fuel and emission systems of modern automobiles and their relationship with computerized engine controls. Prerequisite: AUTO 1160. Co-Requisite: None. Day: Fa; Eve: Fa. Lecture: 2, Lab: 2. ♦

AUTO 2130 Cylinder Block & Lower Engine 3 cr.

Gasoline engines will be disassembled, inspected, and reassembled. Emphasis will be on troubleshooting failed engine components, clearance measurements, and preventive maintenance. Prerequisite: None. Co-Requisite: None. Day: Fa; Eve: Fa. Lecture: 2, Lab: 2. ♦

AUTO 2150 Principles of Air Conditioning 3 cr.

Covers the principles of automotive HVAC systems, plus the operation and diagnosis of the C.C.O.T. (Cycling clutch orifice tube) and V-5 air conditioning systems. Includes purging, charging, reclaiming, leak detection and performance testing. Student will study environmental impact of fluorocarbons. Prerequisite: None. Co-Requisite: None. Day: Sp; Eve: Sp. Lecture: 2, Lab: 2. ♦

BIOLOGY (BIOL)

BIOL 0955 Introduction to Biology 3 cr.

This course is intended for students who have not had high school biology with a "C" or better. It is a review of the basic biology concepts that includes cell biology, genetics, and evolution. Course does not count towards graduation. Prerequisite: None. Co-Requisite: BIOL095L. Day: All. Lecture: 3, Lab: 0.

BIOL 095L Introduction to Biology Lab 1 cr.

This course is intended for students who have not had high

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school biology with a "C" or better. This lab is coordinated with material covered in lecture and includes a review of basic biology concepts including cell structure, genetics, and evolution. Course does not count towards graduation. Prerequisite: None. Co-Requisite: BIOL0955. Day: All. Lecture: 0, Lab: 2.

BIOL 1010 Principles of Biology 3 cr. TM-N

A biology course for non major's which introduces cell biology, physiology, genetics, evolution and ecology. Inquiry-based learning and case studies are used to foster good science process skills in lecture and discussion. Prerequisite: None. Co-Requisite: BIOL 101L. Day: All; Eve: Fa, Sp. Lecture: 3, Lab: 0.

BIOL 101L Principles of Biology Lab 1 cr. TM-N

A biology course for non major's which introduces cell biology, physiology, genetics, evolution and ecology. Inquiry-based learning and case studies are used to foster good science process skills in lecture, discussion and laboratory. Prerequisite: None. Co-Requisite: BIOL 1010. Day: All; Eve: Fa, Sp. Lecture: 0, Lab: 2. ♦

BIOL 1100 General Biology I 3 cr. TM-N

An introductory course for biology majors covering reproduction of cells, their structure and function, classical and molecular genetics and evolution. Prerequisite: HS Biology or BIOL 0955, BIOL 095L or BIOL 1010, BIOL 101L & HS Chemistry or CHEM 0955, CHEM 095L, or CHEM 1210, CHEM 121L. Co-Requisite: BIOL 110L. Day: Fa; Eve: On demand. Lecture: 3, Lab: 0. TAG: OSC003.

BIOL 110H General Biology I Honors 3 cr. TM-N

An introductory course for honors biology majors covering reproduction of cells, their structure and function, classical and molecular genetics and evolution. Students will be required to review relevant scientific journal articles and compose short answers or related questions and complete an inset collection. HS Biology or BIOL 0955, BIOL 095L or BIOL 1010, BIOL 101L & HS Chemistry or CHEM 0955, CHEM 095L, or CHEM 1210, CHEM 121L, and Honors program acceptance. Co-Requisite: BIOL 110L. Day: Fa; Eve: On demand. Lecture: 3, Lab: 0. TAG: OSC003.

BIOL 110L General Biology I Lab 1 cr. TM-N

A series of experiments designed to enhance the material discussed in BIOL 1100. Prerequisite: HS Biology or BIOL 0955, BIOL 095L or BIOL 1010, BIOL 101L & HS Chemistry or CHEM 0955, CHEM 095L, or CHEM 1210, CHEM 121L. Co-Requisite: BIOL 1100. Day: Fa; Eve: On demand. Lecture: 0, Lab: 3. TAG: OSC003. ♦

BIOL 1110 General Biology II 3 cr. TM-N

A continuation of BIOL 1100 with emphasis on the evolution of animal and plant life, including systematics, phylogeny, organ systems, anatomy, physiology and behavior. The

course emphasizes comparative strategies within the animal and plant kingdom. Prerequisite: BIOL 1100 & BIOL 110L with "C" or better. Co-Requisite: BIOL 111L. Day: Sp. Lecture: 3, Lab: 0. TAG: OSC004.

BIOL 111L General Biology II Lab 1 cr. TM-N

A series of experiments designed to enhance the material discussed in BIOL 1110. Prerequisite: BIOL 1100 & BIOL 110L with "C" or better. Co-Requisite: BIOL 1110. Day: Sp. Lecture: 0, Lab: 3. TAG: OSC004. ♦

BIOL 1310 Anatomy & Physiology I 2 cr. TM-N

This course is the first of a two-term sequence designed to facilitate an understanding of the structural and functional units of the human body. Formal classroom activities are integrated in a comprehensive study of the cells, tissues and organs of the body, with emphasis on the integumentary, skeletal, muscular, nervous, endocrine, and reproductive systems. This course is intended for non-science majors and students in the Practical Nursing program. Two class hours per week. Prerequisite: HS Biology or BIOL0955 and BIOL095L or BIOL 1010 and BIOL 101L & HS Chemistry or CHEM0955 and CHEM095L or CHEM 1210 and CHEM 121L. Co-Requisite: BIOL 131L. Day: Fa, F1; Eve: On demand. Lecture: 2, Lab: 0.

BIOL 131L Anatomy & Physiology I Lab 1 cr. TM-N

This course is the first of a two-term sequence designed to facilitate an understanding of the structural and functional units of the human body. Formal laboratory activities are integrated in a comprehensive study of the cells, tissues and organs of the body, with emphasis on the integumentary, skeletal, muscular, nervous, endocrine, and reproductive systems. This lab is intended for non-science majors and students in the Practical Nursing program. Prerequisite: HS Biology or BIOL0955 and BIOL095L or BIOL 1010 and BIOL 101L & HS Chemistry or CHEM0955 and CHEM095L or CHEM 1210 and CHEM 121L. Co-Requisite: BIOL 1310. Day: Fa, F1. Eve: On demand. Lecture: 0, Lab: 2. ♦

BIOL 1320 Anatomy & Physiology II 2 cr. TM-N

The second course in a two-term sequence designed to facilitate understanding of the structure and function of the human body. Formal classroom activities are integrated in a comprehensive study of the special senses, blood, cardiovascular system, lymphatic system, respiratory system, digestive system, and urinary systems. This course is intended for non-science majors and students in the Practical Nursing program. Prerequisite: BIOL 1310 and BIOL 131L. Co-Requisite: BIOL 132L. Day: F2, Sp; Eve: On demand; Online: Sp. Lecture: 2, Lab: 0.

BIOL 132L Anatomy & Physiology II Lab 1 cr. TM-N

The second course in a two-term sequence designed to facilitate understanding of the structure and function of the human body. Formal laboratory activities are integrated

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into a comprehensive study of the special senses, blood, cardiovascular system, lymphatic, respiratory, digestive, and urinary systems. This lab is intended for non-science majors and students in the Practical Nursing program. Prerequisite: BIOL 1310 and BIOL 131L. Co-Requisite: BIOL 1320. Day: F2, Sp. Eve: On demand. Lecture: 0, Lab: 2. ♦

BIOL 1330 Survey Anatomy & Physiology I 2 cr.

This course is the first of a two-term sequence designed to facilitate understanding of the structural and functional units of the human body. Formal classroom activities are integrated in a comprehensive study of the cells, tissues and organs of the body, with emphasis on the integumentary, skeletal, muscular, nervous, endocrine, and reproductive systems. This course is intended for non-science majors. Prerequisite: None. Co-Requisite: None. Day: Fa, Sp; Eve: On demand. Lecture: 2, Lab: 0.

BIOL 1340 Survey Anatomy & Physiology II 2 cr.

The second course in a two-term sequence designed to facilitate understanding of the structure and function of the human body. Formal classroom activities are integrated in a comprehensive study of the special senses, blood, cardiovascular system, lymphatic system, respiratory system, digestive system, and urinary system. This course is intended for non-science majors. Prerequisite: BIOL 1330. Co-Requisite: None. Day: Fa, Sp; Eve: On demand. Lecture: 2, Lab: 0.

BIOL 1360 Anatomy & Physiology I for Massage Therapists 4 cr.

This course is the first of a three-term sequence designed to facilitate understanding of the structure and function of the human body. Formal classroom instruction leading to a comprehensive study of the cells, tissues and organs of the body, with emphasis on body systems and their relation to the practice of Massage Therapy. This course is intended for Massage Therapy Students as preparation for the Certification Exam. Prerequisite: None. Co-Requisite: None. Day: Fa; Eve: Fa even yrs. Lecture: 4, Lab: 0.

BIOL 1370 Anatomy & Physiology II for Massage Therapists 3 cr.

This course is the second of a three-term sequence designed to facilitate understanding of the structure and function of the human body. Formal classroom activities are integrated in a comprehensive study of the skeletal, muscular, and nervous systems. This course is intended for Massage Therapy Students as preparation for the Certification Exam. Prerequisite: BIOL 1360 or BIOL 2310. Co-Requisite: BIOL 137L. Day: Sp; Eve: Sp odd yrs. Lecture: 3, Lab: 0.

BIOL 137L Anatomy & Physiology II for Massage Therapists Lab 1 cr.

This course is the second of a three-term sequence designed

to facilitate understanding of the structure and function of the human body. Formal laboratory activities are integrated in a comprehensive study of the skeletal, muscular, and nervous systems. This course is intended for Massage Therapy Students as preparation for the Certification Exam. Prerequisite: BIOL 1360 or BIOL 2310. Co-Requisite: BIOL 1370. Day: Sp; Eve: Sp odd yrs. Lecture: 0, Lab: 3. ♦

BIOL 1380 Advanced Anatomy & Kinesiology for Massage Therapists 4 cr.

This course builds on knowledge gained by successful completion of BIOL 1360 and BIOL 1370. A review of all body systems with specific emphasis focused on skeletal, joint, and muscle structure, function and motion in the human body. Detailed consideration is given to muscle origin, insertion, nerve interaction and action, joint motion, prime movers and antagonist muscle groups using proper medical terminology. Prerequisite: BIOL 1370 and BIOL 137L or BIOL 2320 and BIOL 232L. Day: Su; Eve: Fa odd yrs. Lecture: 4, Lab: 0.

BIOL 1510 Introduction to Nutrition 3 cr.

A course for non-science majors which introduces the basic nutritional needs of humans through the life cycle; nutrient functions, sources, and requirements. Significant factors which influence food attitudes and habits are included. Students will develop sample meal plans for different life situations. Prerequisite: None. Co-Requisite: None. Day: Fa. Lecture: 3, Lab: 0.

BIOL 2000 Special Topics-Biology 0.5-6 cr.

By permission only. In-depth study of a specific topic(s) pertinent to biological sciences. May be repeated. Prerequisite: Permission. Co-Requisite: None. Day: On demand; Eve: On demand. Lecture: TBD, Lab: TBD.

BIOL 2010 Basic Microbiology 2 cr. TM-N

An introduction to microorganisms and their impact on human health, disease, and the environment. Epidemiology, techniques of infection control and sterile technique are discussed. Prerequisite: HS Biology or BIOL 0955, BIOL 095L or BIOL 1010, BIOL 101L & HS Chemistry or CHEM 0955, CHEM 095L, or CHEM 1210, CHEM 121L. Co-Requisite: BIOL 201L. Day: All. Lecture: 2, Lab: 0.

BIOL 201L Basic Microbiology Lab 1 cr. TM-N

A series of experiments designed to enhance the material discussed in BIOL2010. Prerequisite: HS Biology or BIOL 0955, BIOL 095L or BIOL 1010, BIOL 101L & HS Chemistry or CHEM 0955, CHEM 095L, or CHEM 1210, CHEM 121L. Co-Requisite: BIOL 2010. Day: All. Lecture: 0, Lab: 2. ♦

BIOL 2110 Environmental Biology 3 cr. TM-N

A course for majors and non majors which introduces current environmental problems including air and water

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pollution, toxic wastes, pesticides and energy resources. Human population and environmental impact are also included. Local environmental problems are addressed. Prerequisite: HS Science course with "C" or better or equivalent. Co-Requisite: BIOL 211L. Day: Sp; Online: Sp. Lecture: 3, Lab: 0.

BIOL 211L Environmental Biology Lab 1 cr. TM-N

Topics of the lab align to the lecture course. Prerequisite: HS Science course with "C" or better or equivalent. Co-Requisite: BIOL 2110. Day: Sp. Lecture: 0, Lab: 2. ♦

BIOL 2310 Human Anatomy & Physiology I 3 cr. TM-N

First of two courses on structure and function of the human body. Comprehensive study of cells, tissues, and organs with emphasis on the integumentary, skeletal, muscular, and nervous systems. Prerequisite: HS Biology or BIOL 0955, BIOL 095L or BIOL 1010, BIOL 101L & HS Chemistry or CHEM 0955, CHEM 095L, or CHEM 1210, CHEM 121L. Co-Requisite: BIOL 231L. Day: All; Eve: Fa; Blended: All. Lecture: 3, Lab: 0.

BIOL 231L Human Anatomy & Physiology I Lab 1 cr. TM-N

First of two laboratories on structure and function of the human body. Comprehensive study of cells, tissues, and organs with emphasis on the integumentary, skeletal, muscular, and nervous systems. Prerequisite: HS Biology or BIOL 0955, BIOL 095L or BIOL 1010, BIOL 101L & HS Chemistry or CHEM 0955, CHEM 095L, or CHEM 1210, CHEM 121L. Co-Requisite: BIOL 2310. Day: All; Eve: All. Lecture: 0, Lab: 2. ♦

BIOL 2320 Human Anatomy & Physiology II 3 cr. TM-N

Continuation of BIOL 2310. Comprehensive study of the special senses and the endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive systems. Prerequisite: BIOL 2310 and BIOL 231L. Co-Requisite: BIOL 232L. Day: All; Eve: Sp; Blended: All. Lecture: 3, Lab: 0.

BIOL 232L Human Anatomy & Physiology II Lab 1 cr. TM-N

Continuation of BIOL 231L. This is the second of two laboratories involving comprehensive study of the special senses and the endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive systems. Prerequisite: BIOL 2310 and BIOL 231L. Co-Requisite: BIOL 2320. Day: All; Eve: All. Lecture: 0, Lab: 2. ♦

BIOL 2450 Pathophysiology 3 cr.

This course focuses on basic pathophysiological processes and major disorders to introduce students to the diversity of disease process. By covering some disorders in detail and others by a generic presentation covering a group of disorders, the student is encouraged to compare textbook

presentation with the actual clinical picture of a disorder that they may encounter in the clinical setting. Prerequisite: BIOL 1320 and BIOL 132L or BIOL 2320 and BIOL 232L or BIOL 1360. Co-Requisite: None. Day: On demand; Online: Fa, Sp. Lecture: 3, Lab: 0. TAG: OHL019.

BIOL 2550 Nutrition I 3 cr.

This course is an introduction to the science of nutrition and explores nutritional needs of the individual and the problems that arise if these needs are not met. It includes information on the fundamental principles of nutrition with emphasis on the understanding of the nutrients, their chemical and physical properties, their functions in the body, their food resources and recommended intake for optimum health. Diet therapy is also included. Prerequisite: BIOL 2320 and BIOL 232L. Co-Requisite: None. Day: Sp; Eve: Fa; Online: Su. Lecture: 3, Lab: 0. TAG: OHL016.

BIOL 2600 Introduction to Ecology 3 cr. TM-N

A study of the interactions between organisms and their environments. Ecosystems, population structure and dynamics, as well as environmental perturbations are addressed. Prerequisite: BIOL 1010 and BIOL 101L or BIOL 1100 and BIOL 110L with "C" or better. Co-Requisite: BIOL 260L. Day: Fa. Lecture: 3, Lab: 0.

BIOL 260L Introduction to Ecology Lab 1 cr. TM-N

A study of the interactions between organisms and their environments. Ecosystems, population structure and dynamics, as well as environmental perturbations are addressed. Lab analysis and fieldwork in local areas is conducted. Prerequisite: BIOL 1010 and BIOL 101L or BIOL 1100 and BIOL 110L with "C" or better. Co-Requisite: BIOL 2600. Day: Fa. Lecture: 0, Lab: 2. ♦

BIOL 2650 Nutrition for Sports and Fitness 3 cr.

This course is an overview on the nutritional effects of physiological processes experienced through exercise. Specifically, it focuses on the macro- and micronutrients relationship in combination with an appropriate exercise routine on strength-hypertrophy, endurance, fatigue, and composition-weight changes. This course will also entail a review of the current sport nutrition literature and sport supplements. Prerequisite: BIOL 1510 or BIOL 2550. Co-Requisite: None. Online: SP. Lecture: 3, Lab: 0.

BUSINESS MANAGEMENT (BUSM)

BUSM 1550 Business Management 3 cr.

The nature of business management, organization and opportunities. Development of managerial viewpoints and methods. Explores business personnel, marketing and operational control functions. Prerequisite: None. Co-Requisite: None. Day: Fa, Su; Eve: Sp; Online: Sp. Lecture: 3, Lab: 0. ♦

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BUSM 1570 Small Business Entrepreneurship 3 cr.
A study of the basic fundamentals and problems of operating a small business. Topics of major interest including organization, opportunities in democracy, location, physical facilities, financing, administration of a credit program, problems of distributing goods and services, keeping records of your business, simplified bookkeeping systems. This course contains a student simulation to start a business. Prerequisite: None. Co-Requisite: None. Day: Sp; Eve: Fa; Online: Sp, Su. Lecture: 3, Lab: 0. ♦

BUSM 1600 PC Applications 3 cr.
The primary focus is on the application of personal computers using software popular in the business community. Students will use current operating systems, web browsers, word processing, spreadsheet databases, and presentation software. Concepts will be reinforced by a variety of hands-on assignments. Prerequisite: None. Co-Requisite: None. Day: All; Eve: All; Online: All. Lecture: 2, Lab: 2. ♦

BUSM 1660 Business Law 3 cr.
Introduction to the legal environment of business, based principally on the Uniform Commercial Code. Topics covered in the course include: business ethics, nature and sources of law, the U.S. judicial system, torts, contracts, product liability, agency, partnerships, corporations, anti-trust law, the employment relationship, equal employment legislation, and securities regulation. Prerequisite: None. Co-Requisite: None. Day: Fa; Eve: Fa; Online: All. Lecture: 3, Lab: 0. TAG: OBU004. ♦

BUSM 1710 Auto/Diesel Bus Computer App 3 cr.
Students will study the fundamentals of operating computer business applications in the automotive industry. Topics include basic start-up, inventory control, billing and records maintenance. The computer's disk operating system, spreadsheets, word processing programs, browsers and presentation graphics will be introduced. Students will complete assignments in each type of software. Basic operations in web advisor and Sakai will be covered. This course was developed for Automotive and Diesel Truck majors only. This course is not for business majors and may not be substituted for any other BUSM course in the college's inventory. Prerequisite: None. Co-Requisite: None. Day: Fa; Eve: Fa. Lecture: 2, Lab: 2. ♦

BUSM 2000 Special Topics-Business Management 0.5-6 cr.
By permission only. In-depth study of a specific topic(s) pertinent to business management. May be repeated. Prerequisite: Permission. Co-Requisite: None. Day: On demand; Eve: On demand. Lecture: TBD, Lab: TBD.

BUSM 2300 Introduction to Finance 3 cr.
Introduction to short, intermediate and long-term debt, risk management, financial intermediaries, and valuation of

stock. Prerequisite: None. Co-Requisite: None. Day: Sp; Eve: Fa; Online: Fa. Lecture: 3, Lab: 0. ♦

BUSM 2560 Human Resource Management 3 cr.
Theories of human resource management topics including: equal employment opportunity legislation, the employee selection process: recruiting, testing, and interviewing, a management team approach to performance appraisal, the process of discipline and discharge and safety. Prerequisite: None. Co-Requisite: None. Day: Sp; Eve: Fa. Lecture: 3, Lab: 0. ♦

BUSM 2600 Advanced Computer Applications 3 cr.
Students learn design concepts and computer skills needed to develop effective presentations for meetings, seminars, lectures, or business meetings. Text charts, number charts, and picture charts will be incorporated in order to create slide show presentations that communicate a multitude of business concepts. Design elements will include SmartArt, WordArt, ClipArt as well as sound and animation. Focus on the application of personal computers using databases, Google, and presentation software. Prerequisite: BUSM 1600. Co-Requisite: None. Day: Sp. Lecture: 2, Lab: 2. ♦

BUSM 2610 Business Capstone 3 cr.
Study of the following office management topics: office layout, office environment, selection of office equipment, performance appraisal, job evaluation, salary administration, work measurement, systems analysis, records management, forms design, reprographics. The course contains two projects – a capstone project, and an office layout project. Prerequisite: BUSM 2560. Co-Requisite: BUSM 2560. Day: Sp; Eve: Fa. Lecture: 3, Lab: 0. ♦

BUSM 2750 International Business 3 cr.
This course focuses on the economic, social, and cultural aspects of doing business overseas. The following topics are emphasized – entering foreign markets, regional trading blocks, study of foreign cultures, managing people from other cultures, and foreign exchange. A variety of topics concerning multinational corporations will be studied including their evolution, integration models, sources of risk, and options for solving current global problems. Prerequisite: BUSM 1550 and ECON 2120. Co-Requisite: None. Day: Sp. Lecture: 3, Lab: 0. ♦

CHEMISTRY (CHEM)

CHEM 0955 Basic Chemistry 3 cr.
Provides a survey of basic chemical knowledge for non-science majors on the scientific method, units and measurements, states of matter, elements, compounds, atomic and molecular structure, chemical bonding, solutions, the periodic table, acids and bases, gases, and nuclear chemistry. Course does not count towards

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graduation. Prerequisite: None. Co-Requisite: CHEM095L. Day: All; Eve: All. Lecture: 3, Lab: 0.

CHEM 095L Basic Chemistry Lab 1 cr.

Lab portion of CHEM 0955 that provides basic chemical knowledge for non-science majors on states of matter, elements, compounds, atomic and molecular structure, chemical bonds, solutions and the periodic table. Course does not count towards graduation. Prerequisite: None. Co-Requisite: CHEM0955. Day: All, Eve: All. Lecture: 0, Lab: 2. ♦

CHEM 1200 Chemistry Concepts 3 cr.

Designed to be a college level chemistry for non-science majors; delivered in an online format which provides elementary knowledge on: states of matter, elements, compounds, atomic and molecular structure, chemical bonding, solutions, the periodic table, acids/bases and buffers, gas laws, reaction rates and equilibrium, radioactivity and nuclear processes. For chemical operator majors only. Prerequisite: HS Algebra or MATH 0106. Co-Requisite: None. Online: All. Lecture: 3, Lab: 0.

CHEM 1210 Principles of Chemistry I 3 cr. TM-N

Provides elementary chemistry knowledge for non-science majors on states of matter, elements, compounds, atomic and molecular structure, chemical bonding, solutions and the periodic table, acids, bases & buffers, the Gas Laws, reaction rates & equilibrium, radioactivity & nuclear processes. Prerequisite: HS Algebra or MATH 0106. Co-Requisite: CHEM 121L. Day: All; Eve: All. Online: All. Lecture: 3, Lab: 0.

CHEM 121L Principles of Chemistry I Lab 1 cr. TM-N

Lab portion of the course that provides elementary chemistry knowledge for non-science, majors on states of matter, elements, compounds, atomic and molecular structure, chemical bonds, solutions and the periodic table. Prerequisite: HS Algebra or MATH 0106. Co-Requisite: CHEM 1210. Day: All; Eve: All. Lecture: 0, Lab: 2. ♦

CHEM 1220 Principles of Chemistry II 3 cr. TM-N

Survey of organic chemistry and biochemistry and their impact upon daily existence. Prerequisite: CHEM 1210 and CHEM 121L or CHEM 1510 and CHEM 151L with "C" or better. Co-Requisite: CHEM 122L. Day: Fa, Sp; Eve: On demand. Lecture: 3, Lab: 0.

CHEM 122L Principles of Chemistry II Lab 1 cr. TM-N

Lab for Survey course of Organic Chemistry and Biochemistry and their impact upon daily existence. Prerequisite: CHEM 1210 and CHEM 121L or CHEM 1510 and CHEM 151L with "C" or better. Co-Requisite: CHEM 1220. Day: Fa, Sp; Eve: On demand. Lecture: 0, Lab: 2. ♦

CHEM 1510 Fundamentals of Chemistry I 3 cr. TM-N

This chemistry series is for students majoring in science and related fields. Fundamental chemical concepts covered in the first semester include atomic structure, periodic classification, molecular bonding, stoichiometry, acid-base neutralization, thermochemistry, and gas laws. Critical thinking is stressed through problem solving. Prerequisite: HS Algebra or MATH 2130 & HS Chemistry or CHEM 0955 & CHEM 095L or CHEM 1210 & CHEM 121L with "C" or above. Co-Requisite: CHEM 151L. Day: Fa. Lecture: 3, Lab: 0. TAG: OSC008.

CHEM 151L Fundamentals of Chemistry I Lab 1 cr. TM-N

This chemistry series is for students majoring in science and related fields. General laboratory procedures, emphasizing safety, data analysis and reporting, will be developed through the hands-on laboratory experiments covering fundamental chemical concepts and principles in atomic structure, periodic trends, bonding, stoichiometry, acid-base neutralization, thermochemistry, and gas laws. Prerequisite: HS Algebra or MATH 2130 & HS Chemistry or CHEM 0955, CHEM 095L or CHEM 1210 & CHEM 121L with "C" or above. Co-Requisite: CHEM 1510. Day: Fa. Lecture: 0, Lab: 3. TAG: OSC008. ♦

CHEM 1520 Fundamentals of Chemistry II 3 cr. TM-N

This chemistry series is for students majoring in science and related fields. Fundamental chemical concepts covered in the second semester include intermolecular forces, colligative properties, equilibria, kinetics, thermodynamics, and electrochemistry. Prerequisite: CHEM 1510, CHEM 151L with "C" or better. Co-Requisite: CHEM 152L. Day: Sp; Eve: Su. Lecture: 3, Lab: 0. TAG: OSC009.

CHEM 152L Fundamentals of Chemistry II Lab 1 cr. TM-N

This chemistry lab series is for students majoring in science and related fields. General laboratory procedures, emphasizing safety, data analysis and reporting, will be developed through the hands-on laboratory experiments covering fundamental chemical concepts and principles covering intermolecular forces, colligative properties, equilibria, thermodynamics, and electrochemistry. Prerequisite: CHEM 1510 and CHEM 151L with "C" or better. Co-Requisite: CHEM 1520. Day: Sp; Eve: Su. Lecture: 0, Lab: 3. TAG: OSC009. ♦

CHEM 2000 Special Topics-Chemistry 0.5-6 cr.

By permission only. In-depth study of a specific topic(s) pertinent to chemistry. May be repeated. Prerequisite: Permission. Co-Requisite: None. Day: On demand; Eve: On demand. Lecture: TBD, Lab: TBD.

CRIMINAL JUSTICE TECHNOLOGY (CRJU)

CRJU 1010 Introduction to Criminal Justice 3 cr.

This course examines American criminal justice and the

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systems and procedures developed by society for dealing with crime, law, and justice. Emphasis is on the three major components of the system: police, courts, and corrections. The course also provides an introduction to the major theories of criminal behavior and victimization. Prerequisite: None. Co-Requisite: None. Day: Fa; Eve: Fa on demand. Lecture: 3, Lab: 0. TAG: OSS031.

CRJU 1005 Cyber Security and Investigation Internship 1-3 cr.

The internship experience provides credit opportunity for a paid placement of an individual into a criminal justice or security agency (police/sheriff, probation, courts, or related public service or government placement) as a field or co-operative work experience. Students will spend a minimum of 10 hours per week (150 over the semester) in field work with the respective agency for each hour of credit pursued. The student will participate in a co-requisite weekly seminar of the work experience as related to the internship. Prerequisite: completed 12 hours of general education, 6 hours of CRJU course work, ELEC 2510 and ELEC 2050. Co-Requisite: DTCS 2810. Day: Sp. Lecture: 0, Lab: 10. ♦

CRJU 1110 Criminal Evidence and Procedure 3 cr.

A thorough study of the constitutional basis for procedural law. Emphasis will be placed on the 4th, 5th, 6th, 7th, 8th, and 14th Amendments of the U.S. Constitution. Cases chosen for review will involve significant precedent or will involve current legal decisions affecting the role and performance of our criminal justice professions. Study of the evidence rules with specific emphasis on their application in preparing and presenting evidence. Course will briefly discuss burden of proof, general admissibility tests, witness testimony, and documentary and real evidence. Prerequisite: None. Co-Requisite: None. Day: Sp; Eve: On demand. Lecture: 3, Lab: 0.

CRJU 1120 Criminal Law 3 cr.

Study of the history and development of criminal law, the elements of crime, parties to a crime, types of offenses, and possible defenses. The theories of the text will directly correlate to the specific sections of the Ohio Revised Code. Prerequisite: None. Co-Requisite: None. Day: Fa; Eve: On demand. Lecture: 3, Lab: 0.

CRJU 1210 Criminal Investigation 3 cr.

Fundamental principles and techniques applicable to police investigation from incident to trial. A review of current and evolving technologies and the collection, preservation, and presentation of evidence in a court of law will be presented. Ethical considerations will be addressed. Prerequisite: None. Co-Requisite: None. Day: Fa; Eve: On demand. Lecture: 3, Lab: 0.

CRJU 1310 Police Operations 3 cr.

Introduction to basic principles and philosophies of law

enforcement organizations. Examination of purposes, methods, techniques, and types of patrol. Overview of support services and analysis of various techniques used in surveillance, narcotics, and vice control. Prerequisite: None. Co-Requisite: None. Day: Sp; Eve: On demand. Lecture: 3, Lab: 0. TAG: OSS032.

CRJU 1510 Corrections in the Criminal Justice System 3 cr.

Comprehensive overview of corrections practice and theory to include organization and administration of correctional institutions. Examines history and development of corrections, the interrelationship of corrections and the criminal justice system, elements of correctional process, correctional clients, non-institutional corrections systems, and alternatives to incarceration. Emphasis is placed on the role of the correctional officer and on the operation and analysis of current methods of correctional treatment within institutions. Students learn to apply corrections principles and develop interpersonal communication and decision making skills for direct intervention with correctional clients. Prerequisite: None. Co-Requisite: None. Day: On demand; Eve: Fa on demand. Lecture: 3, Lab: 0. TAG: OSS033.

CRJU 1600 Private Security Academy 6 cr.

Successful completion of the Ohio Peace Officer Training Commission's certified Private Security Academy programs provides graduates with a State of Ohio certification. The state mandates 135 hours of training covers the areas of: administration, legal, human relations, communications, loss prevention, safety and protective services, unarmed self-defense and first aid. Prerequisite: Admission standards per AG's office. Co-Requisite: None. Day: Fa. Lecture: 5, Lab: 15. ♦

CRJU 1601 Firearms Academy 1 cr.

Successful completion of the Ohio Peace Officer Training Commission's certified Private Security programs provides graduates with a State of Ohio certification. The state mandates 45 hours of training covers firearms training revolver, semi-auto and shotgun. Prerequisite: CRJU 1600. Co-Requisite: None. Day: Sp. Lecture: 1, Lab: 5. ♦

CRJU 2000 Special Topics-Criminal Justice 0.5-6 cr.

By permission only. In-depth study of a specific topic(s) pertinent to criminal justice technology. Prerequisite: Permission. Co-Requisite: None. Day: On demand; Eve: On demand. Lecture: TBD, Lab: TBD.

CRJU 2140 Peace Officer Basic Academy (POBA) I 13 cr.

The Peace Officer Training Academy (POBA) is sanctioned under the auspices of the Ohio Attorney General's Office. Successful completion of the POBA certificate program is mandatory for individuals to become certified Law Enforcement Officers in the State of Ohio. Cadets will learn the basic fundamental skills, aptitudes and attitudes necessary to be a successful peace officer in the State of

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Ohio. Prerequisite: Admission standards per AG's office. Co-Requisite: None. Day: Su. Lecture: 8, Lab: 15. ♦

CRJU 2150 Peace Officer Basic Academy (POBA) II 13 cr.

The Peace Officer Training Academy (POBA) is sanctioned under the auspices of the Ohio Attorney General's Office. Successful completion of the POBA certificate program is mandatory for individuals to become certified Law Enforcement Officers in the State of Ohio. Cadets will learn the basic fundamental skills, aptitudes and attitudes necessary to be a successful peace officer in the State of Ohio. Continuation of CRJU2140 POBA I Prerequisite: CRJU 2140. Co-Requisite: None. Day: Fa. Lecture: 8, Lab: 15. ♦

CRJU 2210 Criminalistics 3 cr.

Introduces the crime laboratory and techniques of scientific investigation with emphasis on recognition, collection, and preservation of evidence. Develops skills in using scientific equipment to detect and identify blood, hair, and other serology evidence, fingerprints, narcotics, impression and trace evidence, gun shot evidence, hairs, fibers, and soil evidence. Prerequisite: CRJU 1210. Co-Requisite: None. Day: Sp; Eve: On demand. Lecture: 2, Lab: 2. ♦

CRJU 2520 Community Based Corrections 3 cr.

The study of the development, organization, operation, and results of community based corrections practice. The course emphasizes probation, parole, and alternative sentencing options including day-report centers and residential treatment. Prerequisite: None. Co-Requisite: None. Eve: Fa on demand. Lecture: 3, Lab: 0.

CRJU 2530 Criminal Justice Administration 3 cr.

A study of the objectives of criminal justice organizations, to include corrections, courts, and law enforcement. Topics include organizational effectiveness, leadership, communication, morale, records, programs, and evaluation methods of organizations. Prerequisite: CRJU 1310. Co-Requisite: None. Day: Sp; Eve: On demand. Lecture: 3, Lab: 0.

CRJU 2550 Juvenile Justice Procedures 3 cr.

A survey of the nature and causes of delinquent activity by juveniles. Social and psychological factors underlying delinquency are studied. The roles of police, courts, and corrections in the juvenile justice system. Prerequisite: CRJU 1010. Co-Requisite: None. Day: Fa; Eve: On demand. Lecture: 3, Lab: 0.

CRJU 2560 Correctional Counseling and Treatment 3 cr.

Survey of treatment modalities for adult and juvenile offenders. Topics covered include legal issues in treatment, treatment theory, assessments, group and individual counseling processes, and differences between male/female and adult/juvenile populations. Prerequisite: CRJU

1510. Co-Requisite: None. Eve: Sp on demand. Lecture: 3, Lab: 0.

CRJU 2570 Crisis and Incident Response 4 cr.

Introduction to the Incident Command System, introduces the Incident Command System (ICS) and provides the foundation for ICS training. This course describes the history, features and principles, and organizational structure of the Incident Command System. It also explains the relationship between ICS and the National Incident Management System (NIMS). This course provides the context for ICS within initial response, and supports higher level ICS training. Prerequisite: CRJU 1010. Co-Requisite: None. Day: Sp. Lecture: 4, Lab: 0.

CRJU 2580 Criminal Justice Practicum 2 cr.

Practicum provides the placement of an individual into a criminal justice agency (police, probation, courts, corrections) to observe and participate in its operation. Students will spend 7 hours per week in field work with respective agency. Prerequisite: CRJU 2850. Co-Requisite: CRJU 2590. Day: Fa, Sp. Lecture: 0, Lab: 14. ♦

CRJU 2585 Cyber Security and Investigation Practicum 1 cr.

The knowledge and principles acquired in the Cyber Security & Investigation curriculum will be used through direct interaction with an IT Professional Mentor. The student is required to work with an assigned IT professional for 7 hours per week. The college faculty and practicum site mentor work closely to ensure the student a wide range of potential criminal justice procedural and network security experiences. Prerequisite: ELEC 2510 and ELEC 2050. Co-Requisite: DTCS 2810. Day: Sp. Lecture: 0, Lab: 7. ♦

CRJU 2590 Criminal Justice Seminar 1 cr.

Under the direction of the college faculty, the student will participate in a one-hour weekly review and assessment of the work experience as related to the practicum situation. Input from the agency supervisor will be used as an integral part of this weekly review. Prerequisite: CRJU 2850. Co-Requisite: CRJU 2580. Day: Fa, Sp, Su; Eve: On demand. Lecture: 1, Lab: 0.

CRJU 2850 Criminal Justice Careers 3 cr.

Focuses on job search skills, resume writing, current CJ trends, interview techniques, job retention, and career planning. Prerequisite: None. Co-Requisite: None. Day: Fa. Lecture: 3, Lab: 0.

CYBER SECURITY (CYBS)

CYBS 1010 Introduction to Cyber Security 3 cr.

In this course, students will become familiar with cyber security's core concepts, its terminology, its technologies,

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along with its skills. The Introduction to Cyber Security course is the beginning guide for anyone interested in information technology and cyber security. Major security topics such as vulnerability assessment, virus attacks, hacking, spyware, network-defense, passwords, firewalls, VPNs and intrusion detection are covered. Furthermore, this course helps prepare students for the CompTIA Security+ and TestOut Security Pro certifications. Prerequisite: None. Co-Requisite: None. Day: Fa, Sp; Online: Fa, Sp. Lecture: 2, Lab: 2. ♦

CYBS 1020 Operating Systems and Computing Fundamentals 3 cr.

This course is designed as an introduction to operating systems. It is intended for students with a basic background in computer systems. The first portion of the course presents the basic concepts of operating systems, which are platform independent. The second portion of the course covers specific issues with operating systems in widespread use today. Furthermore, this course helps prepare students for the Microsoft MOS and TestOut Office Pro certifications. Prerequisite: None. Co-Requisite: None. Day: Fa, Sp; Online: Fa, Sp. Lecture: 2, Lab: 2. ♦

CYBS 1030 Fundamentals of Hacking and IT Psychology 3 cr.

This course offers an in-depth analysis of the various methods for attacking and defending an organization's network. Explores network security concepts from the viewpoint hackers and their attack methodologies. Includes topics about hackers, attacks, Blue Team vs. Red Team, Intrusion Detection Systems (IDS) malicious code, computer crime, and industrial intelligence. Furthermore, this course helps prepare students for the CompTIA Security+ and TestOut Security Pro certifications. Prerequisite: None. Co-Requisite: None. Day: Fa; Online: Fa. Lecture: 2, Lab: 2. ♦

CYBS 1210 A+ Hardware and Software 3 cr.

The primary focus of this course will be on mastering skills related to hardware parts and functions of peripherals of a personal computer. Processors, motherboards, buses, ports, cables, expansion cards, hard drives, printers, displays, and other hardware functionalities and topics will be covered. The importance of communication skills, safety, and professionalism is also stressed. The course will help the student to prepare for the CompTIA A+ and TestOut PC Pro certifications. Prerequisite: None. Co-Requisite: None. Day: Fa, Sp; Online: Fa, Sp. Lecture: 2, Lab: 2. ♦

CYBS 1220 Unix/Linux 3 cr.

This course teaches students common tasks a user or system administrator of Unix or Linux has to perform, such as installation and configuration of the operating system. Students will learn command line interface commands and syntax in order to accomplish most of these goals. Students will learn how to use text editors such as vi and gedit as

powerful configuration tools. Furthermore, this course helps prepare students for the CompTIA Security+ and TestOut Security Pro certifications. Prerequisite: CYBS 1020. Co-Requisite: None. Day: Fa, Sp; Online: Fa, Sp. Lecture: 2, Lab: 2. ♦

CYBS 1230 Network+ 3 cr.

This course focuses on the interface of hardware components with PC networks and network operating systems. Detailed specifications are examined. Furthermore, this course helps prepare students for the CompTIA Network+ and TestOut Network Pro certifications. Prerequisite: CYBS 1020. Co-Requisite: None. Day: Sp; Online; Sp. Lecture: 2, Lab: 2. ♦

CYBS 1240 Ethical Protocols of Cyber Security 3 cr.

In this course, students will be introduced to the basic ethical protocols of cyber security, giving students an understanding of the threats and vulnerabilities of a cyber-landscape, along with other topics relating to the information technology cyber security fields. Furthermore, this course helps prepare students for the CompTIA Security+ and TestOut Security Pro certifications. Prerequisite: CYBS 1010. Co-Requisite: None. Day: Sp; Online: Sp. Lecture: 2, Lab: 2. ♦

CYBS 2100 Tactical Perimeter Defense in Cyber Security 3 cr.

This course provides an examination of how software and hardware can be implemented in information technology practices to provide a perimeter defense in protecting resources, and how security is addressed in both wireless and wired networks. In the duration of this course, topics will include the use of tools such as wireless access points, proxy servers, VPN's, auditing, intrusion detection systems and firewalls. Furthermore, this course helps prepare students for the CompTIA Security+ and TestOut Security Pro certifications. Prerequisite: CYBS 1030. Co-Requisite: None. Day: Fa, Online: Fa. Lecture: 2, Lab: 2. ♦

CYBS 2800 Cyber Security Practicum and Capstone 4 cr.

The knowledge and principles acquired in the Cyber Security curriculum will be used through direct interaction with an IT Professional Mentor. The student is required to work with an assigned IT professional for 21 hours per week. The college faculty and practicum site mentor work closely to ensure the student a wide range of repair/troubleshooting and networking experiences. Prerequisite: None. Co-Requisite: None. Day: Sp. Lecture: 1, Lab: 21. ♦

DESIGN DRAFTING (DRFT)

DRFT 1430 Advanced CAD 3 cr.

A class designed to take a basic AutoCAD user to a higher level of understanding and skill. Topics include

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drawing productivity functions, three-dimensional modeling, presentation and customization. Prerequisite: ENGR 1010. Co-Requisite: None. Day: Sp; Eve: Sp. Lecture: 2, Lab: 2. ♦

DRFT 1510 Design Drafting I 3 cr.

Introduction to basic concepts of mechanical drafting with emphasis placed on graphic language, lettering, geometric constructions, sketching, dimensioning, multi-view projection, pictorials and shape and true-size descriptions; solving problems involving points, lines, and planes; use of professional equipment. Prerequisite: None. Co-Requisite: None. Day: Fa; Eve: Fa. Lecture: 1, Lab: 5. ♦

DRFT 1560 Structural Drafting 3 cr.

Foundations, form and concrete work; structural timber, reinforced concrete, and structural steel frames; floor systems; industrial floors; roof systems; industrial roofing; masonry construction; curtain wall construction; building insulation. Prerequisite: ENGR 1010. Co-Requisite: None. Day: Sp; Eve: On demand. Lecture: 1, Lab: 5. ♦

DRFT 2000 Special Topics-Drafting 0.5-6 cr.

By permission only. In-depth study of a specific topic(s) in drafting technology. Prerequisite: Permission. Co-Requisite: None. Day: On demand; Eve: On demand. Lecture: TBD, Lab: TBD.

DRFT 2530 Engineering Drafting 3 cr.

In depth studies in engineering applications and drawing practices of geometric tolerancing, threads and fasteners, gears, electrical and welding symbology, wiring and PNID diagrams. Students apply designs through parametric design software to show the results professionally with computer models and working drawings. May be offered in a blended classroom/online format. Prerequisite: ENGR 1010. Co-Requisite: None. Day: Fa; Eve: Fa. Lecture: 1, Lab: 5. TAG: OET012 ♦

DRFT 2610 Civil Drafting 3 cr.

Basic principles of surveying including actual field work utilizing modern surveying equipment including the transit, tape, and stadia rod, EDM, and total station. Calculations connected with this work will be explained and problems will be solved simulating everyday boundary survey work. Prerequisite: ENGR 1010. Co-Requisite: None. Day: Sp. Lecture: 1, Lab: 5. TAG: OET015. ♦

DRFT 2800 Drafting Capstone Seminar 3 cr.

In depth studies of specific topics pertinent to the design drafting field and preparation to join the job market. Students will participate in an industry-related project and report on the activity with a presentation. Resume and portfolio development and interview techniques are discussed. Prerequisite: DRFT 1430 and SPCH 1510. Co-Requisite: None. Day: Sp; Eve: On demand. Lecture: 2, Lab: 2. ♦

DIESEL TRUCK SYSTEMS (TRCK)

TRCK 1100 Introduction to Truck Systems 3 cr.

Perform minor maintenance and service, such as lubrication, replacing simple components and correcting defects on heavy and medium duty trucks. Includes the study of brakes, clutch, and electrical systems. Hands on training with an emphasis on shop and trade safety procedures. Prerequisite: None. Co-Requisite: None. Day: Fa; Eve: Fa. Lecture: 2, Lab: 2. ♦

TRCK 1120 Medium and Heavy Brakes 3 cr.

Students will be introduced to basic brake systems, terminology, components, and theory of operation. Medium and heavy air and hydraulic brakes systems are covered including: service and emergency systems, disc, wedge and cam foundation brakes. Major antilock braking systems are discussed including service and diagnostics procedures. Basic industrial hydraulics systems for mobile applications are covered including: principles of operation, parts identification, and preventative maintenance. Prerequisite: None. Co-Requisite: None. Day: Fa; Eve: Fa. Lecture: 2, Lab: 2. ♦

TRCK 1130 Medium and Heavy Truck Chassis 3 cr.

This course of training consists of the theory, service, and repair of on-road medium and heavy truck and trailer chassis. Steering, suspension, and tire/wheel configurations are covered as are the associated geometry and alignment for both truck and trailers. Theory and operation of fifth wheels and coupling system are discussed including service and repair. Prerequisite: None. Co-Requisite: None. Day: Sp; Eve: Sp. Lecture: 2, Lab: 2. ♦

TRCK 1140 Diesel Engine Design & Service 3 cr.

Introduction to basic diesel engine designs, terminology, subsystems, components, and theory of operation. Labs: will emphasize proper use of tools, application of appropriate safety and environmental procedures, and the development of professional work standards in a group shop environment. Engines will be disassembled, cleaned, inspected for reusability of parts, reassembled, and test ran. Prerequisite: None. Co-Requisite: None. Day: Sp; Eve: Sp. Lecture: 2, Lab: 2. ♦

TRCK 2000 Special Topics-Diesel Truck Systems 0.5-6 cr.

By permission only. In-depth study of a specific topic(s) pertinent to diesel truck systems. May be repeated. Prerequisite: Permission. Co-Requisite: None. Day: On demand; Eve: On demand. Lecture: TBD, Lab: TBD.

TRCK 2100 Diesel Engine Tune Up & Maintenance 3 cr.

Examines the history of the diesel engine; the role of the trucking industry and the professional technician; the terms, formulae and presentation methods of engine performance

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data; diesel fuel and its alternatives. Labs will emphasize tune-up procedures and troubleshooting methodologies, engine brake theory and adjustment, engine performance and testing procedures. Prerequisite: TRCK 1140. Co-Requisite: None. Day: Fa; Eve: Fa. Lecture: 2, Lab: 2. ♦

TRCK 2110 Diesel Fuel Systems & Hydraulics 3 cr.

A study of the primary hydromechanical fuel management systems and subsystems used by the diesel industry, theory of operation, nomenclature, maintenance procedures. Mobile hydraulic systems, associated components, and theories of operation are covered also. Labs will provide hands-on disassembly, inspection, and calibration of diesel fuel injection systems; and applied hydraulic experiments. Prerequisite: None. Co-Requisite: None. Day: Fa; Eve: Fa. Lecture: 2, Lab: 2. ♦

TRCK 2120 Diesel Truck Drive Trains 3 cr.

Students will remove, disassemble, reassemble, install and test the operation of class 6/8 heavy truck drive train components. Includes five to fifteen speed transmissions; single reduction, double reduction, and internal differential assemblies; automatic transmissions; and related components. Lab work includes disassembly and reassembly procedures, troubleshooting, and component failure analysis. Prerequisite: None. Co-Requisite: None. Day: Fa; Eve: Fa. Lecture: 2, Lab: 2. ♦

TRCK 2130 Electronic Diesel Engines 3 cr.

Study of current electronic engine management systems. Identification and use of service tools/software used for diagnostics, repair, and data retrieval/management. Identification and repair of wiring systems. Labs provide hands-on use of tooling to diagnose and repair engine performance problems on live equipment. Prerequisite: TRCK 2110. Co-Requisite: None. Day: Sp; Eve: Sp. Lecture: 2, Lab: 2. ♦

TRCK 2140 Practicum TRCK/AUTO 2 cr.

Supervised training in the automotive or diesel industry. Students will be mentored 7 hours per week for 15 weeks at an established automotive/diesel service or parts business. Requires weekly journal entries for successful completion of course. Capstone Practicum. Prerequisite: 27 credits TRCK/AUTO courses. Co-Requisite: None. Day: Sp; Eve: On demand. Lecture: 1, Lab: 7. ♦

TRCK 2150 ASE Technician Preparation 3 cr.

This course is intended for automotive or diesel truck systems majors who are preparing to take one or more ASE (Automotive Service Excellence) examinations. Combined refresher materials with an abundance of sample test questions that relate to each competency required for certification by ASE. Labs with hands on operations and the appropriate ASE task check off sheets will be used to put together a portfolio. Prerequisite: 27 credits TRCK/

AUTO courses. Co-Requisite: None. Day: Sp; Eve: Sp. Lecture: 2, Lab: 2. ♦

DIGITAL TECHNOLOGY-COMPUTER GRAPHICS (DTGR)

DTGR 1550 Interface Design 3 cr.

Designing interfaces for multimedia, Web, and software applications. Explore different types of interfaces used in web, game, and software applications. Organize an interface using tools provided creating meaningful progression for the user. Using the user centered approach to design. Prerequisite: None. Co-Requisite: None. Day: Sp; Eve: Sp on demand. Lecture: 2, Lab: 2. ♦

DTGR 1600 Adobe Illustrator 3 cr.

Covers industry standard page vector editing software. Vector and typography tools are utilized. Emphasis is placed on developing logos and vector graphics. Preparation for the Adobe ACE Exam. Prerequisite: None. Co-Requisite: None. Day: Fa; Eve: On demand. Lecture: 2, Lab: 2. ♦

DTGR 1700 3D Graphics 3 cr.

Use computer modeling to create 3D graphics using 3D Studio Mix. Learn basic rendering techniques and lighting to create photorealistic images. Learn the basics of animation using the curve editor. Learn the basics of texturing and UV mapping using the texture node editor. Prerequisite: None. Co-Requisite: None. Day: Sp; Eve: Sp. Lecture: 2, Lab: 2. ♦

DTGR 2000 Special Topics-Computer Graphics 05.-6 cr.

By permission only. In-depth study of a specific topic(s) pertinent to computer graphics technology. May be repeated. Prerequisite: Permission. Co-Requisite: None. Day: On demand; Eve: On demand. Lecture: TBD, Lab: TBD.

DTGR 2100 3D Animation 3 cr.

Learn 3D Modeling and animation tools including sculpting, spline modeling, patch modeling and digital lighting. Learn how to create Animation Rigs for Biped and Quadrapeds. Learn how to work with Animation Curves. Prerequisite: None. Co-Requisite: None. Day: Fa; Eve: On demand. Lecture: 2, Lab: 2.

DTGR 2120 Social Media Marketing 3 cr.

Students will use a variety of current social media sites to create effective and cohesive social media marketing campaigns. Students will use current software to analyze the effectiveness of these social media campaigns, and determine user behavior on websites. Students will use a web content management system to create original content to drive the social media campaigns created. Prerequisite: None. Co-Requisite: None. Day: Sp; Eve: On demand. Lecture: 2, Lab: 2. ♦

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DTGR 2150 Maya Fundamentals 3 cr.

This course is designed to help students understand simulation and event modeling as they relate to software development for games and other types of software. Using software to build 3D models and skeletal structures for use in video games and animation. Creating and modifying polygons, vertices, faces, and splines. Prerequisite: None. Co-Requisite: None. Day: Sp; Eve: On demand. Lecture: 2, Lab: 2. ♦

DTGR 2200 Advanced Maya 3 cr.

The focus of this course is on how to understand simulation and event modeling as they relate to software development for games and other types of software. This course will build on knowledge from Maya Fundamentals to help students add special effects and particle effects to their work. Work on UV Mapping, Rendering, and Lighting. Prerequisite: DTGR 2150. Co-Requisite: None. Day: Fa; Eve: On demand. Lecture: 2, Lab: 2. ♦

DTGR 2620 Adobe Photoshop 3 cr.

Covers advanced digital photography/image editing software. Emphasis is placed on developing graphic projects. Prerequisite: DTGR 1600. Co-Requisite: None. Day: Sp; Eve: On demand. Lecture: 2, Lab: 2. ♦

DTGR 2750 Adobe InDesign 3 cr.

Covers industry standard page layout software Adobe InDesign. Typography and page layout tools are utilized. Emphasis is placed on developing business and advertising related articles. Major emphasis on preparation for the Adobe ACA Exam. Prerequisite: DTGR 2620 or OAST 2210. Co-Requisite: None. Day: Fa. Lecture: 2, Lab: 2. ♦

DTGR 2800 Introduction to ZBrush 3 cr.

Learn the use of an industry standard modeling program called ZBrush to create realistic looking 3D Models for Film and Game Design. Includes modeling basics as well as lighting, texturing, and shading. Prerequisite: None. Co-Requisite: None. Day: Sp; Eve: Fa. Lecture: 2, Lab: 2. ♦

DTGR 2850 Adobe Flash 3 cr.

Interactive application development for media rich projects that run on the web, on the desktop and on mobile devices. Includes creating animations, using special effects, drawing objects, incorporating sound and video and an introduction to programming in ActionScript. Prerequisite: None. Co-Requisite: None. Day: Fa, Eve: On demand. Lecture: 2, Lab: 2. ♦

DTGR 2960 Computer Graphics Practicum 1 cr.

The knowledge and principles acquired in the Computer Graphics curriculum will be used through direct interaction with a graphics professional mentor. The student will be required to work with an assigned graphics professional for 7 hours per week. The college faculty and practicum site

mentor work closely to ensure the student receives a wide range of graphics creations and publishing experiences. Prerequisite: DTGR 2620, DTGR 2750, and DTGR 1600 with a grade of "C" or better. Co-Requisite: DTGR 2970. Day: Sp. Lecture: 0, Lab: 7. ♦

DTGR 2970 Computer Graphics Seminar 1 cr.

This course allows students to use all the skills acquired in the Digital Technology Graphics major. Concentrates on the interpersonal relationships existing in the work environment. Students will have the opportunity to discuss/evaluate their experiences in the Computer Graphics Practicum. Students will share their insights with each other. Prerequisite: DTGR 2620, DTGR 2750 and DTGR 1600 with a grade of "C" or better. Co-Requisite: DTGR 2960. Day: Sp. Lecture: 1, Lab: 0.

DIGITAL TECHNOLOGY-COMPUTER SUPPORT (DTCS)

For other Computer Support Technician courses see Electronics (ELEC)

DTCS 1005 Computer Support Internship 1-3 cr.

The internship experience provides credit opportunity for a paid placement of an individual in an information technology company, organization, department, etc. as a field or co-operative work experience. The students will spend a minimum of 7 hours per week, for the 15 week semester, in field work with the respective site placement for each credit pursued. The student will participate in a co-requisite weekly seminar related to the internship. Prerequisite: 12 completed hours of General Education, 6 completed hours of Computer Support, ELEC 2050, and ELEC 2510. Co-Requisite: DTCS 2810. Day: Sp On Demand. Lecture: 0, Lab: 7-21. ♦

DTCS 1230 O/S Concepts and Customizing 3 cr.

An introduction to mainstream operating systems, focusing on Windows and Linux versions. Course covers the purpose, function, and concepts of an operating system including customizing, trouble shooting, back-ups, network configuration, printing, user configurations, etc. Prerequisite: None. Co-Requisite: None. Day: Fa; Eve: Sp. Lecture: 3, Lab: 0. ♦

DTCS 2000 Special Topics-Computer Support 0.5-6 cr.

By permission only. In-depth study of a specific topic(s) pertinent to computer support technology. May be repeated. Prerequisite: Permission. Co-Requisite: None. Day: On demand; Eve: On demand. Lecture: TBD, Lab: TBD.

DTCS 2100 Database Management 3 cr.

An introduction to database theory and methodology with practical use of a SQL-based database. Projects will include building and interrogating small databases. Prominent database applications will be studied.

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Prerequisite: BUSM 1600. Co-Requisite: None. Day: Fa; Eve: Sp. Lecture: 2, Lab: 2. ♦

DTCS 2550 Network Administration 3 cr.

This course covers effective network management, with an emphasis on Windows Server. Topics include network file system design, active directory configuration, DNS, DHCP, security, group policy, login scripts, printing, email, back-up, and a variety of advanced topics. Prerequisite: ELEC 1950. Co-Requisite: None. Day: Sp. Lecture: 2, Lab: 2. ♦

DTCS 2650 Internet and Web Design 3 cr.

Course starts with students working in a plain text editor such as Eclipse learning XHTML and CSS coding and then introduces techniques used in GUI editors such as Dreamweaver. Topics covered include XHTML coding, cascading style sheets, tables, layers, frames, forms, graphics usage, code validation and security issues. Students are introduced to using server-side scripts to create interactive web pages. Student web hosting accounts are provided for each student for the duration of the course. Prerequisite: None. Co-Requisite: None. Day: Fa; Eve: Sp odd yrs. Lecture: 2, Lab: 2. ♦

DTCS 2800 Computer Repair & Diagnostic Practicum 3 cr.

The knowledge and principles acquired in the Computer Support Technician curriculum will be used through direct interaction with an IT Professional Mentor. The student is required to work with an assigned IT professional for 21 hours per week. The college faculty and practicum site mentor work closely to ensure the student a wide range of repair/troubleshooting and networking experiences. Prerequisite: ELEC 2510. Co-Requisite: DTCS 2810. Day: Sp; Eve: On demand. Lecture: 0, Lab: 21. ♦

DTCS 2810 Capstone Seminar: Computer Support Technician 1 cr.

Capstone course allows students to use all the skills acquired in the Computer Support Technician Major. Concentrates on the interpersonal relationships existing in the work environment. Students will have the opportunity to discuss/evaluate their experiences in the DTCS 2800 Computer Support Technician Practicum. Students will share their insights with each other. Prerequisite: ELEC 2510. Co-Requisite: DTCS 2800. Day: Sp; Eve: On demand. Lecture: 1, Lab: 0. ♦

DIGITAL TECHNOLOGY-DIGITAL MEDIA (DTME)

DTME 1300 Video Production I 3 cr.

An introductory course studying the basics concepts, theories and terminology of producing visually based productions for broadcast and web site environments. Topics include the production process, broadcast equipment application,

lighting for video, audio for video, introduction to non-linear editing, working with talent and writing for video. Prerequisite: None. Co-Requisite: None. Day: Fa; Eve: On demand; Online: On demand. Lecture: 2, Lab: 2. ♦

DTME 1330 Digital Video Effects 3 cr.

Course covers aspects of manipulating digital imagery and video for special effects. Topics include image and video representation, digital workflow, lighting, rendering, compositing mixed environments (live and CG), morphing, particle effects, dynamics, camera properties, image tracking and filters. Students will concentrate on planning, story-boarding, and producing short movies that apply special effects. Prerequisite: None. Co-Requisite: None. Day: Sp; Eve: On demand; Online: On demand. Lecture: 2, Lab: 2. ♦

DTME 2000 Special Topics-Digital Media 0.5-6 cr.

By permission only. In-depth study of a specific topic(s) pertinent to digital media technology. May be repeated. Prerequisite: Permission. Co-Requisite: None. Day: On demand; Eve: On demand. Lecture: TBD, Lab: TBD.

DIGITAL TECHNOLOGY-WEB APPLICATION PROGRAMMING (DTWP)

DTWP 1200 Programming Logic and Problem Solving 3 cr.

A first course in programming where students are exposed to basic programming concepts and use Python to illustrate fundamental principles of design and programming that apply in any language. Emphasizes problem-solving and includes coverage of computer graphics and object-oriented concepts. Prerequisite: None. Co-Requisite: None. Day: Fa; Eve: Sp. Lecture: 2, Lab: 2. ♦

DTWP 2000 Special Topics-Web Programming 0.5-6 cr.

By permission only. In-depth study of a specific topic(s) pertinent to web programming technology. May be repeated. Prerequisite: Permission. Co-Requisite: None. Day: On demand; Eve: On demand. Lecture: TBD, Lab: TBD.

DTWP 2600 .NET Programming 3 cr.

A study of fundamental design tenets for .NET programming. Introduction to Microsoft's C# and VB languages. Programs will incorporate object-oriented code using encapsulation, inheritance, and polymorphism. Students will create high-performance applications of all types-Web forms, Window forms, and Web services to solutions for MS SQL Server, using the .NET framework. Students will get hands-on experience in the classroom. Prerequisite: None. Co-Requisite: None. Day: Fa; Eve: Su. Lecture: 2, Lab: 2. ♦

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ECONOMICS (ECON)

ECON 2000 Special Topics-Economics 0.5-6 cr.

By permission only. In-depth study of a specific topic(s) pertinent to economics. May be repeated. Prerequisite: Permission. Co-Requisite: None. Day: On demand; Eve: On demand. Lecture: TBD, Lab: TBD.

ECON 2120 Principles of Macroeconomics 3 cr. TM-S

Introduction to American capitalism: basic economic concepts including, national income analysis, employment theory, inflation, the business cycle, price level, fiscal policy, federal budget deficit, the role of money, the institutions and function of the American banking system, the Federal Reserve, monetary policy, comparative advantage, and Gross Domestic Product. Prerequisite: None. Co-Requisite: None. Day: Fa, Su; Eve: Sp. Lecture: 3, Lab: 0. TAG: OSS005. ♦

ECON 212H Principles of Macroeconomics Honors 3 cr. TM-S

Introduction to American capitalism: basic economics concepts including, national income analysis, employment theory, inflation, the business cycle, price level, fiscal policy, federal budget deficit, the role of money, the institutions and function of American banking system, the Federal Reserve, monetary policy, comparative advantage, and Gross Domestic Product. This is a special course because it is designed especially for honors students and combines the foundational content elements of an introductory economics course with the higher order analytic challenges of a more advanced economic issues and policy class. Prerequisite: honors program acceptance. Co-Requisite: None. Day: Fa. Lecture: 3, Lab: 0. TAG: OSS005. ♦

ECON 2130 Principles of Microeconomics 3 cr. TM-S

Study of the following microeconomic topics: opportunity cost, production possibilities frontier, supply and demand analysis, supply and demand elasticity, price determination, profit maximization, cost analysis, wage determination, imperfect market structures, antitrust and government deregulation of industry. Prerequisite: None. Co-Requisite: None. Day: Sp; Eve: Fa; Online: Su. Lecture: 3, Lab: 0. TAG: OSS004. ♦

EDUCATION TRANSFER (EDUC)

EDUC 1000 Introduction to Education 3 cr.

Introduction to the teaching profession and college education program. Study revolves around six themes: standards-based education, professionalization, diversity, democratic issues, curriculum and instruction, and legal and organizational issues. These themes will be examined through selected readings and field experiences.

Professional portfolios will be started and transfer options discussed. Includes 10 hours of integrated field exercises in the local schools. Documentation of clear FBI/BCI background check required. Prerequisite: None. Co-Requisite: None. Day: Fa, Sp; Eve: Fa. Lecture: 3, Lab: 0. TAG: OED007.

EDUC 1020 Early Childhood Development 3 cr.

This course focuses on applying knowledge of the characteristics and needs of young children, from conception through age eight, for the creation of healthy, respectful, supportive, challenging, and effective learning environments. It includes examining multiple and interrelated influences on the development and learning of young children. Prerequisite: None. Co-Requisite: None. Day: Sp. Lecture: 3, Lab: 0. TAG: OED010.

EDUC 1510 Early Childhood Education Seminar and Field Work 1 cr.

Classroom observation for students preparing to enter the teaching profession. Students must attend a seminar on campus and complete 40 hours of field work. Students must clear an FBI/BCI background check to participate. Students gain knowledge and experience necessary for initial understanding of concepts and practices presented in education courses. Prerequisite: EDUC 1000. Co-Requisite: None. Day: Fa, Sp. Lecture: 1, Lab: 0. ♦

EDUC 1530 Middle Childhood Education Seminar and Field Work 1 cr.

Classroom observation for students preparing to enter the teaching profession. Students must attend a seminar on campus and complete 40 hours of field work. Students must clear an FBI/BCI background check to participate. Students gain knowledge and experience necessary for initial understanding of concepts and practices presented in education courses. Prerequisite: EDUC 1000. Co-Requisite: None. Day: Fa, Sp. Lecture: 1, Lab: 0. ♦

EDUC 1550 Young Adult Education Seminar and Field Work 1 cr.

Classroom observation for students preparing to enter the teaching profession. Students must attend a seminar on campus and complete 40 hours of field work. Students must clear an FBI/BCI background check to participate. Students gain knowledge and experience necessary for initial understanding of concepts and practices presented in education courses. Prerequisite: EDUC 1000. Co-Requisite: None. Day: Fa, Sp. Lecture: 1, Lab: 0. ♦

EDUC 1700 Educational Technology 3 cr.

Introduces varied uses of the computer and technology in classrooms. Material covered includes integration of computers into the curriculum and record-keeping assistance; hardware and software selection criteria;

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and offers opportunity to use several popular software packages. Assists pre-service teachers in meeting ISTE standards (NETS). Includes laboratory and project work. Prerequisite: BUSM 1600. Co-Requisite: None. Day: Sp, Su; Eve: Fa even yrs. Lecture: 3, Lab: 0. ♦

EDUC 1800 Online Instructional Strategies 3 cr.

This course focuses on the effective ways of integrating technology and instructional strategies to build and deliver online and blended courses at Washington State Community College. It introduces the various academic technologies used by WSCC, including the Sakai learning management system. The course will address topics such as teaching with technology, academic integrity and FERPA. Quality of online content will be discussed within the context of Quality Matters Rubric standards for online and blended course design. Participants will learn how to manage time for efficient delivery of a course and learn how to distinguish between quality of content and quality of delivery in an online and blended course. Prerequisite: None. Co-Requisite: None. Online: All. Lecture: 3, Lab: 0.

EDUC 2000 Special Topics-Education 0.5-6 cr.

By permission only. In-depth study of a specific topic(s) pertinent to education. May be repeated. Prerequisite: Permission. Co-Requisite: None. Day: On demand; Eve: On demand. Lecture: TBD, Lab: TBD.

EDUC 2100 Exceptional Learners 3 cr.

This study of people with special needs and exceptionalities includes information on inclusion and differentiated school programming with emphasis on understanding their needs and behaviors. Prerequisite: None. Co-Requisite: None. Day: Fa, Sp; Eve: Fa. Lecture: 3, Lab: 0. TAG: OED009.

EDUC 2110 Exceptional Learners Education Seminar and Field Work 1 cr.

Classroom observation for students preparing to enter the teaching profession. Students must attend a seminar on campus and complete 40 hours of field work. Students must clear an FBI/BCI background check to participate. Students gain knowledge and experience necessary for initial understanding of concepts and practices presented in education courses. Prerequisite: EDUC 1000. Co-Requisite: None. Day: Fa, Sp. Lecture: 1, Lab: 0. ♦

EDUC 2300 Families, Communities, and Schools 3 cr.

This course explores educational considerations for teachers including the policies, theories, practices, skills, and knowledge of home, school, and community partnerships. Students will examine: the multiple influences on the whole child; accessibility of community services and supports; ethical, practical, and culturally competent decisions to foster family engagement; knowledge and skills needed to address family structure, socio-cultural and linguistic backgrounds, identities and customs, and advocacy for children and

families. Prerequisite: None. Co-Requisite: None. Day: Sp. Lecture: 3, Lab: 0. TAG: OED011.

EDUC 2400 Multicultural Education 3 cr.

Examination of the social, political, and economic context of schooling as it effects diverse learners and their ability to succeed. Emphasis is on the teacher's role in providing an equitable, just, and supportive learning environment for all students. Includes at least one field experience in a school with cultural, racial, and/or ethnic diversity. Prerequisite: None. Co-Requisite: None. Day: Fa, Sp. Lecture: 3, Lab: 0.

EDUC 2950 Education Capstone: Foundations of the Profession 1 cr.

To be taken as the Education Transfer student is completing associate degree requirements. The course will focus on professionalism and finalization of transfer plans. Additionally, the course will highlight current events in education, student achievement, curriculum and instruction, and school government and finance. Educational issues regarding curriculum choice, diversity and social justice will also be explored. Prerequisite: EDUC 2110. Co-Requisite: None. Day: Fa, Sp. Lecture: 1, Lab: 0. ♦

ELECTRICAL ENGINEERING TECHNOLOGY (ELET)

ELET 1000 Internship 1 cr.

Provides the opportunity to put classroom knowledge to practical use. Student's position is selected and/or approved by the college; student is evaluated periodically by the organization and is supervised by a college instructor/coordinator. Prerequisite: None. Co-Requisite: None. Day: On demand; Eve: On demand. Lecture: TBD, Lab: TBD.

ELET 1110 DC Circuits 3 cr.

Comprehensive study of DC electricity with emphasis on basic electrical concepts such as atomic structure, electron theory, current, voltage, resistance, conductance, Ohm's Law, electrical energy and power, Kirchoff's voltage and current laws, series, parallel, series-parallel circuits, network theorems, capacitance, inductance, time constants, and magnetic circuits. Prerequisite: None. Co-Requisite: None. Day: Fa. Lecture: 1, Lab: 6. TAG: OET001. ♦

ELET 1130 AC Circuits 3 cr.

Extensive study of AC Fundamentals emphasizing frequency, reactance, series, parallel, and series-parallel impedances, voltage, current, Ohm's Law, Kirchoff's voltage and current Laws, AC power, network theorems, resonance, complex power, circuit analysis in time and frequency domains, phase angle, phaser diagrams, transformers, coupled circuits, and polyphase systems. Prerequisite: ELET 1110. Co-Requisite: None. Day: Sp. Lecture: 1, Lab: 6. TAG: OET003. ♦

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ELET 1310 Digital I 4 cr.

The first of two courses in digital circuit fundamentals, including: Introductory Concepts, Number Systems, Operations, and Codes, Logic Gates, Boolean Algebra, and Logic Simplification, Combinational Logic Analysis, Functions of Combinational Logic, Latches, Flip-Flops, and Timers, Counters, Shift Registers, Memory and Storage, and Integrated Circuit Technologies. Prerequisite: None. Co-Requisite: None. Day: Fa; Eve: Sp. Lecture: 3, Lab: 3. TAG: OET002. ♦

ELET 1330 Digital II 3 cr.

The second of two courses in digital circuit fundamentals, including: Programmable Logic and Software, Signal Interfacing and Processing, Computer Concepts, and a Design Project. Prerequisite: ELET 1310. Co-Requisite: None. Day: Sp; Eve: Fa. Lecture: 2, Lab: 3. ♦

ELET 1360 Commercial Wiring and Prints 2 cr.

Sizing and installation of home and commercial electrical wiring circuits in compliance with the National Electrical Code, including installation of conduit, junction boxes, outlet boxes, receptacles, and switches. Reading commercial electrical blueprints, conductor ampacity calculations, and sizing of overcurrent protection devices. Prerequisite: None. Co-Requisite: None. Day: Sp. Lecture: 1, Lab: 2.5. ♦

ELET 2000 Special Topics-Electrical Engineering 0.5-6 cr.

By permission only. In-depth study of a specific topic(s) pertinent to electrical engineering technology. May be repeated. Prerequisite: Permission. Co-Requisite: None. Day: On demand; Eve: On demand. Lecture: TBD, Lab: TBD.

ELET 2110 Rotating Machinery 3 cr.

Emphasis on DC and AC equipment and machinery; Includes armature and field windings of generators and motors, controls, parallel generator operation, speed regulation, efficiency, losses, transformers, and polyphase systems. Prerequisite: None. Co-Requisite: ELET 1130. Day: Fa; Eve: On demand. Lecture: 2, Lab: 3. ♦

ELET 2130 Motor Control 2 cr.

Reading and interpreting process and instrument drawings, motor control diagrams and ladder logic diagrams. Installing, testing, and troubleshooting motor control circuits. Prerequisite: None. Co-Requisite: None. Day: Sp. Lecture: 1, Lab: 2.5. ♦

ELET 2210 Electronics I 4 cr.

Semiconductor theory, including diode theory and applications, bipolar transistor theory, small and large signal amplifiers, biasing and gain calculations, JFETs, MOSFETs, Solid State Relays, thyristors, op-amps, and regulated power supplies. Prerequisite: None. Co-Requisite: ELET 1130. Day: Fa. Lecture: 2, Lab: 6. TAG: OET005. ♦

ELET 2230 Electronics II 3 cr.

An introduction to alternative energy technologies, including: solar, wind, and fuel cells. Research and construction project of a selected topic using various facets of electrical engineering technology. Final project term paper and presentation required. Prerequisite: ELET 2210. Co-Requisite: None. Day: Sp. Lecture: 1, Lab: 6. ♦

ELET 2410 Programmable Logic Controllers 3 cr.

Basic operations, history, numbering systems, system hardware and software, ladder logic programming, math functions, sequencers, comparisons, block transfers, program control instructions, fault handling, and PLC networking. Prerequisite: None. Co-Requisite: None. Day: Fa; Eve: Fa. Lecture: 2, Lab: 3. TAG: OET022. ♦

ELECTRONICS (ELEC)

ELEC 1950 Cisco Semester I – Introduction to Networks 3 cr.

This course uses the OSI and TCP layered models of computer networks to examine the nature and roles of protocols and services at various layers. The principles and structure of IP addressing and the fundamentals of Ethernet concepts, media, and operations are introduced. Labs will allow students to analyze protocols and network operations, build small networks, apply basic cabling principles, and perform basic configurations of network devices such as routers, switches, and implementation of IP addressing schemes. Prerequisite: DTCS 1230. Co-Requisite: None. Day: Sp; Eve: On demand. Lecture: 1, Lab: 5. ♦

ELEC 2000 Special Topics-Electronics 0.5-6 cr.

By permission only. In-depth study of a specific topic(s) pertinent to electronics. May be repeated. Prerequisite: Permission. Co-Requisite: None. Day: On demand; Eve: On demand. Lecture: TBD, Lab: TBD.

ELEC 2050 Cisco Semester II - Routing and Switching Essentials 3 cr.

This course covers the architectures, components, and operations of routers and switches in a small network. Students learn how to configure routers and switches for functionality and security. Students will learn to configure and troubleshoot common issues with RIPv2, single-area OSPF, virtual LANs and inter-VLAN routing in both IPv4 and IPv6 networks. Additional topics include configuration of ACLs, DHCP, NAT, SSH and Switch Security. Prerequisite: ELEC 1950. Co-Requisite: None. Day: Fa; Eve: On demand. Lecture: 1, Lab: 5. ♦

ELEC 2410 Microcomputer Diagnostics & Upgrading I 3 cr.

This course covers diagnosing common microcomputer problems, preventive maintenance and using diagnostic

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programs. Students will also learn how to implement and support cloud technologies and mobile computing devices. In addition, topics related to adding additional hardware and enhancing older computers will be covered. Hands-on experience and activities will be included. Students in possession of current CompTIA A+ Certification may receive Advanced Placement credit for this course. A copy of the certification must be provided. Prerequisite: DTCS 1230. Co-Requisite: None. Day: Sp; Eve: Fa odd yrs. Lecture: 2.5, Lab: 1. ♦

ELEC 2450 Network Security Concepts 3 cr.

This course covers intermediate networking concepts with a focus on security fundamentals. Topics include secure network administration practices, common network protocols, vulnerabilities and attacks, wireless network security, access control, switching principles, firewalls, network compliance and auditing. This course maps to the objectives for the CompTIA Security + Certification exam. Students in possession of current CompTIA Security+ Certification may receive Advanced Placement credit for this course. A copy of the certification must be provided. Prerequisite: ELEC 2050. Co-Requisite: None. Day: On demand; Eve: Sp. Lecture: 2, Lab: 2. ♦

ELEC 2510 Microcomputer Diagnostics & Upgrading II 3 cr.

Emphasis will be on system troubleshooting methods using appropriate tools and test equipment, as well as operating system issues using advanced software diagnostics. Students in possession of current CompTIA A+ Certification may receive Advanced Placement credit for this course. A copy of the certification must be provided. Prerequisite: ELEC 2410. Co-Requisite: None. Day: Fa; Eve: On demand. Lecture: 2.5, Lab: 1. ♦

ELEC 2610 Introduction to Linux 3 cr.

Introduces the main aspects of the Linux operating system. Students will install and configure Linux on appropriate hardware. Includes managing users, software, hardware, the Linux file systems, the Bash Shell and configuring TCP/IP servers. Students will configure a server-side LAMP environment for Web development. Students in possession of current CompTIA Linux+ Certification may receive Advanced Placement credit for this course. A copy of the certification must be provided. Prerequisite: DTCS 1230. Co-Requisite: None. Day: Sp; Eve: On demand. Lecture: 2, Lab: 2. ♦

ELEC 2900 Introduction to Computer Forensics 3 cr.

Course focuses on the study and application of criminal investigation skills and evidence-based case development for civil, criminal, and administrative cases. Applies the techniques, skills, and knowledge of computer and network support. Students will complete specialized lab experiences and training designed to build the skills necessary for computer based investigations. Prerequisite: CRJU1210,

ELEC2050 and ELEC2510. Eve: Sp on demand. Lecture: 2, Lab: 2. ♦

ENGINEERING, GENERAL (ENGR)

ENGR 1010 Fundamentals of Engineering 3 cr.

A study of various engineering careers and computer applications in those areas as well as ethics as related to engineering practices. Students will work as teams to apply the problem-solving process as it relates to engineering disciplines and develop related skills. Presents the basics of drafting practices and projection types; basic concepts of operating a CAD system. Emphasis on sketching a form and then converting these images to a CAD produced engineering drawing. Prerequisite: None. Co-Requisite: None. Day: Fa; Eve: Fa. Lecture: 2, Lab: 4. TAG: OES001. ♦

ENGR 2000 Special Topics-Engineering Technology 0.5-6 cr.

By permission only. In-depth study of a specific topic(s) pertinent to engineering technology. May be repeated. Prerequisite: Permission. Co-Requisite: None. Day: On demand; Eve: On demand. Lecture: TBD, Lab: TBD.

ENGR 2210 Statics 4 cr.

Analysis of forces and effects of forces on rigid body structures at rest such as frames and trusses. Prerequisite: MATH 2120, PHYS 2010 and PHYS 201L. Co-Requisite: None. Day: On demand; Eve: Fa. Lecture: 4, Lab: 0. TAG: OET007.

ENGR 2220 Strength of Materials 3 cr.

A comprehensive coverage of the important topics in strength of materials with an emphasis on application, problem solving, and design of structural members, mechanical devices, and systems. Includes evaluation of externally applied forces and internally induced stresses in materials. Consideration is given in terms of compression, tension, and shear to solve problems of an engineering nature. Prerequisite: ENGR 2210. Co-Requisite: None. Day: On demand; Eve: Sp. Lecture: 2, Lab: 3. TAG: OET008. ♦

ENGR 2800 Engineering Capstone Seminar 3 cr.

A research seminar and project development of a topic in student's engineering discipline (industrial, electrical). Presentation of project supported with documented research, proposal, time/cost estimates and PowerPoint presentation. Prerequisite: ENGL 1510, and SPCH 1510 or SPCH 2060. Co-Requisite: None. Lecture: 1, Lab: 5. ♦

ENGLISH COMPOSITION (ENGL)

ENGL 0800 Integrated Language Skills I 4 cr.

Study of sentence-writing, vocabulary, and reading skills in a computer-assisted format. Emphasizes a review of grammar, mechanics, and punctuation; vocabulary skills;

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various reading comprehension skills; and flexible reading rates. Prerequisite: Accuplacer Placement. Co-Requisite: PERS 1003. Day: All; Eve: All; Blended: Fa. Lecture: 3, Lab: 2. ♦

ENGL 0900 Integrated Language Skills II 4 cr.

Integrate reading and writing skills in a computer assisted format in order to develop the ability to write clear, concise paragraphs and to think critically about paragraphs and essays. Students will be required to critically read, critique and write paragraphs with organizational patterns essential to college-level reading and writing. The final module will include reading and interpreting essays and writing an essay which includes an introduction, body, and conclusion. Prerequisite: ENGL 0800 or Accuplacer Placement. Co-Requisite: PERS 1003. Day: All; Eve: All; Blended: Fa. Lecture: 4, Lab: 0. ♦

ENGL 0915 Writing Studio 1 cr.

This course is designed to be taken in conjunction with ENGL 1510 English Composition I for those students who need some extra support with their writing skills. The major emphasis on the class will be on grammar usage, thesis statements, structure of paragraphs and essays, and revision and editing of writing. Students will be working on improving skills and essays being taught in English Composition I through conference and with peer-editing. Prerequisite: accuwriter placement. Co-Requisite: ENGL 1510. Day: All, Eve: All. Lecture: 0, Lab: 2. ♦

ENGL 1510 English Composition I 3 cr. TM-E

Develop, compose, and revise expository essays, which center on a definite thesis statement. The course covers rhetorical modes such as example, process analysis, definition, and comparison/contrast. The course also covers planning, drafting, revision skills. Prerequisite: ENGL 0900 with "C" or better or Accuplacer, ACT, or SAT placement. Co-Requisite: None. Day: All; Eve: All; Online: Fa, Sp. Lecture: 2, Lab: 2. ♦

ENGL 151H English Composition I Honors 3 cr. TM-E

Develop, compose, and revise expository essays, which center on a definite thesis statement. The course covers rhetorical modes such as example, process analysis, definition, and comparison/contrast. The course also covers planning, drafting, and revision skills. English Composition I Honors provides a creative opportunity to develop your skills as a critical thinker, reader, and writer. Students will read and respond to a variety of challenging texts, while also examining rhetorical choices. Writing workshops, peer reviews, revision and source documentation will be central to this course. Prerequisite: ENGL 0900 with "C" or better or Accuplacer, ACT or SAT placement and Honors program acceptance. Co-Requisite: None. Day: Fa, Sp. Lecture: 2, Lab: 2. ♦

ENGL 1515 Technical Writing 3 cr. TM-E

Students adapt their writing skills to prepare technical documents—memos, resume, application letter, abstract, instructions, description, and proposal—including page design and graphics. Prerequisite: ENGL 1510 with "C" or better. Co-Requisite: None. Day: Fa, Sp; Eve: Fa, Sp. Lecture: 3, Lab: 0. ♦

ENGL 1520 English Composition II 3 cr. TM-E

Continues improvement of writing skills. Argumentative and expository papers created by evaluating information from multiple perspectives and drawing reasonable conclusions for a final research writing. Prerequisite: ENGL 1510 or ENGL 1515 or ENGL 1513. Co-Requisite: None. Day: All; Eve: All; Online: All; Blended: All. Lecture: 2, Lab: 2. ♦

ENGL 152H English Composition II Honors 3 cr. TM-E

Continues improvement of writing skills. Argumentative and expository papers created by evaluating information from multiple perspectives and drawing reasonable conclusions for two short papers and one long argument paper. English Composition II Honors provides a challenging opportunity to hone argumentation and persuasion skills. Through critically reading and responding to opinion papers and longer arguments by professional writers, students will analyze rhetorical choices, methods of argumentation, and the use of logic and reasoning. Honors students will use research and citation methods (APA and MLA) in their written assignments to support their own opinions and enhance their credibility as writers writing for a public audience. This class will include formal and informal peer reviews and in-class discussion and debate to encourage students to defend multiple perspectives of an issue. Prerequisite: ENGL 1510 or ENGL 151H or ENGL 1515 or ENGL 1513 and Honors program acceptance. Co-Requisite: None. Day: Fa, Sp. Lecture: 2, Lab: 2. ♦

ENGL 1530 English Composition III 3 cr. TM-E

Analysis and interpretation of world literature (fiction, poetry, and drama); incorporating oral and written responses. Writing formal Literary Criticism from several critical perspectives. Prerequisite: ENGL 1510 or ENGL 1520 or permission. Co-Requisite: None. Day: All; Eve: All; Online: All. Lecture: 2, Lab: 2. ♦

ENGL 153H English Composition III Honors 3 cr.

This course focuses on the analysis and interpretation of literature through extensive writing assignments. The course includes oral responses through class discussion, but emphasis is placed on the writing process (brainstorming, drafting, and revision). English Composition III Honors includes readings and analyses of well-known authors. Students will write two shorter analysis essays and one long critical essay on an author/works of their choosing. Writing capstone course. Prerequisite: ENGL 1510 or

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ENGL 151H or ENGL 1520 or ENGL 152H and Honors program acceptance. Day: Fa, Sp. Lecture: 2, Lab: 2. ♦

ENGL 155H Technical Writing Honors 3 cr.

Technical Writing Honors extends the concepts of business communication directly into the workplace. After classroom study, students will do on-site observation and reporting to create actual site studies, progress reports, process analyses, instruction manuals and other foundational documents. Students will visit local businesses and report on current communication needs in the workplace, and then develop skills to meet those needs. Organizational communication will be emphasized. Students will also focus on the growing use of social media as business communication tools. Prerequisite: ENGL1510 or ENGL151H and Honors program acceptance. Day: Fa, Sp, Su; Eve: Fa, Sp, Su; Online: Fa, Sp, Su. Lecture: 3, Lab: 0.

ENGL 2000 Special Topics-English Composition 0.5-6 cr.

By permission only. In-depth study of a specific topic(s) pertinent to English Composition. May be repeated. Prerequisite: Permission. Co-Requisite: None. Day: On demand; Eve: On demand. Lecture: TBD, Lab: TBD.

ENGL 2500 Creative Writing 3 cr.

Beginning work in writing fiction and poetry, emphasizing structural analysis of student works and established models. Prerequisite: ENGL 1510 or ENGL 1520. Co-Requisite: None. Day: On demand; Eve: On demand. Lecture: 3, Lab: 0. ♦

GEOGRAPHY (GEOG)

GEOG 1210 Cultural Geography 3 cr. TM-S

Basic course in human geography stressing the spatial dimensions of culture, particularly the interrelationships between man's activities and the natural forces of the environment – climate, terrains, arability, and the physical distribution of the earth's products. Selected cultural elements include language, religion, population, and settlement patterns. Prerequisite: None. Co-Requisite: None. Day: Sp; Eve: Sp on demand. Lecture: 3, Lab: 0. TAG: OSS007. ♦

GEOG 2000 Special Topics-Geography 0.5-6 cr.

By permission only. In-depth study of a specific topic(s) pertinent to geography. May be repeated. Prerequisite: Permission. Co-Requisite: None. Day: On demand; Eve: On demand. Lecture: TBD, Lab: TBD.

GEOLOGY (GEOL)

GEOL 2000 Special Topics-Geology 0.5-6 cr.

By permission only. In-depth study of a specific topic(s) pertinent to geology. May be repeated. Prerequisite:

Permission. Co-Requisite: None. Day: On demand; Eve: On demand. Lecture: TBD, Lab: TBD.

GEOL 2310 Environmental Geology 3 cr. TM-N

This course is a survey of geological processes and products and their relation to environments and life forms. It includes the formation of the earth, internal and surface processes with a focus on major environmental processes, immediate and extended influence of humans, natural resources and their sustainability and prospects for future of physical environment. Prerequisite: None. Co-Requisite: GEOL 231L. Day: Fa; Eve: On demand. Lecture: 3, Lab: 0.

GEOL 231L Environmental Geology Lab 1 cr. TM-N

This course is the laboratory associated with the GEOL 2310 course and includes an introduction to laboratory techniques, laboratory safety with an emphasis on geological processes in practical situations. Prerequisite: None. Co-Requisite: GEOL 2310. Day: Fa; Eve: On demand. Lecture: 0, Lab: 2. ♦

GEOL 2500 Petroleum Geology 3 cr.

This course includes a discussion of the concepts of petroleum geology, oil and gas reservoirs, and the subsurface characteristics used in petroleum exploration. Classroom emphasis will be placed upon the practical application of basic geology to the production of crude oil and natural gas. Prerequisite: None. Co-Requisite: None. Day: On demand; Eve: Sp. Lecture: 3, Lab: 0.

HEALTH SCIENCES (HLTH)

HLTH 1000 Personal Fitness Concepts 2 cr.

This course of study focuses on fitness issues which affect Americans today and in the future. Emphasis is placed on establishing positive fitness based on factors which influence fitness. This course will also focus attention on individual personal fitness. Prerequisite: None. Co-Requisite: None. Day: On demand; Eve: On demand; Online: On demand. Lecture: 2, Lab: 0.

HLTH 1001 Basic Life Support for Healthcare Providers 0.5 cr.

This course provides training for basic life support and Cardiopulmonary Resuscitation for Healthcare Providers. Students will learn single-rescuer and team basic life support for adults, children and infants through interactive exercises, scenarios and a written test. This is a one day class that leads to a certificate. Prerequisite: None. Co-Requisite: None. Day: Fa, Su; Eve: On demand. Lecture: 0.4, Lab: 0.4. ♦

HLTH 1002 Basic Life Support for Healthcare Providers Renewal 0.5 cr.

This course provides recertification training for basic life

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support and Cardiopulmonary Resuscitation for Healthcare Providers. Students will learn single-rescuer and team basic life support for adults, children and infants through interactive exercises, scenarios and a written test. This is a one day class that leads to recertification. Prerequisite: None. Co-Requisite: None. Day: Fa, Su; Eve: On demand. Lecture: 0.4, Lab: 0.4. ♦

HLTH 1020 Basic Health Sciences 2 cr.

This course is an introduction to applied basic sciences to the cardiopulmonary anatomy, physiology, and clinical sciences. It applies basic chemistry, physics, and basic physiologic chemistry to applications in the medical fields. Prerequisite: CHEM 0955 and CHEM 095L and MATH 0940 or MATH 0955 and Respiratory Therapy program acceptance. Co-Requisite: None. Day: Fa. Lecture: 2, Lab: 0.

HLTH 1100 Health and Wellness 3 cr.

Identifies and studies timely health and wellness issues from personal and societal viewpoints. Prerequisite: None. Co-Requisite: None. Day: On demand; Eve: On demand; Online: On demand. Lecture: 3, Lab: 0.

HLTH 1120 First Aid and Personal Safety 2 cr.

Lectures, discussion, and practice are used to study safety and give first aid in emergency situations. A certificate (adult, infant, and child) for CPR may be obtained by students who pass appropriate examinations. Prerequisite: None. Co-Requisite: None. Day: Fa, Sp; Eve: Sp on demand. Lecture: 2, Lab: 0. ♦

HLTH 1340 CPT Coding 3 cr.

A course using Current Procedural Terminology (CPT) to convert widely accepted, uniform descriptions of medical, surgical, and diagnostic services rendered by health care providers into five-digit numeric codes. Understand the use of CPT for analysis, research, and reimbursement. Understand the use of Level II National codes. CPT codes are used to evaluate case studies and inpatient scenarios utilizing code assignment in the inpatient setting and the appropriate assignment of inpatient coding conventions. Prerequisite: None. Co-Requisite: BIOL 1330 or BIOL 2310. Eve: Fa on demand. Lecture: 3, Lab: 0.

HLTH 1350 ICD-10-CM-Coding 3 cr.

International Classification of Diseases, Clinical Modification (ICD-10-CM-Coding) to classify patient morbidity and mortality information for statistical purposes and indexing hospital records by disease and operations for storage and retrieval. Application of the guidelines and principles of ICD Coding Volumes 1, 2, 3 are used to evaluate case studies of outpatient scenarios utilizing appropriate coding assignment and coding conventions. Prerequisite: None. Co-Requisite: BIOL 1330 or BIOL 2310. Eve: Fa. Lecture: 3, Lab: 0.

HLTH 1400 Careers in Health Care 3 cr.

This course will provide the basic fundamentals necessary to develop personal and professional skills in health care with include; career exploration and preparation, health care communications, ethical responsibilities, employment skills, professionalism, safety, and professional development. Prerequisite: None. Co-Requisite: None. Day: Fa, Sp, Su. Lecture: 3, Lab: 0.

HLTH 1410 Healthy Eating for a Healthy Lifestyle 3 cr.

This course focuses on basic and practical healthy eating information that addresses misconceptions about the nature of food choices in terms on overall health and wellness. The course is designed to provide personal appreciation, understanding, and awareness of good food choices and healthy lifestyles throughout the lifespan. Prerequisite: None. Co-Requisite: None. Day: Fa, Sp, Su. Lecture: 3, Lab: 0.

HLTH 1420 Introduction to Human Disease 3 cr.

This course will focus on the mechanisms of human diseases and disorders and how they affect the major systems of the human body. The course will cover the prevention, etiology, signs and symptoms, prognosis, and treatments of common diseases. Prerequisite: HS Anatomy & Physiology or BIOL 1320 or higher. Co-Requisite: None. Day: Fa, Sp, Su. Lecture: 3, Lab: 0.

HLTH 1430 Community Health 3 cr.

This course will provide an overview of the different aspects related to community health. A variety of health topics will be covered which include; the identification, prevention and control of diseases, health promotion, school health programs, health across the lifespan, human populations, environmental health and safety. Prerequisite: None. Co-Requisite: None. Day: Fa, Sp, Su. Lecture: 3, Lab: 0.

HLTH 1510 Massage Techniques I 3 cr.

History of medical massage, the therapeutic environment and relationship, professional ethics; applied anatomy of integumentary system and superficial fascia; introduction to Swedish Massage and Deep Tissue massage. Prerequisite: Acceptance into Massage Program. Co-Requisite: None. Day: Fa; Eve: Fa even yrs. Lecture: 2, Lab: 3. ♦

HLTH 1515 Myology and Kinesiology 4 cr.

This course is to prepare the massage therapy student with knowledge of the muscles, ligaments, and tendons of the body including the name, location, insertion, attachment, action, and innervations of those muscles pertaining to the practice of massage therapy. Further, the student will be able to analyze and provide a rationale of how the movement of the muscle will be affected by activity and treatment. Prerequisite: Acceptance into Massage Program. Co-Requisite: HLTH 1510. Day: Fa; Blended: Fa. Lecture: 4, Lab: 0.

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HLTH 1516 Business for Massage Therapists 2 cr.

This is a practical class focusing on the business aspects of the massage profession. It will deal with various potential employment scenarios as well as the realities of owning a personal massage business. Topics include issues such as attitudes about money, legal issues and ethics of business. Prerequisite: None. Co-Requisite: HLTH 1510. Blended: FA. Lecture: 2, Lab: 0.

HLTH 1520 Massage Techniques II 3 cr.

Introduction to soft tissue barriers and their clinical significance; Muscle Energy Techniques, Craniosacral therapy; Pregnancy Massage, Trigger Point Therapy, Pain physiology and assessment; Myofascial Release; Chair Massage, Reflexology, Shiatsu, and other modalities. Swedish massage continued; applied anatomy of neuromuscular and musculoskeletal systems; palpatory and assessment skills, pathology of joints, professional ethics, and communication in therapeutic relationship. Prerequisite: HLTH 1510. Co-Requisite: None. Day: Sp; Eve: Sp odd yrs. Lecture: 2, Lab: 3. ♦

HLTH 1810 Medical Terminology I 2 cr.

Introduction to the basic medical word elements - roots, suffixes, prefixes and combining forms - used by the medical profession. Spelling, definitions, pronunciations and usage of medical terms pertaining to all body systems are stressed. Prerequisite: None. Co-Requisite: None. Day: Fa, Sp; Eve: Fa; Online: All. Lecture: 2, Lab: 0. TAG: OHL020.

HLTH 1820 Medical Terminology II 2 cr.

Continuation of Medical Terminology I - provides an overview of basic terminology necessitated in health care delivery. Students learn how to use appropriate reference material. The course entails instruction in correct pronunciation, accurate spelling, detailed definitions, and administration of acceptable applications of the terminology presented. Prerequisite: HLTH 1810. Co-Requisite: None. Day: Sp; Eve: Sp; Online: All. Lecture: 2, Lab: 0.

HLTH 1830 Pharmacological Terminology 3 cr.

Contains detailed definitions for terminology associated with pharmacology and the administration of drugs. Prerequisite: None. Co-Requisite: None. Day: Sp; Eve: Fa. Lecture: 3, Lab: 0.

HLTH 2000 Special Topics-General Health Sciences 0.5-6 cr.

By permission only. In-depth study of a specific topic(s) pertinent to general health sciences. May be repeated. Prerequisite: Permission. Co-Requisite: None. Day: On demand; Eve: On demand. Lecture: TBD, Lab: TBD.

HLTH 2310 Principles of Reimbursement 3 cr.

Introductory course describing the use of health information and statistical coded data in government reimbursement

and payment systems and commercial health plans. The student will be able to describe the use of the Medicare program, DRG payment systems, PRO review systems, RBRVS system, APC system, and will be able to identify the major components of Managed Health Care. Prerequisite: None. Co-Requisite: BIOL 1330/1340 or BIOL 2310/2320. Eve: Fa. Lecture: 3, Lab: 0.

HLTH 2320 Medical Billing 1 cr.

Comprehensive course designed to teach medical billing using patient accounting software. Activities include record charges and payments, schedule appointments, record information on patients, ICD and CPT coding, produce claim forms, patient statements, and print variety of reports. Prerequisite: None. Co-Requisite: None. Day: Fa, Sp; Eve: Fa. Lecture: 1, Lab: 0. ♦

HLTH 2400 EKG/Cardiovascular Technician 2 cr.

This comprehensive Certified EKG Technician Program prepares students to function as EKG/ Cardiovascular Technicians and prepares them to take the Electrocardiograph (EKG) Technician exam if they have a Health Science degree and/or one year experience. This course will include important practice and background information on anatomy of the heart and physiology, medical disease processes, medical terminology, medical ethics, legal aspects of patient contact, and electrocardiography. Additionally, students will practice with equipment and perform hands-on labs including introduction to the function and proper use of the EKG machine, the normal anatomy of the chest wall for proper lead placement, 12-lead placement, and other clinical practices. Prerequisite: None. Co-Requisite: None. Eve: Su. Lecture: 1, Lab: 3. ♦

HLTH 2480 Orthopedic Assessment & Documentation for Massage Therapists 3 cr.

This course is designed to provide a well rounded opportunity for students to assess anatomical and physiological deficiencies in the body, to document such deficiencies with palpation, observation, and various orthopedic tests, and to develop strategies to resolve these deficiencies. Prerequisite: HLTH 1510 and BIOL 1360 or BIOL 2310. Co-Requisite: None. Day: Sp; Eve: Fa odd yrs. Lecture: 2, Lab: 2.

HLTH 2550 Massage Therapy Directed Practice I 2 cr.

Introductory experience in the clinical setting, application of theories and techniques for client intervention, assessment and medical record keeping, and referral to other health care providers. Prerequisite: HLTH 1520. Co-Requisite: None. Day: Sp; Eve: Sp even yrs. Lecture: 1, Lab: 5. ♦

HLTH 2560 Massage Therapy Directed Practice II 2 cr.

Introductory experience in the clinical setting, application of theories and techniques for client intervention, assessment

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and medical record keeping, and referral to other health care providers. Prerequisite: HLTH 1520. Co-Requisite: None. Day: Su; Sp even yrs. Lecture: 1, Lab: 5. ♦

HLTH 2800 Massage Therapy Seminar 2 cr.

Comprehensive review of massage therapy theory and practice for the massage therapist. Prerequisite: HLTH 1520. Co-Requisite: None. Day: Su; Eve: Sp even yrs. Lecture: 2, Lab: 0.

HLTH 2850 Building an Ethical Massage Therapy Practice 2 cr.

This course prepares students to safely and ethically practice massage therapy. It provides steps and discusses techniques to build a successful and reputable massage therapy practice. Students will develop professionalism and a basic understanding of the therapist – client relationship. A code of ethics and a standard of practice will be explored and implemented. Prerequisite: acceptance into Massage Program. Co-Requisite: None. Day: Fa; Eve: Su odd yrs. Lecture: 2, Lab: 0.

HISTORY (HIST)

HIST 1010 Civilization I: Early World Culture 3 cr. TM-S

The examination of civilization in the Mediterranean, India, and China; Greek and Roman eras; the beginning of Christianity, the Byzantine Empire; the rise of Islam, Buddhism, and Hinduism; Feudalism; the rise of the Christian Church; Scholasticism and the universities; the Renaissance and the Reformation; the rise of the cities in Europe and Asia; the age of exploration. Prerequisite: None. Co-Requisite: None. Eve: Fa. Lecture: 3, Lab: 0. TAG: OHS041.

HIST 1020 Civilization II: Early/Modern Period 3 cr. TM-S

The Commercial Revolution; the Age of Science; Reason & Enlightenment; The Rise of Nationalism; The Industrial Revolution and its problems; social reform; scientific advancement; development of the arts; the world wars; Russian and Chinese revolutions; the Cold War; rise and fall of imperial systems in Africa; East Asia, the Middle East, and Latin America. Prerequisite: None. Co-Requisite: None. Eve: Sp. Lecture: 3, Lab: 0. TAG: OHS042.

HIST 2000 Special Topics-History 0.5-6 cr.

By permission only. In-depth study of a specific topic(s) pertinent to history. May be repeated. Prerequisite: Permission. Co-Requisite: None. Day: On demand; Eve: On demand. Lecture: TBD, Lab: TBD.

HIST 2110 American History to 1865 3 cr. TM-S

Political, diplomatic, social, and economic developments of America from 1607 to 1865: Topics include Colonial America, founding of a new nation, the early national

period, Jacksonian Democracy, territorial expansion, sectionalism & controversy and the Civil War. Prerequisite: None. Co-Requisite: None. Day: Fa; Eve: Fa. Lecture: 3, Lab: 0. TAG: OHS043.

HIST 2120 American History 1865 to Present 3 cr. TM-S

Political, diplomatic, social, and economic development of America 1865 to Present. Topics include Reconstruction, the Industrial Revolution, the progressive movement, World Wars I and II, prosperity and depression, and problems of the Cold War era. Prerequisite: None. Co-Requisite: None. Day: Sp; Eve: Sp. Lecture: 3, Lab: 0. TAG: OHS044.

HUMANITIES (HUMN)

HUMN 1101 Discovering Successful Leadership and Followership 3 cr.

The student will learn basic leadership, followership and team theory and understand the value of identifying individual strengths and capitalizing on those strengths. There is a focus on skills that enhance the student as a leader and follower. Film, short stories and art are utilized to offer examples for class discussion. The student will be able to clearly explain where he/she belongs in the leadership/followership spectrum and why. This course will include a service learning component. Prerequisite: ENGL 1510 and SPCH 1510. Co-Requisite: None. Day: Sp. Lecture: 3, Lab: 0.

HUMN 1200 Introduction to Film 3 cr. TM-H

Study of film as an art form. Includes a brief history on development of the cinema, viewing, and discussion of representative films and excerpts. Prerequisite: ENGL 1510 or ENGL151H. Co-Requisite: None. Day: On demand; Eve: On demand. Lecture: 3, Lab: 0. ♦

HUMN 120H Introduction to Film Honors 3 cr. TM-H

Study of film as an art form. Includes a brief history on development of the cinema, viewing, and discussion of representative films and excerpts. Introduction to Film Honors: important cinematic movements (i.e. German Expressionism, French New Wave, etc.) may be analyzed for style, content, and influence. Specific genres and their styles and tropes may be explored in more depth (i.e. Film Noir, The Western, screwball comedy). Students will write in-depth research papers analyzing specific styles, genres, movements, eras, and/or technological, social or business implications. Honors students will also work together as a group to create a short video, so as to gain hands-on experience with the various elements and techniques of filmmaking. Prerequisite: ENGL 1510 or ENGL 151H and honors program acceptance. Co-Requisite: None. Day: All. Lecture: 3, Lab: 0. ♦

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HUMN 1300 Survey of Mythology 3 cr. TM-H

Overview of mythology from the earliest oral tales to present. Structured around eight major threads into which all myths fall; three major myth divisions. Prerequisite: None. Co-Requisite: None. Day: Fa. Lecture: 3, Lab: 0.

HUMN 1400 Introduction to Islam 3 cr.

The course provides an introduction to the central religious and cultural concepts of Islam as a major world religion. It begins by a historical look at the origin of Islam, the basic concepts of faith, and how Islam relates to the other two monotheistic traditions - Judaism and Christianity. The course will then explore the customs and culture of Muslims around the world, society, politics, and economy. Finally, the course will take a look at Muslims in the West and the problem of Islamophobia. The course functions as a first introduction to the basics of Islam. No prior study or knowledge of Islam is assumed or required. Prerequisite: None. Co-Requisite: None. Online: All. Lecture: 3, Lab: 0.

HUMN 1500 Introduction to Morality 3 cr. TM-H

This course will introduce students to the basic ethical concepts, review major moral theories and explain why ethics should be of concern to students and to the world. It will clarify students' moral decision making skills and validate their ability to make conscious moral decisions. They will also discover how the "religious" and "secular" worlds have impacted morality. Prerequisite: ENGL0900 or Placement Score. Day: Fa, Sp; Eve: On demand. Lecture: 3, Lab: 0.

HUMN 1510 Introduction to World Religion and Tolerance 3 cr. TM-H

This course will address key concepts and terminology in the study of religion. It will also explore how people perceive religion within their communities through social, cultural, critical and contextual perspectives. Students will examine how Atheism can be considered a religion. Students will also investigate what various world religions have to say about "tolerance" and the reality of how they express it. Prerequisite: ENGL0900 or Placement Score. Co-Requisite: None. Day: Fa, Sp; Eve: On demand. Lecture: 3, Lab: 0.

HUMN 2000 Special Topics-Humanities 0.5-6 cr.

By permission only. In-depth study of a specific topic(s) pertinent in the arts & humanities. May be repeated. Prerequisite: Permission. Co-Requisite: None. Day: On demand; Eve: On demand. Lecture: TBD, Lab: TBD.

HUMN 2480 Science of Science Fiction 3 cr. TM-H

The Science of Science Fiction provides an overview of science fiction and some of the science behind it. This will include a short history of science fiction and the science behind it as well as some of the major sub-genres of science fiction in order to see the impact of various fields

of science. Prerequisite: ENGL 0900 or Accuplacer Score greater than 69 & HS Science. Co-Requisite: None. Day: Sp odd yrs; Eve: Sp on demand. Lecture: 3, Lab: 0.

INDUSTRIAL TECHNOLOGY (INDT)

INDT 1000 Internship 1-6 cr.

Provides the opportunity to put classroom knowledge to practical use. Student's position is selected and/or approved by the college; student is evaluated periodically by the organization and is supervised by a college instructor/coordinator. Prerequisite: None. Co-Requisite: None. Day: On demand; Eve: On demand. Lecture: TBD, Lab: TBD.

INDT 1010 Introduction to Chemical Operator 3 cr.

A course delivered in an online modular format designed for newly hired or potential chemical operators. Designed to provide participants with a basic foundation in chemistry and mathematics as well as equipment operation and function. Concepts relating to safe operating practices and environmentally responsible behavior are also included. This course serves as the introductory course for students interested in pursuing an online Chemical Operator Associate degree or certificate and instructs the student in online learning protocols and methods. Course delivery includes use of computer simulations and labs and interactive video. Prerequisite: None. Co-Requisite: None. Online: All. Lecture: 3, Lab: 0. ♦

INDT 1100 Industrial Maintenance 3 cr.

Students will learn the basics of industrial maintenance including safety, use of hand tools, types and uses of fasteners, print reading, and bearings. A detailed exploration of modern machinery and equipment to understand, diagnose, troubleshoot, and maintain a variety of industrial machines. Prerequisite: None. Co-Requisite: None. Day: On demand; Eve: Fa. Lecture: 2, Lab: 2. ♦

INDT 1110 Electrical Maintenance 3 cr.

Students will learn electrical maintenance for an industrial setting including the basics of electricity, circuits, testing, and wiring. A detailed exploration of electrical machinery and controls to develop an understanding for diagnosing, troubleshooting, and maintaining a wide variety of industrial machines. Prerequisite: None. Co-Requisite: None. Day: On demand; Eve: Sp. Lecture: 2, Lab: 2. ♦

INDT 1150 Machining Processes 3 cr.

Introduction to traditional mechanical machining operations. The course is designed to provide basic training in conventional machine tool operations and processes. Projects will be completed on the lathe, vertical milling machine and drill press. Instruction will include proper hand tool use and the use of measuring devices.

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Students will work within specified decimal tolerances from engineering drawings. Prerequisite: None. Co-Requisite: None. Day: Fa; Eve: Fa. Lecture: 1, Lab: 5. ♦

INDT 1170 Computer Numerical Control 3 cr.

Emphasis on advanced machining processes and an introduction to computerized numerical equipment (CNC). Basic alpha-numeric control codes taught along with programming skills using industry standard RS-274D machine programming language. Students will work within specified decimal tolerances from engineering drawings. Prerequisite: INDT 1150. Co-Requisite: None. Day: Sp; Eve: Sp. Lecture: 1, Lab: 5. ♦

INDT 1210 Industrial Safety and Hazmat 2 cr.

An introduction to occupational health and safety through recognition and control of health and safety hazards in the workplace. Tools and techniques for injury/illness prevention, incident investigation, and the implementation of a typical safety program. Prerequisite: None. Co-Requisite: None. Day: Fa; Online: Sp. Lecture: 2, Lab: 0. ♦

INDT 1220 OSHA Safety 2 cr.

This safety course is designed to equip students with knowledge of workplace safety and health hazards, and the knowledge of how to minimize and mitigate such risks. At the successful completion of the course, students will have earned both the OSHA-10 and OSHA-30 General Industry Safety Certification. Prerequisite: None. Co-Requisite: None. Day: Fa. Lecture: 2, Lab: 1. ♦

INDT 1330 Industrial Electricity 2 cr.

This course introduces the basic concepts of electricity, electrical components and equipment, and their applications in an industrial environment. Electrical basics, including Ohm's Law, series and parallel circuits, resistance, capacitance and inductance are covered; as well as direct and alternating electrical current. Electrical drawings and symbols, power and energy, motors, motor control, transformers, electrical distribution, and basic industrial electronics will also be covered. The application of trouble shooting is incorporated and electrical safety awareness in the workplace is reinforced. Prerequisite: MATH 0106. Co-Requisite: None. Day: Fa; Eve: Fa; Online: On demand. Lecture: 1, Lab: 3. ♦

INDT 1340 Team Concepts and Practices 3 cr.

This course focuses on the urgency of making American businesses competitive in a global economic environment. It presents an overview of total quality management (TQM) for technicians and managers in organizations of all types and sizes. Principles and processes, as well as the tools and techniques for continuous improvement, are emphasized. This course describes patterns of change in the social, economic, and political structures of the United States, and illustrates how individuals and organizations applying

TQM principles can increase productivity and effectiveness. Prerequisite: None. Co-Requisite: None. Day: Sp; Eve: On demand; Online: On demand. Lecture: 2, Lab: 2. ♦

INDT 2100 Fabrication Processes 2 cr.

Theory and practice of sheet metal fabrication processes. Hand and machine processes will be introduced with lab activities involving layout, pattern development, cutting, bending, forming, turning, punching and joining. Assembly methods will include seaming, welding, and riveting. Assigned projects will be completed and one original design project will be required. Prerequisite: INDT 1150. Co-Requisite: None. Day: Fa; Eve: On demand. Lecture: 1, Lab: 5. ♦

INDT 2170 Advanced Computer Numerical Control 3 cr.

CNC programming for milling machine and lathe. Application of CAM software to design, edit and verify CNC programs with NC code and real time graphics. Importing AutoCAD and DXF files into the FeatureCAM software to create part programs. Designing parts, drawing geometry, defining tools and tool paths, setting cutting speeds and feed rates are all part of this introductory programming class. Use CAM files to design and produce machine parts on CNC VMC center and Sharp CNC lathe. Prerequisite: INDT 1170. Co-Requisite: None. Day: On demand; Eve: Fa. Lecture: 1, Lab: 5. ♦

INDT 2180 Manufacturing Processes 3 cr.

This class provides up-to-date coverage of the processes used in modern manufacturing settings. It also provides comprehensive coverage of the concepts that are shaping the future of manufacturing. Visits to local industries, textbook assignments and classroom discussions are the methods by which this will be accomplished. Prerequisite: None. Co-Requisite: None. Day: Sp; Eve: On demand. Lecture: 1, Lab: 4. TAG: OET010 ♦

INDT 2210 Process Control 4 cr.

This introductory course covers the equipment and technology associated with the control systems found in modern chemical process and manufacturing plants. The introduction is followed by units covering valves, piping and vessels, pumps, compressors, turbines and motors, heat exchangers, cooling towers, boilers, furnaces, basic instrumentation and process diagrams. This course introduces the concept of process control and instrumentation and covers the fundamental components of a control loop. PID control and PLC's are introduced along with the concept of distributive control systems. The function of pneumatic and electronic transmitters and transducers is explained and the function, operation, and maintenance of chemical analyzers are included. The application of trouble shooting is incorporated and safety awareness, environmental responsibility, and professionalism in the workplace are reinforced. Prerequisite: None. Co-Requisite:

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None. Day: Sp; Eve: On demand; Online: On demand.
Lecture: 4, Lab: 0. ♦

INDT 2280 Management & Supervision 3 cr.

Basics in the need and means of getting things done using organizational and communication skills to direct the work of others. A study of goals, group dynamics, planning, follow-up, giving instructions, training means and methods, and industrial psychology. Prerequisite: None. Co-Requisite: None. Day: Sp Eve: Sp. Lecture: 3, Lab: 0. ♦

INDT 2300 Process Troubleshooting 3 cr.

The effective troubleshooter needs to understand basic troubleshooting methods & tools, as well as how equipment and systems work. We use a systematic approach to the troubleshooting process including using problem solving tools like, Ask Why 5 Times & Cause and Effect Diagrams. This course develops industrial workers' skills to identify, analyze and resolve process problems and abnormal situations. Prerequisite: None. Co-Requisite: None. Day: Sp. Lecture: 3, Lab: 0. ♦

LITERATURE (LITR)

LITR 2000 Special Topics-Literature 0.5-6 cr.

By permission only. In-depth study of a specific topic(s) pertinent to literature. May be repeated. Prerequisite: Permission. Co-Requisite: None. Day: On demand; Eve: On demand. Lecture: TBD, Lab: TBD.

LITR 2010 Introduction to Fiction 3 cr. TM-H

Students study the forms and techniques of fiction. Selections may include short stories or short novels. Prerequisite: ENGL 1510 or ENGL 1520 or permission. Co-Requisite: None. Day: Fa on demand; Eve: Fa on demand; Online: Fa on demand. Lecture: 3, Lab: 0.

LITR 2020 Introduction to Poetry 3 cr. TM-H

Study of poetry from various periods of literature. Covers forms and techniques that poets use. Prerequisite: ENGL 1510 or ENGL 1520. Co-Requisite: None. Day: Sp; Eve: Su. Lecture: 3, Lab: 0.

LITR 2030 Introduction to Drama 3 cr. TM-H

Students study plays from various periods and cultures. Students will examine different dramatic forms including tragedy, comedy, historical, or others. Prerequisite: ENGL 1510 or ENGL 1520 or ENGL 1530. Co-Requisite: None. Day: Sp on demand; Eve: Sp on demand. Lecture: 3, Lab: 0.

LITR 2040 World Literature I 3 cr. TM-H

Critical study of a variety of international works of poetry, prose, and drama to the 16th-17th Century. Prerequisite: ENGL 1510 or ENGL 1520 or permission. Co-Requisite:

None. Day: Sp even yrs; Eve: Sp even yrs; Online: even yrs. Lecture: 3, Lab: 0.

LITR 2050 World Literature II 3 cr. TM-H

Critical study of a variety of international works of poetry, prose and drama from the 17th century to the present. Prerequisite: ENGL 1510 or ENGL 1520 or permission. Co-Requisite: None. Day: Sp even yrs; Eve: Sp even yrs; Online: even yrs. Lecture: 3, Lab: 0.

LITR 2100 Survey of American Literature I 3 cr. TM-H

Historical and critical study of American authors from colonial period to the Civil War. Prerequisite: ENGL 1510 or ENGL 1520 or permission. Co-Requisite: None. Fa: On demand; Eve: On demand; Online: On demand. Lecture: 3, Lab: 0. TAG: OAH053.

LITR 2110 Survey of American Literature II 3 cr. TM-H

A historical and critical study of American authors from the Civil War to the present. Prerequisite: ENGL 1510 or ENGL 1520 or permission. Co-Requisite: None. Day: Sp odd yrs; Eve: Sp odd yrs; Online: Sp odd yrs. Lecture: 3, Lab: 0. TAG: OAH054.

LITR 2200 Survey of British Literature I 3 cr. TM-H

Historical and critical study of British authors from the Old English period through the 18th century. Prerequisite: ENGL 1510 or ENGL 1520 or permission. Co-Requisite: None. Day: All; Eve: All; Online: Fa, Sp. Lecture: 3, Lab: 0. TAG: OAH055.

LITR 2210 Survey of British Literature II 3 cr. TM-H

Historical and critical study of British authors from the 19th century to the present. Prerequisite: ENGL 1510 or ENGL 1520 or permission. Co-Requisite: None. Day: On demand; Eve: On demand; Online: On demand. Lecture: 3, Lab: 0. TAG: OAH056.

LITR 2600 Children's Literature 3 cr.

Survey course focusing on literature for children from birth to age 12. Students study the history of children's books, child development as it relates to literature, evaluation and selection of appropriate print media, and children's responses to literature. Ten hours of field application is included for education majors. Prerequisite: ENGL 1510 or permission. Co-Requisite: None. Day: Fa; Eve: On demand. Lecture: 3, Lab: 0.

LITR 2620 Adolescent Literature 3 cr. TM-H

Survey course focusing on literature for the adolescent in which students study the evaluation and selection of books for adolescents, the relationship between literacy and adolescent development, the history and various genres of adolescent literature, and the Internet as a research tool. Prerequisite: ENGL 1510 or ENGL 1520 or permission. Co-Requisite: None. Day: Sp. Lecture: 3, Lab: 0.

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LITR 2700 Introduction to Shakespeare 3 cr. TM-H

Critical study of selected Shakespeare plays from the comedies, histories, and tragedies. Prerequisite: ENGL 1510 or ENGL 1520 or permission. Co-Requisite: None. Day: Sp on demand; Eve: Sp on demand; Online: Sp on demand. Lecture: 3, Lab: 0.

LITR 2720 Survey of Women's Literature 3 cr. TM-H

Study of literature by women from the 1600's to the present. The course includes readings by female authors, various documentaries, the writing of response papers that examine ideas and themes discussed in class, an oral presentation, and the writing of a critical research paper. Prerequisite: ENGL 1510 or ENGL 1520 or permission. Co-Requisite: None. Day: Fa, Sp. Lecture: 3, Lab: 0.

MARKETING (MKTG)

MKTG 2000 Special Topics-Marketing 0.5-6 cr.

By permission only. In-depth study of a specific topic(s) pertinent to marketing. May be repeated. Prerequisite: Permission. Co-Requisite: None. Day: On demand; Eve: On demand. Lecture: TBD, Lab: TBD.

MKTG 2130 Sales 3 cr.

Basic course on planning and delivering a sales presentation. Covers preparation of a sales presentation including prospecting, approach, body, demonstration and close. Course includes a student project to plan and deliver an individual sales presentation. Prerequisite: None. Co-Requisite: None. Day: Fa; Eve: Sp. Lecture: 3, Lab: 0. ♦

MKTG 2160 Advertising 3 cr.

The course will explore advertising and promotions. It will introduce the integrated marketing communication and then examine the promotion industry. Students will examine the history of promotion and branding, buyer behavior, the communication process and the regulatory and ethical environment of promotions. Students learn about the international environment for brand promotion, messaging and media strategies, the internet and direct marketing. They will also explore sales promotions, sponsorships and product placements. Prerequisite: None. Co-Requisite: None. Day: Fa; Eve: Sp, Online: Sp. Lecture: 2, Lab: 2. ♦

MKTG 2510 Marketing 3 cr.

Introduction to the marketing process. Study the framework of marketing in the organization, the marketing concept, the marketing mix, target marketing, consumer decision making, marketing research, physical distribution, channels of distribution, product concepts, promotion, pricing concepts, global marketing. Prerequisite: None. Co-Requisite: None. Day: Sp; Eve: Sp. Lecture: 3, Lab: 0. ♦

MATHEMATICS (MATH)

MATH 0106 Math Essentials 4 cr.

A review of the essentials of math and an introduction to algebra. Topics include the four basic operations with fractions, decimals, natural numbers, whole numbers, and integers; ratio, proportion, percent, some basic geometry topics, Metric and English conversions, scientific notation, and an introduction to solving equations and problem solving. Prerequisite: Mandatory Accuplacer Score. Co-Requisite: None. Day: All; Eve: Fa, Sp; Online: All. Lecture: 3, Lab: 2. ♦

MATH 0110 Statistics Insights 1 cr.

This course is designed to be taken in conjunction with Principles of Statistics (MATH 2110) for those students who need some extra support with their math skills and technology. The major emphasis of the class will be on statistical terminology, creating graphical displays, calculating measures of center and variation, calculating probabilities using various techniques, the binomial distribution, the normal distribution, calculating and interpreting confidence intervals, conducting hypothesis tests, correlation, and linear regression encountered within their Principles of Statistics co-requisite course. Students will be working on improving math skills to better comprehend topics in their Principles of Statistics course, as well as learning appropriate technology applications. Prerequisite: Placement Score. Co-Requisite: MATH 2110. Day: All, Eve: All. Lecture: 0, Lab: 2.

MATH 0130 College Algebra Insights 1 cr.

This course is designed to be taken in conjunction with College Algebra (MATH 2130) for those students who need some extra support with their math skills. The major emphasis of the class will be on algebra techniques, factoring, solving equations, graphing, logarithms, exponents, polynomials, complex numbers, quadratic equations, functions, composite functions, polynomial division, system of equations, and matrix operations encountered within College Algebra co-requisite course. Students will be working on improving math skills to better comprehend topics in the College Algebra course. Prerequisite: Placement Score. Co-Requisite: MATH 2130. Day: All; Eve: All. Lecture: 0, Lab: 2.

MATH 0940 Introduction to Quantitative Literacy 3 cr.

Viewing life mathematically: This course will provide the tools needed to gain practical knowledge and develop problem-solving skills in everyday real-world contexts. Regardless of chosen discipline, the ability to analyze and interpret data is essential to become informed citizens of a complex, technological world. Prerequisite: MATH 0106 or placement. Co-Requisite: MATH 2140. Day: All; Eve: All. Lecture: 2, Lab: 2. ♦

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MATH 0955 Basic Algebra 4 cr.

This course covers simplifying and evaluating expressions, solving, graphing, writing of linear equations and inequalities, and solving systems of linear equations and inequalities. It also includes operations with exponents, polynomials, factoring, rational expressions and equations, simplifying radicals, solving radical equations, solving quadratic equations by various means, and graphing quadratic equations. Prerequisite: MATH 0106. Co-Requisite: None. Day: All; Eve: All; Online: All. Lecture: 3, Lab: 3. ♦

MATH 1050 Math for Health Sciences 2 cr.

This course uses basic math and common equations used in respiratory care to solve problems. Prerequisite: MATH 0106 and Respiratory Therapy program acceptance. Day: Fa. Lecture: 2, Lab: 0.

MATH 1100 Pharmacology Math 2 cr.

Review of basic mathematical principles in addition, subtraction, multiplication and division are applied to whole numbers, fractions and decimals. Principles of percentage and ratio and proportion are also reviewed. Conversions within and between the metric, apothecary and household systems of measurement are taught. Calculate IV flow rates, computing medication doses, pediatric, insulin & heparin doses. Prerequisite: MATH 0955 with "C" or better. Co-Requisite: None. Day: Fa, Su. Lecture: 2, Lab: 0.

MATH 1101 Respiratory Math 1 cr.

This course uses basic math and common equations used in respiratory care to solve problems. Prerequisite: RESP 1330, RESP 2450, RESP 2610, and MATH 0106. Co-Requisite: RESP 2500. Day: Fa. Lecture: 1, Lab: 0.

MATH 1104 Technical Mathematics 3 cr.

For automotive, diesel, and industrial technology majors. Includes a brief review of fractions, decimals, percents, and introduction to basic algebra with emphasis on evaluation of formulas and principles of ratio and proportion. Includes English and Metric systems. Selected topics from plane and solid geometry with emphasis on practical applications to measurement of length, area, and volume. Selected topics from statistics. A scientific hand-held calculator will be used to solve these problems. Prerequisite: MATH 0106 with "C" or better or placement. Co-Requisite: None. Day: Fa, Sp; Eve: Sp on demand. Lecture: 3, Lab: 0.

MATH 1106 Business Mathematics 3 cr.

Introduction to business calculations applied to selected topics from retailing, finance, banking, and accounting. This course includes a brief review of basic arithmetic and percents, followed by trade and cash discounts, mark-up, payroll, depreciation, inventory, and simple and compound interest. Prerequisite: MATH 0940 or MATH0955 or

placement. Co-Requisite: None. Day: All; Eve: Fa. Lecture: 3, Lab: 0.

MATH 2000 Special Topics-Mathematics 0.5-6 cr.

By permission only. In-depth study of a specific topic(s) pertinent to mathematics. May be repeated. Prerequisite: Permission. Co-Requisite: None. Day: On demand; Eve: On demand. Lecture: TBD, Lab: TBD.

MATH 2110 Principles of Statistics 4 cr. TM-M

Introduction to the vocabulary, concepts, formulas, and presentation of statistics as applied to business and the sciences. This course focuses on measures of central tendencies and dispersion; probability; sampling practices and theory, and probability distributions with emphasis on binomial and normal distributions. Calculator usage will be incorporated into this course. Prerequisite: MATH 0106 with "C" or better. Co-Requisite: MATH 0110. Day: Fa, Sp. Lecture: 4, Lab: 0.

MATH 2120 Trigonometry 3 cr. TM-M

Topics from trigonometry and analytical geometry including identities will be discussed. Application of mathematical skills to develop mathematical models and problem solving will be emphasized. Prerequisite: MATH 0955 with "C" or better or placement. Co-Requisite: None. Day: All; Eve: Fa. Lecture: 3, Lab: 0.

MATH 2130 College Algebra 4 cr. TM-M

Application-based course on functions and graphs, systems of linear equations, 3x3 determinants, factoring, quadratic equations and inequalities, exponents and radicals, and logarithms. Prerequisite: MATH 0106 with "C" or better or placement. Co-Requisite: MATH 0130. Day: All; Eve: All. Lecture: 4, Lab: 0.

MATH 2140 Quantitative Reasoning 3 cr. TM-M

This course focuses on using real world application to build quantitative reasoning and problem solving skills. It is designed for students in majors that do not require College Algebra, PreCalculus, or Calculus. Topics include ratios, rates, percentages, units, descriptive statistics, linear and exponential modeling, correlation, and probability. Prerequisite: MATH 0106 with "C" or better or placement. Co-Requisite: MATH 0940 Day: All, Eve: All. Lecture: 3, Lab: 0.

MATH 2150 Precalculus 5 cr. TM-M

This course is intended for the student needing a solid mathematical background in order to take the Analytical Geometry and Calculus sequence. Topics to be covered include: functions, graphs of functions including polynomial, rational, all powers, as well as logarithmic and exponential functions, complex numbers, and systems of equations and inequalities, operations on matrices ,trigonometric definitions, right and nonright angle

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trigonometry, trigonometric identities, law of sines and cosines, graphing trigonometric and inverse trigonometric functions, vectors, conics, and polar coordinates. Prerequisite: MATH 2130 with "C" or better or placement. Co-Requisite: None. Day: Fa; Eve: On demand. Lecture: 5, Lab: 0.

MATH 2173 Survey of Math I 4 cr. TM-M

This course is the first of a series of two courses designed for elementary education majors. Topics to be covered are: Mathematical reasoning and problem solving, sets and whole number operations and properties, estimation and computation, number theory, integer operations and properties, rational number operations and properties, and ratio and proportion. Prerequisite: MATH 0955 with "C" or better. Co-Requisite: None. Day: Fa; Eve: On demand. Lecture: 4, Lab: 0.

MATH 2175 Survey of Math II 3 cr. TM-M

Continuation of MATH 2173. Includes topics in algebra, geometry, statistics, and probability as they apply to an elementary education. Prerequisite: MATH 2173 with "C" or better. Co-Requisite: None. Day: Sp; Eve: On demand. Lecture: 3, Lab: 0.

MATH 2200 Laboratory Math 3 cr.

Course includes the study and usage of scientific notation, exponents, logarithms, algebraic equations, systems of measurement, including Metric, US Customary Systems and Systeme Internationale. The concepts of normality, molarity, molality and percentage solutions are studied in relation to preparation of solutions. Calculations pertinent to particular areas of the clinical laboratory are addressed, including Clinical Chemistry, Hematology, Immunohematology and Molecular Diagnostics. Statistical analysis of data, including making and reading graphs, is studied in relation to assessing Quality Assurance in the laboratory. Prerequisite: MATH 0106. Co-Requisite: MMLT 2210. Blended: Fa. Lecture: 3, Lab: 0.

MATH 2250 Elementary Linear Algebra 3 cr. TM-M

Solutions to linear systems, matrices and matrix algebra, determinants, n-dimensional vector spaces and subspaces, bases and dimension, linear mappings, matrices of linear mappings, eigenvalues and eigenvectors, diagonalization. Emphasis is on techniques and computational skills. Prerequisite: MATH 2264 with "C" or better. Co-Requisite: None. Day: On demand; Eve: On demand. Lecture: 3, Lab: 0. TAG: OMT019.

MATH 2260 Introduction to Calculus 3 cr. TM-M

Math series is for general business, education, and technology majors. Survey of basic concepts of calculus. For student who want an introduction to calculus but do not need depth. (Not open for credit to students who have taken the MATH 2263 series) Prerequisite: MATH 2130 or

MATH 2150 with "C" or better. Co-Requisite: None. Day: Sp, Su. Lecture: 3, Lab: 0.

MATH 2263 Analytical Geometry and Calculus I 4 cr. TM-M

For engineering and science majors. Introduction to the Calculus sequence with emphasis on techniques and their applications. Topics covered: functions and limits, differentiations and integration, analytic geometry, vectors, transcendental functions, multiple integrals, and infinite series. Prerequisite: MATH 2120 and MATH 2130 or MATH 2150 with "C" or better. Co-Requisite: None. Day: Fa, Sp; Eve: On demand. Lecture: 4, Lab: 0.

MATH 2264 Analytical Geometry and Calculus II 4 cr. TM-M

This series is for engineering and science majors. Basic introduction to calculus with emphasis on techniques and their applications. Topics covered: functions and limits, differentiation and integration, analytic geometry, vectors, transcendental functions, multiple integrals, conics and infinite series. Prerequisite: MATH 2263 with "C" or better. Co-Requisite: None. Day: Sp on demand. Lecture: 4, Lab: 0.

MATH 2265 Analytical Geometry and Calculus III 4 cr. TM-M

This series is for engineering and science majors. Basic introduction to calculus with emphasis on techniques and their applications. Topics covered: functions and limits, differentiation and integration, analytic geometry, vectors, transcendental functions, multiple integrals and infinite series. Prerequisite: MATH 2264 with "C" or better. Co-Requisite: None. Day: Sp on demand. Lecture: 4, Lab: 0. TAG: OMT018.

MATH 2270 Differential Equations 3 cr. TM-M

This course is for engineering and science majors. Basic introduction to differential equations with emphasis on techniques and their applications. Prerequisite: MATH 2265 with "C" or better. Co-Requisite: None. Day: On demand; Eve: On demand. Lecture: 3, Lab: 0. TAG: OMT020.

MECHANICAL ENGINEERING TECHNOLOGY (MECH)

MECH 1000 Internship 1-6 cr.

Provides the opportunity to put classroom knowledge to practical use. Student's position is selected and/or approved by the college; student is evaluated periodically by the organization and is supervised by a college instructor/coordinator. Prerequisite: Permission. Co-Requisite: None. Day: On demand; Eve: On demand. Lecture: TBD, Lab: TBD.

MECH 1100 Engineering Materials 4 cr.

Introduces engineering materials, including ferrous and nonferrous materials, plastics, and ceramics; various

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material property tests such as tension, compression, shear, elongation, and impact; basic metallurgy; various plastic processing techniques. Prerequisite: None. Co-Requisite: None. Day: Sp; Eve: Sp. Lecture: 3, Lab: 3. TAG: OET013. ♦

MECH 1230 Hydraulics & Pneumatics 3 cr.

A comprehensive introduction to fluid power including both hydraulic and pneumatic. Course includes underlying theoretical concepts and mathematical equations; construction, selection, and function of components; operation and design of basic circuits; reading basic schematics. Prerequisite: None. Co-Requisite: None. Day: Sp; Eve: Sp. Lecture: 2, Lab: 3. ♦

MECH 2000 Special Topics-Mechanical Engineering 0.5-6 cr.

By permission only. In-depth study of a specific topic(s) pertinent to mechanical engineering technology. May be repeated. Prerequisite: Permission. Co-Requisite: None. Day: On demand; Eve: On demand. Lecture: TBD, Lab: TBD.

MECH 2060 Statistical Quality Control 2 cr.

Introduces techniques to improve quality and reduce production costs: variable (\bar{X} and R) and attributes (p, np, c, u); charting techniques using data from a variety of production cases; use of a variety of statistical analysis techniques: including frequency, distribution, measures of central tendency, and measure of dispersion. Prerequisite: MATH 0955. Co-Requisite: None. Day: Fa; Online: Sp. Lecture: 1, Lab: 3. ♦

MECH 2150 Instrumentation I 3 cr.

Physical properties of matter and energy, the common types of measurement used in industry, instrument communication signals, common types of instruments used in industry, elements of control systems, thermocouples and RTD's. Types of level, flow, pressure, and weight sensors used in industry; use of transmitters and recorders in control systems. Prerequisite: None. Co-Requisite: None. Day: Fa. Lecture: 2, Lab: 3. ♦

MECH 2170 Instrumentation II 3 cr.

Control loops, controllers, the types of control modes, controller tuning, and final control elements. All aspects of selecting, sizing, maintenance and repair of control valves and actuators and their proper use in different types of control systems, use a laptop to calibrate instruments and construct and tune control loops. Prerequisite: MECH 2150. Co-Requisite: None. Day: Sp. Lecture: 2, Lab: 3. ♦

MECH 2300 Thermodynamics 3 cr.

Introduction to the fundamental concepts of energy transformation and transport. Covers the first and second laws of thermodynamics; properties of liquids and gases. Prerequisite: MATH 2120, PHYS 2010 and PHYS 201L. Eve: On demand. Lecture: 3, Lab: 0.

MECH 2800 Mechanical Engineering Capstone Seminar 2 cr.

In depth study/project of a student chosen topic pertinent to the field of mechanical engineering technology. Participants will study the topic in a structured format with a specific outcome. The project must be supported with documented research, a written project proposal, estimate, a prototype product, PowerPoint presentation, and a physical display. Prerequisite: ENGL 1510 and SPCH 1510 or SPCH 2060 and MECH 1100 and ENGR 2210. Co-Requisite: None. Day: Sp; Eve: Sp. Lecture: 2, Lab: 0. ♦

MEDICAL LABORATORY TECHNOLOGY (MMLT)

MMLT 1010 MLT Orientation 2 cr.

This course presents an overview of the role of the MLT which includes ethics, employment areas, job opportunities, and some basic laboratory skills. The collection of blood specimens is taught. This course also includes a self-study course in medical terminology. Prerequisite: MLT Program Admission. Co-Requisite: None. Day: Fa. Lecture: 1, Lab: 3. TAG: OHL008. ♦

MMLT 1210 Urinalysis and Body Fluid Analysis 2 cr.

Quantitative and qualitative procedures for routine chemical, physical and microscopic examination of urine. Includes theory and application of renal function. Also included are the analyses of cerebral spinal fluid, seminal fluid, gastric secretions and feces. Prerequisite: MLT Program Admission. Co-Requisite: None. Day: Fa. Lecture: 1, Lab: 3. TAG: OHL010. ♦

MMLT 1310 Hematology I 3 cr.

Course which studies the origin, formation and differentiation of blood cells. Erythrocyte, leukocyte, and platelet pathology as well as the mechanism of hemostasis, vascular integrity and platelet function in relation to disease states is discussed. Techniques in counting red cells, white cells, and platelets are included, as well as red blood cell indices. Clinical application of coagulation includes the study of various procedures such as prothrombin time, activated partial thromboplastin time, thrombin time, fibrinogen level, bleeding time and fibrinogen degradation products. Prerequisite: MLT Program Admission. Co-Requisite: None. Day: Fa. Lecture: 2, Lab: 3. TAG: OHL009. ♦

MMLT 1320 Hematology II 2 cr.

Course which studies the various types of anemias, leukemias, lymphomas, proliferative disorders and storage syndromes. Techniques include reticulocyte counts, ESRs, normal differentials and abnormal differentials. Prerequisite: MMLT 1310. Co-Requisite: None. Day: Sp. Lecture: 1, Lab: 3. ♦

MMLT 1410 Immunology and Serology 3 cr.

A study of the formation, characteristics and reactions of

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antigens and antibodies. The serological applications of these principles are investigated in theory and application in agglutination, flocculation, and precipitation reactions. Also includes principles of immunodiffusion and the study of complement. Prerequisite: MMLT 1010. Co-Requisite: None. Day: Su. Lecture: 2, Lab: 2. ♦

MMLT 1420 Immunoematology 3 cr.

Course which includes the study of blood group systems, phenotyping, atypical antibodies and cases of crossmatching incompatibilities. Time is spent studying investigations of transfusion reactions, the use of blood components in therapy, fetal-maternal incompatibilities and other immunological procedures. ABO and Rh typing, antibody screening and crossmatching of patient and donor blood are some of the procedures practiced. Topics of safety in immunoematology laboratory are addressed. Prerequisite: MMLT 1010. Co-Requisite: None. Day: Su. Lecture: 2, Lab: 3. ♦

MMLT 1510 Diagnostic Microbiology 5 cr.

Course which provides the study of bacteriology, parasitology, mycology and virology. Procedures include the cultivation and identification of organisms via the use of primary and secondary culture techniques, aerobic and anaerobic techniques, biochemical techniques, serological techniques and microscopic examination. Antibiotic sensitivity testing, blood cultures, concentration of mycobacteria and the preparation of culture media and stains are also studied. Parasitology, host parasite relationships, as well as the various types of fungi, are included in the course. Prerequisite: MMLT 1010. Co-Requisite: None. Day: Sp. Lecture: 3, Lab: 4. ♦

MMLT 1610 Clinical Chemistry 4 cr.

Course which provides the student with an introduction to manual and analytical techniques used in a clinical laboratory. Includes information about the procedures used in clinical chemistry in relation to principle, reagents, specimens, controls, procedures, instruments, normal and abnormal test results and correlation with clinical conditions. Topics of safety in the clinical chemistry laboratory are addressed. Prerequisite: MMLT 1010, CHEM 1220 and CHEM 122L. Co-Requisite: MMLT 2210. Day: Fa. Lecture: 3, Lab: 2. ♦

MMLT 2000 Special Topics-Medical Laboratory Technology 0.5-6 cr.

By permission only. In-depth study of a specific topic(s) pertinent to medical laboratory technology. May be repeated. Prerequisite: Permission. Co-Requisite: None. Day: On demand; Eve: On demand. Lecture: TBD, Lab: TBD.

MMLT 2210 Instrumentation and Laboratory Skills 2 cr.

Provides an integration of the theory, application, and laboratory skills learned during the first three semesters of

the program in an on-campus clinical laboratory. Areas of emphasis include: instrumentation, quality control, time management, and laboratory information systems. Designed to increase proficiency in laboratory techniques. Student competency will be assessed by comparison with known results in coagulation, hematology, immunohematology, microbiology, serology, and urinalysis. Prerequisite: Completion of the first 3 semesters of MLT Program. Co-Requisite: MMLT 1610. Day: Fa. Lecture: 0, Lab: 7. ♦

MMLT 2310 MLT Seminar 1 cr.

Student participation in discussions about their progress and challenges in the Directed Practice. Projects include preparation of a patient case study report and a research project describing medical laboratory practice in a non-US country. Guest lecturers, technical workshops, field trips and discussion of timely topics in the field are utilized. Students learn the importance of continuing education in the medical laboratory field. Prerequisite: Completion of the first 4 semesters of MLT Program. Co-Requisite: None. Day: Sp. Lecture: 1, Lab: 0.

MMLT 2410 MLT Directed Practice 6 cr.

One semester of an off-campus directed practice where the student applies the principles and practice skills learned in the first four semesters of the program in an actual clinical laboratory. Students progress through 3 levels: observation of laboratory procedures, practice of laboratory procedures with maximum supervision, and practice of laboratory procedures with minimal supervision. Competency in laboratory procedures is assessed by comparison with known results. Prerequisite: Completion of the first 4 semesters of MLT Program. Co-Requisite: None. Day: Sp. Lecture: 1, Lab: 32. ♦

MUSIC (MUSC)

MUSC 1010 Fundamentals of Music 3 cr.

Fundamentals of Music is a basic introduction to the mechanics and structure of the components of the Western harmonic system. The course is designed to give the non-music major a background in the perception and reading of musical symbols. Prerequisite: None. Co-Requisite: None. Day: Sp; Eve: Sp on demand. Lecture: 3, Lab: 0.

MUSC 1200 Music Appreciation 3 cr. TM-H

Development of listening skills for understanding elements of musical style in a historical perspective and the significance of music as Fine Art. Prerequisite: None. Co-Requisite: None. Day: Fa, Sp; Eve: Fa, Sp; Online: Fa, Sp. Lecture: 3, Lab: 0.

MUSC 1250 Survey of American Music 3 cr. TM-H

Survey of Americans musical heritage, including recognition of the different evolutions in music, such as

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operetta, jazz, blues, and country. Prerequisite: None. Co-Requisite: None. Day: Sp; Eve: On demand. Lecture: 3, Lab: 0.

MUSC 2000 Special Topics-Music 0.5-6 cr.

By permission only. In-depth study of a specific topic(s) pertinent to music. May be repeated. Prerequisite: Permission. Co-Requisite: None. Day: On demand; Eve: On demand. Lecture: TBD, Lab: TBD.

NURSING EDUCATION, ASSOCIATE DEGREE (NADN)

NADN 1100 Introduction to Nursing 1 cr.

This theory course is a one hour course to introduce students to concepts concerning the practice of nursing. The learning activities are designed around the interaction of the person, the environment, and society in the changing health care system. This course will explore nursing education and diverse nursing roles, roles and responsibilities of health team members, the political process and its effects on nursing practice, financing of healthcare, and ethical and legal practice parameters. Prerequisite: Admission to ADN program. Co-Requisite: BIOL 2310, BIOL 231L, NADN 1110, NADN 1115, ENGL 1510 and PSYC 1010. Day: Fa. Lecture: 1, Lab: 0.

NADN 1110 Foundations of Medical Surgical Nursing 4 cr.

This foundational course provides a theoretical basis to clinical nursing practice. It emphasizes assessment of functional health patterns in the use of the nursing process, safety, health promotion, communication skills, and basic medical-surgical nursing content. It is designed to cultivate a safe level 1 nursing student in preparation for future clinical courses. Prerequisite: Admission ADN Program. Co-Requisite: NADN 1100, NADN 1115, BIOL 2310, BIOL 231L, ENGL 1510, and PSYC 1010. Day: Fa. Lecture: 4, Lab: 0. ♦

NADN 1115 Foundations of Clinical Nursing Practice 2 cr.

This course is designed to build a foundation for nursing practice using evidence based practice while emphasizing rationale for simple to complex essential nursing skills. This course emphasizes assessment of functional health patterns in the use of the nursing process to cultivate safe care practices for a level 1 nursing student. This course includes: assessment, mobility, hygiene, asepsis, wound care, urinary elimination, bowel elimination, gastrointestinal functioning and medication administration. Prerequisite: Admission to ADN program. Co-Requisite: BIOL 2310, BIOL 231L, NADN 1100, NADN 1110, ENGL 1510, and PSYC 1010. Day: Fa. Lecture: 0, Lab: 6. ♦

NADN 2000 Special Topics-ADN 0.5-6 cr.

By permission only. In-depth study of a specific topic(s) pertinent to associate degree nursing. May be repeated.

Prerequisite: Permission. Co-Requisite: None. Day: On demand; Eve: On demand. Lecture: TBD, Lab: TBD.

NADN 2050 Role Transition to ADN 2 cr.

Designed to enhance the transition of Practical Nursing Education program graduates to the Associate Degree Nursing Program. Focuses on the transition from Licensed Practical Nursing to Associate Degree Nursing: introduces program philosophy, functional health patterns, nursing process, and clinical skills. Prerequisite: Graduate of LPN Program, and admission to Associate Degree Nursing Program. Co-Requisite: NADN 2120, NADN 2150, BIOL 2320, BIOL 232L, and PSYC 2700. Day: Sp. Lecture: 2, Lab: 0. ♦

NADN 2060 Transitional Synthesis 3 cr.

Designed to enhance the transition of WSCC Practical Nursing Education program graduates to the Associate Degree Nursing Program: introduces the program philosophy, nursing process, and evidence-based practice. Emphasizes clinical judgment in the application of the nursing process to adults with common and altered functional health patterns. Prerequisite: Graduate of the WSCC LPN Program, and admission to Associate Degree Nursing Program. Co-Requisite: NADN 2320. Day: Su. Lecture: 2, Lab: 0.5, Clinical: 2.5. ♦

NADN 2120 Applying NP Across the Lifespan 8 cr.

This course is a continuation of Foundations of Medical-Surgical Nursing and is designed to strengthen the student's ability to apply the nursing process to common and altered functional health patterns, in order to prevent illness and maintain or regain health. This course is designed to cultivate a safe Level 1 nursing student in developing assessment, nursing and communication skills while processing medical surgical nursing information in acute care and community settings. The student role as a beginning provider of care, manager of care and member of the nursing profession will be expanded as knowledge and value clarification increases. Prerequisite: NADN 1100, NADN 1110, NADN 1115, BIOL 2310, BIOL 231L, PSYC 1010 and ENGL 1510. Co-Requisite: NADN 2150, BIOL 2320, BIOL 232L and PSYC 2700. Day: Sp. Lecture: 4, Lab: 1.5, Clinical: 10.5. ♦

NADN 2150 Nursing Process in Pharmacology 3 cr.

This theory course is an introduction to the use of pharmacological interventions in relationship to functional health patterns. Identified classes of drugs will be discussed. The nurses' role in drug therapy will be explored. The nursing process will be reviewed as a means for assessing, diagnosing, intervening, and evaluating clients' responses to drug administration. Individual responses to drug therapy and variables which affect responses will also be explored. Prerequisite: NADN 1100, NADN 1110, NADN 1115, BIOL 2310, BIOL

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231L, PSYC 1010 and ENGL 1510. Co-Requisite: NADN 2120, BIOL 2320, BIOL 232L and PSYC 2700. Day: SP. Lecture: 3, Lab: 0.

NADN 2240 Applying NP Patterns Emotional Distress 3 cr.

Mental health concepts and selected theoretical frameworks are used to understand adaptive and maladaptive coping behaviors in response to alterations in psychological functioning. This course explores psychiatric illnesses and mental health concepts consistent with the roles of the professional nurse. Emphasis is on the nursing process, DSM-IV criteria, therapeutic communication, therapeutic relationships, self awareness, treatment modalities, community resources, and inter-related client needs in a variety of health care settings. Current relevant research and the sociocultural, legal and ethical implications of providing nursing care to clients experiencing patterns of emotional distress is discussed. Prerequisite: NADN 2120, NADN 2150, BIOL 2320, BIOL 232L and PSYC 2700. Co-Requisite: NADN 2320. Day: Su. Lecture: 3, Lab: 0.

NADN 2320 Applying NP Maternal/Newborn Clients 3.5 cr.

This nursing course is designed to build upon concepts and practice skills of previous learning while providing an emphasis on family centered maternal and newborn health. Utilizing functional health patterns, the student will apply the nursing process in family centered care from the prenatal period through postpartum and including newborns. Prerequisite: NADN 2120, NADN 2150, BIOL 2320, BIOL 232L and PSYC 2700. Co-Requisite: NADN 2240. Day: Su. Lecture: 2.5, Lab: 0.5. Clinical: 2.5. ♦

NADN 2330 Applying NP Pediatric Clients 3.5 cr.

This course is designed to assist the Associate Degree Nursing student in the comprehension of pathophysiological and psychosocial concepts as they relate to pediatric clients experiencing complex alterations in functional health patterns. Emphasis will be placed upon assisting clients and their support persons to attain, maintain and regain health in advanced technological settings. The student will utilize the nursing process and evidence-based practice to enhance and refine their clinical decision-making skills. Prerequisite: NADN 2350, BIOL 1510 and MATH 2130 or MATH 2110. Co-Requisite: NADN 2400. Day: Sp. Lecture: 2.5, Lab: 0.5. Clinical: 2.5. ♦

NADN 2350 Applying NP Complex Clients 7 cr.

This course is designed to assist the Associate Degree Nursing student in the comprehension of pathophysiological and psychosocial concepts as they relate to clients experiencing complex alterations in functional health patterns. Emphasis will be placed upon assisting clients and their support persons to attain, maintain and regain health in advanced technological settings. The student will utilize the nursing process and evidence-based practice to enhance

and refine their clinical decision-making skills. Prerequisite: NADN 2320, and NADN 2240. Co-Requisite: BIOL 1510 and MATH 2130 or MATH 2110. Day: Fa. Lecture: 3, Lab: 3. Clinical: 9. ♦

NADN 2400 Applying NP Care of Groups of Clients 5 cr.

This course is designed to assist the Associate Degree Nursing student in developing a theoretical foundation for the professional practice of nursing. The course will enhance the student's ability to refine clinical and leadership skills as well as develop patient management skills for multiple clients in a "real world setting". This course focuses on discovering, discussing and writing about issues and trends which affect nursing practice. The scope of nursing practice, laws which govern nursing, ethical considerations, and managerial concepts will be explored. This course also prepares the student for taking the NCLEX-RN examination. Prerequisite: NADN 2350, BIOL 1510 and MATH 2130 or MATH 2110. Co-Requisite: NADN 2330. Day: Sp. Lecture: 2, Lab: 1, Clinical: 8 ♦

NURSING EDUCATION, PRACTICAL (NPNT)

NPNT 1410 Nursing Fundamentals I 6 cr.

This course explores the use of basic nursing skills combined with the nursing process to develop safe entry level nursing students. This course encompasses, asepsis, hygiene, medication administration, while introducing basic medical-surgical nursing skills in the lab and later in the clinical setting. Prerequisite: None. Co-Requisite: None. Day: Fa; Eve: Fa. Lecture: 3, Lab: 3. Clinical: 6. ♦

NPNT 1420 Nursing Fundamentals II 5 cr.

This course emphasizes more complex nursing skills with continued use of the nursing process to develop competent and safe nursing students. Complex Skills to be performed included skills related to the respiratory, perioperative, circulatory, endocrine, integumentary, reproductive and neurological systems, as well as the skills and principles of IV therapy in the state of Ohio. Prerequisite: NPNT1410. Co-Requisite: NPNT1910. Day: Sp; Eve: Sp. Lecture: 2, Lab: 1.5. Clinical: 7.5. ♦

NPNT 1510 Practical Nursing Trends & Ethics 2 cr.

Offered to provide an understanding of past, current, and future issues which impact nursing, end of life issues and various capstone topics. Included are: historical perspectives, legal & ethical issues, roles and responsibilities of the practical nurse. The role of the Ohio Board of Nursing will be explored. The student will be assisted in formulating a letter of application and a resume, applying for licensure, and preparing for the NCLEX-PN examination using the computer lab. Prerequisite: NPNT1410. Co-Requisite: None. Day: Sp; Eve: Su. Lecture: 2, Lab: 0. ♦

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NPNT 1610 Introduction to Practical Nursing 2 cr.

This course will introduce the student to Practical Nursing beginning with growth and developmental tasks of adulthood and aging. Also covered will be diabetes mellitus, perioperative nursing, pain, the immune system, fluid & electrolytes, IV therapy, shock, and acid-base balance. Prerequisite: Practical Nursing program admission. Co-Requisite: None. Day: Su; Eve: Fa. Lecture: 2, Lab: 0. ♦

NPNT 1620 Practical Nursing I 3 cr.

This course continues with nursing care of adults with various needs. Includes nursing care, assessment and teaching for lymphatic and hemopoietic, gastrointestinal, musculoskeletal, endocrine, renal, and reproductive systems. Prerequisite: NPNT 1610. Co-Requisite: None. Day: Fa; Eve: Sp. Lecture: 3, Lab: 0.

NPNT 1630 Practical Nursing II 3 cr.

This course is the third in a series which develops the art and science of nursing care of adults. It includes nursing care of adults with problems of Cardiovascular, Respiratory, Neurological, Special Senses, & Integumentary systems. Prerequisite: NPNT 1620. Co-Requisite: None. Day: Sp; Eve: Fa. Lecture: 3, Lab: 0.

NPNT 1710 Pharmacology 4 cr.

This course is a comprehensive study of drugs; including pharmacology math, drug classifications, pharmaceutical preparations, site of drug actions and physiological responses of the body to drugs. Responsibilities of the practical nurse in relation to the care of the client receiving the medication will be stressed. Prerequisite: None. Co-Requisite: None. Day: Fa; Eve: Sp. Lecture: 4, Lab: 0. ♦

NPNT 1720 Pharmacology I 1 cr.

This course is an introduction to the study of drugs; including pharmacology math, drug classifications, pharmaceutical preparations, site of drug actions and physiological responses of the body to drugs. Responsibilities of the practical nurse in relation to the care of the client receiving the medication will be stressed. Prerequisites: Practical Nursing program admission. Co-Requisite: NPNT 1610. Day: Su; Eve: Fa. Lecture 1, Lab: 0.

NPNT 1730 Pharmacology II 3 cr.

This course is a continuation of NPNT 1720, which is a comprehensive study of drugs; including pharmacology math, drug classifications, pharmaceutical preparations, site of drug actions and physiological responses of the body to drugs. Responsibilities of the practical nurse in relation to the care of the client receiving the medication will be stressed. Prerequisite: NPNT 1720. Co-Requisite: None. Day: Fa; Eve: Sp. Lecture: 3, Lab: 0. ♦

NPNT 1910 Maternal Child Health 5 cr.

Study of the maternity cycle including the common

deviations from the normal obstetrical course and the sick child, including common deviations from normal for each age group. Prerequisite: NPNT 1410. Co-Requisite: NPNT 1420. Day: Sp; Eve: Sp. Lecture: 3, Lab: 0, Clinical: 7. ♦

NPNT 2000 Special Topics-LPN 0.5-6 cr.

By permission only. In-depth study of a specific topic(s) pertinent to licensed practical nursing. May be repeated. Prerequisite: Permission. Co-Requisite: None. Day: On demand; Eve: On demand. Lecture: TBD, Lab: TBD.

NPNT 2240 Applying Nursing Process in Patterns of Emotional Distress 3 cr.

Mental health concepts and selected theoretical frameworks are used to understand adaptive and maladaptive coping behaviors in response to alterations in psychological functioning. This course explores psychiatric illnesses and mental health concepts consistent with the roles of the professional nurse. Emphasis is on the nursing process, DSM-IV criteria, therapeutic communication, therapeutic relationships, self awareness, treatment modalities, community resources, and inter-related client needs in a variety of health care settings. Current relevant research and the sociocultural, legal and ethical implications of providing nursing care to clients experiencing patterns of emotional distress are discussed. Prerequisite: PSYC 1010. Co-Requisite: Current Practical Nursing student. Day: Su, Sp. Lecture: 3, Lab: 0. ♦

PERSONAL DEVELOPMENT (PERS)

PERS 0250 Essential Keyboarding Skills 2 cr.

A course designed for the person who has limited knowledge of the computer and keyboard. The course will include beginning computer skills and function of basic computer parts. The course will develop basic keyboarding skills for alphabetic keys, symbols, and numeric keypad. Basic formatting features will include margins, spacing, and text alignment. Students will learn to format letters, memos, and reports. Prerequisite: None. Co-Requisite: None. Day: Fa, Sp; Eve: Fa, Sp. Lecture: 2, Lab: 0. ♦

PERS 1003 College Foundations 2 cr.

This course is designed to help students create greater success in college and in life. The student will learn many proven strategies for creating greater academic, professional and personal success through cooperative learning activities, guided journal activities and reflection. Prerequisite: None. Co-Requisite: ENGL 0800 or ENGL 0900. Day: Fa, Sp; Eve: Fa, Sp. Lecture: 2, Lab: 0.

PERS 1060 Personal Career Development 3 cr.

Prepares students for the world of work and future career plans. Students develop a career plan, practice job search skills and resume writing, complete job applications,

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learn interview strategies, and job market research. Covers global work issues, workplace diversity, personal budgeting, and continuing education opportunities. Prerequisite: None. Co-Requisite: None. Day: Sp; Eve: On demand. Lecture: 3, Lab: 0.

PERS 1080 Financial Literacy 1 cr.

Introduces concepts of financial responsibility, managing personal income, savings, debt, and charitable giving. Explores a broad spectrum of money management and financial planning options for use in protecting and growing one's assets. Prerequisite: None. Co-Requisite: None. On demand. Lecture: 1, Lab: 0.

PERS 1200 21st Century Workplace Skills 3 cr.

An introduction to basic skills and knowledge required for the 21st Century workplace. Topics include communication basics, interpersonal skills, teamwork, problem solving, ethics and personal responsibility, leadership skills, dealing with change, and planning for professional development. The course includes a capstone presentation that requires teamwork and application of the lessons learned in each module. Prerequisite: None. Co-Requisite: None. Day: On demand; Eve: On demand; Online: On demand; Blended: On demand. Lecture: 3, Lab: 0.

PERS 2000 Special Topics-Personal Development 0.5-6 cr.

By permission only. In-depth study in a specific topic(s) pertinent to personal development. May be repeated. Prerequisite: Permission. Co-Requisite: None. Day: On demand; Eve: On demand. Lecture TBD, Lab: TBD.

PHILOSOPHY (PHIL)

PHIL 1010 Introduction to Philosophy 3 cr. TM-H

This course represents humanity's attempts to understand the nature of the universe and the meaning and purpose of life. The class is divided into five topics; reasoning; epistemology; metaphysics; ethics; and, aesthetics. Prerequisite: None. Co-Requisite: None. Day: Fa, Sp; Eve: Fa. Lecture: 3, Lab: 0. TAG: OAH045.

PHIL 1200 Principles of Reasoning 3 cr. TM-H

Basic concepts of logic and techniques for judging the validity of arguments. Topics include systems for symbolizing arguments and deriving conclusions from premises, formal and informal fallacies of reasoning, classical and contemporary theories of deduction - the syllogism and the enthymeme - as well as induction - generalization and hypothesis testing. Prerequisite: None. Co-Requisite: None. Day: Fa, Sp; Eve: Fa, Sp; Online: On demand. Lecture: 3, Lab: 0.

PHIL 1300 Introduction to Ethics 3 cr. TM-H

Discussion of classic and modern philosophical views

of human values, ideals, and morality. Provides some introductory problems, concepts, and results of ethics; includes selected philosophers of past and present. Lecture, reading and discussion. Prerequisite: ENGL 0900 or Accuplacer score greater than 69. Co-Requisite: None. Day: Fa, Sp; Eve: Fa, Sp; Online: Fa, Sp. Lecture: 3, Lab: 0. TAG: OAH046.

PHIL 2000 Special Topics-Philosophy 0.5-6 cr.

By permission only. In-depth study of a specific topic(s) pertinent to philosophy. May be repeated. Prerequisite: Permission. Co-Requisite: None. Day: On demand; Eve: On demand. Lecture: TBD, Lab: TBD.

PHYSICAL THERAPIST ASSISTANT TECHNOLOGY (PTAT)

PTAT 1010 Introduction to Physical Therapy 2 cr.

This course introduces the physical therapist assistant student to the history of the physical therapy profession and the PTA, contemporary physical therapy practice and the role of the PTA in relationship to the physical therapists and other health care providers, and the American Physical Therapy Association. Medical terminology and documentation techniques are also introduced in relation to physical therapy practice. Prerequisite: Acceptance into PTA Program or interest in the PTA program. Co-Requisite: None. Day: Fa. Lecture: 2, Lab: 0.

PTAT 1550 Basic Exercise Physiology 3 cr.

This course covers all areas of basic exercise physiology. There is an emphasis on both cardiovascular and pulmonary exercise physiology as the basis of safe and effective exercise prescription in normal individuals, pulmonary, cardiac and special needs patients. This course is part of the progression for the ACSM's Group Exercise Leader or NSCA-Certified Personal Trainer. Prerequisite: BIOL 1310 and BIOL 131L or BIOL 2310 and BIOL 231L. Co-Requisite: None. Day: Sp. Lecture: 2, Lab: 2.

PTAT 2000 Special Topics-Physical Therapist Assistant Technology 0.5-6 cr.

By permission only. In-depth study of a specific topic(s) pertinent to physical therapist assistant technology. May be repeated. Prerequisite: Permission. Co-Requisite: None. Day: On demand; Eve: On demand. Lecture: TBD, Lab: TBD.

PTAT 2210 Physical Therapy Procedures 4 cr.

Students will be exposed to basic theory and physiology of heat, cold, ultrasound, electrical stimulation, hydrotherapy, traction, and compression, light, and massage. The opportunity for development of skills in application of these modalities will be offered to students in the laboratory setting. Prerequisite: PTAT 1010. Co-Requisite: PTAT 2400. Day: Sp. Lecture: 3, Lab: 3. ♦

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PTAT 2250 Introduction to Clinical Setting 2 cr.

The goal of this course is to bring the Physical Therapist Assistant student to proficiency level in foundational patient handling and mobility skills, including positioning and draping; monitoring of vital signs and physiological responses, bed mobility; range of motion (ROM); wheelchair selection and management; transfers; ambulation aids; gait training, and management of lines, leads, and tubes. This course will enhance the students' abilities to interact effectively with patients' social support networks and other professions involved in patient care. It will also reinforce the knowledge and skills acquired in all prior classes including communication, documentation, and professionalism. Prerequisite: PTAT 2400 and PTAT 2210. Co-Requisite: PTAT 2320. Day: Su. Lecture: 1, Lab: 2. ♦

PTAT 2320 Principles and Applications of Therapeutic Exercise I 2 cr.

This course is designed to introduce students to therapeutic exercise techniques. Topics including range of motion, passive stretching, joint mobilization, resistive exercise, aerobic exercise, aquatic exercise, and balance techniques are studied. Students are introduced to therapeutic exercise equipment such as: variable resistance and other free standing resistive exercise equipment, ergometers, treadmill, and basic exercise equipment including cuff weights and elastic resistive equipment. Therapeutic exercise techniques are studied by anatomical regions. Prerequisite: PTAT 2210, and PTAT 2400. Co-Requisite: PTAT 2250. Day: Su. Lecture: 1, Lab: 2. ♦

PTAT 2340 Principles and Applications of Therapeutic Exercise II 3 cr.

This course is a continuation of PTAT 2320. This course covers the basic concepts and principles associated with musculoskeletal dysfunction and the types of physical therapy intervention utilized to treat these common musculoskeletal disorders. Emphasis will be on recognition and understanding of the dysfunction and disease process. Prerequisite: PTAT 2210, PTAT 2400, PTAT 2250, and PTAT 2320. Co-Requisite: PTAT 2420, PTAT 2520, PTAT 2610. Day: Fa. Lecture: 2, Lab: 2.

PTAT 2400 Functional Anatomy & Kinesiology 4 cr.

This course covers the relationships between the systems that relate to functional movement of the human body. It is designed to integrate muscle innervation, position and function of the musculoskeletal system for specific joints and their muscular components. Includes the upper extremity, lower extremity, face and trunk. Students are taught palpation skills joint range of motion, goniometric measurement and manual muscle testing. Biomechanical concepts are also integrated with this course as they relate to simple movement analysis and kinesiology. Prerequisite: BIOL 2310, BIOL 231L, and PTAT 1010. Co-Requisite: PTAT 2210. Day: Sp. Lecture: 3, Lab: 3. ♦

PTAT 2420 Neurological Conditions in Physical Therapy I 2 cr.

This is an entry level survey on principles of neurological rehabilitation course, for the conditions and their clinical presentations. Clinical management and physical therapy interventions will be discussed for the most common neurological problems that may be seen in physical therapy practice. Normal and abnormal neurodevelopment will also be covered. Prerequisite: PTAT 2250, PTAT 2400 and BIOL 2450 or HLTH 1420. Co-Requisite: PTAT 2340, PTAT 2520, and PTAT 2610. Day: Fa. Lecture: 2, Lab: 0.

PTAT 2440 Neurological Conditions in Physical Therapy II 2 cr.

This is a continuation of PTAT 2420. This is an advanced survey on principles of neurological rehabilitation course, for the conditions and their clinical presentations. Clinical management and physical therapy interventions will be discussed for the most complex neurological problems that may be seen in physical therapy practice. Prerequisite: PTAT 2420. Co-Requisite: PTAT 2720, and PTAT 2660. Day: Sp. Lecture: 2, Lab: 0.

PTAT 2460 Directed Practice I 3 cr.

An introductory experience in clinical settings in which the student will be able to perform previously learned theories and techniques for patient care under the close supervision of a licensed physical therapist and/or physical therapist assistant. Prerequisite: PTAT 2210, PTAT 2400, PTAT 2250, PTAT 2320, PTAT 2340, PTAT 2520, and PTAT 2610. Co-Requisite: PTAT 2470. Day: Fa. Lecture: 0, Lab: 15. ♦

PTAT 2470 PTA Seminar 1 cr.

Student participation in discussions related to clinical experiences in Directed Practice I. This course cover begins the review process for the National Physical Therapy Examination through the use of online quizzes and online access to Scorebuilder's Basecamp/ACE review course. Prerequisite: PTAT 2210, PTAT 2400, PTAT 2250, PTAT 2320, PTAT 2520, and PTAT 2610. Co-Requisite: PTAT 2460. Day: Fa. Lecture: 1, Lab: 0. ♦

PTAT 2520 Geriatric Conditions in Physical Therapy 2 cr.

This course is an overview of the physical and psychobehavioral aspects of aging in adulthood. Students are introduced to usual and pathological changes with aging and are challenged to problem solve treatment issues relevant to the types of older clients they will assist in physical therapy clinical settings. The multidimensional concerns of our older patients are emphasized, and students are encouraged to develop themselves as strong generalist physical therapists to serve the needs of our older clientele. Prerequisite: PTAT 2210, PTAT 2400, PTAT 2250, PTAT 2320, BIOL 2310, BIOL 231L, BIOL 2320, BIOL 232L, and BIOL 2450 or HLTH 1420. Co-Requisite: PTAT 2340, PTAT 2420, PTAT 2610. Day: Fa. Lecture: 2, Lab: 0.

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PTAT 2610 Advanced Rehabilitation Concepts in Physical Therapy I 2 cr.

Using selective topics from comprehensive sources, this course introduces the basic concepts of rehabilitation management of adult patients with differing special needs, including, but not limited to: amputees, cardiovascular, and pulmonary patients. Prerequisite: PTAT 2210, PTAT 2400, PTAT 2250, and PTAT 2320. Co-Requisite: PTAT 2340, PTAT 2420, and PTAT 2520. Day: Fa. Lecture: 2, Lab: 0.

PTAT 2660 Advanced Rehabilitation Concepts in Physical Therapy II 2 cr.

This is a continuation of PTAT 2610. Using selective topics from comprehensive sources, this course introduces the basic concepts of rehabilitation management of adult patients with differing special needs, including, but not limited to: obstetrics/gynecological, burns, taping methods, and lymphedema. Prerequisite: PTAT 2610. Co-Requisite: PTAT 2440, and PTAT 2720. Day: Sp. Lecture 2, Lab: 0.

PTAT 2720 Pediatric Conditions in Physical Therapy 2 cr.

The purpose of this course is to review and analyze the normal and abnormal development changes over the course of the maturation process with emphasis on selected medical conditions in pediatrics. Current motor control and motor learning theories are applied to therapeutic intervention strategies for the pediatric population. Prerequisites: PTAT 2210, PTAT 2400, PTAT 2250, PTAT 2320, PTAT 2340, BIOL 2310, BIOL 231L, BIOL 2320, BIOL 232L, and BIOL 2450 or HLTH 1420. Co-Requisite: PTAT 2440, and PTAT 2660. Day: Sp. Lecture 2, Lab: 0.

PTAT 2820 Directed Practice II 4 cr.

This is a continuation of PTAT 2460. Advanced final educational experience in a clinical setting in which the student will be able to perform learned theories and techniques for patient care under the guidance and supervision of a licensed Physical Therapist and/or Physical Therapist Assistant. Prerequisite: PTAT 2460, and PTAT 2470. Co-Requisite: PTAT 2900. Day: Sp. Lecture: 0, Lab: 20. ♦

PTAT 2900 PTA Capstone 2 cr.

Student participation in discussions related to clinical experience in Directed Practice II. This course continues the review process for the National Physical Therapy Examination through the use of online quizzes and online access to Scorebuilder's Basecamp/ACE review course. The first 8 weeks of this course is summative. It will provide a cumulative conclusion of the course to assess overall learning outcomes. Students will be provided with individualized feedback regarding strengths and weaknesses to better prepare them for the national physical therapist assistant examination for licensure. During the last week of this course, students present the Evidence Based Research Project that was presented at the clinical

sites during Directed Practice II. Special topics in the last week of the course include, but are not limited to: job placement and career development, evidence-based journal reviews, round table discussions, professionalism in physical therapy, and final preparation for licensing and the national physical therapy licensing examination. (Exam Fee: \$95.00). Prerequisite: PTAT 1010, PTAT 2210, PTAT 2400, PTAT 2250, PTAT 2320, PTAT 2340, PTAT 2460, PTAT 2470, PTAT 2420, PTAT 2520, PTAT 2610, PTAT 2440, PTAT 2720, and PTAT 2660. Co-Requisite: PTAT 2820. Day: Sp. Lecture: 2, Lab: 0. ♦

PHYSICS (PHYS)

PHYS 1010 Applied Physics 2 cr.

Introduction to the principles combined with its applications in industry today. Covers the broad fields of mechanics, heat, light, sound. Specific topics include atomic structure, flow of fluids, work, energy, simple machines, thermal expansion & gas laws. High school physics is not required. Prerequisite: MATH 1104. Co-Requisite: PHYS 101L. Day: Fa, Sp; Eve: Fa, Sp; Online: Fa, Sp. Lecture: 2, Lab: 0.

PHYS 101L Applied Physics Lab 1 cr.

The Laboratory portion of the course PHYS 1010. This includes an introduction to laboratory techniques, laboratory safety, significant figures as well as communicating scientific ideas. For non-science majors. Prerequisite: MATH 1104. Co-Requisite: PHYS 1010. Day: Fa, Sp; Eve: On demand; Online: Fa. Lecture: 0, Lab: 2. ♦

PHYS 1100 Principles of Physical Science I 3 cr. TM-N

Covers basic principles and concepts of astronomy and physics. For non-science majors. Prerequisite: high school science. Prerequisite: High school science or equivalent. Co-Requisite: PHYS 110L. Day: Fa; Eve: On demand. Lecture: 3, Lab: 0.

PHYS 110L Principles of Physical Science I Lab 1 cr. TM-N

This course is the laboratory component of the PHYS 1100 course and deals with the basic principles and concepts of astronomy and physics. This course is designed for non-science majors. Prerequisite: High school science or equivalent. Co-Requisite: PHYS 1100. Day: Fa; Eve: On demand. Lecture: 0, Lab: 2. ♦

PHYS 1200 Principles of Physical Science II 3 cr. TM-N

This course covers the basic principles and concepts of chemistry, geology, and meteorology. For non-science majors. Prerequisite: High school science or equivalent. Co-Requisite: PHYS 120L. Day: Sp; Eve: On demand. Lecture: 3, Lab: 0.

PHYS 120L Principles of Physical Science II Lab 1 cr. TM-N

This course is the laboratory component of the Phys 1200 course and includes principles and concepts of chemistry,

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geology, and meteorology. This course is designed for non-science majors. Prerequisite: High school science or equivalent. Co-Requisite: PHYS 1200. Day: Sp; Eve: On demand. Lecture: 0, Lab: 2. ♦

PHYS 1210 Survey of Astronomy 3 cr. TM-N

The history of astronomy, the nature of the solar system, common constellations and stars, galaxies and recent discoveries in the field. A few sessions held at night for telescope viewing. Prerequisite: None. Co-Requisite: PHYS 121L. Day: Sp; Eve: Fa, On demand. Lecture: 3, Lab: 0.

PHYS 121L Survey of Astronomy Lab 1 cr. TM-N

The course is the laboratory associated with the Survey of Astronomy course and includes proper laboratory and safety procedures, communicating scientific ideas as well as identifying common constellations and stars. For the day class, a few sessions may be held at night for telescope viewing. Prerequisite: None. Co-Requisite: PHYS 1210. Day: Sp; Eve: Fa, On demand. Lecture: 0, Lab: 2. ♦

PHYS 2000 Special Topics-Physics 0.5-6 cr.

By permission only. In-depth study of a specific topic(s) pertinent to physics. May be repeated. Prerequisite: Permission. Co-Requisite: None. Day: On demand; Eve: On demand. Lecture: TBD, Lab: TBD.

PHYS 2010 Introduction to Physics I 3 cr. TM-N

The course is an introduction to engineering mechanics and covers kinematics, Newton's laws of motion, work, energy, power, conservation of energy, conservation of momentum, mechanics of solids and liquids, statics, uniform circular motion oscillations, and waves. Prerequisite: MATH 2120. Co-Requisite: PHYS 201L. Day: Sp; Eve: On demand. Lecture: 3, Lab: 0. TAG: OSC014.

PHYS 201L Introduction to Physics I Lab 1 cr. TM-N

This course is the laboratory associated with the PHYS 2010 course and includes an introduction to laboratory techniques, laboratory safety, significant figures for engineers. Prerequisite: MATH 2120. Co-Requisite: PHYS 2010. Day: Sp; Eve: On demand. Lecture: 0, Lab: 2. TAG: OSC014. ♦

PHYS 2030 Introduction to Physics II 3 cr. TM-N

Continuation of PHYS 2010 including an introduction to optics, heat and thermodynamics, electricity and magnetism. The course covers the properties of electrostatics, the electric field, electric potential, direct current circuits, magnetism, electro-magnetic induction, electro mechanical devices and instruments, and alternating currents by combining lectures with demonstrations and labs. Prerequisite: PHYS 2010 and PHYS 201L. Co-Requisite: PHYS 203L. Day: Fa; Eve: On demand. Lecture: 3, Lab: 0. TAG: OSC015.

PHYS 203L Introduction to Physics II Lab 1 cr. TM-N

This course is a continuation of the PHYS 201L course and is associated with PHYS 2030. Prerequisite: PHYS 2010 and PHYS 201L. Co-Requisite: PHYS 2030. Day: Fa; Eve: On demand. Lecture: 0, Lab: 2. TAG: OSC015. ♦

PHYS 2510 General Physics I 4 cr. TM-N

This physics series is for science and engineering majors. Classical physics with calculus and vectors. Topics include Newtonian mechanics, rotational dynamics, gravitation, fluids and wave phenomena. Prerequisite: None. Co-Requisite: MATH 2263 and PHYS 251L. Day: Fa; Eve: On demand. Lecture: 4, Lab: 0. TAG: OSC016.

PHYS 251H General Physics I Honors 4 cr. TM-N

This honors physics course is for science and engineering majors seeking a deep understanding of physics. Students will solve problems involving classical physics with calculus and vectors. Topics in the course include Newtonian mechanics, rotational dynamics, gravitation, fluids and wave phenomena. The honors physics course will provide opportunities for students to get more experience with critical thinking and problem solving by being involved in a project. The project will hone the students skills by involving them with practical applications of physics. Prerequisite: Honors program acceptance. Co-Requisite: MATH 2263 and PHYS 251L. Day: Fa; Eve: On demand. Lecture: 4, Lab: 0. TAG: OSC016.

PHYS 251L General Physics I Lab 1 cr. TM-N

The laboratory section associated with the General Physics I class. The course includes proper laboratory and safety procedures, significant digits and communicating scientific ideas. This physics series is intended for science and engineering majors. Prerequisite: None. Co-Requisite: MATH 2263 and PHYS 2510. Day: Fa; Eve: On demand. Lecture: 0, Lab: 2. TAG: OSC016. ♦

PHYS 2530 General Physics II 4 cr. TM-N

Continuation of PHYS 2510. Classical physics with calculus and vectors; thermal properties of matter, heat, and thermodynamics, electricity, magnetism and optics. Prerequisite: PHYS 2510, PHYS 251L and MATH 2263. Co-Requisite: MATH 2264 and PHYS 253L. Day: Sp; Eve: On demand. Lecture: 4, Lab: 0. TAG: OSC017.

PHYS 253L General Physics II Lab 1 cr. TM-N

Continuation of PHYS 251L. Classical physics with calculus and vectors; thermal properties of matter, heat, thermodynamic, electricity and magnetism. Prerequisite: PHYS 2510, PHYS 251L and MATH 2263. Co-Requisite: MATH 2264 and PHYS 2530. Day: Sp; Eve: On demand. Lecture: 0, Lab: 2. TAG: OSC017. ♦

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ethical, and professional topics important for success in the profession, including professional issues in Radiologic Technology, patient care and safety, and instrumentation. This course also presents the student with the didactic material necessary to achieve the cognitive domain in order to be successful in the clinical setting by teaching the student how to perform specific radiographic procedures. The student is required to attend two lecture sessions per week. Prerequisite: Acceptance into RADT Program. Co-Requisite: None. Day: Fa. Lecture: 2, Lab: 0.

RADT 1110 Principles of Radiographic Exposure I 3 cr.

This is the first of two radiographic exposure courses. This course introduces the student to the fundamentals of X-ray exposure, anatomy and physiology of the X-ray tube, principles of X-ray production, interactions between X-rays and matter, and basic radiographic quality. This course provides the student with the prerequisite knowledge (cognitive domain) base required prior to operating the radiographic equipment in the clinical setting. This course presents the student with the study of Image Receptors, automatic exposure control, scattered radiation, and devices used to improve radiographic quality including stationary and moving grids, anode heel effect, and compensating filters. Prerequisite: Acceptance into RADT Program. Co-Requisite: None. Day: Fa. Lecture: 3, Lab: 0.

RADT 1120 Principles of Radiographic Exposure II 3 cr.

This is the second of two radiographic exposure courses. This course presents the student with the study of "radiographic quality" and the factors that control it. The course also covers recorded detail, receptor exposure, contrast, distortion, and the factors controlling each. This course reviews and relates exposure principles to practical problem solving. It covers Quality Improvement, and exposure combination problems. Prerequisite: RADT 1110. Co-Requisite: None. Day: Sp. Lecture: 3, Lab: 0.

RADT 1220 Radiographic Procedures II 3 cr.

This is the second of three Radiographic Procedures courses. This course is a continuation of Radiographic Procedures I and presents the student with the didactic material and laboratory demonstration and practice necessary to develop the cognitive and psychomotor domains in order to be successful in clinic. The course will teach the student how to perform specific radiographic procedures and allow the student to practice the procedures in the laboratory setting prior to performing them in the clinical setting. Prerequisite: RADT 1010. Co-Requisite: None. Day: Sp. Lecture: 3, Lab: 0.

RADT 1230 Radiographic Procedures III 2 cr.

This is the Third and final positioning course in the program. This course offers a comprehensive review of "routine" positions already taught, and "non-routine"

positions not yet covered, but common to the profession and part of the A.R.R.T. certification exam test bank. Prerequisite: RADT 1220. Co-Requisite: None. Day: Su. Lecture: 2, Lab: 0.

RADT 1310 Applied Radiography I 2 cr.

This is the first of six Applied Radiography courses that provides the student with the exposure to the practice of Radiology necessary to develop competence in patient care, instrumentation, radiographic procedures, image acquisition, promote professional and ethical conduct, and develop the student's ability to function both independently and as a member of the health care team, develop critical thinking/problem solving skills, and develop and promote Life-Long Learning skills. The outcomes are measured by performance objectives, written objectives, competency evaluations, and adherence to policy and the professional code of conduct. This is a knowledge based course designed to develop and evaluate the cognitive and psychomotor Domains. Prerequisite: Acceptance into RADT program. Co-Requisite: None. Day: Fa. Lecture: 0, Lab: 0, Clinical: 14.

RADT 1320 Applied Radiography II 2 cr.

This is the second of six Applied Radiography courses that provides the student with the exposure to the practice of Radiology necessary to develop competence in patient care, instrumentation, radiographic procedures, image acquisition, promote professional and ethical conduct, and develop the student's ability to function both independently and as a member of the health care team, develop critical thinking/problem solving skills, and develop and promote Life-Long Learning skills. The outcomes are measured by performance objectives, written objectives, competency evaluations, and adherence to policy and the professional code of conduct. This is a knowledge based course designed to develop and evaluate the cognitive and psychomotor Domains. Prerequisite: RADT 1310. Co-Requisite: None. Day: Sp. Lecture: 0, Lab: 0, Clinical: 14.

RADT 1330 Applied Radiography III 2 cr.

This is the third of six Applied Radiography courses that provides the student with the exposure to the practice of Radiology necessary to develop competence in patient care, instrumentation, radiographic procedures, image processing, promote professional and ethical conduct, and develop the student's ability to function both independently and as a member of the health care team, develop critical thinking/problem solving skills, and develop and promote Life-Long Learning skills. The outcomes are measured by performance objectives, written objectives, competency evaluations, and adherence to policy and the professional code of conduct. This is a knowledge based course designed to develop and evaluate the cognitive and psychomotor Domains. Prerequisite: RADT 1320. Co-Requisite: None. Day: Su. Lecture: 0, Lab: 0, Clinical: 14.

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RADT 2000 Special Topics-Radiologic Technology 0.5-6 cr.

By permission only. In-depth study of a specific topic(s) pertinent to radiologic technology. May be repeated. Prerequisite: Permission. Co-Requisite: None. Day: On demand; Eve: On demand. Lecture: TBD, Lab: TBD.

RADT 2170 Radiographic Physics 4 cr.

This course includes the study of matter, electrostatics, electrodynamics, magnetism, electromagnetism, electromagnetic induction, the generation of electricity, the production and control of high voltage, regulation of current, rectification, review of x-ray production, half value layer, pair production, review of the x-ray tube, and x-ray circuits. Prerequisite: RADT 1120. Co-Requisite: None. Day: Fa. Lecture: 4, Lab: 0.

RADT 2190 Special Procedures/Radiographic Imaging 2 cr.

This course covers the equipment, positioning, and anatomy involved with "Special Procedures" radiography, image identification and image acquisition, digital imaging processing, image display, digital imaging informatics, and criteria for image evaluation. Prerequisite: RADT 1230. Co-Requisite: None. Day: Fa. Lecture: 2, Lab: 0.

RADT 2310 Applied Radiography IV 3 cr.

This is the fourth of six Applied Radiography courses that provides the student with the exposure to the practice of Radiology necessary to develop competence in patient care, instrumentation, radiographic procedures, image processing, promote professional and ethical conduct, and develop the student's ability to function both independently and as a member of the health care team, develop/demonstrate (Affective Domain) Critical Thinking/Problem Solving skills, and promote Life-Long Learning. The outcomes are measured by performance objectives, written objectives, competency evaluations, and adherence to policy and the professional code of conduct. This is a knowledge/skills based course designed to develop and evaluate the cognitive, psychomotor, and affective Domains. Prerequisite: RADT 1330. Co-Requisite: None. Day: Fa. Lecture: 0, Lab: 0, Clinical: 21.

RADT 2320 Applied Radiography V 3 cr.

This is the fifth of six Applied Radiography courses that provides the student with the exposure to the practice of Radiology necessary to develop competence in patient care, instrumentation, radiographic procedures, digital image processing, promote professional and ethical conduct, and develop the student's ability to function both independently and as a member of the health care team, develop critical thinking/problem solving skills, and develop and promote Life-Long Learning skills. The outcomes are measured by performance objectives, written objectives, competency evaluations, and adherence to policy and the professional code of conduct. This is a knowledge/skills based course

designed to develop and evaluate the cognitive, psychomotor, and affective Domains. Prerequisite: RADT 2310. Co-Requisite: None. Day: Sp. Lecture: 0, Lab: 0, Clinical: 21.

RADT 2330 Applied Radiography VI 3 cr.

This is the last of six Applied Radiography courses that provides the student with the exposure to the practice of Radiology necessary to develop competence in patient care, instrumentation, radiographic procedures, processing techniques, promote professional and ethical conduct, and develop the student's ability to function both independently and as a member of the health care team, develop critical thinking/problem solving skills, and develop and promote Life-Long Learning skills. The outcomes are measured by performance objectives, written objectives, competency evaluations, and adherence to policy and the professional code of conduct. This is a knowledge/skills based course designed to develop and evaluate the cognitive, psychomotor, and affective Domains. Prerequisite: RADT 2320. Co-Requisite: None. Day: Su. Lecture: 0, Lab: 0, Clinical: 21.

RADT 2420 Selected Topics 3 cr.

This course covers the A.R.R.T. credentialing exam (Registry) content specifications for the current Radiography examination. It is intended to be a review of material from all previous terms to prepare the student for the ARRT Registry exam. This course includes a separate 2 day Kettering A.R.R.T. Registry Review Seminar. Prerequisite: RADT 2510. Co-Requisite: None. Day: Su. Lecture: 3, Lab: 0.

RADT 2430 Kettering National ARRT Review 1 cr.

This is a 2 day course taught during the 6th semester of the program. It is a comprehensive review of the American Registry of Radiologic Technologists Certification Exam Content Specifications. It provides each student with a step by step method of preparing for the Certification Exam. Prerequisite: Enrollment in RADT 2420. Co-Requisite: None. Day: Su. Lecture: 1, Lab: 0. ♦

RADT 2510 Pathology/Advanced Radiobiology & Radiation Protection 3 cr.

This course provides some review of anatomy and pathology, and a detailed study of radiographically diagnosed diseases and abnormalities. This course provides an introduction to cross sectional anatomy. This course also details the deleterious biological effects of ionizing radiation on cellular function and body systems, and the Dose Equivalent Limits of ionizing radiations. The course also reviews and details radiation protection procedures with Federal and state requirements. Prerequisite: RADT 2190. Co-Requisite: None. Day: Sp. Lecture: 3, Lab: 0. ♦

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REAL ESTATE (REAL)

REAL 1900 Real Estate Principles & Practices 3 cr.

Introduction to the U.S. real estate industry. Covers ethics, regulation; nature, importance, and character of land; real estate business and market; ownership and interest; contracts; surveying and property descriptions; transfer of title; mortgage instruments; title closing; financing; investment; deeds, leases and other instruments. Prerequisite: None. Co-Requisite: None. Eve: Fa on demand. Lecture: 3, Lab: 0.

REAL 2400 Real Estate Law 3 cr.

Includes law of agency as applied to real estate brokers and sales agents; law of fixtures; estates (including leases); conveyance of real estate titles; license law of Ohio; zoning; cooperatives and condominiums. Prerequisite: None. Co-Requisite: None. Eve: Sp on demand. Lecture: 3, Lab: 0.

REAL 2410 Real Estate Appraising 2 cr.

Study of the professional approach to value estimation; economic, sociological, and political forces on real property; appraisal of single family residence; problem definition; how data is acquired, classified, analyzed, and interpreted into an estimate of value. Prerequisite: None. Co-Requisite: None. Eve: Sp on demand. Lecture: 2, Lab: 0.

REAL 2420 Real Estate Finance 2 cr.

Role of real estate financing in community development; financial instruments; nature of financial institutions in the mortgage market; and how the market is influenced by government policy. Includes risk analysis, procedures and methods in financing income properties. Prerequisite: None. Co-Requisite: None. Eve: Fa on demand. Lecture: 2, Lab: 0.

RECREATION & PHYSICAL EDUCATION (RECR)

RECR 1350 Zumba 1 cr.

This course is a fun upbeat aerobic class. This course is designed to increase coordination and cardiovascular fitness. Zumba is a nationally recognized exercise program. The objective is to teach a fun way to exercise by bringing students to a party setting for aerobic exercise. Prerequisite: None. Co-Requisite: None. Day: On demand. Lecture: 0, Lab: 2. ♦

RECR 1360 Walking 1 cr.

This course will involve walking outside. This course is designed to improve cardiovascular fitness and assist with weight loss. The course will take place on the trails at Washington State Community College. There will also be walking on area sidewalks and steps, stairs & concrete surfaces. Prerequisite: None. Co-Requisite: None. Day: On demand. Lecture: 0, Lab: 2. ♦

RECR 1750 Yoga 1 cr.

Yoga class offers instruction and practice in basic asana with emphasis on breath and the synchronization of breath and movement. Yoga class addresses and emphasizes the integration of body, mind, and spirit via a series of practices involving seven to ten postures and breathing techniques. Prerequisite: None. Co-Requisite: None. Day: Fa, Sp. Lecture: 0, Lab: 2. ♦

RECR 2000 Special Topics-Recreation and Physical Education 0.5-6 cr.

By permission only. In-depth study of a specific topic(s) pertinent to recreation and physical education. May be repeated. Prerequisite: Permission. Co-Requisite: None. Day: On demand; Eve: On demand. Lecture: TBD, Lab: TBD.

RESPIRATORY THERAPY TECHNOLOGY (RESP)

RESP 1100 Introduction to Respiratory Care 2 cr.

History, organization, credential systems and job functions of the respiratory care profession; respiratory care theory and procedures including terminology, applied principles of physics, vital signs, ambulation and body mechanics, universal precautions, oxygen appliances and quality assurance procedures. Prerequisite: BIOL 1320, BIOL 132L, HLTH 1020, MATH 1050 and program admission. Co-Requisite: None. Day: Sp. Lecture: 1, Lab: 3. ♦

RESP 1210 Cardiopulmonary Pharmacology 2 cr.

The course is an orientation to general pharmacology including drug groups, dosage, effects, and dispensing regulations. It is an emphasis on drugs used in the treatment and management of cardiopulmonary disease including bronchodilators, mucokinetics, steroids, and other drugs. Prerequisite: BIOL 1320, BIOL 132L, HLTH 1020, MATH 1050, and program admission. Co-Requisite: None. Day: Sp. Lecture: 1, Lab: 3. ♦

RESP 1250 Medical Gas Administration Therapeutics 4 cr.

This course is a study of therapeutic modalities and physiologic monitoring practices used in the treatment and diagnosis of pulmonary diseases inclusive of: Arterial Blood Gas Analysis and puncture, Co-oximetry, Pulse-oximetry, End tidal CO₂ monitoring and Oxygen analysis. This course includes material on the calibration, maintenance, function equipment used and an introduction to basic skills relating to patient care, including scientific principles of equipment operation, and basic oxygen administration, aerosol, bronchial hygiene therapy, humidification therapy and Airway management techniques inclusive of endotracheal intubation. Prerequisite: BIOL 1320, BIOL 132L, HLTH 1020, MATH 1050 and program admission. Co-Requisite: None. Day: Sp. Lecture: 3, Lab: 3. ♦

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RESP 1330 Cardiopulmonary Anatomy & Physiology 2 cr.

Overview of the fundamental concepts of the cardiopulmonary system and function. Emphasis on normal physiology. Prerequisite: BIOL 1320, BIOL 132L, HLTH 1020, MATH 1050, and program admission. Co-Requisite: None. Day: Sp. Lecture: 1, Lab: 3. ♦

RESP 1350 Clinical Practice I 1 cr.

Experiences will include basic skills such as; medical asepsis, monitoring vital signs, charting in medical record and other record keeping, isolation techniques, and CPR. The student will become familiarized with Hospital and Respiratory Therapy Dept.(RT) policies and procedures for operations and emergency procedures. Also includes performance of medical gas administration and introduction to basic therapeutic procedures. The student will also be assigned to a physician's office for involvement with patient History and physicals. Prerequisite: BIOL 1320, BIOL 132L, HLTH 1020, MATH 1050 and program admission. Co-Requisite: None. Day: Sp. Lecture: 0, Lab: 5. ♦

RESP 1360 Advanced Cardiopulmonary Resuscitation 1 cr.

In-depth study of specific respiratory care issues in a group with a structured format. Prerequisite: HLTH 2400, RESP 2500 and program admission. Co-Requisite: None. Day: Sp. Lecture: 0, Lab: 3. ♦

RESP 2000 Special Topics-Respiratory Therapy Technology 0.5-6 cr.

By permission only. In-depth study of a specific topic(s) pertinent to respiratory therapy technology. May be repeated. Prerequisite: Permission. Co-Requisite: None. Day: On demand; Eve: On demand. Lecture: TBD, Lab: TBD.

RESP 2450 Clinical Practice II 1 cr.

Continuation of the hospital clinical experience including basic patient care skills such as medical asepsis, vital sign monitoring, documentation of the patient's response to procedures, CPR and other basic skills. Also performance of therapeutic and diagnostic modalities such as: Aerosol Therapies, I.P.P.B., Postural Drainage & Percussion, Medical Gas Administration, Pulse Oximetry, End Tidal CO2 Monitoring, Airway Care, and Arterial Puncture and analyzation of Blood Gas Samples. Students will explore the Cultural Diversity and Age Specific requirements of the patient population and be introduced to the care of pediatric patients. In this semester the student will also be assigned to a hospital operating room under the supervision of the Anesthesia Dept to experience airway maintenance procedures. Prerequisite: RESP 1100, RESP 1210, RESP 1250, RESP 1330, and RESP 1350. Co-Requisite: None. Day: Su. Lecture: 0, Lab: 8. ♦

RESP 2460 Arterial Blood Gases 1 cr.

The course will review the fundamentals of acid-base respiratory physiology, interpretation and assessment of

blood gases and the clinical applications. Prerequisite: RESP 2500, RESP 2610 and RESP 2450. Co-Requisite: None. Day: Fa. Lecture: 1, Lab: 0. ♦

RESP 2500 Respiratory Critical Care I 2 cr.

Initial studies of the care of the critically ill patient with an emphasis on Mechanical Ventilation. In this session the student will study the principles, effects, and modes of mechanical ventilation as well as the techniques of initiation, monitoring, and weaning patients. The course will conclude with a study of the principles of Neonatal ventilation. Prerequisite: RESP 1100, RESP 1210, RESP 1250, RESP 1330, and RESP 1350. Co-Requisite: None. Day: Su. Lecture: 1, Lab: 3. ♦

RESP 2510 Cardiopulmonary Pathology I 3 cr.

Diseases and disorders affecting the cardiopulmonary systems emphasizing diagnosis, selection and implementation of therapeutic modalities, and the role of the respiratory care practitioner treatment. Prerequisite: RESP 2500, RESP 2610 and RESP 2450. Co-Requisite: None. Day: Fa. Lecture: 3, Lab: 0. ♦

RESP 2520 Cardiopulmonary Pathology II 1 cr.

Practical application of the principles obtained in Cardiopulmonary Pathology I, as they apply to the National Board for Respiratory Care (NBRC) examination process, with emphasis on the Clinical Simulation Exam. Prerequisite: RESP 2510. Co-Requisite: None. Day: Sp. Lecture: 0, Lab: 3. ♦

RESP 2550 Clinical Practice III 2 cr.

Additional Hospital experience and continuation of patient care skills, providing therapeutic modalities: Small Volume Nebulizer, Postural Drainage & Percussion, IPPB, Incentive Spirometry, etc. In addition the student should be able to perform Arterial puncture and analysis of blood samples as well as non-invasive diagnostic procedures; pulse oximetry, capnography, etc. The student will begin to explore aspects of Mechanical Ventilation and Critical Care environments in this semester as well as provide care to the Pediatric Patient. The student will also apply various modes of mechanical ventilation to adult patients in the hospital setting toward the end of the semester. Prerequisite: RESP 2500, RESP 2610 and RESP 2450. Co-Requisite: None. Day: Fa. Lecture: 0, Lab: 15. ♦

RESP 2600 Respiratory Critical Care II 3 cr.

Continuation of the care of the critically ill patient, beginning with a review of adult and neo-natal ventilation procedures. This semester will deal with aspects of managing a patient on mechanical ventilation, inclusive of hemodynamic monitoring, ventilator waveform interpretation, and pharmacological interventions for the ventilator patient as well as ventilation of the patient in the home. The course will conclude with a discussion on

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classification of mechanical ventilators and patient case studies. Prerequisite: RESP 2500, RESP 2610 and RESP 2450. Co-Requisite: None. Day: Fa. Lecture: 2, Lab: 3. ♦

RESP 2610 Respiratory Pediatrics and Neonatology I 2 cr.

Development of fetus, anticipation of high-risk pregnancies and evaluation and care of the newborn infant emphasizing neonatal and pediatric pulmonary physiology and disease. Prerequisite: RESP 1100, RESP 1210, RESP 1250, RESP 1330, and RESP 1350. Co-Requisite: None. Day: Su. Lecture: 1, Lab: 3. ♦

RESP 2620 Respiratory Pediatrics and Neonatology II 2 cr.

This course is a continuation of RESP 2610 and involves more advanced Respiratory Care of neonatal and pediatric patient care preparation. Prerequisite: RESP 2610 and RESP 2450. Co-Requisite: None. Day: Fa. Lecture: 1, Lab: 3. ♦

RESP 2700 Assessment of Pulmonary Function 2 cr.

Advanced pulmonary physiology and pathology related to pulmonary function, test interpretation emphasizing performance of testing protocols, interpretation of results, equipment maintenance and quality assurance, computer applications, special procedures, and pulmonary function calculations and math. Prerequisite: RESP 2510 and RESP 2600. Co-Requisite: None. Day: Sp. Lecture: 1, Lab: 3. ♦

RESP 2730 Pulmonary Rehabilitation & Subspecialties 2 cr.

This course encompasses areas of Respiratory Care that are considered subspecialties such as Hyperbaric Oxygen, Thoracic Imaging, Bronchoscopy, Cardiac/Pulmonary Rehabilitation, Alternative Respiratory Care sites/Home Care, Respiratory care administration, responsibilities and basic math with common equations used in respiratory care. Prerequisite: RESP 2510 and RESP 2600. Co-Requisite: None. Day: Sp. Lecture: 2, Lab: 0. ♦

RESP 2750 Clinical Practice IV 2 cr.

Final experiences in the practical application of Respiratory Care. The student will be assigned specific areas of clinical experience in: Pulmonary Function, Pulmonary Rehabilitation, Sleep Lab, Home care, and Neonatal and Pediatric Intensive Care. During this semester the student will also be assigned to sites outside of the acute care hospital for clinical experience. The student will also apply various modes of mechanical ventilation to adult patients in the hospital setting. Prerequisite: RESP 2600, RESP 2510, RESP 2550, RESP 2620, RESP 2460 and MATH 1101. Co-Requisite: None. Day: Sp. Lecture: 0, Lab: 15. ♦

RESP 2800 Cardiology and Hemodynamic Monitoring 2 cr.

This course encompasses areas of Respiratory Care Hemodynamic Monitoring in critical care and cardiology. Prerequisite: RESP 2510 and RESP 2600. Co-Requisite: None. Day: Sp. Lecture: 2, Lab: 0. ♦

RESP 2850 Polysomnography 2 cr.

This course encompasses areas of sleep disorders and the polysomnography testing procedure used to diagnosis these disorders. Therapeutic procedures and test interpretation is also included and the appropriate therapy for specific sleep disorders. Prerequisite: RESP 2510 and CRT or RRT. Co-Requisite: None. Day: Sp. Lecture: 2, Lab: 0. ♦

RESP 2990 Respiratory Capstone 3 cr.

This course is a summative course in which several summative evaluations (knowledge & affective domains) are performed prior to graduation. It is also a continuation of writing and verbal communication skills and summative evaluation. This is a writing intensive course. Prerequisite: ENGL 1510 and ENGL 1515. Co-Requisite: None. Day: Sp. Lecture: 3, Lab: 0. ♦

ROBOTICS & MECHATRONICS (ROBT)

ROBT 1500 Robotics I 3 cr.

The history and evolution of robotics. The classification and characteristics of robots, robotic applications, and safety protocols. Introduction to robotic programming. Prerequisite: None. Co-Requisite: None. Day: F. Lecture: 2, Lab: 2. ♦

ROBT 2500 Robotics II 3 cr.

Students will learn the application of pendent boxes. The control of the robot by both computer and pendent box will be practiced. Students will develop programming skills for materials handling. The above skills will be exercised on various robot models. Students will learn how to program the industrial robot for it to properly respond to the external stimulation and react accordingly. Prerequisite: ROBT 1500. Co-Requisite: None. Day: F. Lecture: 2, Lab: 2. ♦

ROBT 2800 Robotics Capstone Seminar 3 cr.

A research seminar focused on project development of a topic in student's engineering discipline (industrial, robotics, mechanical, or electrical). Presentations of project supported with documented research, proposal, time/cost estimates and PowerPoint presentations. Prerequisite: ENGL 1510, and SPCH 1510 or SPCH 2060. Co-Requisite: None. Day: Sp. Lecture: 1, Lab: 5. ♦

SOCIAL SERVICES TECHNOLOGY (SOSV)

SOSV 1005 SOSV First Year Experience Seminar 1 cr.

This course is designed to help the social services student make an effortless and successful transition to Washington State Community College. Students are introduced into the mission of the profession of social work practice, current and anticipated socioeconomic and cultural conditions and emerging research findings. The social services student

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will identify social work skills and competencies that are consistent with the social work profession, its core values and ethics. Students will recognize that education extends far beyond what takes place within the classroom and also includes the extracurricular life of the community college as well as the experience as a practicum student representing Washington State Community College. Prerequisite: None. Co-Requisite: None. Day: Fa, Sp. Lecture: 1, Lab: 0.

SOSV 1110 Introduction to Social Work & Social Welfare 3 cr.

Introduces social services through examination of social problems, community resources, and practice methods from both historical and contemporary perspectives. Discusses professional roles of generalist social work practice. Prerequisite: None. Co-Requisite: None. Day: Fa; Eve: Fa. Lecture: 3, Lab: 0. TAG: OSS029.

SOSV 1130 Generalist Practice 3 cr.

Generalist Practice emphasizes the importance of the interpersonal relationship between worker and client. It provides an introduction to the fundamental concepts, principles, and skills of social work practice. This course is intended to introduce students to beginning knowledge, values and skills of social work practice from a generalist perspective and provide a foundation for subsequent elective courses and the practicum experience. The course content includes an introduction to roles, tasks, and functions of the generalist practitioner, knowledge and value bases of practice, problem-solving processes using various methods and strategies of intervention. Prerequisite: None. Co-Requisite: None. Day: Sp. Lecture: 3, Lab: 0.

SOSV 1140 American Social Welfare Institution 3 cr.

A general overview of the nature of social welfare as a social institution. The course will focus on social welfare acts, historical development of programs and services, value and diversity orientation, issues in social policy and the emergence of social work as a profession. Prerequisite: None. Co-Requisite: None. Day: Fa; Eve: Fa. Lecture: 3, Lab: 0. TAG: OSS030.

SOSV 1150 Introduction to Theories of Addiction 3 cr.

Explores the process through which individuals develop addictions. Covers similarities between particular addictive behaviors and examines the common effects of addiction on family life and society. Prerequisite: None. Co-Requisite: None. Day: Fa, Sp. Lecture: 3, Lab: 0.

SOSV 1680 Social Service and the Law 3 cr.

Study of basic legal concepts and procedures as they affect social service policies, practices and service delivery. Develops legal understanding necessary to guide social service workers through the complications encountered in a profession increasingly regulated by law. Prerequisite: None. Co-Requisite: None. Day: Sp; Eve: Sp. Lecture: 3, Lab: 0.

SOSV 2000 Special Topics-Social Services Technology 0.5-6 cr.

By permission only. In-depth study of a specific topic(s) pertinent to social services technology. May be repeated. Prerequisite: Permission. Co-Requisite: None. Day: On demand; Eve: On demand. Lecture: TBD, Lab: TBD.

SOSV 2100 Crisis Intervention 3 cr.

Designed to acquaint the student with practical strategies of crisis intervention and the knowledge and skills needed to deal with these situations. Prerequisite: None. Co-Requisite: None. Day: Fa; Eve: Fa. Lecture: 3, Lab: 0.

SOSV 2110 Family Intervention 3 cr.

The purpose of this course is to introduce family, systems, and relational therapies to the worker client relationship. The intent is to provide an overview of theoretical concepts and intervention strategies associated with systemic and post-modern theories of family therapy. To understand and practice family therapy concepts it requires an epistemological shift from individual to relational thinking. Therefore, the focus of this course will be on examining how we construct reality and think in ways that facilitate interventions with couples, families, and organizational systems. Prerequisite: None. Co-Requisite: None. Day: Sp; Eve: Sp. Lecture: 3, Lab: 0.

SOSV 2120 Gerontology 3 cr.

Study of gerontology with emphasis on the ways in which social structures and institutions help to shape our concepts of the aging process. The behavior patterns of aging, the effects of the aging process on health, problems related to aged persons and a consideration of appropriate worker roles will be studied. Prerequisite: None. Co-Requisite: None. Day: Sp; Eve: Sp. Lecture: 3, Lab: 0.

SOSV 2130 Issues and Ethics in the Helping Profession 3 cr.

This course provides a review of current professional, ethical, and legal standards, as well as practices related to the counseling profession. It will explore multicultural perspectives and diversity issues, individuals, couples and group work. This course will address the major principles of professional conduct, personal identity, competence, privacy and confidentiality when working with clients in any helping profession. It is designed to develop the ability to identify ethical dilemmas, apply ethical reasoning, and take appropriate professional action when facing those dilemmas. Prerequisite: None. Co-Requisite: None. Day: Fa. Lecture: 3, Lab: 0.

SOSV 2150 Domestic Violence 3 cr.

Introduces key issues of domestic violence and evaluates policy responses of public and private criminal justice and social services. Assessment of intervention methods and

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measures that can be taken to prevent abusive behavior. Prerequisite: None. Co-Requisite: None. Day: Sp; Eve: Sp. Lecture: 3, Lab: 0.

SOSV 2200 Social Services Practicum I 1 cr.

This course provides a practical, field-based experience of 112 hours in a social work setting. This experience may be arranged with supervision coordinated through the practicum course instructor and an on-site supervisor. A total of one credit of practicum work must be completed. Prerequisite: None. Co-Requisite: SOSV 2210. Day: Fa, Sp; Eve: On demand. Lecture: 0, Lab: 7. ♦

SOSV 2210 Social Services Seminar I 1 cr.

First of two seminars. Under the direction of the college faculty, the student participates in a one-hour weekly review and assessment of the work experience as related to the practicum situation. Input from the agency supervisor will be used as an integral part of this weekly review. Prerequisite: None. Co-Requisite: SOSV 2200. Day: Fa, Eve: On demand. Lecture: 1, Lab: 0.

SOSV 2220 Social Services Practicum II 1 cr.

A continuation of SOSV2200. This course provides a practical, field-based experience of 112 hours in a social work setting. This experience may be arranged with supervision coordinated through the practicum course instructor and an on-site supervisor. A total of 1 credit of practicum work must be completed for this course. Prerequisite: SOSV 2200. Co-Requisite: SOSV 2230. Day: Fa, Sp; Eve: On demand. Lecture: 0, Lab: 7. ♦

SOSV 2230 Social Services Seminar II 1 cr.

A continuation of SOSV 2210. Prerequisite: SOSV 2210. Co-Requisite: SOSV 2220. Day: Fa, Sp; Eve: On demand. Lecture: 1, Lab: 0.

SOSV 2240 Chemical Dependency Seminar I 1 cr.

First of two seminars. Under the direction of the college faculty, the student participates in a one-hour weekly review and assessment of the work experience as related to the practicum site supervision. Input from the agency supervisor will be used as an integral part of this weekly review. Prerequisite: None. Co-Requisite: SOSV 2250. Day: All; Eve: On demand. Lecture: 1, Lab: 0.

SOSV 2250 Chemical Dependency Practicum I 2 cr.

This course provides a practical, field-based experience of 220 hours in an addiction counseling setting as required by the Ohio Chemical Dependency Board. This experience may be arranged with supervision coordinated through the practicum course instructor and an on-site supervisor. A total of 2 credits-two semesters-of practicum work must be completed. Prerequisite: None. Co-Requisite: SOSV 2240. Day: All; Eve: On demand. Lecture: 0, Lab: 14. ♦

SOSV 2260 Chemical Dependency Seminar II 1 cr.

Under the direction of the college faculty, the student participates in a one-hour weekly review and assessment of the work experience as related to the practicum site supervision. Input from the agency supervisor will be used as an integral part of this weekly review. Prerequisite: SOSV 2240 and SOSV 2250. Co-Requisite: SOSV 2270. Day: All; Eve; On demand. Lecture: 1, Lab: 0.

SOSV 2270 Chemical Dependency Practicum II 2 cr.

This course provides a practical, field-based experience of 220 hours in an addiction counseling setting as required by the Ohio Chemical Dependency Board. This experience may be arranged with supervision coordinated through the practicum course instructor and an on-site supervisor. A total of 2 credits-two semesters-of practicum work must be completed. Prerequisite: SOSV 2240 and SOSV 2250. Co-Requisite: SOSV 2260. Day: All; Eve: On demand. Lecture: 0, Lab: 14. ♦

SOSV 2320 Theories of Addiction 3 cr.

This course will examine the biological, psychological, social and spiritual dimensions of addictions and addictive behavior. Addictive behaviors will be presented as part of a continuum of mental and emotional disorders. This course will emphasize the biological substrate and developmental course of addictions and the relationship of addictive behavior to common psychological disorders. Models and theories of addictive behavior that the professional counselor needs to understand when treating clients with addictive and co-occurring disorders will be reviewed. Prerequisite: None. Co-Requisite: None. Day: Fa, Sp. Lecture: 3, Lab: 0.

SOSV 2330 Advanced Theories of Addiction 3 cr.

This course provides a comprehensive overview of the major theories of the counseling professions inclusive of ethical, privacy and legal issues, counseling techniques, supervision and outcomes research. Exploration of the population demographics counselors work with regarding naturally and synthetically manufactured drugs and the impact on the individual, family and community will be explored. Students will learn how to conduct assessment for and diagnosis of substance abuse and addiction disorders, including co-occurring disorders; the effects of substances and addictions on the client and others; etiology; and best practices in counseling and treatment. This course presents an in-depth coverage of the effects of chemical dependency on health, individuals, families and communities using a holistic, bio-psycho-social-spiritual approach. Prerequisite: SOSV 1150 and SOSV 2320. Day: Sp. Lecture: 3, Lab: 0.

SOSV 2340 Substance Abuse Counseling 3 cr.

This course is designed to provide a structured learning environment for acquiring substance use and addictive behavior counseling skills. It will cover all aspects of the

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scope of practice for substance use disorder practitioners. This course will provide students with an understanding of the connections to the physiological and psychological effects of drugs and the significance of treatment planning in diverse settings. The students will apply their knowledge of individual, group, and family counseling strategies as they are applied to behavior change and relapse prevention. Students will learn about the diagnostic criteria of substance use and addictive behavior, models of etiology, and approaches to treatment. The course will review substance abuse studies, individual and group counseling and family systems approaches to prevention and intervention and treatment. Students will also be introduced to the skills and techniques an alcohol and other drugs abuse (AODA) counselor requires to develop working knowledge in order to practice in the AODA counseling profession. Prerequisite: None. Co-Requisite: None. Day: Sp. Lecture: 3, Lab: 0.

SOCIOLOGY (SOCI)

SOCI 1010 Introduction to Sociology 3 cr. TM-S

Introduction to the nature of human society and its development. Covers fundamental concepts and ideas: culture, personality, socialization, social organization, groups, and institutions. Prerequisite: None. Co-Requisite: None. Day: All; Eve: All; Online: All. Lecture: 3, Lab: 0. TAG: OSS021.

SOCI 101H Introduction to Sociology Honors 3 cr. TM-S

Introduction to Sociology Honors provides overview understanding to the nature of human society and its development. Covers fundamental concepts and ideas: culture, personality, socialization, social organization, groups, and institutions. Required drill down assignments and projects will give the honor student real time data relating to community, state, and global issues. The issues will be identified in assigned reading, class discussions and outside community work. Using data, research methods, group discussion, reflection or response papers the honors student will go beyond surface issues. Using key community groups, agencies or leaders the honor student will interview and review plans to address focus issues. Prerequisite: Acceptance in Honors Program. Co-Requisite: None. Day: All, Evening: All. Lecture: 3, Lab: 0. TAG: OSS021.

SOCI 2000 Special Topics-Sociology 0.5-6 cr.

By permission only. In-depth study of a specific topic(s) pertinent to sociology. May be repeated. Prerequisite: Permission. Co-Requisite: None. Day: On demand; Eve: On demand. Lecture: TBD, Lab: TBD.

SOCI 2010 Social Problems 3 cr. TM-S

Sociological perspectives on social problems, including: crime, sexual inequality, racism, drug and alcohol, mental

illness, unemployment and poverty. Prerequisite: SOCI 1010. Co-Requisite: None. Day: Sp on demand; Eve: On demand. Lecture: 3, Lab: 0. TAG: OSS025.

SOCI 2200 Sociology of the Family 3 cr. TM-S

Emphasis on the American family and how it is changing. Covers interaction within the family, mate selection, marriage and its alternatives, family disorganization, and the future of the American family. Prerequisite: SOCI 1010. Co-Requisite: None. Day: On demand; Eve: On demand. Lecture: 3, Lab: 0. TAG: OSS023.

SOCI 2250 The Sociology of Race and Ethnic Relations in America 3 cr. TM-S

Social, economic and political survey of America's diverse racial, ethnic and religious groups; immigration and residential patterns; subcultural characteristics and histories of the groups in the United States. Special attention to African-Americans, Asian-Americans, Native Americans and Latino peoples. Prerequisite: SOCI 1010 or one American History course. Co-Requisite: None. Day: Sp. Lecture: 3, Lab: 0. TAG: OSS024.

SOCI 2300 Introduction to Criminology 3 cr.

Introduction to major concepts, theories and empirical data that make up criminology and corrections. Emphasis on types and rates of crime, definitions of criminal deviance, explanations of criminal behavior, jails/prisons and community programs. Prerequisite: CRJU 1010 or SOCI 1010. Co-Requisite: None. Eve: Sp; Online: Sp. Lecture: 3, Lab: 0.

SOCI 2500 Cross Cultural Communication 3 cr.

Examines the communication issues associated with transactions between people from different cultures. Discussions focus on differences in perception and cognitive patterns; value systems and hierarchies; and, symbolic meaning as expressed through various verbal codes and nonverbal cues. The issues of ethnocentrism and conflict management are also considered. Students cannot receive credit for both SPCH 2500 and SOCI 2500. Prerequisite: SOCI 1010 or SPCH 2060 or SPCH 1510. Co-Requisite: None. Day: All; Eve: All; Online: All. Lecture: 3, Lab: 0.

SPANISH (SPAN)

SPAN 1110 Beginning Spanish I 3 cr.

Development of comprehension, speaking, reading, and basic writing skills through grammar exercises, oral and written communication activities, and on-line work. Beginning course of a 2 semester, first year sequence. Prerequisite: None. Co-Requisite: None. Day: Fa; Eve: Fa. Lecture: 3, Lab: 1.

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SPAN 1130 Beginning Spanish II 3 cr.

Continuation of basic skills in Spanish. Prerequisite: SPAN 1110 or 1 year high school Spanish. Co-Requisite: None. Day: Fa; Eve: Fa. Lecture: 3, Lab: 1.

SPAN 2000 Special Topics-Spanish 0.5-6 cr.

By permission only. In-depth study of a specific topic(s) pertinent to Spanish. May be repeated. Prerequisite: Permission. Co-Requisite: None. Day: On demand; Eve: On demand. Lecture: TBD, Lab: TBD.

SPAN 2110 Advanced Spanish 3 cr.

First course of a 2-semester intermediate level sequence. Continued study of advanced concepts of Spanish grammar; includes readings, discussions and compositions in Spanish, as well as cultural material. Prerequisite: SPAN 1130 or 2-3 years high school Spanish. Co-Requisite: None. Day: Fa, Sp; Eve: Fa, Sp. Lecture: 3, Lab: 1.

SPAN 2130 Conversational Spanish 3 cr.

Continued review. Emphasis on advanced grammar concepts, advanced oral and written communication in Spanish. Cultural material and selected readings of Spanish & Latino dramatists, poets, & novelists with discussion and analysis in Spanish. Prerequisite: SPAN 2110 or 3-4 years high school Spanish. Co-Requisite: None. Day: Sp. Lecture: 3, Lab: 1.

SPEECH (SPCH)

SPCH 1510 Speech 3 cr. TM-C

Introduces students to both the general principles of communication and the specific process involved in the preparation and presentation of informative and persuasive one-to-many messages. Prerequisite: None. Co-Requisite: None. Day: All; Eve: All; Online: All. Lecture: 3, Lab: 0. TAG: OCM013.

SPCH 2000 Special Topics-Speech 0.5-6 cr.

By permission only. In-depth study of a specific topic(s) pertinent to speech. May be repeated. Prerequisite: Permission. Co-Requisite: None. Day: On demand; Eve: On demand. Lecture: TBD, Lab: TBD.

SPCH 2060 Interpersonal Communication 3 cr.

Focuses on such factors as gender, age, and social position as they influence the most common form of human communication: the dyadic encounter. Discussion topics include: perception; self-concept; nonverbal cues; verbal codes; listening skills; and, conflict management techniques. The course also examines the basic stages in significant interpersonal relationships involving family, friends, and intimates. Prerequisite: ENGL 0900. Co-Requisite: None. Day: All; Eve: All; Online: All. Lecture: 3, Lab: 0. TAG: OCM002.

SPCH 2500 Cross Cultural Communication 3 cr.

Examines the communication issues associated with transactions between people from different cultures. Discussions focus on differences in perception and cognitive patterns; value systems and hierarchies; and, symbolic meaning as expressed through various verbal codes and nonverbal cues. The issues of ethnocentrism and conflict management are also considered. Students cannot receive credit for both SPCH 2500 and SOCI 2500. Prerequisite: SOCI 1010 or SPCH 2060 or SPCH 1510. Co-Requisite: None. Day: All; Eve: All; Online: All. Lecture: 3, Lab: 0.

THEATRE (THEA)

THEA 1200 Introduction to Theatre 3 cr. TM-H

Overview of theatre as an art form. Includes historical and production points of view. Students will effectively view and critique plays and musicals. Writing intensive course. Prerequisite: None. Co-Requisite: None. Day: On demand; Eve: On demand; Online: All. Lecture: 3, Lab: 0.

THEA 2000 Special Topics-Theatre 0.5-6 cr.

By permission only. In-depth study of a specific topic(s) pertinent to theatre. May be repeated. Prerequisite: Permission. Co-Requisite: None. Day: On demand; Eve: On demand. Lecture: TBD, Lab: TBD.

WELDING (WELD)

WELD 1230 Introduction to Welding Safety and Cutting Practices 3 cr.

During this course, students will learn and identify hazards in the workplace. Different welding positions and electrode types will be taught as well as the set up and use of welding/fabrication equipment. Students will learn how welding is used in different manufacturing processes and the history of welding and cutting. Safety in the welding lab and jobsite will be stressed the during entire course. Prerequisite: None. Co-Requisite: None. Day: Fa. Lecture: 3, Lab: 0. ♦

WELD 1231 Metal Fabrication 3 cr.

Theory and practice of metal fabrication. All aspects of metal fabrication and manufacturing will be introduced with lab activities involving layout, pattern development, bending, punching, and joining. Assembly methods practiced will include fit-up, attachment, and welding. Assigned projects will be completed and one original design project will be required. Prerequisite: None. Co-Requisite: None. Day: Fa. Lecture: 1, Lab: 5. ♦

WELD 1240 Basic Oxy/Acetylene Cutting and Welding 3 cr.

This course will instruct students on the proper set up and use of oxy/fuel cutting and welding equipment. Manual

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and mechanized oxy/fuel processes will be introduced with lab activities involving equipment set up, layout, cutting, welding, and joining. Students will be provided with a period of instruction and demonstration of modern safety inspection guidelines as well as work area requirements. Oxy/fuel cutting and welding training exercises will be administered throughout the course. Prerequisite: None. Co-Requisite: None. Day: Fa. Lecture: 1, Lab: 5. ♦

WELD 1250 SMAW I 3 cr.

Oxy acetylene cutting and plasma arc cutting techniques will be employed and performed. Basic shielded metal arc welding techniques on plate are introduced and performed. Basic weld symbols and math and layout skills for welders are explained. Safety is emphasized throughout all aspects. Prerequisite: None. Co-Requisite: None. Eve: Fa. Lecture: 1, Lab: 5. ♦

WELD 1251 SMAW II 3 cr.

Students will use shielded metal arc welding techniques in an open groove weld in all positions on plate, pipe, carbon steel and stainless steel. Weld symbols, math and layout skills for welders are explained and performed. Safety is emphasized throughout all procedures. Prerequisite: WELD 1250. Co-Requisite: None. Day: Sp. Lecture: 1, Lab: 6. ♦

WELD 1260 GMAW I 3 cr.

Gas metal arc welding, short arc, spray and pulse arc techniques on plate are introduced, demonstrated and performed. Intermediate weld symbols and math and layout skills for welders are explained, demonstrated and performed. Safety is emphasized throughout all aspects. Prerequisite: None. Co-Requisite: None. Eve: Sp. Lecture: 1, Lab: 5. ♦

WELD 1261 GMAW II 3 cr.

Students will use gas metal arc welding techniques in an open groove weld in all positions on plate and pipe. Weld symbols, math and layout skills for welders are explained and performed. Safety is emphasized throughout all procedures. Prerequisite: WELD 1260. Co-Requisite: None. Day: Fa. Lecture: 1, Lab: 6. ♦

WELD 1270 FCAW I 3 cr.

Flux cored arc welding techniques on plate are introduced, demonstrated and performed. Intermediate weld symbols and math and layout skills for welders are explained, demonstrated and performed. Safety is emphasized throughout all procedures. Prerequisite: None. Co-Requisite: None. Day: Fa, Sp. Lecture: 1, Lab: 5. ♦

WELD 1271 FCAW II 3 cr.

Students will be provided with a period of instruction on gas shielded and self-shielded flux cored arc welding. E71T-1 (gas-shielded) and E71T-11 (self-shielded) electrodes will be used along with 75% argon, 25% CO₂ shielding gas. Training exercises related to structural

steel and pipe welding will be administered along with advanced welding techniques, principles of operation and weld procedure interpretation. This course will follow the guidelines set forth by the American Welding Society S.E.N.S.E. program. Prerequisite: WELD 1270. Co-Requisite: None. Day: Fa, Sp. Lecture: 1, Lab: 5. ♦

WELD 2000 Special Topics-Welding 0.5-6 cr.

By permission only. In-depth study of a specific topic(s) pertinent to welding. May be repeated. Prerequisite: Permission. Co-Requisite: None. Day: On demand; Eve: On demand. Lecture: TBD, Lab: TBD.

WELD 2241 Weld Inspection Practices 3 cr.

Fundamentals of destructive/non-destructive weld inspection lectured and explained. Proper development of weld procedures/testing are lectured and students will work directly with established welding codes. Students will also be provided with instruction related to visual weld inspection, common weld discontinuities, and safe inspection practices. Weld inspector responsibilities will be lectured and demonstrated throughout the course. Prerequisite: None. Co-Requisite: None. Day: Fa, Sp. Lecture: 3, Lab: 0. ♦

WELD 2250 GTAW I 3 cr.

Gas tungsten arc welding carbon/stainless steel on plate are introduced, demonstrated, and performed. Weld symbols and math and layout skills for welders are explained, demonstrated and performed. Safety is emphasized throughout all aspects. Prerequisite: WELD 1260. Co-Requisite: None. Eve: Fa. Lecture: 1, Lab: 5. ♦

WELD 2260 Pipe and Open-V Plate Welding 3 cr.

SMAW, GMAW and GTAW techniques on open groove weld in all positions on plate and pipe are demonstrated and performed. Weld symbols and math and layout skills for welders are explained, demonstrated and performed. Safety is emphasized throughout all aspects. Prerequisite: WELD 2250. Co-Requisite: None. Eve: Sp. Lecture: 1, Lab: 5. ♦

WELD 2261 Downhill Pipe Welding 3 cr.

This course will prepare students for entry level employment as a welder in the oil and gas industry. SMAW techniques will be practiced on open root V-groove joints with a downhill welding progression. This course includes pipe welding in the 5G and 6G positions with E6010, E8010, and E7018 electrodes and follows the welding standards defined by the American Petroleum Institute. Prerequisite: WELD 1251. Co-Requisite: None. Day: Fa, Sp. Lecture: 1, Lab: 5. ♦

FULL-TIME FACULTY

| Name | Credentials |
|------------------------|--|
| Altier, Justina | BSN, Ohio University; ADN, Ohio University |
| Anderson, Jill | MA, State University of New York; BA, Hollins University |
| Baker, Kathy | BA, Glenville State; AAS, Cuyahoga Community College |
| Ball, Renea | BSN, Ohio University; ADN, Ohio University; AAS, Hocking College |
| Barker, Sheri | MSN, University of Phoenix; BSN, University of Phoenix; ADN, Hocking College |
| Barrows, Roxane | MS, Ohio University; BS, The Ohio State University |
| Beatty, Adam | PhD, University of Charleston; MS, West Liberty University; BS, Mountain State University; AAS, West Virginia Northern Community College |
| Beverly, Christopher | PhD, Alliant International University; MS, University of North Florida; BS, University of North Florida |
| Bogard, Tracey | BSN, Ohio University; AAS, Hocking College |
| Boone, Darla | MSN, West Virginia University; BSN, University of Cincinnati |
| Burgardt, John | BSME, University of Kansas |
| Carpenter, Christopher | BSAST, Thomas Edison State University; AAS, Coastline Community College |
| Dennis, Jennifer | Doctor of Chiropractic, Palmer College of Chiropractic; BA, Buena Vista University; AAS, Indian Hills Community College |
| DeWees, Brent | MA, Kentucky Christian College; BS, Kentucky Christian College |
| Garcia, Laura | MA, West Virginia University; BA, Wheeling Jesuit College |
| Gater, Christina | MBA, Franklin University; BS, Franklin University; AA, Hocking College |
| Godfrey, Donhnall | MA, Goldsmiths University; BA, Marietta College |
| Harlow, Stephanie | MS, Tiffin University; BS, Ohio University; AAS, Washington State Community College |
| Hirsch, Dean | PhD, University of Kansas; MS, University of Kansas; BS, University of Utah |
| Johnson, Paula | ME, Marietta College; BS, Marietta College |
| Kinker, J. Robert | PhD, The Ohio State University; MA, The Ohio State University; BA, Capital University |
| LaBarre, Mary | MS, Otterbein University; BS, Mount Carmel College of Nursing |
| Lemley, Lindy | BS, Touro University International; AAS, Washington State Community College |
| Lerch, Kelsey | MS, Case Western Reserve University; BS, Marietta College |
| Limegrover, Angie | MSW, West Virginia University; BA, West Virginia University |
| Lowe, Natalie | MEd, Ohio Valley University; BA, Glenville State College; AAB, Washington Technical College |
| Marasco, Christine | BSN, Ohio University; AAS, Washington State Community College |
| Maxwell, Roberta | AAS, Belmont Technical College |
| McKenry, Timothy | PhD, The Ohio State University; MA, Marshall University; BA, Marshall University |
| Merritt, Brad | MBA, Ohio University; BA, Marietta College |
| Nutter, Joseph | AAS, Lincoln Technical Institute; ASE/OEM Certified; Mack Truck Certifies Provider |
| Offenberger, Diane | MS, Walden University; BSN, Ohio University; AAS, Hocking College |
| Penich, Jessie | MS, University of Pittsburgh; BS, Saint Vincent College |
| Pennock, Ashleigh | MA, Muskingum University; BS, University of Akron |
| Schaad, Tricia | MSN, Otterbein College; BSN, Mount Carmel |
| Simmons, Darren | PhD, Ohio University; MS, Ohio University; BS, Marietta College |
| Starkey, Jeffrey | MBA, Bowling Green University; BA, Ohio University |
| Stengel, Dyani | Doctor of Physical Therapy, Ohio University; BS, Bowling Green State University |
| Tamm, Andrea | MS, Grand Canyon University; BS, Fairmont State University |
| Taylor, Emily | BA, Ohio Valley University; AAS, Washington State Community College |
| Temesvary, Steve | MHA, Ohio University; BS, Marietta College; AAS, Washington State Community College |
| Tokodi, Elizabeth | MBA, Keller Graduate School of Management; BA, Marshall University |
| Unsold, Deborah | MEd, Bowling Green State University; BA, Wittenberg University |
| Veladota, Christina | PhD, Ohio University; MFA, University of North Carolina; BFA, Emerson College |
| Warren, Alicia | MSN, Ohio University; BSN, Ohio University; ADN, Parkersburg Community College; LPN, Muskingum/Perry Career Center |
| Wood, Darren | MS, West Virginia University; BS, Mansfield University of Pennsylvania |
| York, James | MS, Ohio University; BS, Purdue University |

ADJUNCT FACULTY

| Name | Credentials |
|---------------------------|--|
| Akir, Ziad | Ph.D., Ohio University; MS, Ohio University; BS, Ohio University |
| Anderson, Richard | BS, Marietta College |
| Ankrom, David | BA, Kaplan University; AAB, Washington State Community College |
| Arnold, Nick | MA, American Public University; BA, Ohio State University |
| Bailey, Willard | MS, Nova Southeastern University; BS, Franklin University; AAS, Muskingum Area Technical College |
| Barrett, Richard | MEd, Ohio University; BSEE, Ohio University |
| Beall, Jennifer Tricia | MA, Marshall University; BA, Fairmont State College; AAS, Hocking College |
| Biehl, Stephanie | Certificates, Kritalu Center |
| Bishop, Kelly | MA, Marietta College; BS, Marietta College |
| Bradford, Jerry | BA, West Virginia University at Parkersburg; AAS, Washington State Community College |
| Brown, Julia | MS, American Public University; BS, Grand Canyon University; BS, Ohio Dominican University |
| Brown, Pearley | MA, Marietta College; BA, Ohio University |
| Burdette, John | AAS, Northern Virginia Community College |
| Cahill-Kammerer, Kathleen | BS, University of Cincinnati |
| Coe, Steven | Certificates |
| Conrath, Dave | BGS, Ohio University |
| Copen, Lauren | MS, Ohio University; BS, Boston University |
| Crandall, Norvel | MS, Rio Grande; BS, Le Moyne College; AAS Onondaga Community College |
| Danison, Amy | BS, Purdue University |
| Davis, Kaitlin | BS, Chamberlain College of Nursing; AAS, Hocking College |
| Davis, Korey | MS, Arkansas Tech University; BA, Arkansas Tech University; AAS, University of Arkansas Community College |
| Davis, Whitney | BS, Marshall University |
| Devine, Melanie | MS, Iowa State University; BS, Cumberland College |
| Doan, Karina-Mikalya | PhD, Ohio University; MA, Ohio University; BS, Westminster College |
| Doeblich, Mark | MA, Xavier University; BS, University of Cincinnati |
| Downer, Blake | AAS, Washington State Community College |
| Drennen, Brooke | AAS, Washington State Community College |
| Duff, Angela | MSN, Wheeling Jesuit University; BSN, Wheeling Jesuit University; ADN, West Virginia University at Parkersburg |
| Duffy, Brenda | BA, Ohio Valley University; AAS, Hocking College |
| Dunfee, Hope | AAS, Washington State Community College |
| Duvall, Donald | MS, The Ohio State University; BS, The Ohio State University |
| Dye, Joyce | MDiv, Methodist Theological School of Ohio; BA, Marietta College |
| Eichmiller, Robin | PhD, State University of New York; BS, Marietta College |
| Engle, Stephanie | BSN, The Ohio State University; Certificate, Washington State Community College |
| Feger, Christopher | PhD, The Ohio State University; BS, Massachusetts Institute of Technology |
| Finley-Boggs, Kathleen | MA, West Virginia University; BA, Glenville State College |
| Freimann, Flite | JD, The Ohio State University; BS, University of Utah |
| Gabbert, Terrie | MSN, Regis University; BSN, Marshall University; AAS, Parkersburg Community College |
| Garletts, Brenda | MEd, Ohio State University; BSBA, Ohio State University |
| Gould, Jane | RN, Mansfield General Hospital School of Nursing |
| Graves, Zachary | BS, Franklin University; AAS, Washington State Community College |
| Griffith, Luke | PhD, Ohio University; MA, Ohio University; BA, Ohio University |
| Hager, Tommy | BSEE, West Virginia University; AAS, Parkersburg Community College |
| Halbleib, Jason | MFA, Ohio University; BA, University of Wisconsin-Eau Claire |
| Hall, Craig | Certificates, ASE Certified |
| Hall, Kent | MEd, University of Rio Grande; BS, Ohio University; AAS, Washington State Community College |
| Hanshaw, Abby | BS, West Virginia University; AAS, Ohio Valley University |
| Hein, Tracee | MFA, The Ohio State University; BFA, The Ohio State University |
| Hellinger, Adrienne | BS, Muskingum University; AAS, Washington State Community College |
| Hiles, Janine | BSN, University of Phoenix; AAS, Washington State Community College |
| Hirsch, Helen | JD, University of San Diego; BSW, Brigham Young University |

ADJUNCT FACULTY

| Name | Credentials |
|-------------------------|--|
| Hower, Rhonda | MS, Kent State University; BS, Bowling Green State University |
| Huffman, Angela | PhD, Ohio University; MA, West Virginia University; BA, Lubbock Christian University |
| Huffman, Stacia | ADN, West Virginia Northern Community College; MSN, Wheeling Jesuit University |
| Husk, Gloria | MA, West Virginia University; RBA, West Virginia University at Parkersburg |
| Jenkins, Kaitlin | BS, Muskingum University; AAS, Washington State Community College |
| Jusek, Jeremy A | MFA, University of Arcadia; BA, Marietta College; BS, Marietta College |
| Kimes, Kristen | MS, West Virginia University; BS, West Virginia University |
| Lang, Judith | BSN, Kent State University |
| Lopreste, Aaron | BS, Marietta College; AAS, Washington State Community College |
| McAfee, Tracy | MA, The Ohio State University; BA, Baldwin-Wallace |
| McAuley, Carol | MSN, Otterbein College; BSN, Ohio University |
| McKinney, Rose | AAS, Washington State Community College |
| Meadows, Aimee | ME, Harvard University; BA, San Diego State; AA, Southwestern College |
| Miller, Julian | BS, Duquesne University |
| Miller, Robert | AAS, Washington State Community College |
| Mitchell, Gregory | MS, Golden Gate University; BS, University of Maryland; AA, University of Maryland; AA, Shasta College; AAS, Community College of the Air Force |
| Moegling, Larry | PhD, Ohio University; MEd, Ohio University; BA, Bowling Green State University |
| Moncivaiz, Cynthia | AAS, Zane State College |
| Morris, Meagann | MSW, West Virginia University; BA, West Virginia Wesleyan College |
| Nutter, Mark | PhD, Ohio University; MA, Ohio University; BS, Ohio University |
| Owen, Frieda | PhD, New York University; MAT, Augustana College; BA, Augustana College |
| Peck, Samantha | BS, Ohio University; AAS, Washington State Community College |
| Perez, Raphael | BA, Ohio Valley University; AAS, Southwest Texas State University |
| Phillips, Aimee | MS, West Virginia University; BS, West Virginia University at Parkersburg; BA, Augustana College |
| Prigge, Beverly | MSN, University of Phoenix; BA, Marietta College; AAS, St Joseph School of Nursing |
| Puls, David | MFA, Penn State University; BA, University of Arizona |
| Rataiczak, Terry | BS, Wheeling Jesuit University |
| Ray, Ray Glenn | PhD, Ohio University; MED, Ohio University; BA, Ohio University |
| Rech, Meagan | BSN, Chamberlain College of Nursing; ADN, Washington State Community College |
| Richards, Emily R C | MS, Ohio University; BS, Ohio University |
| Richards, Patrick | DMA, The University of Southern Mississippi; M.Mus, West Virginia University; B.Mus, West Virginia University |
| Richards, Paul | BA, West Virginia University; AAS, West Virginia University at Parkersburg |
| Ritter, Kevin | ABD, Western Michigan University; MA, Central Michigan University; BA, Central Michigan University |
| Romans, Rebecca | MA, University of Phoenix; BS, Ohio Valley University |
| Sampson, Bradley | BS, Franklin University; AAS, Washington State Community College |
| Santini, Lexie | MS, University of North Dakota; BS, Ohio University |
| Santini, Martin | MA, Marietta College; BA, Marietta College |
| Scheimann, David | MA, Ohio University |
| Shore, Allen | MS, Murray State University; BS, Appalachian State University; AA, Caldwell Community College |
| Showen, Heather | MS, Concord University; BS Marietta College |
| Sites, Andrea | MS, Ohio University; BS, Ohio University |
| Smith, Stacy | MS, Walden University; RBA, West Virginia University |
| Stanley, Amy | BSN, Ohio University; ADN, Washington State Community College |
| Styrt, Mikhail | MA, Cleveland State University; BA, Ivan Franko Pedagogical Institute (Ukraine) |
| Taylor, Amy | MS, Louisiana State University-Shreveport; BS, West Virginia University at Parkersburg |
| Temple-Miller, Kathleen | MS, Ohio University; BS, Denison University |
| Thomas, Rufus | MSW, The Ohio State University; BA, Anderson College |
| Thompson, Michal | BA, Hiram College; AAS, Lakeland Community College |
| Tornes, Howard | MA, Xavier University; BA, Bliss College; AAB, Mountain State College |
| Urban, John S | DC, Palmer College of Chiropractic; BS, University of Scranton |

ADJUNCT FACULTY

| Name | Credentials |
|---------------------|--|
| Urban, Letty L | DC, Palmer College of Chiropractic |
| VanNoy, Gerri | MA, West Virginia University; BA, West Virginia University at Parkersburg; AA, West Virginia University at Parkersburg; AAS, Washington State Community College |
| Vaughan, Dixie | PhD, Ohio University; MEd, Ohio University; BS, Marshall University |
| Warren, Amy | MA, Ohio University; BA, Ohio University |
| Wascom, Theresa | MA, Marshall University; MA, West Virginia University; BA, West Virginia University |
| Wasmund, Geraldine | MA, Ohio University; BA, Slipper Rock State College |
| Weaver, Heather | BSN, Ohio University; AAS, Ohio University Zanesville |
| Weaver, Jamie | MS, Southern New Hampshire University; BS, Southern New Hampshire University |
| Weber, Sheila | BA, Ohio Valley University; AB, Washington State Community College |
| Webster, Valerie | MBA, University of Rio Grande; BS, University of Rio Grande |
| Weihl, Andrew | BS, Franklin University; AAS, Washington State Community College |
| Welch, Clint | JD, Capital University; MHA, Ohio State University; BA, Ohio University; ADN, Hocking College |
| Weppler, Kenneth | BBA, Kent State University; AAS, Washington State Community College |
| Wessels, Hanlie | PhD, Virginia Tech Polytechnic Institute & State University; BS, University of Pretoria (South Africa) |
| Willey, Quentin | MBA, Ohio University; BS, California Polytechnic State University |
| Williams, Megan | BS, Marietta College |
| Williamson, Rebecca | MS, Marietta College; BFA, American Intercontinental; AAS, West Virginia University at Parkersburg |
| Williamson, Robert | DC, Palmer College of Chiropractic; BA, Marietta College |
| Woomer, Michaela | BSN, Ohio University |
| Zoller, Lynne | MHSA, Otterbein University; BSN, Ohio University; ADN, West Virginia University |
| Zwick, Laken | BSN, Chamberlain College of Nursing; ADN, Washington State Community College |