Be Inspired.
#BeWSCC

2021-2022
COURSE CATALOG

WASHINGTON STATE
COMMUNITY COLLEGE

TABLE OF CONTENTS

Updated March 2021

Foreword

The college catalog is published by Washington State Community College every year. This volume contains official information for the academic years 2021-22. 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.

2021-2022 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

Sarah Parker
Vice President, Academic Affairs

Amanda K. Herb, MBA
Vice President, Institutional Advancement

Angela Lang, MA
Interim Vice President of Finance and Administration

Gary Barber
Executive Director of Workforce Development and Corporate Partnerships

DEANS

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

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

George Bilokonsky
Academic Dean of Technology

Jona Hall, Ph.D.
Dean of Transfer & Public Services

BOARD OF TRUSTEES

Bernie Anderson - *Chair*
David E. Vandenberg - *Vice Chair*
Jodey L. Altier
Randall T. Barengo
Daniel L. Pennock
Susan L. Vessels

2021-2022 WSCC ACADEMIC CALENDAR

FALL SEMESTER 2021

Fall Semester Classes begin	August 16	Monday
First 8 weeks begins	August 16	Monday
Last day to register for courses	August 18	Wednesday
Labor Day - Campus closed	*September 6*	*Monday*
Mid-term exams	October 4-8	Monday - Friday
First 8 weeks ends	October 8	Friday
Second 8 weeks begins	October 11	Monday
Winter Intersession/Spring Advisement/Registration begins	October 25	Monday
Veteran's Day observed - Campus closed	*November 11*	*Thursday*
Last day to withdraw from Fall Semester	November 22	Monday
Thanksgiving Break - Campus closed	*November 25-26*	*Thursday - Friday*
Final Exam period	Nov. 30 - Dec. 6	Tuesday - Monday
Second 8 weeks ends	December 6	Monday
Fall Semester ends	December 6	Monday
Final Grades Due	December 8	Wednesday

ONLINE WINTER INTERSESSION 2022

Winter Intersession Classes begin	December 14	Tuesday
Last day to register for Winter Intersession	December 14	Tuesday
Last Day to withdraw from Winter Intersession	January 3	Monday
Winter Intersession ends	January 6	Thursday
Final Grades Due	January 7	Friday

SPRING SEMESTER 2022

Spring Semester Classes begin	January 10	Monday
First 8 weeks begins	January 10	Monday
Last day to register for courses	January 12	Wednesday
Martin Luther King Day - Campus closed	*January 17*	*Monday*
President's Day Observed - Campus closed	*February 18*	*Friday*
Mid-term exams	Feb. 28 - Mar. 4	Monday - Friday
First 8 weeks ends	March 4	Friday
Spring Break - no classes	March 7-11	Monday - Friday
Second 8 weeks begins	March 14	Monday
Summer/Fall Advisement/Registration begins	April 4	Monday
Last day to withdraw from Spring Semester	April 22	Friday
Final Exam period	May 2-6	Monday - Friday
Second 8 weeks ends	May 6	Friday
Spring Semester ends	May 6	Friday
Final Grades Due	May 10	Tuesday
College Commencement Ceremony	May 14	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

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
- Robotics & Mechatronics Technology

HEALTH

- Health & Wellness Technology
  - Associate Degree Nursing
  - Health Information Management Technology
  - 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.

- Business Administration Transfer
- Education Transfer
- General Sciences Transfer
- Liberal Arts Transfer
- Social Services Transfer

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** represents a student's ability to utilize rhetorical approaches and appropriate tone, seek out and analyze appropriate information, adopt a logical structure and voice, and demonstrate proper conventions of writing/language.
2. **Critical Thinking** reflects a student's ability to identify a problem, gather relevant data and information to tackle the problem, evaluate and interpret the data and information to attain a solution, and formulate and demonstrate conclusions and related outcomes.
3. **Cultural Competency** reflects a student's ability to exhibit cultural self-awareness and awareness of other cultures, integrate knowledge of cultural worldviews, reflect attitudes of openness and curiosity, and illustrate empathy and understanding of own and other cultures.
4. **Professionalism** represents a student's ability to communicate maturely and thoroughly, exhibit timeliness in class and assignments, demonstrate respect to instructors and peers, and practice personal accountability for behaviors and actions.
5. **Scientific Inquiry** represents a student's ability to ask appropriate questions and formulate a hypothesis, acquire appropriate data, interpret data correctly, solve problems using technology, and summarize and communicate evidence.

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.

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.

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 — 3 hours
  (economics, geography, history, political science, psychology, sociology)
- Arts and Humanities — 3 hours
  (art, foreign language, literature, philosophy, humanities, music, theater)
- Natural Sciences — 3 hours
  (biology, chemistry, geology, physics, astronomy)

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

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.

TRANSFER & ARTICULATION

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

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

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.

TRANSFER & ARTICULATION

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

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

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)

Humanities

- HUMN 1200 Introduction to Film (3)
- HUMN 1300 Survey of Mythology (3)
- HUMN 2480 Science of Science Fiction (3)

Literature

- 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)

Music

- MUSC 1200 Music Appreciation (3)

Philosophy

- PHIL 1010 Introduction to Philosophy (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)

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 2250 Elementary Linear Algebra (3)
- MATH 2260 Introduction to Calculus (3)
- MATH 2263 Analytic Geometry and Calculus I (4)
- 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 2010 Basic Microbiology (2)
- BIOL 201L Basic Microbiology Lab (1)
- 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)

**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 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 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)

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)

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)

AUTO/DIESEL

AUTOMOTIVE TECHNOLOGY—AUTOMOTIVE SERVICE

FIRST SEMESTER

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

SECOND SEMESTER

AUTO 1140	Automotive Chassis	3
AUTO 1150	Manual Drive Trains	3
AUTO 1160	Fuel & Emission Controls	3
ENGL 1515	Technical Writing	3
MATH 1104	Technical Math	4
WELD 1232	Industrial Welding	3
Credit Hours		19

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

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

Total Credit Hours **63**

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

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

SECOND SEMESTER

BUSM 1550	Business Management	3
ENGL 1515	Technical Writing	3
MATH 1104	Technical Math	4
TRCK 1130	Medium & Heavy Truck Chassis	3
TRCK 1140	Diesel Engine Design & Service	3
WELD 1232	Industrial Welding	3
Credit Hours		19

THIRD SEMESTER

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

FOURTH SEMESTER

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

Total Credit Hours **63**

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

Updated March 2021

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.

BUSINESS MANAGEMENT TECHNOLOGY

FIRST SEMESTER

BUSM 1550	Business Management	3
BUSM 1600	PC Applications	3
BUSM 1660	Business Law	3
ENGL 1510	English Composition I	3
SPCH 1510	Speech	3
Credit Hours		15

SECOND SEMESTER

BUSM 1570	Small Business Entrepreneurship	3
BUSM 2560	Human Resource Management	3
ACCT 1550	Introduction to Financial Accounting	4
MKTG 2160	Advertising	3
MATH 2140	Quantitative Reasoning	3
Credit Hours		16

THIRD SEMESTER

ENGL 1515	Technical Writing	3
ADMN 2220	Microsoft Excel	3
ECON 2120	Principles of Macroeconomics	3
MKTG 2150	Marketing *or*	3
DTGR 2120	Social Media Marketing	
PSYC 1010	General Psychology	3
Credit Hours		15

FOURTH SEMESTER

BUSM 2610	Business Leadership or	3
BUSM 1000	Internship	
BUSM 2300	Introduction to Finance	3
BUSM 2750	International Business	3
ECON 2130	Principles of Microeconomics	3
PHIL 1300	Introduction to Ethics	3
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 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	4
Credit Hours		16

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 **62**

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

ENGINEERING & INDUSTRIAL

Updated March 2021

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 1340	Embedded Systems	3
MATH 1104	Technical Math	4
MECH 2170	Instrumentation II	3
ELET 1360	Commercial Wiring & Prints	2
Credit Hours		15

THIRD SEMESTER

ELET 2210	Electronics I	4
ELET 2410	Programmable Logic Controllers I	3
ELET 2110	Rotating Machinery	3
PHYS 1010	Applied Physics	2
PHYS 101L	Applied Physics Lab	1
DRFT 1430	Advanced CAD	3
Credit Hours		16

FOURTH SEMESTER

SPCH 2060	Interpersonal Communication	3
POLS 2050	Global Issues	3
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 **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

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

ENGL 1510	English Composition	3
ENGR 1010	Fundamentals of Engineering	3
INDT 1100	Industrial Maintenance	3
INDT 1150	Machining Processes	3
INDT 1170	Computer Numerical Control	3
INDT 1220	OSHA Safety	2
Credit Hours		17

SECOND SEMESTER

DRFT 2530	Engineering Drafting	3
INDT 1330	Industrial Electricity	2
INDT 1340	Team Concepts and Practices	3
MATH 1104	Technical Math	4
WELD 1232	Industrial Welding	3
Credit Hours		15

THIRD SEMESTER

ELET 2410	Programmable Logic Controllers	3
ENGL 1515	Technical Writing	3
INDT 2170	Advanced CNC	3
MECH 2150	Instrumentation I	3
PHYS 1010	Applied Physics	2
PHYS 101L	Applied Physics Lab	1
Credit Hours		15

FOURTH SEMESTER

INDT 2180	Manufacturing Processes	3
INDT 2280	Management & Supervision	3
ENGR 2800	Engineering Capstone Seminar	3
POLS 1020	American National Government	3
SPCH 1510	Speech *or*	3
SPCH 2060	Interpersonal Communication	
Credit Hours		15

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

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
CHEM 1210	Principles of Chemistry I	3
ENGL 1510	English Composition I	3
MATH 1104	Technical Mathematics	4
Credit Hours		15

SECOND SEMESTER

INDT 1340	Team Concepts and Practices	3
INDT 1330	Industrial Electricity	2
INDT 2210	Process Control	4
MECH 1100	Engineering Materials	4
ELET 2410	Programmable Logic Controls	3
PHYS 1010	Applied Physics	2
PHYS 101L	Applied Physics Lab	1
Credit Hours		19

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
PHIL 1300	Introduction to Ethics	3
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

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 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		15

SECOND SEMESTER

ENGL 1515	Technical Writing	3
MATH 1104	Technical Math	4
WELD 1232	Industrial Welding	3
WELD 1270	FCAW I	3
WELD 2250	GTAW I	3
Credit Hours		19

THIRD SEMESTER

PHYS —	Physics Elective	3
INDT 1220	OSHA Safety	2
SPCH 1510	Speech *or*	3
SPCH 2060	Interpersonal Communication	
WELD 1231	Metal Fabrication	3
WELD 1261	GMAW II	3
Credit Hours		14

FOURTH SEMESTER

———	Social/Behavioral Science Elective	3
WELD 2241	Weld Inspection Practices	3
WELD 1251	SMAW II	3
WELD 2260	Pipe & V-Groove Welding	3
WELD 2261	Downhill Pipe Welding	3
Credit Hours		15

Total Credit Hours **63**

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.

**Not accepting new students into this program for 2021–2022.*

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	4
INDT 1330	Industrial Electricity	2
DRFT 2530	Engineering Drafting	3
ROBT 2500	Robotics II	3
Credit Hours		15

THIRD SEMESTER

ELET 2110	Rotating Machinery	3
ELET 2410	Programmable Logic Controllers	3
MECH 2150	Instrumentation I	3
PHYS 1010	Applied Physics	2
PHYS 101L	Applied Physics Lab	1
MECH 1100	Engineering Materials	4
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
ENGR 2210	Statics	4
INDT 1100	Industrial Maintenance	2
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

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
264 Precision Blvd.
Telford, TN 37690
PHONE: 817.283.2835
www.coarc.com
WSCC Program Data:
https://coarc.com/students/
programmatic-outcomes-data/

The Physical Therapist Assistant Technology program is accredited by:

The Commission on Accreditation
in Physical Therapy Education
(CAPTE)
3030 Potomac Ave., Suite 100,
Alexandria, VA 22305-3085
PHONE: 703.706.3245
www.capteonline.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 BIOL1360/2310)	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 BIOL2320)	3–4
MATH 1104	Technical Math *or*	4
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		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 **64–65**

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 (Massage Therapy, Nursing, Radiologic Technology, Respiratory Therapy, Physical Therapist Assistant, Medical Laboratory Technology, Health Information Management 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.

HEALTH INFORMATION MANAGEMENT TECHNOLOGY

FIRST SEMESTER

BIOL 1300	The Human Body	4
HLTH 1420	Introduction to Human Disease *or*	3
BIOL 2450	Pathophysiology	
HIMT 1100	Legal Aspects	2
HIMT 1200	Health Record Management I	3
HLTH 1800	Medical Terminology	3
Credit Hours		15

SECOND SEMESTER

BUSM 1600	PC Applications	3
HIMT 1301	Clinical Classifications ICD10-CM/PCS	3
HIMT 1302	Current Procedural Terminology	3
MATH 2110	Statistics	4
Credit Hours		13

THIRD SEMESTER

ENGL 1510	English Composition I	3
HIMT 1400	Healthcare Reimbursement	3
HIMT 1500	Advanced Clinical Classification Systems	3
HIMT 1700	Revenue Cycle and Coding	3
Credit Hours		12

FOURTH SEMESTER

HIMT 2100	Health Record Management II	3
HIMT 2200	Health Information Technology Systems	3
PSYC 1010	General Psychology *or*	3
SOCI 1010	Introduction to Sociology	
SPCH 1510	Speech *or*	3
SPCH 2060	Interpersonal Communication	
Credit Hours		12

FIFTH SEMESTER

BUSM 1550	Business Management	3
HIMT 2301	Statistics Analysis	2
HIMT 2400	Quality Management	2
HIMT 2500	Info Management & Data Governance	3
HIMT 2900	Professional Practice	2
Credit Hours		12

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

Health Information Management Technologist are diverse experts who keep the human in patient health information. Health information management professionals manage and protect patient records and patient information to enhance patient care by ensuring medical records are complete, accurate, and accessible in real-time to healthcare providers so they can make critical health-related decisions to provide quality patient care. Health information management professionals understand medical department workflows and department workflow within computer information systems. Health information management technologists demand is above the average demand and Is increasing.

Nationally and regionally, the future outlook for careers is above the national average. Credentials earned through this program are national credentials, which means you can apply outside the state you reside for employment and have a valid credential. Students who live within a 20-county radius or 50 miles of Marietta will be placed in clinical sites. Students outside the surrounding area will need to work with the program director three semesters before enrolling in the professional practice course to allow time to research and secure a clinical site and contracting.

The program goal is to graduate competent health information management technology professionals as demonstrated by their professional behavior, knowledge and competency skills.

Graduates of the program will be able to:

- Demonstrate the ability to perform the 2018 entry-level health information management associate degree competencies identified by the American Health Information Management Association (AHIMA).
- Demonstrate proficiency in determining diagnosis and procedure codes according to official guidelines.
- Demonstrate proficiency in meeting compliance and regulatory requirements in reimbursement technologies.
- Demonstrate proficiency in utilization of data-driven performance improvement techniques for decision making.
- Demonstrate the ability to apply policies, regulations, and standards to the management of Information.
- Apply various forms of communication effectively as a communicator and an observer.
- Demonstrate the ability to use current technology and scientific principles to adapt to a changing world.

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 *or*	2
HLTH 1800	Medical Terminology	3
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		18-19

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 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		13-14

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 **39-41**

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 exam will 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 sensitivity to 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/112L	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/153L	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/113L	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/154L	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.

Students exceeding 60 miles from Washington State Community College campus **MAY** be eligible to enroll in an online program format. For more details, please contact the Medical Laboratory Technology program director.

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	7
NADN 2150	NP in Pharmacology	3
PSYC 2700	Developmental Psychology	3
Credit Hours		17

THIRD SEMESTER

NADN 2240	Applying NP Patterns of Emotional Distress	3
NADN 2320	Applying NP Mat-Newborn Clients	3
Credit Hours		6

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	6
Credit Hours		13

FIFTH SEMESTER

BIOL 2010	Basic Microbiology	2
BIOL 201L	Basic Microbiology Lab	1
NADN 2330	Applying NP Pediatric Clients	3
NADN 2400	Applying NP Groups & Clients	5
Credit Hours		11

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 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.
- 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.

FIRST SEMESTER

BIOL 1510	Introduction to Nutrition	3
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 2310	Human Anatomy & Physiology I	3
BIOL 231L	Human Anatomy & Physiology I Lab	1
NPNT 1410	Nursing Fundamentals	5
NPNT 1620	Practical Nursing I	3
NPNT 1730	Pharmacology II	3
Credit Hours		15

THIRD SEMESTER

BIOL 2320	Human Anatomy & Physiology II	3
BIOL 232L	Human Anatomy & Physiology II Lab	1
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		22

Total Credit Hours **49**

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

NURSING — PRACTICAL NURSING EVENING

FIRST SEMESTER

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

SECOND SEMESTER

BIOL 2320	Human Anatomy & Physiology II	3
BIOL 232L	Human Anatomy & Physiology II Lab	1
NPNT 1620	Practical Nursing I	3
NPNT 1730	Pharmacology II	3
Credit Hours		10

THIRD SEMESTER

PSYC 1010	General Psychology	3
Credit Hours		3

FOURTH SEMESTER

ENGL 1510	English Composition I	3
NPNT 1410	Nursing Fundamentals I	5
NPNT 1630	Practical Nursing II	3
Credit Hours		11

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 **49**

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 1800	Medical Terminology	3
MATH 2110	Principles of Statistics *or*	4
MATH 2130	College Algebra	
PTAT 1010	Introduction to Physical Therapy	2
Credit Hours		16

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 2610	Advanced Rehab Concepts in PT I	2
PTAT 2620	Physical Therapy & Special Populations	3
Credit Hours		14

FIFTH SEMESTER

PTAT 2440	Neurological Conditions in PT II	2
PTAT 2660	Advanced Rehab Concepts in PT II	2
PTAT 2820	Directed Practice II	4
PTAT 2900	PTA Capstone	2
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

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), 3030 Potomac Ave., Suite 100, Alexandria, WV 22305-3085; 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 2310	Human Anatomy & Physiology I	3
BIOL 231L	Human Anatomy & Physiology I Lab	1
ENGL 1510	English Composition I	3
HLTH 1040	Basic Health Science	3
MATH 1104	Technical Math *or*	4
MATH 2110	Principles of Statistics *or*	
MATH 2130	College Algebra	
_____	Social/Behavioral Science Elective	3
Credit Hours		17

SECOND SEMESTER

BIOL 2320	Human Anatomy & Physiology II	3
BIOL 232L	Human Anatomy & Physiology II Lab	1
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
Credit Hours		15

THIRD SEMESTER

HLTH 2400	EKG/Cardiovascular Technician	2
RESP 2450	Clinical Practice II	1
RESP 2500	Respiratory Critical Care I	2
RESP 2630	Respiratory Pediatrics & Neonatology	3
Credit Hours		8

FOURTH SEMESTER

BIOL 2010	Basic Microbiology	2
BIOL 201L	Basic Microbiology Lab	1
RESP 1360	Adv. Cardiopulmonary Resuscitation	1
RESP 2460	Arterial Blood Gases	1
RESP 2510	Cardiopulmonary Pathology I	3
RESP 2550	Clinical Practice III	2
RESP 2600	Respiratory Critical Care II	3
Credit Hours		13

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 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 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), 264 Precision Blvd. Telford, TN 37690, Ph. # (817) 283-2835. For program outcome data: https://coarc.com/students/programmatic-outcomes-data/

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.

LAW & PUBLIC SAFETY

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 2310	Human Anatomy and Physiology I	3
BIOL 231L	Human Anatomy and Physiology I Lab	1
Credit Hours		13

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
Credit Hours		12

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 **63**

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	4
BUSM 1600	PC Applications	3
CRJU 1010	Introduction to Criminal Justice	3
CRJU 1110	Criminal Evidence & Procedures	3
Credit Hours		16

SECOND SEMESTER

ENGL 1515	Technical Writing	3
SPCH 1510	Speech *or*	3
SPCH 2060	Interpersonal Communication	
CRJU 1120	Criminal Law	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 **61**

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).

CRIMINAL JUSTICE TECHNOLOGY - POBA

PEACE OFFICER BASIC ACADEMY

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

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	4
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

FIRST SEMESTER

EDUC 1000	Introduction to Education	3
ENGL 1510	English Composition I	3
HIST 2110	American History to 1865	3
PSYC 1010	General Psychology	3
LITR	TM Literature	3
Credit Hours		15

SECOND SEMESTER

EDUC 1560	Education Seminar & Field Work	1
EDUC 1700	Educational Technology	3
HIST 2120	American History 1865-present *or*	3
POLS 1020	American National Government	
MATH 2110	Principles of Statistics	4
SPCH 1510	Speech	3
Credit Hours		14

THIRD SEMESTER

BIOL 1010	Principles of Biology	3
BIOL 101L	Principles of Biology Lab	1
EDUC 1020	Early Childhood Development	3
EDUC 2100	Exceptional Learners	3
EDUC 2110	Exceptional Learners Education Seminar and Field Work	1
Elective ***	Art/Music/Theater TM Course	3
PSYC 2700	Developmental Psychology	3
Credit Hours		17

FOURTH SEMESTER

EDUC 2300	Families, Communities, & Schools *or*	3
_____	Education Major Elective	
EDUC 2950	Education Capstone	1
_____	Natural Sciences Elective	4
ENGL 1520	English Composition II	3
PSYC 2750	Education Psychology	3
Credit Hours		14

Total Credit Hours **60**

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

BIOL 1100	General Biology I	3
BIOL 110L	General Biology I Lab	1
ENGL 1510	English Composition I	3
MATH 2130	College Algebra *or*	4-5
MATH 2150	Pre-Calculus	
PHIL 1300	Introduction to Ethics	3
Credit Hours		14–15

SECOND SEMESTER

BIOL 1110	General Biology II	3
BIOL 111L	General Biology II Lab	1
ENGL 1520	English Composition II	3
PSYC 1010	General Psychology	3
_____	Natural Science Elective	4
_____	Natural Science Elective	4
Credit Hours		17

THIRD SEMESTER

CHEM 1510	Fundamentals of Chemistry I	3
CHEM 151L	Fundamentals of Chemistry I Lab	1
HIST 2110	American History to 1865 *or*	3
POLS 1020	American National Government	
SPCH 1510	Speech	3
_____	Natural Science Elective	4
_____	Arts & Humanities Elective	3
Credit Hours		17

FOURTH SEMESTER

CHEM 1520	Fundamentals of Chemistry II	3
CHEM 152L	Fundamentals of Chemistry II Lab	1
SOCI 1010	Introduction to Sociology	3
_____	Arts & Humanities Elective	3
_____	Natural Science Elective	4
Credit Hours		14

Total Credit Hours **62–63**

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	4
ENGL 1510	English Composition I	3
PSYC 1010	General Psychology	3
SPCH 1510	Speech	3
_____	Focused Elective	3
Credit Hours		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	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 **62**

Prerequisites are required for some courses. Evening courses may be required to complete this program.
A focused elective is a course, often TM or TAG, that is within the area of interest and taken the first year.

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	
_____	Arts & Humanities Elective	3
SOSV 1130	Generalist Practice	3
SOSV 2150	Domestic Violence	3
Credit Hours		12

THIRD SEMESTER

_____	Arts and Humanities Elective	3
MATH 2110	Principles of Statistics	4
BIOL 2310	Human Anatomy and Physiology I	3
BIOL 231L	Human Anatomy and Physiology I Lab	1
PSYC 1010	General Psychology	3
EDUC 1020	Early Childhood Development	3
Credit Hours		17

FOURTH SEMESTER

BIOL 2320	Human Anatomy and Physiology II	3
BIOL 232L	Human 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		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 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

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
ENGL 1510	English Composition I	3
MATH 1104	Technical Mathematics	4
WELD 1232	Industrial Welding	3
Credit Hours		19

Total Credit Hours **37**

C.A.S. HELP DESK - Pending

FIRST SEMESTER

CRJU 1120	Criminal Law	3
CYBS 1010	Introduction to Cybersecurity	3
CYBS 1020	Operating System and Computing Fund	3
DTCS 1020	Desktop Applications	3
ENGL 1510	English Composition I	3
MATH 1104	Technical Math	4
Credit Hours		19

SECOND SEMESTER

CYBS 1210	A+ Hardware and Software	3
CYBS 1230	Network+	3
DTCS 2010	Microsoft Organizational Implementations	3
DTCS 2610	Microsoft Domain Controllers	3
SPCH 1510	Speech *or*	3
SPCH 2060	Interpersonal Communication	
Credit Hours		15

Total Credit Hours **34**

CYBERSECURITY - Pending

FIRST SEMESTER

CYBS 1010	Introduction to Cybersecurity	3
CYBS 1020	OS and Computing Fundamentals	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 Cybersecurity	3
MATH 1104	Technical Math	4
Credit Hours		16

Total Credit Hours **31**

CERTIFICATE PROGRAMS

INDUSTRIAL TECHNOLOGY - CHEMICAL OPERATOR

FIRST SEMESTER

INDT 1010	Introduction to Chemical Operator	3
INDT 1210	Industrial Safety/Hazmat	2
INDT 1340	Team Concepts and Practices	3
MATH 1104	Technical Mathematics	4
CHEM 1210	Principles of Chemistry I	3
Credit Hours		15

SECOND SEMESTER

PHYS 1010	Applied Physics	2
PHYS 101L	Applied Physics Lab	1
INDT 1330	Industrial Electricity	2
INDT 2210	Process Control	4
ELET 2410	Programmable Logic Controllers	3
MECH 1100	Engineering Materials	4
Credit Hours		16

Total Credit Hours **31**

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	4
WELD 2250	GTAW I	3
WELD 1251	SMAW II	3
WELD 1261	GMAW II	3
WELD 2241	Weld Inspection Practices	3
Credit Hours		16

Total Credit Hours **31**

**Not accepting new students into this program for 2021–2022.*

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**

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 *or*	2
HLTH 1800	Medical Terminology	3
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		18-19

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 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		13-14

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 **39-41**

MEDICAL BILLING & CODING - Pending

FIRST SEMESTER

BIOL 1300	The Human Body	4
HLTH 1420	Introduction to Human Disease or	3
BIOL 2450	Pathophysiology	
HIMT 1100	Legal Aspects	2
HIMT 1200	Health Record Management I	3
HLTH 1800	Medical Terminology	3
Credit Hours		15

SECOND SEMESTER

BUSM 1600	PC Applications	3
ENGL 1510	English Composition I	3
HIMT 1301	Clinical Classifications ICD10-CM/PCS	3
HIMT 1302	Current Procedural Terminology	3
Credit Hours		12

THIRD SEMESTER

HIMT 1400	Healthcare Reimbursement	3
HIMT 1500	Advanced Clinical Classification Systems	3
HIMT 1700	Revenue Cycle and Coding	3
Credit Hours		9

Total Credit Hours **36**

CERTIFICATE PROGRAMS

PRACTICAL NURSING

FIRST SEMESTER

BIOL 1510	Introduction to Nutrition	3
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 2310	Human Anatomy & Physiology I	3
BIOL 231L	Human Anatomy & Physiology I Lab	1
NPNT 1410	Nursing Fundamentals	5
NPNT 1620	Practical Nursing I	3
NPNT 1730	Pharmacology II	3
Credit Hours		15

THIRD SEMESTER

BIOL 2320	Human Anatomy & Physiology II	3
BIOL 232L	Human Anatomy & Physiology II Lab	1
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		22

Total Credit Hours **49**

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**

SMALL BUSINESS ENTREPRENEURSHIP - Pending

FIRST SEMESTER

ENGL 1510	English Composition I	3
BUSM 1550	Business Management	3
BUSM 1600	PC Applications	3
SPCH 1510	Speech	3
BUSM 1660	Business Law	3
Credit Hours		15

SECOND SEMESTER

ACCT 1550	Introduction to Financial Accounting	4
MKTG 2160	Advertising	3
BUSM 2560	Human Resources Management	3
MATH 2140	Quantitative Reasoning	3
BUSM 1570	Small Business Entrepreneurship	3
Credit Hours		16

Total Credit Hours **31**

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	4
TRCK 1130	Medium and Heavy Truck Chassis	3
Credit Hours		16

Total Credit Hours **31**

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
INDT 1170 Computer Numerical Control

EKG Technician
HLTH 2400 EKG Technician
HLTH 1800 Medical Terminology *or*
BIOL 2310 Human Anatomy & Physiology I
BIOL 2320 Human Anatomy & Physiology II

Gasoline Engines
AUTO 1100 Vehicle Service & Maintenance
AUTO 2130 Cylinder Block & Lower Engine
WELD 1232 Industrial Welding

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

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

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

CERTIFICATES OF COMPLETION

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

Supply Chain Management - Pending

ADMN 2220	Microsoft Excel
BUSM 2560	Human Resources Management
DTCS 2100	Database Management
ENGL 1510	English Composition I

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	Literature	LITR
Administrative Assistant	ADMN	Marketing	MKTG
Art	ARTS	Mathematics	MATH
Automotive Service Tech	AUTO	Mechanical Engineering Tech	MECH
Biology	BIOL	Medical Lab Tech	MMLT
Business Management	BUSM	Music	MUSC
Chemistry	CHEM	Nursing Education - Associate Degree	NADN
Criminal Justice	CRJU	Nursing Education - Practical	NPNT
Cyber Security	CYBS	Personal Development	PERS
Design Drafting	DRFT	Philosophy	PHIL
Diesel Truck Systems	TRCK	Physical Therapist Assistant Tech	PTAT
Digital Tech - Computer Graphics	DTGR	Physics	PHYS
Digital Tech - Computer Support	DTCS	Political Science	POLS
Digital Tech - Digital Media	DTME	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
Geology	GEOL	Sociology	SOCI
Health Information Management	HIMT	Spanish	SPAN
Health Science	HLTH	Speech	SPCH
History	HIST	Theatre	THEA
Humanities	HUMN	Welding	WELD
Industrial Tech	INDT		

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.

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 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: ACCT 1550 and ACCT 1610. 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: ACCT*1550. 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 and ACCT 1610. 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: ACCT 1550 and ACCT 2550. 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: ACCT 1550, ACCT 1610, ACCT 2210, and ACCT 2550. Co-Requisite: None. Day: Sp; Eve: Sp. Lecture: 2, Lab: 2. ♦

ACCT 2920 QuickBooks for Accountants 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 and ACCT 1610. 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 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 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.

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 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: None. Co-Requisite: None.

Day: Fa; Eve: On demand. Lecture: 3, Lab: 0. TAG: OAH005.

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: None. 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: 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 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. ♦

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 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 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 BIOL1100 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 BIOL1110. Prerequisite: BIOL 1100 & BIOL 110L with "C" or better. Co-Requisite: BIOL 1110. Day: Sp. Lecture: 0, Lab: 3. TAG: OSC004. ♦

BIOL 112L General Biology for MLT Lab I 1 cr.

A series of online experiments for students in the MLT program 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. Online: Fa. Lecture 0, Lab: 3. ♦

BIOL 113L General Biology for MLT Lab II 1 cr.

A series of online experiments for students in the MLT program designed to enhance the material discussed in BIOL 1110. Prerequisite: BIOL 1100 & BIOL 112L with "C" or better. Co-Requisite: BIOL 1110. Online: Sp. Lecture: 0, Lab: 3. ♦

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, with emphasis on the skeletal and muscular 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 bodies systems and their relation to the practice of Massage Therapy, with emphasis on the nervous system. 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 musculoskeletal system. 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 1520 Introduction to Plant-Based Nutrition 3 cr.

A course which introduces the basic nutritional needs of humans through the lifecycle living on a plant-based (vegan) diet. Nutrient functions, food sources, and level of requirements are all covered. Food attitude and approaches to making a plant-based diet sustainable are included along with extensive examples of positive health benefits related to this lifecycle. Students will develop theoretical meal plans using plant only foods and complete a 3-day diet analysis while consuming only plants to assess nutrient levels and any deficiencies. A few assignments will require real food preparation of staple plant foods such as grains (i.e., rice, oats, quinoa), beans and vegetables. Prerequisite: None. Co-Requisite: None. Day: Fa, Sp. Lecture: 3, Lab: 0.

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 Science 3 cr. TM-N

A course for majors and non majors which introduces current environmental problems including air and water 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 Science 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 2320 and BIOL 232L or BIOL 1360. Co-Requisite: None. Day: On demand; Online: Fa, Sp. Lecture: 3, Lab: 0. TAG: OHL019.

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. ♦

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. ♦

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 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 Leadership 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 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 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 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 153L Chemistry for MLT Lab I 1 cr.
An online chemistry laboratory sequence for the students

in the MLT program. 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. Registration is restricted to students in the online MLT program. Prerequisite: HS Algebra or MATH 2130 & HS Chemistry or CHEM 0955, CHEM 095L, or CHEM 1210 & CHEM 121L with a "C" or above. Co-Requisite: CHEM 1510. Online: Fa. Lecture: 0, Lab: 3.

CHEM 154L Chemistry for MLT Lab II 1 cr.

An online chemistry laboratory sequence for students in the MLT program. 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. Registration is restricted to students in the online MLT program. Prerequisite: CHEM 1510 and CHEM 153L. Co-Requisite: CHEM 1520. Online: Sp. Lecture: 0, Lab: 3.

CRIMINAL JUSTICE TECHNOLOGY (CRJU)

CRJU 1010 Introduction to Criminal Justice 3 cr.

This course examines American criminal justice and the 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 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: Fa; 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: Sp; 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 2130 Corrections Academy 8 cr.
Successful completion of the Ohio Peace Officer Training Commission's Corrections Academy program provides students with a State of Ohio certification. The state mandates 154 hours of training that covers the areas of: ethics/professionalism, report writing, inmate rights, civil liability, searches, inmate supervision, crisis intervention, administration, legal, human relations, communications, loss prevention, safety and protective services, unarmed self-defense and first aid. Prerequisite: Meet the admission standards per the Ohio Attorney General's Office. Co-Requisite: None. Lecture: 7, Lab: 3. ♦

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 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 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 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 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, 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 examines. 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 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 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 ♦

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 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 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 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 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. ♦

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. ♦

DIGITAL TECHNOLOGY-COMPUTER SUPPORT (DTCS)

For other Computer Support Technician courses see Electronics (ELEC)

DTCS 1020 Desktop Applications 3 cr.

This course is designed as an introduction to Windows Applications. It is intended for students with a basic background in the Windows Operating systems. The first portion of the course presents the basic concepts of the operating systems applications. 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 Desktop Pro Plus certifications. Prerequisite: None. Co-Requisite: None. Day: Fa; Online: Fa. Lecture: 2, Lab: 2. ♦

DTCS 2010 Microsoft Organizational Implementations3 cr.

This course is designed as an introduction to operating systems and its organizational implementations. It is intended for students with a basic background with the Windows Operating Systems. The first portion of the course presents the basic concepts of the operating systems of Windows. The second portion of the course covers specific issues with layout, design, organization, and implementations of the operating systems of Windows. Furthermore, this course helps prepare students for the Microsoft MOS and TestOut Client Pro certifications. Prerequisite: None. Co-Requisite: None. Day: Sp; Online: Sp. Lecture: 2, Lab: 2. ♦

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. Prerequisite: BUSM 1600. Co-Requisite: None. Day: Fa; Eve: Sp. Lecture: 2, Lab: 2. ♦

DTCS 2610 Microsoft Domain Controllers 3 cr.

This course focuses on the installation, configuration, and utilization of interface of Microsoft Windows Servers and Domain Controllers. The course will provide the instruction to build, configure, and manage a Windows Domain Controller. Furthermore, this course helps prepare students for the Microsoft Server and TestOut Server Pro certifications. Prerequisite: CYBS 1020. Co-Requisite: None. Day: Sp, Online: Sp. Lecture: 2, Lab: 2. ♦

DIGITAL TECHNOLOGY-DIGITAL MEDIA (DTME)

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. ♦

ECONOMICS (ECON)

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 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: ECON 2120. 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. This course explores the purposes organizations, and outcomes of schooling from the perspectives of the field of social foundations of education. The focus of the course revolves around four themes: aims of education and role of schools in democratic society, economic legal and political context of schools, culturally responsive and inclusive education, and ethics and professionalization. These themes will be examined through selected readings and field experiences. Professional portfolios will be started and transfer options discussed. 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 1560 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: 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; 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 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 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 1100 Basic Programming and Sensors 2 cr.

Basic Programming and Sensors is a 2-credit hour (1 lecture; 2 lab hours) course that introduces the student to Embedded Systems, Sensors, and C Programming, with an emphasis on automation. The credit hours can be applied to an Associate's degree in Electrical Engineering Technology. Prerequisite: None. Co-Requisite: None. Day: Fa, Sp. Lecture: 1, Lab: 2. ♦

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. ♦

ELET 1150 Advanced Programming and Sensors 2 cr.

Advanced Programming and Sensors is a 2-credit hour (1 lecture, 2 lab hours) course that introduces the student to applied mathematical concepts, automated systems, Smart Manufacturing, C Programming, with an emphasis on the importance of team work and communication skills. The credit hours can be applied to an Associate's degree in Electrical Engineering Technology. Prerequisite: ELET 1100. Co-Requisite: None. Day: Fa, Sp. Lecture: 1, Lab: 2. ♦

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 1340 Embedded Systems 3 cr.

Study of embedded systems, and their application to IOT, as pertinent to electrical engineering technology. Embedded systems have been described as "computers as components" of larger systems. Examples include the embedded microcontrollers in autos, airplanes, and robots. This course uses the Arduino microcontroller as the platform to learn to design and program embedded systems including IOT applications. Prerequisite: ELET 1310. Co-Requisite: None. Day: Sp; 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 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: None. Co-Requisite: None. Day: Sp; Eve: On demand. Lecture: 1, Lab: 5. ♦

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 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, and ELEC2050. 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 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. 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 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: Accuplacer Placement. Co-Requisite: None. 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: Accuplacer Placement. Co-Requisite: ENGL 1510. Day: All, Eve: All. Lecture: 0, Lab: 2. ♦

ENGL 1510 English Composition I 3 cr. TM-E
Effective communication is a critical skill to learn for success in life, academics, and careers. In this first-year writing course, in response to different writing experiences, students will develop the ability to draft, analyze and revise their writing. The students will learn and utilize various skills of writing in areas of rhetorical knowledge and critical reasoning. Additionally, students will analyze the work of other students and professional writers. The goal of the course is to provide students a chance to improve their writing and learn how to effectively respond to unique writing challenges. Prerequisite: None. Co-Requisite: None. Day: All; Eve: All; Online: 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 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. ♦

GEOLOGY (GEOL)

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. ♦

HEALTH INFORMATION MANAGEMENT TECHNOLOGY

HIMT 1100 Legal Aspects 2 cr.
This course covers evaluation of healthcare records as legal documents and places special emphasis on policies and procedures concerning release of medical information and protecting patient confidentiality. Topics including legal principles, organization of the judicial system, healthcare fraud and abuse, Health Insurance Portability and Accountability (HIPAA) regulations are covered. Ethical issues in healthcare settings concerning the privacy and security of healthcare are addressed. Prerequisite: None. Co-Requisite: None. Online: Fa. Lecture: 2, Lab: 0.

HIMT 1200 Health Record Management I 3 cr.
This is the entry course to health information management. This course explores and gives an overview of healthcare delivery systems, health information management professions, healthcare settings, introduction to patient record documentation and guidelines, clinical terminologies and classification systems, data privacy and confidentiality, data management, data privacy and security, revenue management and reimbursement, fraud and abuse, ethical issues in health information management, human resource management, and professional development. Prerequisite: Program admission. Co-Requisite: None. Online: Fa. Lecture: 3, Lab: 0. ♦

HIMT 1301 Clinical Classifications ICD10-CM/PCS 3 cr.

This course focuses on the ICD-10-CM and ICD-10-PCS coding classification systems and applies coding guidelines for each body system. Coding guidelines, rules, and conventions for each body system will be studied. Principal, primary, secondary, and history diagnosis will be studied as well as procedures for patient encounters in inpatient, ambulatory, and physician services will be studied. Coding references, case studies in various patient settings, and manual and computerized coding methods will be utilized. Prerequisite: BIOL 1300, and BIOL 2450, or HLTH 1420 and HLTH 1800. Co-Requisite: None. Online: Sp. Lecture: 2, Lab: 2.

HIMT 1302 Current Procedural Terminology 3 cr.

This comprehensive course is designed for students requiring advanced knowledge in the Current Procedural Terminology (CPT) coding classification system starting with the purpose of CPT, then learning and applying principles, guidelines and conventions to assign CPT for evaluation and management, ambulatory, surgical and ancillary coding. Practical experience in coding will be obtained through the use of coding references, case studies in various patient settings, and manual and computerized coding methods will be utilized. Prerequisite: BIOL 1300, and BIOL 2450, or HLTH 1420 and HLTH 1800. Co-Requisite: None. Online: Sp. Lecture: 3, Lab: 0.

HIMT 1400 Healthcare Reimbursement 3 cr.

Students will review the organization of healthcare delivery systems including managed care and capitation. The theory and use of reimbursement systems such as Diagnostic Related Groups (DRGs), Ambulatory Payment Classifications (APCs), and Resource-Based Relative Value Scale (RBRVS) are applied. Revenue cycle discussions and analysis include data flow from admission to billing and the analysis of case-mix. In addition, other external forces, such as Health Insurance Portability and Accountability Act (HIPAA) and Recovery Audit Contractors (RACs), are reviewed. Prerequisite: HIMT 1200, HIMT 1301, and HIMT 1302. Co-Requisite: None. Online: Su. Lecture: 3, Lab: 0.

HIMT 1500 Advanced Clinical Classification System 3 cr.

This course provides the student with advanced knowledge and coding practice in the clinical classification systems. In depth topics will be studied on Principles of Nomenclatures, Terminologies, Clinical Vocabularies, Taxonomies and other data sets (OASIS, HEDIS, UHDD, & DEEDS) and applications of Classification Systems (ICD/CPT, HCPCS, SNOMED, and DSM). Other topics studied include RX Norm; LONIC; International Classifications of Functioning, Disability, and Health; Data Standards; Data Interchange Standards; Centralized Locations and Tools for Servers, Databases, and Registries; and the use of Vocabulary, Terminology, and Classification Systems. Prerequisite: HIMT 1301 and HIMT 1302. Co-Requisite: None. Online: Su. Lecture: 3, Lab: 0.

HIMT 1700 Revenue Cycle and Coding 3 cr.

This course provides application in the revenue cycle management process and focuses on acute care hospital perspective. Topics include revenue cycle basics, cost analysis and payer contracts, patient access, documentation and charge capture, record completion and coding, claims management, and an overview how charges become revenue. Prerequisite: HIMT 1301 and HIMT 1302. Co-Requisite: HIMT 1400 and HIMT 1500. Online: Su; Lecture: 2, Lab: 2. ♦

HIMT 2100 Health Record Management II 3 cr.

This course is a continuation of Health Record Management I where students will build their knowledge and complete projects at the end of the course and blend content knowledge from HIMT 1200 Health Record Management I. This course explores and studies data security, health information systems, management, performance improvement, secondary data sources and research and data analysis. Data management and data privacy and confidentiality will be heavily reviewed. Prerequisite: HIMT 1200. Co-Requisite: None. Online: Fa. Lecture: 3, Lab: 0. ♦

HIMT 2200 Health Information Technology Systems 3 cr.

This course looks in-depth into the role, purpose, and use of health information in the healthcare delivery system. Topics of study include defining the electronic health record (EHR), the development of EHR, EHR adoption challenges in relation to the current status of the EHR, study of hardware and software, proprietary application use in health information management, clinical inpatient information systems, information exchange, and current initiatives. Prerequisite: None. Co-Requisite: None. Online: Fa. Lecture: 3, Lab: 0.

HIMT 2301 Statistical Analysis 2 cr.

This course covers calculating statistics for healthcare operations and introduces procedures to properly collect, organize, display and interpret healthcare data. Uses for healthcare data and users of healthcare data will be covered. Calculations will be done manually and by spreadsheet application. Prerequisite: None. Co-Requisite: None. Online: Sp. Lecture: 2, Lab: 0.

HIMT 2400 Quality Management 2 cr.

This course will introduce procedures for facility-wide quality management and performance improvement programs. Students will analyze clinical data, and utilize performance improvement tools to demonstrate effectiveness in demonstrating quality and safety. Prerequisite: None. Co-Requisite: None. Online: Sp. Lecture: 2, Lab: 0.

HIMT 2500 Health Information Management and Data Governance 3 cr.

This course introduces the evolution of health information systems and the complexities of data flow. Students will demonstrate leadership skills through a case study threaded

throughout the textbook and learn the roles, functions, and practices for successfully managing healthcare data as an enterprise set and application of policies and procedures. Students will explore enterprise functions such as data governance, data architecture, metadata management, master data management, business intelligence, data security management, and terminology and classifications systems within healthcare departments or business unit context. Prerequisite: HIMT 1200. Co-Requisite: None. Online: Sp. Lecture: 3, Lab: 0.

HIMT 2900 Professional Practice 2 cr.

Students will gain experience at a facility to gain real-life experience. During this course, students will prepare to take the Registered Health Information Technician Certification Exam through the American Health Information Management Association and be encouraged to sit for medical billing certifications through the Healthcare Financial Management Association and medical coding certification exams through the American of Professional Coders and/or the American Health Information Management Association. Students will participate in weekly discussions and complete case students as a comprehensive review. Prerequisite: Approval, and must be taken in the last semester of HIMT program. Co-Requisite: None. Online: Sp. Lecture: 1, Lab: 3. ♦

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 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 3 cr.

This course is an introduction to applied math and basic sciences concerning cardiopulmonary anatomy and physiology. Basic math, chemistry and physics are applied to applications in the respiratory and medical fields. Prerequisite: HS Algebra with "C" or better or MATH 0106 and admission to the respiratory therapy program. Co-Requisite: None. Online: Fa. Lecture: 2, Lab: 2.

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 inpatients scenarios utilizing code assignment in the inpatient setting and the appropriate assignment of inpatient coding conventions. Prerequisite: None. Co-Requisite: None. 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: None. 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. 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.

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: None. Blended: Sp. 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; Myofacial 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 1800 Medical Terminology 3 cr.

This course provides an overview of medical language used by the medical profession. Students will learn how to use appropriate terminology/abbreviations pertaining to anatomy, physiology, pathology, diagnostic processes/procedures and medical interventions related to the human body. Prerequisite: None. Co-Requisite: None. Online: All. Lecture: 3, Lab: 0. TAG: OHL020.

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 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: None. 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 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 it's 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 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 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 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 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: None. 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. 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 machine programming language. Students will work within specified decimal tolerances from engineering drawings. Students will earn FANUC CNC certification. Prerequisite: INDT 1150. Co-Requisite: None. Day: Fa. 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 the OSHA-30 General Industry Safety Certification. A total of 30 classroom hours is required for this course. They may be divided into 3 to 6 hour blocks per week, at the instructor's discretion. 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 Solidworks 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 programming class. Use CAM files to design and produce machine parts on available CNC machines. Prerequisite: INDT 1170. Co-Requisite: None. Day: Sp; Eve: Sp. 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: 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 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.

MARKETING (MKTG)

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 Quantitative Reasoning Insights 1 cr.

This course is designed to be taken as a corequisite to Quantitative Reasoning (MATH 2140) for students who may need some extra support with their foundational mathematics skills, need personal assistance understanding the course concepts, or need help with small group and individual course projects in the Quantitative Reasoning course. Students will work collaboratively with other students to do, to think, to listen, and to talk about mathematics, statistics, and mathematical modeling. Students will also learn how to make your mathematical thinking seen, heard, and understood by others. Prerequisite: MATH 0106 or placement. Co-Requisite: MATH 2140. Day: All; Eve: All. Lecture: 0, Lab: 2. ♦

MATH 1104 Technical Mathematics 4 cr.

Includes Geometry 2D and 3D. Includes selected topics from plane and solid geometry with emphasis on practical applications to measurement of length, area, volume. Includes measurements of properties of angles. Includes Pythagorean Theorem and uses of it. Includes measurement units and converting units American and Metric Systems. Topics in algebra using equations, inequalities and graphics. Topics include dimensional analysis. Right angle trigonometry and using trig functions. Includes vectors, complex numbers and functions. A scientific hand-held calculator will be used to solve these problems. Prerequisite: MATH 0106 or placement. Co-Requisite: None. Day: Fa, Sp; Su. Lecture: 4, Lab: 0.

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 0106 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

Quantitative Reasoning will be unlike any mathematics course you have ever taken. This course develops critical thinking and problem-solving skills in a variety of mathematical contexts, real-life situations, and quantitative comparisons. You will work collaboratively with other students to do, to think, to listen, and to talk about mathematics, statistics, and mathematical modeling. You will also learn how to make your mathematical thinking seen, heard, and understood by others. 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 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 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 2263 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.

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 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 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. ♦

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 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 Immunohematology 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 immunohematology 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. Co-Requisite: MMLT 2210. Day: Fa. Lecture: 3, Lab: 2. ♦

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 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.

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 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 7 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: 7.5. ♦

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 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 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: 1.5. ♦

NADN 2330 Applying NP Pediatric Clients 3 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: 1.5. ♦

NADN 2350 Applying NP Complex Clients 6 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: 2. Clinical: 7. ♦

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 5 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: 2.5, Lab: 5. Clinical: 3. ♦

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. ♦

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 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, 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.

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 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: None. Co-Requisite: None. Day: Fa, Sp; Eve: Fa, Sp; Online: Fa, Sp. Lecture: 3, Lab: 0. TAG: OAH046.

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 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. ♦

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 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 2620 Physical Therapy and Special Populations 3 cr.

This course is designed for the entry level student in Physical Therapist Assistant education. A survey of current practices in a pediatric and geriatric physical therapy is offered. A wide range of disabilities including neurological, musculoskeletal, developmental, neuromuscular, and cardio pulmonary problems will be discussed. An overview of major problems in the older adult population with suggested procedures for treatment will be presented as well as information on evaluating and treating a child with the disability. Prerequisite: BIOL 2450 or HLTH 1420, PSYC 1010, PSYC 2700, PTAT 2320, and PTAT 2400. Co-Requisite: PTAT 2340, PTAT 2420, and PTAT 2610. Day: Fa. Lecture: 2, Lab: 2. ♦

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 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, 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 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: 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: PHYS 2530. Day: Sp; Eve: On demand. Lecture: 0, Lab: 2. TAG: OSC017. ♦

POLITICAL SCIENCE (POLS)

POLS 1020 American National Government 3 cr. TM-S

Survey of all aspects of our democratic system; emphasis on the Constitution, the three branches of government, civil rights and liberties, and foreign policy. Prerequisite: None. Co-Requisite: None. Day: Fa, Sp; Eve: Fa, Sp. Lecture: 3, Lab: 0. TAG: OSS011.

POLS 1030 State and Local Government 3 cr. TM-S

Survey of the structure and operation of state and local governments. Emphasis on the relationship and interaction of state and local government subdivisions in Ohio. Prerequisite: None. Co-Requisite: None. Day: Fa, Sp. Lecture: 3, Lab: 0. TAG: OSS014.

POLS 2050 Global Issues 3 cr.

Consideration of major problems such as environment, health, economics, war, population, human rights; discussion of possible political solutions. Writing Intensive Course. Prerequisite: ENGL 1515 or ENGL 155H or ENGL 1510 or ENGL151H. Co-Requisite: None. Day: Sp on demand. Lecture: 3, Lab: 0. TAG: OSS012.

PSYCHOLOGY (PSYC)

PSYC 1010 General Psychology 3 cr. TM-S

Introduction to Psychology: Survey of topics in psychology including physiological bases of behavior, methods of psychology, cognition, social/organizational, developmental, and personality/psychology. Prerequisite: None. Co-Requisite: None. Day: All; Eve: All; Online: Fa, Sp. Lecture: 3, Lab: 0. TAG: OSS015.

PSYC 2100 Social Psychology 3 cr. TM-S

Study of social interactions emphasizing a balance of research and application. Topics will include social cognition, attitude formation and change, conformity/obedience, group processes, pro-social behavior, aggression, and stereotyping/prejudice. Prerequisite: PSYC 1010. Co-Requisite: None. Day: On demand. Lecture: 3, Lab: 0. TAG: OSS016.

PSYC 2320 Abnormal Psychology 3 cr. TM-S

Survey of the major categories of psychological disturbance emphasizing a balance of research and application. Topics will include etiology, prognosis, and treatment modalities using the current DSM as a reference basis. Prerequisite: PSYC 1010. Co-Requisite: None. Day: Sp; Eve: On demand. Lecture: 3, Lab: 0. TAG: OSS017.

PSYC 2700 Developmental Psychology 3 cr. TM-S

Examines the life cycle of humans from conception to death. Applies developmental theories and research in the explanation of human behavior. Allows experiential learning opportunities that demonstrate research in the field. This course is considered a writing intensive course that has at least 20 pages of collegiate writing. Prerequisite: PSYC 1010. Co-Requisite: None. Day: All; Eve: Fa, Sp. Lecture: 3, Lab: 0. TAG: OSS048.

PSYC 2750 Educational Psychology 3 cr. TM-S

Applications of psychological theories and models to the classroom. Major topics include goals of education; cognitive, social and affective development in children; cognitive and behavioral models of learning; motivation; individual and cultural differences; effects of social class, ethnicity, and gender on learning and development; tests and evaluation. Prerequisite: PSYC 1010. Co-Requisite: None. Day: Fa; Eve: On demand; Online: Fa. Lecture: 3, Lab: 0. TAG: OED008.

RADIOLOGIC TECHNOLOGY (RADT)

RADT 1010 Introduction to Radiologic Technology and Procedures I 2 cr.

This course introduces the student to specific medical, legal, 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.

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. ♦

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. ♦

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 2310, BIOL 231L, HLTH 1040, 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 2310, BIOL 231L, HLTH 1040, 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 2310, BIOL 231L, HLTH 1040, and program admission. Co-Requisite: None. Day: Sp. Lecture: 3, Lab: 3. ♦

RESP 1330 Cardiopulmonary Anatomy & Physiology 2 cr.

Overview of the fundamental concepts of the cardiopulmonary system and function. Emphasis on normal physiology. Prerequisite: BIOL 2310, BIOL 231L, HLTH 1040, 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 2310, BIOL 231L, HLTH 1040, 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 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 2630 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 2630 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 2630 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 classification of mechanical ventilators and patient case studies. Prerequisite: RESP 2500, RESP 2630 and RESP 2450. Co-Requisite: None. Day: Fa. Lecture: 2, Lab: 3. ♦

RESP 2630 Respiratory Pediatrics & Neonatology 3 cr.

This course emphasizes neonatal and pediatric care, focusing on 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: 2, 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 & Subspecialities 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, and RESP 2460. 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: Fa. 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.

This course is intended for an operator, technician, engineer, or programmer who much setup and record programs on a robot. The course covers the robot operations outline intermixed with the tasks required to set up the handling tool application, test, run and refine the program and production setup. It prepares students to take the Robotics Operations Certification, tests for Fanuc and other systems. 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: Sp. 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 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 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 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 additions 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 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 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 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.

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.

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 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 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: None. 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.

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 1232 Industrial Welding 3 cr.

This course will instruct students on safety and welding shop and in the field. Proper personal protective equipment used in welding and cutting. Proper use of hand tools. Oxy/Acetylene safety and set-up and plasma safety and set-up. Various cutting processes OFC, PAC and different welding processes OFW, SMAW, and GMAW used with proper safety and equipment set-up. Different variables and filler metal explained for each process will be discussed. Demonstrations using virtual welder in GMAW and SMAW. Safety in the lab will be highly stressed in this course. Prerequisite: None. Co-Requisite: None. Day: Fa, Sp. Lecture: 1; Lab: 5. ♦

WELD 1240 Basic Oxy/Acetyl 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 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 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. ♦

WSCC FACULTY

FULL-TIME FACULTY

Name	Credentials
Altier, Justina	BSN, Ohio Univeristy; ADN, Ohio University
Ammons, Matthew	PhD, Ohio Dominican University; BA, James Madison University
Anderson, Jill	MA, State Univeristy of New York, BA, Hollins University
Ball, Renea	MSN, Xavier University; BSN, Ohio University; ADN, Ohio University/AAS, Hocking College
Barker, Sheryl	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; Certified of Completion AutoDesk, Dale Carnegie Course
Carpenter, Christopher	BSAST, Thomas Edison State University; AAS, Coastline Community College; US Navy Specialized, SAP
Covert, Micah	MBA, Ohio Dominican University; BS, Ohio University
Garcia, Laura	MA, West Virginia University; BA, Wheeling Jesuit College
Gater, Christina	MBA, Franklin University; BS, Franklin University; AA, Hocking College
Godfrey, Donhnall	MA, Goldsmith University; BA, Marietta College
Harlow, Stephanie	MS, Tiffin University; BS, Ohio University; AAS, Washington State Community College
Hirschi, Dean	PhD, University of Kansas; MS, University of Kansas; BS, University of Utah
Hellinger, Adrienne	BS, Muskingum Universtiy; AAS, Washington State Community College
Johnson, Paula	ME, Marietta College; BS, Marietta College
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
Lopreste, Aaron	BS, Marietta College; AAS, Washington State Community College
Lowe, Natalie	MEd, Ohio Valley University; BA, Glenville State College; AAB, Washington Technical College
Manley, Christina	MA, Mount Vernon Nazarene, BS, University of Cincinnati, BS, The Ohio State University; AAS, Marion Technical
Marasco, Christine	BSN, Ohio University; AAS, Washington State Community College
McKeny, Timothy	PhD, The Ohio State Univeristy; MA, Marshall University; BA, Marshall Univeristy
Merritt, Brad	MBA, Ohio University; BA, Marietta College
Nutter, Joseph	AAS, Lincoln Technical Institute; ASE/OEM Certified; Mack Truck Certified Provider;
Penich, Jessie	MS, University of Pittsburg; BS, Saint Vincent College
Schaad, Tricia	MSN, Otterbein College; BSN, Mt. Carmel
Simmons, Darren	PhD, Ohio University; MS, Ohio University; BS, Marietta College
Starkey, Jeffrey	MBA, Bowling Green University; BA, Ohio University; ASE certified
Tamm, Andrea	MS, Grand Canyon University; BS, Fairmont State University
Taylor, Emily	BS, Ohio Valley University; AAS, Washington State Community College
Temesvary, Steve	MHA, Ohio University; BS, Marietta College; AAS, Washington State Community College
Unsold, Deborah	Southern New Hampshire (working on MA English); 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
Webster, Valerie	MS, University of Toledo; BS, University of Rio Grande
Williams, Laura	MSN, University of South Alabama; BSN, Ohio University; AAS, Ohio University
York, James	MS, Ohio University; BS, Purdue University
Zepeda Mejia, Ivan	PhD, Universidade Federal do Rio Grande do Sul