North Central State College

2022 – 2023

Catalog and Student Handbook

The information contained in this catalog is the most accurate available at the time of publication, but changes may become effective before the next catalog is printed. It is ultimately the student's responsibility to stay abreast of current regulations, curricula, and the status of specific programs being offered. Further, the College reserves the right to modify requirements, curricula offerings, and charges, and to add, alter, or delete courses and programs through appropriate procedures. While reasonable effort will be made to publicize such changes, a student is encouraged to seek current information from appropriate offices. The North Central State College catalog is neither a contract nor an offer to contract. North Central State College reserves the right to make changes in any material contained herein as deemed necessary without notice.

2441 Kenwood Circle
Mansfield, Ohio 44906
419-755-4800
Toll Free: 888-755-4899
www.ncstatecollege.edu

Law enforcement officers authorized to carry concealed weapons or dangerous ordnance and acting within the scope of their duties must do the following:

- Prior to the start of class, a student shall present a letter from their commanding officer to the Registrar indicating they are required to carry a weapon, even when not on duty, as part of their overall duties as a peace officer.
- Prior to employment, an employee shall present a letter from their commanding officer to the Director of Human Resources indicating they are required to carry a weapon, even when not on duty, as part of their overall duties as a peace officer.
- Notify their instructor, supervisor, etc. that they are peace officers required to carry a weapon.

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MESSAGE FROM THE PRESIDENT

I'M DELIGHTED THAT YOU ARE INTERESTED IN KNOWING MORE ABOUT OUR OUTSTANDING COLLEGE.

On behalf of the NCSC Board of Trustees, faculty, and staff, it is my sincere pleasure to welcome you to our college. Each fall, several thousand students begin their academic year at North Central State College alongside dedicated faculty and staff. Students also attend classes at the Kehoe Center in Shelby, the Crawford Success Center in Bucyrus, and through alternative delivery as they begin a rewarding career. Others are here beginning their education, planning to transfer to another institution to continue toward a bachelor's degree that may also be available on our campus, or finishing our new bachelor's degree in Mechanical Engineering Technology at the Kehoe Center.

A VERY SPECIAL THING HAPPENS WHEN YOU VISIT OUR COLLEGE CAMPUS. You will begin encountering people who take pride in their role toward helping students succeed. It may be the campus security officer in the parking lot or maintenance workers and other staff as you progress toward your destination. Once in a building, you will encounter committed and caring faculty and staff who will engage you, guide you and support you as you progress toward your goal, whether it is a course, a certificate or a college degree.

PLEASE TAKE A MOMENT TO EXPLORE OUR CATALOG. You will discover a wide range of information about programs, services, and opportunities in healthcare, business, engineering, manufacturing, information technology, public service, and arts and sciences. You will also discover that, along with our excellent quality, the cost of attending North Central State College remains one of the most affordable tuition rates in the state of Ohio.

In addition, I invite you to explore Career Coach, which will give you localized information on careers, training for those careers, regional job opportunities available in those fields, along with salary and benefits.

WHEN YOU COMBINE THE VALUE OF YOUR EDUCATION HERE AT NC STATE with the proven, increased earning potential of receiving a baccalaureate degree, an associate degree, or an industry recognized certificate, I hope you will agree that this college is the place to start, and finish, your college education.

WE ARE VERY PROUD OF OUR STRONG REPUTATION. North Central State College is a leader in excellent and affordable quality higher education with employable and transferable programs to help our community and its citizens prosper. We look forward to seeing you on campus very soon! It is an honor and a privilege to be of service.

Sincerely,
Dr. Dorey Diab, President

COLLEGE CONTACTS

NORTH CENTRAL STATE COLLEGE
2441 Kenwood Circle
Mansfield, Ohio 44906
419-755-4800
888-755-4899

CRAWFORD SUCCESS CENTER
130 North Walnut
Bucyrus, Ohio 44820
419-755-9039

JAMES W. KEHOE CENTER
175 Mansfield Avenue
Shelby, Ohio 44875
419-755-4700

ACADEMIC AND STUDENT SERVICES

Office of the President	157 Fallerius	419-755-4811
Vice President for Academic Services/Chief Academic Officer	158 Fallerius	419-755-4733
Admissions	103 Byron Kee	419-755-4761
Bookstore		419-747-5401
Campus Life/Student Engagement	214 Eisenhower	419-755-4313
Campus Recreation Center		419-755-4041
Career Development	102 Byron Kee & 163 Kehoe	419-755-4896
Cashier's Office	140 Byron Kee	419-755-4722
Child Development Center		419-755-5600
College Credit Plus	108 Byron Kee	419-755-4732
Disability and Personal Counseling	138A Byron Kee	419-755-4727
eLearning and Innovation	150A Fallerius	419-755-4706
Financial Aid	143 Byron Kee	419-755-4899
Library/Bromfield Learning Commons	131 Bromfield	419-755-4331
Security/Public Safety – Main Campus	161 Riedl Hall	419-755-4218
Student Records	142 Byron Kee	419-755-4857
Student Success and Transition Center	136 Byron Kee	419-755-4536
TRIO Support Services	120A Byron Kee	419-755-9015
Tutoring Center	119 Fallerius	419-755-3322
Workforce Development	156 Kehoe	419-755-4740

ACADEMIC DIVISIONS

LIBERAL ARTS	141 Fallerius	419-755-4876
Associate of Arts, Associate of Science, Communication, Criminal Justice, English, Human Services, Humanities, Mathematics, and Social Sciences		
HEALTH SCIENCES	201 Health Sciences	419-755-4805
Agriculture Management, Biology, Bioscience, Chemistry, College-NOW Bioscience, Health Information Technology, Health Services Technology, Nursing, Occupational Therapy Assistant, Physical Therapist Assistant, Radiological Sciences, and Respiratory Care		
BUSINESS, INDUSTRY AND TECHNOLOGY	150 Kehoe	419-755-4700
Accounting, Business Administration, College-NOW Business, College-NOW Engineering, Engineering Technology, Industrial Technology, Information Technology, Physics, and Visual Communications Media and Technology		

BUSINESS SERVICES

Business Office	156 Fallerius	419-755-4816
Human Resources	156 Fallerius	419-755-4871
Information Technology Services	141 Fallerius	419-755-4734
Marketing and Public Relations	132 Byron Kee	419-755-4810
North Central State College Foundation	122 Byron Kee	419-755-4753

PROFILE OF THE COLLEGE

ABOUT THE COLLEGE

Prior to its charter as North Central Technical College, the institution was known as the Mansfield School of Technology. It was initiated by the Mansfield Board of Education in September, 1961, and approved by the State Department of Education. The rationale of the Mansfield Board of Education was to establish a two-year, post-high school diploma granting school that would prepare men and women for various careers. The graduates were satisfying the rapidly-growing employment needs in the industrial and business society of the area.

The original location of the Mansfield School of Technology was 218 Marion Avenue, Mansfield, Ohio. The limited physical facilities, projected enrollment growth, and need for additional student services led the school's administration, advisory committees, and the Mansfield Board of Education to seek the creation of a Technical College District in compliance with the Ohio Revised Code. North Central Technical College was approved by the Ohio Board of Regents and certified by the Secretary of State on September 26, 1968. This action of the Ohio Board of Regents and the Secretary of State created the Technical College District in the contiguous counties of Ashland, Crawford, and Richland. In August of 1999, the Board of Trustees changed the name of the college to North Central State College.

Currently, the NC State-OSU campus houses North Central State College and a regional campus of The Ohio State University. Certain physical facilities and services are shared by each institution. The campus represents a model in sharing resources by two separate institutions. Each institution has its own faculty, curricula, policies, and operating procedures. NC State also maintains the James W. Kehoe Center for Advanced Learning in Shelby and the Crawford County Success Center in Bucyrus.

A Board of Trustees, the members of which are public representatives of Ashland, Crawford, and Richland counties, directs North Central State College. Copies of North Central State College's most recent financial statement are available upon request. If interested, please contact the Business Office at 419-755-4816.

ACCREDITATION AND MEMBERSHIPS

ACCREDITATION

North Central State College is regionally accredited through the Higher Learning Commission's* Open Pathways Program. Through the Open Pathways program, the College focuses on improving systems and processes to better meet the College's mission while maintaining accreditation.

North Central State College was chartered by the Ohio Board of Regents as a state-assisted institution of higher education and is approved by the Ohio Department of Higher Education; U.S. Department of Education; State Department of Education for Veterans; Bureau of Vocational Rehabilitation; and the Department of Justice, Immigration, and Naturalization Service.

**Higher Learning Commission, 230 S. LaSalle St., Suite 7-500, Chicago IL, 60604 • 1-800-621-7440*

MEMBERSHIPS

The College is either a member of or recognized by the following organizations:

- Health Sciences
    - Accreditation Commission for Education in Nursing (ACEN)
    - Commission on Accreditation in Physical Therapy Education (CAPTE)
    - Committee on Accreditation for Respiratory Care (CoARC)
    - Accreditation Council for Occupational Therapy Education (ACOTE)
    - Joint Review Committee on Education in Radiological Technology (JRCERT)
- Business Industry and Technology
    - National Institute for Metalworking Skills (NIMS)
    - Accreditation Council for Business Schools and Programs (ACBSP)
- Support Services
    - American Association of Collegiate Registrars and Admissions Officers
    - American Association of Community and Junior Colleges
    - Mansfield-Richland Area Chamber of Commerce
    - National Association of Student Financial Aid Administrators
    - Association of Community College Trustees (ACCT)
    - State Affiliations
    - Ohio Association of College Admission Counseling (OACAC)
    - Ohio Association of Community Colleges (OACC)
    - Ohio Association of Student Financial Aid Administrators
    - Ohio Association of Two-Year Colleges (OATYC)
    - Ohio Board of Nursing RN & LPN
    - Ohio Department of Health (STNA)
    - Ohio State Board of Pharmacy
    - Community Health Worker Certificate (Ohio Board of Nursing)

COLLEGE MISSION

Providing individuals with the knowledge, skills and inspiration to succeed in their chosen paths.

COLLEGE VISION

North Central State College is committed to being a leader in excellent affordable higher education and a partner in achieving greater community prosperity and a better quality of life.

COLLEGE VALUES

In all we do, we value a culture of integrity, inclusion, and excellence.

We value our students and are committed to creating an accessible environment that is affordable, caring, supportive, inclusive, and learner-centered.

We value our employees and are committed to creating an environment that is culturally diverse, collaborative, and respectful.

We value our communities and are committed to creating an environment that is innovative, responsive, and accountable.

COLLEGE-WIDE LEARNING OUTCOMES

- Critical Thinking
- Communication - Oral and Written
- Information Literacy
- Intercultural Knowledge and Competence
- Quantitative Literacy
- Professional/Soft Skills

ENDS POLICIES STATEMENTS

1.0 GLOBAL ENDS POLICY

North Central State College exists for the citizens of its service region to have the knowledge and skills to succeed in their chosen path for learning, work, or enrichment, sufficient for the college to justify available resources.

1.1 DIVERSITY

The College maintains an environment that encourages tolerance of differences while recognizing similarities and providing equalizing opportunities for participation by all.

1.2 EQUAL OPPORTUNITY

The proportion of students from economically or educationally disadvantaged backgrounds is at least equivalent to the proportion in the local communities.

1.3 CAREER READINESS AND DEVELOPMENT

Students acquire and enhance relevant business and industry credentials, job skills, work habits, job leads and pathways to economic self-sufficiency especially in high demand technologies.

1.4 TRANSFERABILITY

Students prepared for advanced academic success will have the ability and the prerequisite academic experience sufficient for entry into a four-year college or university.

1.5 ENRICHMENT

Enrichment opportunities exist to reflect community needs and values.

FOUNDATION

The mission of the North Central State College (NCSC) Foundation is to assist the college in providing lifelong learning opportunities by securing financial and community support. With the help of area donors, friends, partnerships, and leaders, the NCSC Foundation empowers individuals to change their lives through education. The Foundation supports preparing a future ready workforce for area employers and contributes to the betterment of the community.

Each year the NCSC Foundation administers over $200,000 in scholarships to students in financial aid. The Foundation also serves the college with the following goals:

- Develop financial resources for college projects, including scholarships, programs, technology, and capital improvements that support the NCSC mission.
- Partners with members of the community to advance the mission of the college, offering educational opportunities, and services for students.
- Support creative, forward-thinking projects of faculty and staff in order to be the most current technological institution possible.
- Harness the support of alumni to expand relationships, give back, stay informed, increase skills, and enhance the value of a student's degree.

For more information, call the Foundation Executive Director, Chris Copper at 419-755-4753.

All gifts to the North Central State Foundation are tax deductible under section 501(c) (3) of the Internal Revenue Code. The Foundation is a tax-exempt organization, formed in 1990 to seek, receive, and distribute funds, equipment, property, and other donations for the benefit of the students and programs provided by NCSC.

PHYSICAL FACILITIES

Located on a 600-acre tract of land, the campus offers a variety of physical facilities to support many academic and extracurricular activities. The campus consists of ten buildings, encompassing an area of approximately 250,000 square feet.

The **Henry R. Fallerius Technical Education Center** contains classrooms, lecture halls, technical laboratories, data center, faculty offices, tutoring, the Liberal Arts Division, and the administrative offices for North Central State College

The **Dwight D. Eisenhower Memorial Center** serves as a comprehensive student center which includes the student union, quiet and active game areas, music-listening rooms, cafeteria, and a student coffee house.

The **Louis Bromfield Hall** includes the Information Commons.

The **Byron Kee Center for Student Success** houses a comprehensive array of services and educational support activities to assist students as they pursue their educational careers. Departments located in Kee Hall include Admissions, Recruitment and Gateway Services, Student Records, Financial Aid, Cashier's Office, Disability Support Services, Career Services, Institutional Advancement, and the Foundation Office. Support offered in Byron Kee include registration, assessment, tutoring, academic advising, and personal counseling, along with support courses in reading, writing and college survival skills.

The **Health Sciences Center** contains classrooms, a lecture hall, laboratories, faculty offices, and the Health Sciences Division.

The **Child Development Center** provides childcare services for the children of students and staff and serves as a teaching laboratory for college students preparing for careers working with young children and their families.

The **Campus Bookstore** sells textbooks, academic supplies, and related items.

The **Campus Recreation Center** contains a gymnasium, weight room, cardio-aerobic fitness equipment, locker room facilities and offers intramural sports throughout the year.

Riedl Hall houses the main campus security office.

The **James W. Kehoe Center for Advanced Learning**, located in Shelby, houses the Ralph Phillips Conference Center, classrooms, laboratories, faculty offices, College-NOW Engineering and Business programs, Workforce Development, and the Business, Industry and Technology Division.

The **Crawford Success Center** (CSC), located in Bucyrus, is dedicated to raising the educational attainment in Crawford County by creating and supporting community access to North Central State College. The 7,000 square feet space houses offices, classrooms, computer labs, and meeting space for small and large groups.

GUARANTEE OF JOB COMPETENCY

North Central State College guarantees that graduates are occupationally competent. The guarantee applies only to job skills identified in the program outcomes for a specific degree. The guarantee applies only to graduates employed on a full-time basis in a position directly related to the area of their program concentration, during the 12 months immediately following their graduation.

If a graduate is judged by his or her employer to be lacking in technical job skills identified by the program outcomes for his or her specific degree program, North Central State College under the conditions of the guarantee policy will provide the graduate up to nine, tuition-free, semester credit hours of additional training. Cost of books, insurance, uniforms, laboratory and activity fees, and other course-related expenses are the responsibility of the graduate and/or the employer.

SPECIAL CONDITIONS FOR THE GUARANTEE

The employer must provide to the College:

- Identification, in writing, of areas of deficiency within six months of the graduate's initial employment.
- Verification, in writing, of specific job skills the employee is lacking which relate directly to the degree's program outcomes.
- A written educational plan for retraining developed in cooperation with the appropriate academic department at the College.

Retraining will be limited to nine semester hours of credit related to the identified skill deficiency and to those classes regularly scheduled during the period covered by their training plan and must be completed within a calendar year from the time the educational plan is agreed upon.

The guarantee does not imply the graduate will pass any licensing or qualifying examination for a particular career.

NOTICE OF NONDISCRIMINATION

It is the policy of North Central State College not to discriminate based on sex, race, age, creed, religion, national origin, disability status, veteran status or sexual orientation in its educational programs, activities, or employment practices.

Title VI of the Civil Rights Act of 1964 prohibits discrimination based on race or national origin in any educational program or activity of North Central State College.

Title IX of the Educational Amendment of 1972 prohibits discrimination based on sex in any educational program or activity of North Central State College.

Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act (ADA) of 1990 prohibits discrimination based on handicap status in any educational activity of North Central State College.

An internal, formal grievance procedure for violation of such acts has been set forth by North Central State College. Information on this policy is located in Student Records, Human Resources, and the Admissions, Advising and Enrollment Services Office. Inquiries regarding the College's obligation in this area should be directed to the Enrollment Services Office. Inquiries regarding the College's obligation in this area should be directed to:

TITLE VI & IX COORDINATOR
Vice President for Academic Services/Chief Academic Officer
North Central State College
2441 Kenwood Circle
Mansfield, Ohio 44906
(419) 755-4538

SECTION 504 COORDINATOR
Specialized Support Services Coordinator
North Central State College
2441 Kenwood Circle
Mansfield, OH 44906
419-755-4727
419-755-5611 (TTY/Voice)

TRANSFER PROGRAM INFORMATION

North Central State College welcomes transfer students--including

- Students wishing to transfer out their associate degree credits to continue their education toward bachelor and master degrees at other colleges/universities
- Students wishing to transfer in credits from other institutions to earn an NCSC associate degree
- Transient students wishing to take one or more NCSC courses for transfer back to another institution

For all transfer students—North Central State College offers high-quality education with hands-on and project-based learning, in small classes where you can easily connect with faculty and other students, and with intensive support services and extremely affordable tuition.

TRANSFERRING FROM NORTH CENTRAL STATE COLLEGE

Starting your bachelor degree at North Central State College makes sense and is easy. Finish your first two years while still living at home and keeping your part-time job, taking in person or online classes, and then transfer your credits to the bachelor program and university of your choice. We will be there every step of the way to answer questions and help you transfer seamlessly.

The steps to transfer are simple:

1. Tell us your transfer goals when you start at NC State—your career interests and the bachelor's program and the university or type of university where you want to continue your studies.
2. Meet with your advisor each semester to refine and focus your interests and to plan a program at NC State that will transfer intact to the university you choose.
3. Attend visits and consultations with the university representatives that your NC State advisor arranges.
4. Start your third year in the university bachelor's program with your program well defined and university connections made.

TRANSFER PARTNERS

NC State has many transfer partners and articulation programs to make transfer even easier:

- Ashland University: Articulation agreements for Bachelor degree programs in Biology, Communication Studies, Criminal Justice, Fine Art/Graphic Design, Nursing, Psychology, and Social Work
- Baldwin Wallace University: Articulation agreement for AA/AS/AAS degrees to BA/BS
- Bowling Green State University: Articulation agreements for the Bachelor of Science technology degree in Mechatronics Engineering Technology
- Capital University: Pathways from AA degrees to BA degrees in Communication, Public Relations, Business Management, History, Philosophy, and Psychology
- Eastern Michigan University: Articulation agreements for Bachelor of Science degree programs in Mechanical Engineering Technology, Electrical Engineering Technology, and Electrical and Computing Engineering
- Franklin University: General articulation agreement for AA/AS degrees and 2+2 and 3+1 transfer of AAS degrees to Bachelor of Science programs. Specific pathways for Criminal Justice and Psychology
- Heidelberg University: General articulation agreement for AA/AS degrees and AAS credits as well as dual admission and enrollment agreement
- Herzing University: General articulation agreement for Bachelor of Arts and Bachelor of Science programs in various disciplines
- Indiana Wesleyan University: Pathways in Accounting, Business Administration, Business Management-Marketing, Human and Social Work Services, and Social Work
- Kent State University: General transfer agreement for OTM courses and specific pathway for RN to BSN
- Mount Vernon Nazarene University: Pathway for BS in Social Work
- Muskingum University: General articulation agreement for AA/AS/AAS to BA/BS
- Ohio University: Articulation agreements for Bachelor of Science degrees in Applied Management, Bachelor of Technical and Applied Studies (BTAS), Bachelor of Science in Nursing (BSN), and Bachelor of Criminal Justice (BCJ)
- Old Dominion University: Pathway for BS in Electrical Engineering Technology and Mechatronics Systems Technology Concentration
- Otterbein University: General articulation agreement for AA/AS/AAS to BA/BS
- Tiffin University: General education articulation agreements for AA/AS/AAB/AAS to BS and pathways for Business and Criminal Justice
- University of Cincinnati: Articulation agreements for AA/AS/AAS to Bachelor Degrees in Communication Studies, Criminal Justice, Education, English, Psychology, and Radiological Sciences
- Western Governors University: Articulation agreements for Bachelor Degree programs in Business, Education, Health Services and Nursing, and Information Technology

OHIO TRANSFER MODULE (OTM)

The Ohio Transfer Module helps transferring students by assuring them the quality of the general education courses that they complete but also by ensuring that the credits earned for these OTM courses will be accepted for transfer by other colleges and universities in the University System of Ohio.

TRANSFER MODULE GUARANTEE.

The Ohio Department of Higher Education, following the directive of the Ohio General Assembly, developed a statewide Articulation and Transfer Policy to facilitate movement of students and transfer credits from one Ohio public college or university to another. Students are guaranteed the transfer of applicable general education credits among Ohio's public colleges and universities and equitable treatment in the application of credits to admissions and degree requirements.

The purpose of the state policy is to avoid duplication of course requirements and to enhance student mobility throughout Ohio's higher educational system. Since private colleges and universities in Ohio may or may not be participating in the transfer policy, students interested in transferring to a private institution are encouraged to check with their advisor or the college or university of their choice regarding transfer agreements.

NC STATE'S TRANSFER MODULE.

Consistent with Ohio's Articulation and Transfer Policy, North Central State College's transfer module consists of 38 semester credit hours of coursework in English composition, mathematics, arts and humanities, social and behavioral sciences, and natural and physical sciences. Once a student completes the NC State Transfer Module in its entirety, with a "D" or better in each course, the entire module is guaranteed to be transferable to any state-supported college or university in Ohio in place of that institution's module. The student must, of course, meet the admissions criteria of the particular state-supported institution before the module can be transferred. Also, students may be required by the receiving institution to meet additional general education requirements beyond those included in the Transfer Module, so long as the same requirements apply to native students.

Students meeting the requirements of the Transfer Module are subject to the following conditions:

- The policy encourages receiving institutions to give preferential consideration for admission to students who complete the Transfer Module with a "D" or better in each course and who have successfully completed altogether at least 60 semester credit hours. These students must have an overall grade-point average of 2.00 in Transfer Module courses to be given credit for the Transfer Module, and only courses in which a "D" or better has been earned will transfer.
- The policy encourages receiving institutions to admit, on a non-preferential consideration basis, students who complete the Transfer Module with a grade of "D" or better in each course and who have successfully completed altogether less than 60 semester credit hours. These students will be able to transfer all courses in which they received a grade of "D" or better.

Admission to a given institution does not guarantee that a transfer student will be automatically admitted to all majors, minors, or fields of concentration at that institution. However, once admitted, transfer students shall be subject to the same regulations governing applicability of catalog requirements as all other students. Furthermore, transfer students shall be accorded the same class standing and other privileges as all other students on the basis of the number of credits earned. All residency requirements must be successfully completed at the receiving institution before the granting of a degree.

TRANSFER MODULE GUIDANCE.

To facilitate transfer with maximum applicability of transfer credit, prospective transfer students should plan a course of study that will meet the requirements of a degree program at the receiving institution. Specifically, students should identify early in their collegiate studies an institution and major to which they desire to transfer. Students should also determine if there are any special course requirements that can be met during their time at NC State. This will enable students to plan and pursue a course of study that will articulate with the receiving institution's major. Students will work with their advisor to get the information they need regarding transfer and the contacts for communicating with the college or university to which they plan to transfer.

COURSES INCLUDED IN THE NORTH CENTRAL STATE COLLEGE TRANSFER MODULE.

These are the courses included in NC State's transfer module (also listed on the website of the Ohio Department of Higher Education).

AREAS	COURSES	CREDITS
I. ENGLISH/ORAL COMMUNICATION	**CHOOSE TWO:**	
	ENGL 1010 English Composition I	3
	ENGL 1030 English Composition II	3
	COMM 1010 Speech	3
II. MATHEMATICS, STATISTICS AND FORMAL LOGIC	**CHOOSE TWO:**	
	MATH 1110 College Algebra	4
	MATH 1130 Trigonometry	4
	MATH 1150 Calculus I	5
	MATH 1151 Calculus II	5
	MATH 2010 Calculus III	4
	MATH 2030 Differential Equations	5
	STAT 1010 Probability and Statistics	3
III. *ARTS/ HUMANITIES	**CHOOSE TWO:**	
	ENGL 2050 American Literature I	3
	ENGL 2070 American Literature II	3
	ENGL 2090 Introduction to Fiction	3
	HIST 1010 American History I	3
	HIST 1030 American History II	3
	HIST 1070 Western Civilization II	3
	HUMA 1010 Introduction to the Humanities	3
	MUSC 1010 Music Appreciation	3
	PHIL 1010 Western Philosophy	3
	PHIL 1110 Ethics	3
	THEA 1010 Introduction to Theatre	3
IV. SOCIAL SCIENCES	**CHOOSE TWO FROM TWO DIFFERENT SUBJECT AREAS:**	
	ECON 1010 Introduction to Economics	3
	ECON 1510 Microeconomics	3
	POLT 1010 American National Government	3
	PSYC 1010 Introduction to Psychology	3
	PSYC 1070 Introduction to Women's Studies	3
	PSYC 2010 Human Growth and Development	3
	PSYC 2050 Abnormal Psychology	3
	PSYC 2090 Social Psychology	3
	PSYC 2100 Personality Theory	3
	SOCY 1010 Introduction to Sociology	3
	SOCY 2010 Cultural Diversity and Racism	3
V. NATURAL SCIENCES	**CHOOSE THREE, WITH AT LEAST ONE LAB COURSE:**	
	BIOL 1550 Microbiology for Health Professionals	3
	BIOL 1710 Introduction to Anatomy and Physiology	3
	BIOL 2751 Human Anatomy and Physiology I	4
	BIOL 2752 Anatomy and Physiology II	4
	CHEM 1030 Chemistry	3
	CHEM 1210 Chemistry	5
	CHEM 1220 Chemistry II	5
	PHYS 1010 Introductory Physics	3
	PHYS 1110 General Physics I	4
	PHYS 1130 General Physics II	4

NC STATE TRANSFER DEGREE PROGRAMS

All NC State degree credits will transfer in whole or in part to other colleges and universities. The Associate of Arts and the Associate of Science degrees consist largely of general education credits, and they are especially designed for transfer in entirety. However, many or most of the credits in applied degrees will also transfer and will allow you to get work experience while or before continuing your education. The choice of a degree program depends on your career goals and individual situation. All students should discuss their goals and interests during their first semester at NC State.

TRANSFER TO NORTH CENTRAL STATE COLLEGE

North Central State College makes the transfer of credits in easy for students who have completed course work at an institution other than North Central State College and would like that coursework to be considered for credit towards a North Central State College program/degree.

To ensure a seamless and successful transition, NC State follows these guidelines and procedures for students transferring credits in:

- NC State Admissions alerts all incoming students of the potential for the awarding of prior-earned credit.
- All students with prior credit wishing to be evaluated need to contact their previous institution(s) and have an official transcript sent to North Central State College Registrar (Student Records) by mail or through a 3rd party transcript service.
- Credits are accepted only from institutions that have regional or national accreditation. Credits are not awarded for courses where the student received below a D- (prior to fall 2006). For courses completed before September 2005, a grade of at least a C- must have been received in any course accepted for transfer credit. For courses completed after September 2005, grades of D-, D, and D+, are considered for transfer credit unless a specific department requires a higher grade for non-transfer students. In addition, some transfer courses with D-, D, and D+ grades may not meet prerequisite and graduation requirements for specific degree programs. A minimum C- grade is required in all transfer courses for the NC State courses that are Pass/No Pass. Courses that are considered for transfer credit must meet the same grade requirements as the NC State courses. See the Program Description section of the catalog and individual program Curriculum Worksheets for specific course grade requirements.
- Transcripts are forwarded to the Academic Services Office and are evaluated within 30 business days.
- After evaluation, transcripts are returned to Student Records where all applicable transfer credit(s) are posted to the student's academic record, and a summary report of such credit is then sent to the student.

TRANSCRIPT EVALUATION APPEALS

North Central State College has an appeals process for the use of any student who disagrees with the amount of transfer credit he/she has been given by the College. Details about this procedure and the steps involved in filing an appeal are available to students upon request in the Office of the Chief Academic Officer. (Every other state-supported college or university in Ohio is also required to have such an appeals process regarding transfer credit decisions.) If a transfer student's appeal is denied by the institution after all appeal levels within the institution have been exhausted, the student can appeal to the state level Articulation and Transfer Appeals Review Committee. The Appeals Review Committee reviews and recommends to institutions the resolution of individual cases of appeal from transfer students who have exhausted all local appeal mechanisms concerning applicability of transfer credits at receiving institutions. (See also "Student Complaints Following Transfer Appeals at the Receiving Institution" on the Ohio Department of Higher Education website at https://www.ohiohighered.org/transfer/policy.)

TRANSIENT STUDENTS

Students who wish to take one or several courses at North Central State College will find it to be an easy and worthwhile experience. In the summer, NC State is an ideal place to take care of general education credits while at home on break from your college or university.

Federal financial aid is not available for transient students since federal financial aid rules require that the students be degree-seeking at the institutions where attending classes. Students, who are currently enrolled at another institution and wish to take classes at NC State as a transient student to transfer back to their home institution, need to pick up a Consortium Agreement from their home institution and submit it to the NC State Financial Aid Office. The students then pay their tuition out of pocket at NC State, and the home institution processes the aid and sends any aid the students are eligible for to them.

ADMISSIONS, RECRUITMENT AND GATEWAY SERVICES

NC State has an "open door" admissions policy. General admission is open to (a) high school graduates; (b) persons who have attained high school equivalency (GED); and (c) select high school students who qualify under specific Early Learning Programs (College Credit Plus and College-NOW). If you do not meet these criteria, you may still be eligible for admission. Please contact Admissions, Recruitment and Gateway Services for specific information.

ADMISSIONS AND RECRUITMENT

Recruiters assist new students, transfer students and students returning to college with questions related to program information and the steps involved with college admission. A personal visit allows the Admissions Office to answer all questions and make the transition to college an easy one.

For more information about enrolling in the college and completing the enrollment checklist, contact the Admissions Office in Byron Kee at 419-755-4761, or by email at admissions@ncstatecollege.edu.

GATEWAY SERVICES

North Central State College believes a strong start is essential to achieving success in college. A strong start consists of a series of steps designed to communicate the process for selecting, entering and completing a program of study. To achieve this, the Student Success Coaches work through the Student Success and Transition Center. Academic Liaisons focus on persistence and completion and report to each division academic dean.

STUDENT SUCCESS AND TRANSITION SERVICES

Success Coaches provide academic advising and support services for new, returning, developmental, and probation students in the Student Success and Transition Center. Success Coaches are often the first college advisors that work closely with students to identify career goals, discuss mandatory placement testing, create individual academic plans, provide registration assistance, and coordinate mandatory Connect to College - new student orientation. Success Coaches arrange academic and personal support services and create academic plans that guide students to meet completion goals. Upon completion of developmental or first semester coursework, students are transitioned to the appropriate Academic Liaison for additional advising support.

ACADEMIC ADVISING

NC State provides a 3-tiered advising structure to support the needs of students as they progress to completion. Students can find their assigned advisor's information within student academic planning and registration software on MyNC.

Success Coaches are advisors located in Student Success and Transition Services. Each provide academic planning and registration services for new and returning students as well as developmental and probation status students. Advisors work closely with developmental students as part of the DIRECTIONS advising program. DIRECTIONS students are required to meet each semester with an assigned Success Coach to ensure that the student is taking the necessary steps to be successful.

Academic Liaisons are advisors in each division that provide academic advising to college-ready students after completion of developmental coursework. Liaisons specialize in divisional and/or program advising and continue to assist students with academic planning and registration.

Faculty Advisors are assigned to each student based on his or her declared major. Students with curriculum specific questions are encouraged to meet with the faculty advisor as they enter technical field coursework.

ADDITIONAL PROGRAM REQUIREMENTS

The Associate Degree Nursing, Practical Nursing, Occupational Therapy Assistant, Radiological Sciences, Respiratory Care, Physical Therapist Assistant, Human Services, and Criminal Justice departments publish student handbooks. These student handbooks delineate specific department/program policies which are not explained in the general catalog. The specific policies as described in the department student handbooks take precedence over any general policy outlined in the College catalog. Copies may be requested through divisional offices.

BACKGROUND CHECK AND DRUG SCREENING

An acceptable Bureau of Criminal Identification and Investigation (BCI&I) report/FBI background check is required to enter the clinical or practicum sequence of many of the health science programs and the Police Academy. Some programs also require drug screening. Contact the specific Program Directors for current information.

CPR

Program CPR requirements can be met by taking the appropriate non-credit coursework or HLST 1010.

HEALTH PHYSICAL AND REQUIRED IMMUNIZATIONS

Health Services Technology, Occupational Therapy Assistant, Physical Therapist Assistant, Practical Nursing, Radiological Sciences, Registered Nursing, and Respiratory Care programs all require an acceptable health physical and verification of immunizations/immunities in order to participate in the program clinical, practicum, or lab activities. Contact the specific Program Directors for current information.

LIABILITY INSURANCE

Students in Bioscience, Health Services Technology, Human Services, Nursing (R.N. and P.N.), Occupational Therapy Assistant, Physical Therapist Assistant, Radiological Sciences, and Respiratory Care programs are required to purchase professional liability insurance. Over the past several years,

there have been a number of nationwide liability claims involving students enrolled in health technologies. These claims include error, negligence and omission, as well as personal torts. A student in one of these technologies has personal responsibility for his/her own actions in contact with patients, even though the student is not yet licensed, registered, or otherwise accredited for his/her profession. Coverage for students pays up to $1,000,000 for each claim. The premium is assessed and paid through student fees. No student is permitted to attend a clinical facility or practicum unless covered by the student liability insurance program.

ARTICULATION

Students in selected programs in area high schools and joint vocational schools may receive advanced standing in North Central State College program based on articulation agreements between North Central State College and the high school or joint vocational school. These agreements are annually reviewed annually. For further information or specificities of a particular agreement, contact the Admissions Office. Currently, there are articulation agreements with the following schools:

- Ashland County - West Holmes Center
- Knox County Career Center
- Madison Comprehensive High School
- Mansfield Senior High School
- Pioneer Career & Technology Center
- Tri-Rivers Career Center
- Wayne County Schools Career Center

Students seeking articulation credit must:

1. Submit an application to NC State within two years of high school graduation (unless indicated otherwise in the preface to a list of courses).
2. Request articulation credit by completing the form available in the NC State Office of Student Records.
3. Submit an official high school transcript to the NC State Office of Student Records.

In addition to the Articulation Agreements described above, various special arrangements exist regarding credit-by-examination available to vocational and Tech Prep graduates under certain circumstances. Details can be found in the articulation documents signed by representatives of NC State and the respective schools.

ASSESSMENTS

New student assessments, such as the ACCUPLACER, Computer Literacy, and the TEAS, are administered through the Student Success and Transition Center. The CSI (College Student Inventory) is also administered through this office.

ACCUPLACER

North Central State College assesses new and returning students for course placement purposes with an assessment programs called the ACCUPLACER. The ACCUPLACER assess students' skills in the following areas: reading, writing, and mathematics.

Students should complete this assessment as soon as they apply to the college and before enrolling in any classes. The ACCUPLACER must be completed before enrolling in ENGL 0040 , ENGL 1010 , or any math or statistics courses. Students are encouraged to review computerized test taking techniques as well as reading/writing/math concepts before taking the assessment. The Student Success and Transition Center can provide information on how to prepare for the ACCUPLACER by using certain websites and other resources.

Students who have already earned an associate degree or a bachelor degree may not be required to take the ACCUPLACER. Furthermore, students are not required to take certain portions of the ACCUPLACER if they have achieved the required scores in COMPASS or the various ACT subtests or if those students are transferring in college credit for specific English and/or math classes. The following portions of the ACCUPLACER are waived based on the following criteria:

- Math - a score of 21 or higher on the ACT math subtest, or transfer of credit for any of the following: MATH 1110, MATH 1150, STAT 1010.
- Reading - a score of 21 or higher on the ACT reading subtest, or transfer credit for ENGL 1010.
- English - a score of 18 or higher on the ACT writing subtest, COMPASS or ACT e-Write of 8 or higher, or transfer credit for ENGL 1010.

The first attempt of the ACCUPLACER is free. There will be a fee of $25 for each retest. Students who want to schedule an appointment to take the ACCUPLACER should contact the Student Success and Transition Center. Students who are unsure whether they need to take assessment testing should contact the Admissions Office.

COMPUTER LITERACY

This assessment is required of any student wishing to take a computer class for the first time at the college, except for CISS 1020. This assessment evaluates the student's knowledge of Windows, email, Microsoft Word, the Internet, and skills in typing. This may be waived with proper transfer credit. More information is available at the Student Success and Transition Center. The first attempt of the Computer Literacy is free. There will be a fee of $15 for each retest.

TEAS

The TEAS is required for admission to the Associate Degree Nursing and Practical Nursing programs. The test is a 4-hour assessment on reading, writing, math, and science that requires prior registration and fee payment at the Cashier's Office, Room 140 Byron Kee. Students can acquire information on how to prepare from the Student Success and Transition Center. Some rules and restrictions apply.

Associate of Technical Studies (ATS)

The Technical Studies program allows a student who has specific needs that are not met by any single program at the College to combine elements of several technologies in a meaningful and logical way. Appropriate administrators and faculty will assist the student in formulating a course of study that closely matches his/her goals and needs. The course of study will be documented and upon successful completion of the program, the student will be awarded the Associate of Technical Studies degree.

To pursue Technical Studies, a student must complete a special Technical Studies application form available from any academic division office. A student will be considered admitted to the Technical Studies program only after his/her course of study has been formulated and approved by the appropriate administration and faculty.

College Credit Plus (CCP)

North Central State College is proud to partner with over 30 high schools in north central Ohio to create pathways from high school to college that encourage qualified students to earn dual credit - high school and college credit - while they are still in high school.

As of the 2015-2016 academic year, the Ohio Board of Regents requires that districts work together to offer college course work that will result in transcripted college or high school credit. What was known before as "Dual Enrollment," "Post-Secondary Enrollment," or "Seniors to Sophomores (S2S)" are all part of the College Credit Plus legislation.

College-NOW

Bioscience

Through a partnership between area high schools, businesses, and North Central State College, qualified students have the opportunity to earn a Bioscience associate degree right along with their high school diploma.

Business

Through a partnership between Pioneer Career and Technology Center, area high schools, businesses, and North Central State College, qualified high school students have a unique opportunity to earn an associate degree in business along with their high school diploma. This program is ideal for students who wish to complete their first two years of college while in high school and then transfer to a four-year college or university business program.

Engineering Technology

College-NOW Engineering Technology is a two year program that allows high school juniors to enter North Central State College, in partnership with Pioneer Career and Technology Center, on a track to earn an associate degree in Integrated Engineering Technology in conjunction with their high school diploma. Coursework is designed for students to meet all high school graduation requirements, associate degree requirements, and transition to the college's Bachelor's of Applied Science in Mechanical Engineering Technology program.

For more information on the Early College Programs, please see www.college-now.org.

Developmental Studies

Many adult students, as well as students just out of high school, have difficulties making the transition to college. These transition difficulties are most apparent in the areas of math, reading and writing, study skills, test-taking skills, time management, and decision-making. The purpose of the following courses is to help the student gain the necessary background and coping skills for a successful college experience.

- CHEM 1010 - Introduction to Chemistry
- ENGL 0010 - College Composition Lab
- ENGL 0040 - Integrated Reading and Writing
- FYEX 0070 - College and Career Success
- MATH 0020 - Basic Mathematics and Pre-Algebra Lab
- MATH 0030 - Foundations of Mathematical Reasoning Lab
- MATH 0065 - Algebra for Applied Geometry & Trigonometry
- MATH 0075 - Foundations of Mathematical Reasoning
- MATH 0084 - Introductory and Intermediate Algebra
- STAT 0086 - Algebra for Probability & Statistics

International Students and Transcripts

NC State has approval to admit foreign students. For further details, contact the Admissions Office at 419-755-4761.

The college offers English as a Second Language classes to international students who are not yet fluent in English.

A college-specific list of professional evaluation services is available for individuals requesting foreign credential evaluations. The recognized expertise and reliability of a professional evaluation report will provide a consistent and valid credit evaluation for the student and the College. The student will pay the cost for this service (approximately $120-$150). The full text of this policy, which includes the list of College-approved evaluation services, is available in the Student Records Office.

MANDATORY PLACEMENT GUIDELINES

Students are placed into English and mathematics courses based on a Multiple Measures placement process. This process ensures that enrolling post-high school students' skills are assessed as accurately as possible, and students are placed in classes that match their skill levels. A high school GPA of 2.7 or above (through the first semester of 12th grade) serves as the primary means of placing post-high school students into college-level English and mathematics courses. Accuplacer or ACT results serve as the secondary means of placing students whose GPA is below the threshold for college-level classes. Accuplacer and ACT results continue to be the mechanism for placing College Credit Plus students.

Based on their new-student assessment scores, students can be placed into one or more of the following prerequisite developmental courses:

- ENGL 0010 - College Composition Lab
- ENGL 0040 - Integrated Reading and Writing
- FYEX 0070 - College and Career Success
- MATH 0030 - Foundations of Mathematical Reasoning Lab
- MATH 0065 - Algebra for Applied Geometry & Trigonometry
- MATH 0075 - Foundations of Mathematical Reasoning
- MATH 0084 - Introductory and Intermediate Algebra
- STAT 0086 - Algebra for Probability & Statistics

Students who believe they have been misplaced into a reading/writing/math course should see an advisor in the Student Success and Transition Office about retesting or providing additional information noted above before the first day of the semester's classes. If students have further questions, they can contact the Student Success and Transition Center in 136 Byron Kee, 419-755-4764.

PROGRAM 60

Persons who are 60 years of age or older are entitled to register for courses on a space available basis, for no credit, at no charge other than any applicable lab fee. Textbooks must be purchased and are available at the College bookstore. For further details, contact the Admissions Office.

REGISTRATION

New students and students returning to NC State after an absence of one year or more are required to complete the application to the college and may have to take the Accuplacer assessment before enrolling. Student registration is conducted via the web or can be done in person at the Student Records Office. Students in the Directions Advising Program, on probation, receiving funding through the Trade Adjustment Act (TAA), or in the Post-Secondary College Credit Plus (CCP) are required to meet with a Success Coach/Advisor before registering each term. Web registration is available to eligible students each term beginning with the first day of Priority Registration and ending on the last day to add a class. The last day to add a class for a given term is 11:59 p.m. (EST) on the Tuesday prior to the start of the term. Contact the Office of Student Records with questions about eligibility or the Student Success and Transition Center for help with choosing classes.

Students have the right to appeal to the faculty instructing their desired course for entrance after the deadline. However, the College and the faculty reserve the right to deny a student entrance into any course after the established deadline. If the faculty gives the student permission to register, the student must present a signed permission form from the course instructor to the Office of Student Records no later than the end of the business day on the second Monday of the term. The student must also attend the first day of the scheduled class.

Courses can be dropped from a course through the withdrawal date noted on each course within the course search function on the school's website. Note that each course may have a different last date to drop based on the overall length of the course. Student initiated withdrawals are processed in the Office of Student Records.

Students are required to pay fees or arrange for fee payment on an installment basis by the payment deadline in each registration period. Students with unpaid fees may be administratively withdrawn from classes after the payment deadline has passed. Formal confirmation of class availability and fee adjustments is available in the Office of Student Records and/or the Cashier's Office.

SECOND DEGREE

Any student may wish to pursue a second degree. To be eligible, a student must complete all required coursework within a second technology as listed in the program section of this catalog, complete a Petition to Graduate form in the Office of Student Records, and pay the graduation fee. The Financial Aid Office can address questions concerning limitations of financial aid or veteran's benefits in support of second degree programs.

Several of the program technologies have more than one major. Students enrolled in any one of these several majors will be eligible for an associate degree in the technology upon completion of required coursework and the filing of the Petition to Graduate. Completion of a second or subsequent major within the same technology does not lead to a second degree. This applies to Business Administration, Criminal Justice, Industrial Technology, Information Technology and Visual Communications Media and Technology. The official student course transcript, however, will note the second major, if the student completed a Petition form in the Office of Student Records.

TECH PREP

College Tech Prep programs prepare high school students for the high-skill, high-demand technical careers required for an increasingly complex global economy. College Tech Prep emphasizes math, science and technology for Ohio's economic development.

Students master college prep math, science and English and build marketable skills in areas such as engineering, health, information technology, biotechnology, business, and many others. Program pathways align to an associate or bachelor degree or certification at North Central State College and other Ohio colleges and universities and/or employment.

The unique core of College Tech Prep is the pathway – a sequential course of study that aligns instruction and student services from high school to college and career.

- Employers identify skills that will be valuable for future careers. Colleges and high schools coordinate curriculum to develop these skills.
- Students with similar goals, interests and talents are engaged in a peer-friendly, educational environment.
- Teachers coach students in project-based learning - building skills needed for high tech, high paying careers.
- Industry support ensures rigorous instruction and marketplace relevance.
- Curriculum is aligned to industry standards.
- Academic coursework is integrated.
- Learning is focused on teamwork, critical thinking and problem-solving.
- Students acquire expertise and confidence required for tomorrow's top careers.
- Credentialing, internships, mentoring, co-opportunities and classes in industry settings support workforce development.

Early Access to College Pays Off

- Students begin college coursework in high school with the option of earning college credits and qualifying for advanced standing and scholarships.
- College costs are reduced and time to degree completion accelerated.
- Students build early relationships with college personnel---confidence is nurtured.
- Students explore career options before making costly decisions.

TRANSIENT STUDENTS

Students may complete a number of credits at another college and transfer them to NC State. The Transfer Credit Contract form, available in the Office of Student Records, must be completed in order to do this as smoothly as possible. Prior approval from the appropriate division dean is necessary. An official transcript of all credits earned as a transient student should be sent to the Office of Student Records in order to apply such credits to graduation requirements.

TUITION AND FEES

For the most current fees, see www.ncstatecollege.edu/about/tuition-and-fees.

Tuition and fees which include instructional, general, and a general career services fee will be charged at a rate of $181.60 per credit hour for residents of Ohio and $363.20 per credit hour for out-of-state and international students. This listing does not include fees charged for specific degrees or the cost of books.

** All fees are subject to change by action of the North Central State College Board of Trustees.*

MISCELLANEOUS FEES

Graduation Fee	$35.00
Transcript Fee - Mail	$5.00
Transcript Fee - Same Day	$15.00
Directed Study Fee	$30.00
Liability Insurance Fee	$40.00
Late Payment Fee	$15.00
Late Registration Fee	$30.00
Re-Registration Fee	$30.00
Alternative Delivery Fee	$35.00
Deferred Payment Option Fee	$15.00
Fingerprinting Fee - BCI	$25.00
Fingerprinting Fee - BCI/FBI	$50.00

CREDIT/CONTACT HOUR DIFFERENTIAL

All students will be assessed a fee for each course contact hour that exceeds the credit hours for which they have registered. Contact hour fees are based on the college program and type of course, and are subject to change without notice.

LAB FEES

Laboratory fees are assessed for the costs of supplies and materials used in selected courses. These fees are subject to change without notice.

LATE FEES

Late charges of $15.00 will be applied on all accounts not paid by the published fee payment deadline. Outstanding balances owed at the end of the semester will be charged an additional $50.00 late fee.

LATE REGISTRATION

A $30.00 Late Registration Fee will be assessed to students registering after the last day to pay fees and your fees will be due on the date of registration.

RE-REGISTRATION

A $30.00 re-registration fee will be charged to re-instate classes.

REFUND POLICY

The College has a policy of scheduled refunds for students who withdraw from credit courses during a standard academic term. (NOTE: Recipients of financial aid who withdraw from all classes should refer to the Return of Title IV Funds Policy in the Financial Aid section of this catalog.) Each individual course on the web site lists the refund and withdrawal dates. 100% and 50% refund amounts are determined by the percentage of course completed based on the beginning and ending dates for each course. Flexibly scheduled courses have individual refund and withdrawal dates.

RESIDENCY

A student's residency dictates the fees charged. The Office of Student Records is responsible for assuring that each student at North Central State College has the proper residency status. Residency information is available at the Office of Student Records. Students may apply for a change in their residency status through the Office of Student Records. Applications for a change in residency status must be submitted, along with all required documentation, no later than one week prior to the first day of the semester in order to be considered for that semester. Applications received after this date, if approved, will take effect for the subsequent semester.

FINANCIAL AID

Financial support is available to NC State students that makes a college education affordable. Funding for student aid comes from the federal and state governments, from the college and its foundation, and from private sources. Types of available aid include grants and scholarships, loans, and part-time employment. The college's Financial Aid office oversees and coordinates the administration of financial aid programs at the college; contact the office for further information.

The availability of financial aid and the policies governing the administration of financial aid programs are subject to change.

GENERAL AID ELIGIBILITY REQUIREMENTS

- High school graduate or GED recipient
- Admitted as a regular North Central State College student
- Seeking to earn a bachelor's or associate's degree, or aid-eligible certificate at the college
- Making satisfactory academic progress as defined by the college
- Other criteria may apply

APPLYING FOR AID

1. FAFSA (federal aid application) – submit electronically at fafsa.gov at least two months prior to the start of the semester for which aid is desired.
2. High school transcript (showing date of graduation) or GED certificate – submit to the college's admissions office.
3. Scholarships and Employment – additional applications are required.

The entire application process, other than #2, must be repeated each academic year.

GRANTS AND SCHOLARSHIPS

GRANTS

Grants are "gift" or "free" aid provided by the federal and state governments which only rarely have to be repaid.

- Federal Pell Grant: Amounts set annually; awarded to both full and part-time students; amount varies with level of enrollment and extent of FAFSA-demonstrated need.
- Federal Supplemental Educational Opportunity Grant (FSEOG): Awards are made to those with the greatest financial need.

SCHOLARSHIPS FUNDED BY THE COLLEGE

Tuition Freedom Scholarship - The Tuition Freedom Scholarship (TFS) is awarded to those who have participated in College Credit Plus courses while in high school or who have articulated credit from a career center. The TFS pays the base cost of tuition charges (the sum of general and instructional fees) which are not paid for by other free financial aid. Tuition Freedom covers up to 64 credit hours minus the credits taken as a CCP student or for which articulated credit is awarded. Full time enrollment is required. For more information about the College Credit Plus program, see www.ncstatecollege.edu/ccp/.

ReConnect to College Scholarship - The ReConnect scholarship assists former students of the college, age 25 and older, who have not earned a degree, but are close to completing degree requirements.

SCHOLARSHIPS FUNDED BY THE COLLEGE'S FOUNDATION

Benefactor-funded - The North Central State College Foundation receives funds from supporters of the college and, in turn, provides merit, need-based, and general financial assistance to over one hundred NC State students each year. Scholarships are available for students who are new, current, or previously enrolled at NC State. Scholarships are available to both full and part-time students. Application forms and complete details about foundation scholarships are available on the college website.

Necessities Fund - This is a loan that can be forgiven. Students who have little or no eligibility for federal grants, but do have a specific financial obstacle to attending the college, may apply for a loan from the Necessities Fund. While this is a loan, it will be forgiven (will not have to be repaid) if the borrower graduates from the college within four years of receiving funding. Contact the Foundation office for details.

Emergency Loan Fund - Short-term, small amount funding is available to assist eligible students who encounter an unusual expense that might prevent them from continuing to attend the college. Loans will not be approved for typical college expenses (e.g., tuition and books) or for daily living expenses. Repayment is required within 60 days. An application form is available in the Financial Aid office.

STUDENT LOANS

Repayment is required for student loans, and therefore, they are a "last resort" type of financial aid. Complete student loan information is available on the College website at ncstatecollege.edu/ admissions-and-aid/financial-aid/loans.

- Federal Direct Student Loans: Federally funded; must be enrolled at least half-time; eligibility varies with year in college and dependency status; repayment begins six months after last date of at least half-time enrollment. Direct Loans are offered to eligible students and must be formally accepted.
- Federal Parent Loan for Undergraduate Students (FPLUS): Federally funded; made to parents of dependent students; requires credit check. Contact the financial fid office for program details and a request form.

- Private (alternative) Loans: Made by commercial lenders; not subject to federal financial aid rules and protections; requires credit check and often a co-borrower. Contact the financial aid office for details.

The last day to accept an offered student loan or apply for an increased loan amount is the Friday of the third week of the semester.

STUDENT EMPLOYMENT

The Federal Work-Study (FWS) program is federally and college funded. The program provides part-time employment on and off campus for students who demonstrate federally-defined need. Applications are available at the financial aid office. Work-Study students will be required to maintain half-time enrollment; other eligibility criteria apply. View complete details at www.ncstatecollege.edu/admissions-and-aid/financial-aid/federal-work-study.

RETURN/REPAYMENT OF FINANCIAL AID FUNDS

(Title IV Refund Policy)

Should a student withdraw from or stop attending all classes, s/he may be required to return some or all awarded financial aid. A federal formula determines to amount to be returned, and that amount will be billed to the student.

VETERANS' BENEFITS

Military veterans and their dependents may be eligible for educational benefits from the United States Veterans Administration (VA) while attending the college. The financial aid office certifies to the VA recipient eligibility relating to enrollment. Those seeking benefits should note:

- Students must apply on-line at gibill.va.gov.
- Processing time of applications for VA benefits may take eight weeks or longer.
- The VA will notify applicants directly about their eligibility for benefits.
- Benefits will only be provided for courses required for the (one) major for which the recipient has been approved.
- The financial aid office certifies enrollment for the VA, but the office is not a full-service veterans' affairs department.

To maintain eligibility for VA benefits, the recipient must:

- Progress toward completing an educational objective
- Attend the classes for which s/he is registered
- Notify the financial aid office of all enrollment activity including registering, adding, dropping, and repeating courses, and changes of major or catalog year.
- Notify the financial aid office of all personal information changes including address, phone number, etc.

VETERANS BENEFITS AND TRANSACTION ACT OF 2018

North Central State College will not impose any penalty, including the assessment of late fees, the denial of access to classes, libraries or other institutional facilities, or the requirement that a Chapter 31 or Chapter 33 recipient borrow additional funds to cover the individual's inability to meet his or her financial obligations to the college due to the delayed disbursement of a payment by the U.S. Department of Veterans Affairs.

More information about the college's compliance with the Act is found at www.ncstatecollege.edu/documents/President/PoliciesProcedures/PolicyManual/Final%20PDFs/PoliciesManual_TOC.pdf.

STUDENT SERVICES

ADMISSIONS

See *Admissions, Recruitment and Gateway Services* on page 11.

BROMFIELD LIBRARY & INFORMATION COMMONS

Bromfield Library & Information Commons (IC), serving the students, faculty, and staff of both North Central State College and The Ohio State University at Mansfield, occupies the ground floor of Conard Hall. Housing a collection of nearly 50,000 items, the BLIC also offers access to other Ohio State University/co-located campus libraries, which own some 5 million items. Additionally, patrons can also choose to request materials through OhioLINK, which boasts some 50 million items, and SearchOhio, a collection of approximately 10 million items. The BLIC, through OhioLINK, also provides access to full-text databases, e-journals, and e-books. These materials can be accessed remotely or in-person from any of the PCs (15 of which are touchscreen) and iMacs (loaded with Creative Suite) that are in the BLIC.

If students are looking for a great place to study, the BLIC offers six group study rooms equipped with dry erase boards and large touchscreen computers with audio and visual recording capabilities. For those not looking to study, the BLIC is now able to provide, through the Mansfield Richland County Public Library, a newly updated leisure collection including DVDs, audiobooks, and fiction books for patron check-out.

Unlike many traditional libraries, the BLIC is not a quiet library. Patrons may bring in food and drink as long as items are not consumed at a computer station.

A photo I.D. and a current validation sticker are required as proof of current enrollment to begin library circulation privileges. A photo I.D. is required to borrow items at all times. Patrons can only borrow items in their own name, not as a proxy for someone else.

For the more information about the Bromfield Library and Information Commons and hours of operation, please see www.mansfield.osu.edu/blic/.

CAMPUS ACTIVITIES BOARD

The Campus Activities Board (CAB) is the primary activities planning committee for the NC State/OSU-M campus. The members are responsible for planning and implementing social, cultural, physical, emotional, and spiritual programs for the campus community. Some of the events include May Daze, Murder Mystery, Tuesday Afternoon Get-Together (second Tuesday of the month) comedians, and lecturers. These events are open to all students, faculty, and staff, and select events are open to the public.

CAB provides the opportunities for students to become effective and productive leaders, as well as develop personal, professional, and leadership skills through planning, implementing, and evaluating a variety of activities for students, faculty, and staff at North Central State College. Any student interested in becoming a part of the Campus Activities Board should stop by the Office of Student Engagement, second floor of Eisenhower, or call 419-755-4313.

CAMPUS CAFETERIA AND CYBER CAFÉ

The Campus Cafeteria is located on the first floor of Eisenhower. The Campus Cafeteria serves breakfast and lunch, which includes selections of hot entrees and sides, sandwiches, salads, and desserts. Check the weekly menu for cook to order specials. The Cyber Café is located in the main entrance of Ovalwood Hall and features specialty coffees, gourmet deli sandwiches and salads, desserts and pastries. The Café provides a relaxed comfortable atmosphere offering big screen TV's, WiFi and a fireplace for your enjoyment. Students also have access to vending machines that are located in most buildings throughout the campus courtesy of the Campus Cafeteria.

CAMPUS RECREATION CENTER

The Campus Recreation Center (CRC) offers a diverse combination of intercollegiate athletics, intramural sports, and open recreation activities to students, faculty, staff, alumni, family members, and guests of North Central State College. The Campus Recreation Center contains a cardio and fitness area, a weight room, locker room facilities for both men and women, and a multipurpose gym sufficient for playing a variety of team and individual sports. The cardio and fitness equipment available to patrons includes elliptical machines, a punching bag, a row machine, a stair stepper, stationary bicycles, treadmills, decline sit-up benches, an abdominal resistance chair, and workout videos with a TV and mat area. The weight room supplies include dumbbells, a squat rack, a preacher curl, a leg press machine, pull-up/dip machine, a multi-station weight machine, and two flat panel TV's. In addition to using the facility, a wide array of sports equipment, locks, towels, and radios may be checked out with a current NC State ID card.

The Campus Recreation Center features outdoor facilities including two tennis courts, two basketball courts, a football field, a soccer field, a softball diamond, and a sand volleyball court. All students, faculty, staff, and alumni are eligible to participate in the competitive intramural program for the following sports: tennis, sand volleyball, flag football, dodge ball, basketball, indoor volleyball, softball, tug-of-war, street hockey, kickball, indoor soccer, ultimate Frisbee, outdoor soccer, and corn hole. Special events and tournaments such as 3-on-3 basketball, 3-point shoot-out, golf scramble, and softball tournaments are also organized throughout the year.

Additionally, students can try out for the school athletic teams, which consist of men's soccer, women's volleyball, men's and women's basketball, cheerleading, and baseball. Depending on the sport, tryouts and practice are usually held at the beginning of Fall semester. (Soccer and volleyball begin before school in mid-June). Teams compete in the Ohio Regional Campus Conference and play games within Ohio and the surrounding states. In addition to our intramurals, athletic programs, and special events, we also offer non-credit courses for a minimal fee. Classes include Cardio Kickboxing, Personal Training, Yoga, and Zumba.

Contact the Campus Recreation Center at 419-755-4041 for additional information about guest and family passes or drop in for a tour and pick up more information. The Campus Recreation Center's website along with the Mansfield Mavericks Facebook account is also available for information regarding our intramurals, athletics, and recreation events.

Career Development

Career Development Services provide career counseling/ exploration and job placement assistance. For access to services, students can stop by the office or schedule an individual appointment by calling the Career Counselor at 419-755-4786.

Career Development Services is located in Byron Kee, Room 102, and in the Kehoe Center, Room 163. Services provided include the following areas.

Career Counseling/Exploration

North Central State provides free career counseling and exploration services. Students exploring careers might be undecided in their major and/or thinking about changing their major. The career assessment software FOCUS2 helps students learn about careers that match their interests, abilities and values.

Career Coach

Career Coach generates local career outlook data, including current and potential earnings, local job trends, required training programs, and current job openings.

Job Search Assistance

Job search assistance is available for students and alumni. Job seeking skills training include resume assistance, cover letter assistance, interviewing, soft skill development, social media training, and sharing job leads. Students/alumni can post resumes online to connect with local employers. Online job leads and local employment information can be accessed through NC State's active job board at collegecentral.com/ncstatecollege.

Job seeking workshops are offered every semester to help students and alumni prepare quality resumes and job search materials, as well as find employment.

On-Campus Employment/Federal Work Study

Career Development Services assist students that qualify for Federal Work Study in finding campus employment. There are various on-campus positions available each year that provide flexible work hours around student class schedules. The Federal Work Study program is coordinate through the Financial Aid Office and students must apply for this employment opportunity. More information is available at www.ncstatecollege.edu/admissions-and-aid/financial-aid/federal-work-study.

Internship Program

Students experience on-the-job training in their field of study through the Internship Program. Internships can be paid or unpaid, for-credit or not for-credit, and they can be at non-profit or for-profit companies. Students in any major can participate in an internship experience during any semester at NC State. Contact Career Development Services for more information.

Employer Services

For employers, NC State offers valuable online employment resources through a job posting website - College Central Network at www.collegecentral.com/ncstatecollege.

Online resources allow employers to post positions to recruit qualified students and alumni. Employers can access registered student/alumni resumes. Annual career expos/recruitment events and on-campus interview dates are arranged to connect students and employers.

Child Development Center

The Child Development Center (CDC) opened in 1994 with the purpose of serving the child care needs of North Central State College, The Ohio State University-Mansfield students and our community while operating as a teaching laboratory for college students preparing for careers with young children and their families. The following programs are provided at the CDC to students, faculty, staff, and members of our community:

Prenatal/Infant/Toddler services are enriched in several ways. A federal Early Head Start (EHS) grant allows for enrollment of forty infants, toddlers, and pregnant women in either center-based or home-based services. EHS is a program designed to respond to the unique strengths, interests, and needs of each child and family. Services and supports are layered into early care and education services.

> **Infant/Toddler** center-based care and education are also offered to families who do not qualify for the EHS program. There is a seamless integration of the EHS center based and Infant/Toddler programs in the three mixed age classrooms serving children from six weeks to three years of age.

Preschool services are offered in two classrooms. We assure that the care and education provided to enrolled children are based on Ohio's Early Learning and Development Standards. Children learn best when they have positive and caring relationships with adults and other children; when they receive carefully planned, intentional guidance and assistance; and when they can safely encounter and explore many interesting things in their environment. Skilled teaching staff maintain appropriate expectations, providing each child with the right mix of challenge, support, sensitivity, and inspiration. These learning environments support thinking abilities, reasoning, problem solving, decision-making, social competencies and development of children.

Our curricula are inspired and influenced by multiple research-based approaches. Assessment of children and documentation of their progress, research and various standards, Head Start Early Learning Outcomes Framework, Ohio's Early Learning and Development Standards, and National

Association for the Education of Young Children Standards, assist teaching staff in facilitating intentional learning experiences and opportunities while providing guidance to foster children's growth and development. Staff value and respect family members as a child's first and most important teachers.

The CDC enrolls prenatal women, children six weeks through kindergarten entry and summer school-age children kindergarten completion through third grade. Open Monday through Friday from 6:45 a.m. to 5:30 p.m., the Center offers full-day, full-year services and flexible scheduling to meet the needs of students, faculty, staff and community. The Child Development Center is licensed by the Ohio Department of Job and Family Services as well as accredited by the National Association for the Education of Young Children. An additional sign of quality services is the attainment of a five star rating from Ohio's Step Up To Quality rating system and an Ohio Healthy Program developing healthy lifestyles in children and families.

If you would like to arrange a visit to learn more about our programs, please call 419-755-5600. You can find our child application on the North Central State College web site or pick one up during your visit.

Students interested in work-study opportunities at the CDC are encouraged to call 419-755-4899 for NC State students, or 419-755-4234 for Ohio State Mansfield students.

Disability Services

The Office of Disability Services coordinates support services that assist students with physical, sensory, attention deficit and learning disabilities to an equal opportunity towards achieving their maximum educational potential.

Prospective or current students, who either have a documented disability(s) or would like to learn more about the Office of Disability Services, are encouraged to visit us at least 3 to 4 weeks before classes begin to discuss and, if appropriate, start the intake process.

To be eligible for services for the Office of Disability Services, you must be a current student and have documentation from a licensed professional that:

- Is no more than 5 years old
- States the nature of the disability, and
- Clearly describes the kinds of accommodation recommended by the licensed professional.

Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 prohibit discrimination against individuals with disabilities.

Please contact the Coordinator of Specialized Support Services at 419-755-4727 (TTY - 419-755-4757), or see the Disability Services webpage at www.ncstatecollege.edu/student-services/disability-services for further information.

Financial Aid

See *Financial Aid* on page 17.

Health Insurance

Student health insurance information is available from the College Welcome Center in Byron Kee. The low-cost insurance program is designed specifically for full-time students who traditionally are inadequately insured. In many cases, family insurance plans do not cover family members beyond age 27. Additional student insurance is available for the dependents of students upon request.

MyNC

The student web portal, known as MyNC, gives students the ability to access class schedules, grades, and financial aid records, search courses, perform degree audits and register for classes online.

Personal Counseling

Free, personal counseling is available to currently enrolled NC State students who feel that certain issues/concerns are preventing them from being able to focus on their academic work. Early detection and assistance often can prevent small problems from becoming serious problems. These problems/issues may relate to: college adjustment, test anxiety, personal trauma, relationships, parenting, alcohol or drug use or misuse, sexual identity, finances, or legal concerns.

The Student Assistance Program (SAP) services (evaluation, brief counseling, and referral services) are confidential and provided by New Directions, a Mansfield, Ohio counseling agency.

Students can contact New Directions at 419-529-9941 or www.newdirectionsforlife.com, or a Success Coach/Advisor in the Student Success and Transition Center at 419-755-4536.

Phi Theta Kappa

North Central State College is proud to have a chapter of Phi Theta Kappa International Honor Society (Beta Theta Eta). Membership is based upon academic achievement. In order to become a member, a student, either full-time or part-time, must have completed at least 12 credit hours of coursework and have a 3.5 accumulative grade point average. Membership in Phi Theta Kappa offers many opportunities such as over $37 million in transfer scholarships offered to Phi Theta Kappa members to four-year institutions, intellectual enrichment, and personal development through programs based on Phi Theta Kappa's four Hallmarks of Scholarship, Leadership, Service, and Fellowship. For additional information, please contact the Phi Theta Kappa Advisor at bkeener@ncstatecollege.edu.

Proctoring Services

Make-Up Exam Proctoring Services

As a service to North Central State students, the college provides proctoring services for making up NC State exams, free of charge. Students need to make an appointment for proctoring by calling 419-755-4536 or 419-755-4736.

Non-NC State Proctoring Services

As a service to the students of other educational institutions, North Central State College can be utilized as a proctoring site for non-NC State exams or ACCUPLACER placement assessment for admission to another college. A $25 fee applies to each exam or ACCUPLACER assessment appointment.

The Proctoring Center is located in the Student Success and Transition Center, Byron Kee in Room 138, and the hours are by appointment only.

For more information about NC State's Non-NC State Proctoring Services, contact the Testing and Assessment Specialist at 419-755-4736 or Student Success and Transition Center at 419-755-4764 or send an e-mail to proctoring@ncstatecollege.edu.

Safety and Security

Security personnel patrol the campus buildings and grounds on a 24-hour basis. The security officers:

- Prevent and investigate criminal acts on campus property.
- Investigate traffic accidents.
- Enforce traffic and parking regulations.
- Assist in the aid of ill or injured persons.
- Provide for the security of campus buildings.
- Lend assistance in many other ways to the faculty, staff, students, guests, and visitors of this campus.
- Will provide an escort from a vehicle to class and back.

You are encouraged to seek their assistance when needed. Security may be reached by calling 419-755-4218 or 419-755-4346 for Main Campus. Security for the Kehoe Center can be reached at 419-545-4143, or 419-913-9194. For all emergencies at the Kehoe Center, dial 911 or contact the Shelby Police Department.

As a part of our commitment to safety on campus, and in compliance with the Student Right to Know and Campus Security Act of 1990, the campus safety and security report is provided annually. Copies of the report are available on the College website one the Safety and Security webpage at www.ncstatecollege.edu/safety-and-security or in Room 161 of Riedl Hall.

Student Email Accounts

All registered NC State students are assigned an email account. Student email accounts should be checked on a regular basis for college news and announcements. Students should use their assigned email accounts when communicating via email with faculty members or other college personnel. For more information about student email accounts, go to www.ncstatecollege.edu/help-documents-and-tutorials/student-email-office-365.

Student Identification Cards

Student ID cards are provided free to all NC State students and must be accompanied by a current validation sticker. The photo ID cards are produced at NC State College's Cashier's office in Byron Kee, any time during normal working hours.

The NC State ID must be presented at a variety of locations throughout the campus in order to receive services and for campus security. The Campus Recreation Center, various health science and computer labs, the campus library, and the campus bookstore are a few of the more prominent locations where you will be required to present a valid student ID.

Your NC State ID is also required to print documents in campus computer labs using Pay to Print. For more information, see www.ncstatecollege.edu/student-services/identification-cards.

Student Success Center (SSC)

The Student Success Center (SSC) is a central place for support services — from the point of entry (New Student Orientation) to graduation and beyond (job search assistance).

A team of staff provide comprehensive services ranging from: holistic advising and coaching, advocacy and resource support, testing and placement, disability services, and career development services. The Student Success Center operates a food pantry open to all currently enrolled students and staff is available to make referrals to local community agencies/resources that address transportation issues, housing instability and other basic need insecurities.

Helping Students Succeed

As a student at North Central State College, it is important to us that you get off to a great start with furthering your education. Our Student Success Center (SSC) staff is dedicated to providing each student individualized services to ensure that the student is able to maintain their goals and objectives and have access to the resources that they may need along the way.

Our Student Success Center offers many services, free of charge for NC State students. We want you to succeed, and we're here to help you reach your goals.

Support services available through the SSC include:

- Academic Advising
- Testing & Assessment Services
- Career Development Services
- Specialized Support Services (Disability Services)
- Advocacy & Resource Support (Retention Services)

The goal of the Student Success Center is to provide a coordinated network of care that addresses student-defined needs, eliminates barriers, and supports all students in achieving their individual goals. The SSC is located in room 136 of Byron Kee Center. Students can contact the SSC by emailing studentsuccess@ncstatecollege.edu or by calling 419-755-4764.

STUDENT UNION/GAME ROOM/TICKETS

The Student Union is located on the second floor of the Eisenhower Center. It offers the perfect environment for you to relax between classes, meet new people, and hold group study sessions. These facilities include a big screen TV with plenty of seating; a gas log fireplace with comfortable furniture; and a Game Room with pool tables, video games, ping-pong, foosball, air hockey, Xbox 360, a Wii and more. Lots of entertainment occurs in the Union during the day, including free entertainment and food on the second Tuesday of the month in the Union area.

In addition to the above activities, the Office of Student Engagement serves as a central office for campus student organizations and ticket sales on campus. Tickets are sold for a variety of events including, but are not limited to, the Arts and Lecture series and special events. For more information, call 419-755-4314. Ohio State Mansfield theatre tickets may be purchased by calling 419-755-4045.

TRIO STUDENT SUPPORT SERVICES

This program provides and coordinates a variety of educational support services to students who are first generation, low-income, and/or have disabilities. The purpose of the program is to increase college retention, graduation, and transfer rates for eligible participants. Eligibility is based on federally defined criteria. For more information, contact the TRIO Student Support Services Office at 419-755-9015, or by email at triosss@ncstatecollege.edu.

TUTORING

Free tutoring is available to currently enrolled NC State students in the Tutoring Resource Center, located in Fallerius, Rooms 117 and 119, and the Kehoe Center, Room 229. Students are welcome to use the center on a "drop-in" basis and receive free tutoring as often as they choose. If tutoring is needed outside of center hours, students may make an appointment by calling 419-755-4539.

Tutoring is offered in a variety of courses by faculty, community members, and academically accomplished students. Tutors participate in training that leads to tutor certification that promotes researched based practices and increases student success. Faculty may require their students to visit the center and receive tutoring. Students that are interested in becoming a tutor may contact the Manager of Tutoring and Transition Services, at bkeener@ncstatecollege.edu.

ACADEMIC POLICIES AND PROCEDURES

ACADEMIC HONESTY

See also *Code of Student Conduct* on page 33.

It is the position of the College that the responsibility for academic honesty is that of the student. It is expected that the student's work will be the product of his/her own efforts, unless the student clearly indicates otherwise. Academic honesty is an important element of mature, responsible learning. While it is recognized by the college that the prime responsibility for academic honesty belongs to the individual student, the instructor will also try to create a learning environment that discourages cheating and encourages honest scholarship.

More information about academic honesty and academic misconduct can be found in the Code of Student Conduct. Hard copies can be obtained in the Office of the Vice President for Academic Services, Room 158 Fallerius or by calling 419-755-4733.

ACADEMIC PROBATION

In keeping with the College's commitment to guiding students toward educational success, students who have completed a minimum of 6 graded credit hours must maintain at least a 2.0 grade point average (GPA) in order to remain in good academic standing. Any student who has completed at least 6 credit hours of coursework at the college and is unable to maintain at least a 2.0 GPA will be placed on academic probation.

Students on academic probation must work with a Success Coach/Advisor in the Student Success and Transition Center when registering for classes and when making changes to their class schedule. Students on academic probation may not:

- Enroll in an on-line course. Students are also strongly discouraged from enrolling in classes that meet only once per week, unless approved by Success Coach/Advisor.
- Enroll in more than 12 credit hours, or 4 courses, per semester, unless approved by Success Coach/Advisor.

If any student has already signed up for classes in a given semester before the status of academic probation has been assigned to that student, that student will have until Wednesday of the first week of classes to adjust their schedule according to this policy. The College reserves the right to remove students who are on academic probation from any and all classes for a given semester in the event that the student has registered for more than 12 credit hours before the status of academic probation has been assigned.

PROBATIONARY STATUS AND VA BENEFITS

Veteran students and eligible dependents that have been certified for VA benefits are subject to a satisfactory progress standard specified by the Veterans Administration. These students will forfeit their certification for benefits when, after one academic term of probationary status, they fail to improve their semester grade point average during their next term of credit course enrollment. While VA benefits must be terminated, these students are subject to the academic suspension and dismissal policy described below.

ACADEMIC SUSPENSION AND DISMISSAL

Students who remain on academic probation for more than two consecutive semesters are eligible for academic suspension or dismissal. The Chief Academic Officer makes decisions regarding academic suspension and dismissal. Students who are academically suspended from the College must follow the readmission procedure for academically suspended students. Students who are readmitted after academic suspension may be subject to restrictions or requirements designed to improve opportunities for academic success. Students who are academically dismissed are ineligible for readmission.

Please note that academic suspension and dismissal are not the same as financial aid suspension and termination. Questions about ongoing financial aid eligibility must be directed to the Financial Aid Office at 419-755-4899.

READMISSION PROCEDURE FOR ACADEMIC SUSPENDED STUDENTS

Students who have been suspended from North Central State College for academic reasons and who wish to be readmitted must petition for readmission. The petition must be submitted at least four weeks before the first day of classes for the semester the student wishes to enter.

A student suspended for the first time must remain out of school for a minimum of one semester, including summer. For example, if academic suspension was at the end of fall semester, the student may not attend spring semester and may petition for readmission to summer semester. A student suspended for a second time must remain out of school for one full academic year (three semesters). A third occurrence will result in academic dismissal. A student who has been academically dismissed will not be readmitted to North Central State College unless there are documented, extenuating circumstances.

A student petitioning for readmission must submit a Request for Academic Readmission form. The Student Petition for Readmission form is available online or can be obtained on campus at the Welcome Desk in Byron Kee or by calling 419-755-4761. The petition must be submitted to the office of the Chief Academic Officer at least four weeks before the first day of classes for the semester the student wishes to reenter.

The request will be reviewed by the director or an advisor in Student Success and Transition Services, and by the student's academic department dean or assistant dean. For undeclared or unassigned students, the second reviewer may also be the faculty advisor. If both college reviewers do not agree upon approval of the request for readmission, then the Chief Academic Officer will determine final disposition.

The student will be notified of approval or denial of the request. Students approved for readmission will be placed on Probation Level 3 and will work with a Success Coach/Advisor to create and implement an academic contract for success.

ACADEMIC RECORDS

North Central State College has a policy for administering and maintaining student education records which is in compliance with the Family Educational Rights and Privacy Act of 1974. The general principles of NC State's policy, subject to some exceptions, are as follows:

- Educational Records are defined as those records, files, documents, and other materials which contain information directly related to the student and are maintained by the College or by a person acting for the College.
- Students have certain rights of access to this information.
- Students who wish to review their files must contact the Office of Student Records to arrange an appointment. After reviewing their individual file, students may challenge a perceived inaccuracy, misleading statement, or other perceived violation of privacy or other rights.
- The College has certain responsibilities to protect this information with the exception of directory information which includes the student's name, local and permanent address, e-mail, telephone listing, date and place of birth, major field of study, class schedule, participation in officially recognized activities and sports, dates of enrollment, degrees and awards received, high school graduated from, and most recent previous educational agency or institution attended by the student.
- Students may restrict the publication and release of directory information by filing a written request in the Office of Student Records.
- Documents submitted by or for the student in support of the application for admission or for transfer credit may not be returned to the student nor sent elsewhere at his/her request. The student should request these documents from the original institution. Original documents will be kept in the student master file; a copy will be given to the student upon request.
- There are special conditions including unmet financial obligations under which NC State may choose to withhold grade reports, transcripts, certifications, or other information about a student.
- Additional information about the Family Educational Rights and Privacy Act (FERPA) is available in the Office of Student Records.

ATTENDANCE POLICY

All students are required to attend all scheduled classes and examinations. Each faculty member has the right to establish regulations regarding attendance that he/she considers necessary for successful study. Students who do not attend classes may be administratively withdrawn from those classes. However, failure to attend classes does not constitute withdrawal, and students are expected to process a formal withdrawal through the Student Records Office if unable to complete a class.

AUDITING A COURSE

Course auditing involves attending classes without submitting assignments or taking examinations. An auditor, therefore, receives neither a grade nor course credit. The auditing fee is the same as for credit enrollment. Permission for course auditing is available from the Office of Student Records. Changes from audit to credit or credit to audit will be allowed only within the registration period for the specified class.

CREDIT FOR PRIOR LEARNING

CREDIT BY ADVANCED PLACEMENT EXAMS

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. Refer to the NC State website for specific course information.

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 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.

CREDIT BY EXAMINATION

A student may earn proficiency credit by taking a specific comprehensive examination. This can be either a written exam or a lab exam. A fee is charged for each examination. When both a written examination and a lab are required, the written examination will be administered first. If the written examination is successful, the student can then take the lab portion of the exam. A CBE cannot be taken for a course in which a letter grade, a "W" (withdrawal), or P/NP has already been received. The CBE Credit Request form can be obtained online or from the academic division offices and the Student Success and Transition Center.

CREDIT BY EXTERNAL EXAMINATIONS

A student may receive proficiency credit through the College-Level Examination Program (CLEP) and the American College Testing Proficiency Examination Program (ACT PEP). The College-Level Examination Program (CLEP) is a national system of credit-by-examination for assessing college level competencies in five General Examinations (English, humanities, mathematics, natural sciences, and social sciences-history) and a large number of Subject Examinations. The American College Testing Proficiency Examination Program (ACT PEP) is a national testing program consisting of exams developed by the faculty of the University of the State of New York. North Central State College has reviewed the CLEP and ACT PEP examinations and found the following tests to be similar in content to its courses:

MINIMUM SCORE FOR AWARDING CREDIT

CLEP Subject Exams	Minimum Score	College Course	Credit Hours
American Government	63 and above	POLT 1010 - American National Government	3
	56-62	OTM Social Sciences Credit	3
American Literature	53 and above	OTM Arts and Humanities Credit	3
Biology	50 and above	OTM Natural Sciences Credit without Labs	3
Chemistry	50 and above	OTM Natural Sciences Credit without Labs	3
College Algebra	63 and above	MATH 1110 - College Algebra	5
English Literature	62 and above	OTM Arts and Humanities Credit	3
Financial Accounting	65 and above	ACCT 1010 - Financial Accounting	4
French Language	65 and above	General Elective Credit	12
	55-64	General Elective Credit	6
German	67 and above	General Elective Credit	9
	59-66	General Elective Credit	6
History of the US I	56 and above	HIST 1010 - American History I	3
History of the US II	57 and above	HIST 1030 - American History II	3
Human Growth and Development	58 and above	PSYC 2010 - Human Growth and Development	3
Information Systems	50 and above	General Elective Credit	3
Introduction to Educational Psychology	62 and above	OTM Social Sciences Credit	3
Introductory Business Law	60 and above	BUSM 1110 - Business Law & Ethics	3
Introductory Psychology	59 and above	PSYC 1010 - Introduction to Psychology	3
Introductory Sociology	56 and above	SOCY 1010 - Introduction to Sociology	3
Principles of Macroeconomics	56 and above	ECON 2510 - Macroeconomics	3
Principles of Management	50 and above	General Elective Credit	3
Principles of Marketing	65 and above	BUSM 1150 - Marketing	3
Principles of Microeconomics	57 and above	ECON 1510 - Microeconomics	3
Spanish Language	68 and above	SPAN 1010 - Beginning Spanish I, SPAN 1020 - Beginning Spanish II, and General Elective Credit	3+3+6
	63-67	SPAN 1010 - Beginning Spanish I, SPAN 1020 - Beginning Spanish II, and General Elective Credit	3+3+3
	56-62	SPAN 1010 - Beginning Spanish I, SPAN 1020 - Beginning Spanish II	3+3
Western Civilization I	55 and above	HIST 1050 - Western Civilization I	3
Western Civilization II	54 and above	HIST 1070 - Western Civilization II	3

ACT PEP Exams	Minimum Score	College Course	Credit Hours
Statistics	45	STAT 1010 - Probability and Statistics	3
Introductory Accounting	45	ACCT 1010 - Financial Accounting	3
Corporate Finance	45	ACCT 2060 - Principles of Finance	3
Principles of Management	45	BUSM 1050 - Management	3
Principles of Marketing	45	BUSM 1150 - Marketing	3
Abnormal Psychology	45	PSYC 2050 - Abnormal Psychology	3
Microbiology	45	BIOL 1550 - Microbiology for Health Professionals	3

A student may obtain proficiency credit for any of these NC State courses provided that he or she successfully passes the appropriate CLEP or ACT PEP examination including the essay section where applicable. Students seeking transfer credit for CLEP or ACT PEP examinations must furnish the Student Records Office with appropriate documentation. Any course which receives proficiency credit will be noted on the student's academic record with the symbol "X". Letter grades and quality points are not used.

CREDIT BY LIFE/WORK EXPERIENCE

In some curricular areas, it is the policy of the College to recognize competencies acquired through life/work experience that have no external test as proof of outcome attainment.

In order to qualify, interested persons must apply for Life Experience Credit. Students will contact the appropriate Assistant Dean to determine availability of life experience credit within their degree program. A student must translate life and/or work experience into competencies, match competencies with what is specified in the course outcomes, and display these materials in a "portfolio."

Students applying for Life/Work Experience Credit must have five full years of relevant experience. Portfolios are evaluated by faculty and/or external reviewers with expertise in the field.

CREDIT BY MILITARY SERVICE

College credit will be granted to students with military training, experience, or coursework that is recognized by the American Council on Education (ACE). North Central State College will use the ACE Guide to the Evaluation of Educational Experiences in the Armed Services in evaluating and awarding academic credit for military training, experience, and coursework.

If the course to which the military training, experience, or coursework is equivalent fulfills a general education or major course or degree program requirement the credit will count towards graduation and meet a requirement accordingly. Otherwise, appropriate course credit including elective course credit will be granted.

North Central State College will provide information on awarding of college credit for military training, experience, and coursework; this will include the number of credits awarded and the course equivalents. Credits earned via military training, experience, and coursework are transferable within public institutions of higher education in Ohio according to the state's Transfer Module, Transfer Assurance Guides, Career-Technical Credit Transfer, and transfer policy.

Academic Deans and the Academic Service Coordinator will use the ACE website to evaluate military training credit.

In academic disciplines containing highly dependent sequences (mathematics, sciences, etc.) students are strongly advised to confer with the Dean, Assistant Dean, or Program Director of the discipline to ensure they have the appropriate foundation to be successful in advanced coursework within the sequence.

CREDIT HOURS MAXIMUM

The maximum number of credit hours that a student may register for in any given semester without special permission is 23. If a student wishes to register for 24 or more credit hours in a single semester, he/she must have an accumulative grade-point average (GPA) of 2.5 or higher and must obtain the permission of the dean or assistant dean of the division in which his/her program resides (the dean or assistant dean must sign the course request form which is available in the Student Records Office and specify the number of credit hours that he/she is approving the student to take). The student should be prepared to explain to the dean or assistant dean why he/she wishes or needs to take an unusually high number of credit hours and how he/she plans on handling the heavy workload that this will entail. The College reserves the right to remove students from any and all classes for a given semester in the event that the student has registered for more than 23 credit hours without receiving the appropriate approval.

CURRICULUM CHANGES

Students will be assigned to the curriculum in place at the time of enrollment or specific selection into the academic program. That curriculum should be followed, even if subsequent catalogs contain curriculum changes. Students must request formal approval from the appropriate academic dean in order to change the curriculum year that is being followed. Some students are not able to pursue continuous enrollment. Students away from the College for one year or more will follow the curriculum in place when they return.

Over a period of time, curricula will change. As a result, some courses are dropped from a program and others are added. When this occurs, the academic dean may choose to substitute one course for another. In order to fulfill graduation requirements, course substitutions must be authorized by the appropriate academic dean.

Academic credits (either NC State or external) that are older than eight years will be evaluated with special care. Their acceptance toward an NC State certificate or degree may be denied based upon changes in the field of study. In addition, some restricted admission programs at the College apply their own special requirements related to the age of academic credits. For further information, contact the program director, assistant dean or the division dean of the appropriate program.

CURRICULUM LENGTH

NC State's associate degree programs are designed so that a student who begins a program in the fall can complete that program within two years of full-time attendance following the recommended course load each semester.

A certificate program, like Practical Nursing, will require a year of full-time, daytime study, while shorter term certificate programs, Microsoft Applications, may require less than a year. Students attending on a part-time basis can expect to spend three to five years or more in completing an associate degree. In some programs, the course sequence and the prerequisites for courses can dictate the length of time necessary to complete the program. For further details regarding the curriculum and prerequisites for a specific program, contact the Student Success and Transition Center.

DEAN'S LIST

A student who earns a 3.5 semester grade point average or better without any grade less than "C-", with no incomplete grades or not-reported (NR) grades, and who is taking 12 or more credit hours, will be recognized by placement on the Dean's List, which is published on the College's web site after each semester. Students who graduate with a 3.5 grade point average or better in all courses taken will graduate with honors. For the actual commencement program, the cumulative grade point average for the semester immediately preceding the semester in which the student is graduating will determine honors recognition in the program.

Part-time students who have earned a total of 12 or more semester hours of credit with no grade below "C-" and non-resolved incomplete grades in any academic year (Summer, Fall, and Spring), and who have achieved a GPA of 3.5 or above for that academic year, will be recognized on the Dean's List at the end of Spring semester each year. Eligibility for this distinction will be limited to students who have not attended full-time for any semester during the academic year. Students must attend at least two semesters during an academic year in order to be eligible for consideration for that year.

No letter is mailed and your name will not appear on any published Dean's List if you filled out a Withhold Directory Information form.

DECLARING A MAJOR

For a variety of reasons, a new student may decide not to declare a major and will be initially classified in an undeclared status. It is strongly recommended that students in undeclared status work closely with the college Career Services Office in order to explore career choices. A student may remain in undeclared status through the academic session in which the 24th credit hour is completed. The student must then declare a major. Students who remain in undeclared status after this point will have a "hold" placed on their future registrations. The Change of Major form is available online and in the Student Records Office, Room 142 Byron Kee. Once completed, it should be returned to the Student Records Office.

Student should be aware that in order to receive federal student aid (Pell Grants, student loans, and work-study employment), they need to be considered a regular student in an eligible program. As such, they need to have a declared major and be seeking to earn a degree or approved **CERTIFICATE AT THE COLLEGE TO BE AID-ELIGIBLE.**

Enrollment Certifications

Request for enrollment certifications for insurance and other purposes are handled through the Student Records Office. Processing time for an enrollment certification is 24 to 48 hours.

FLEXIBLY SCHEDULED COURSES

The College offers some classes which do not follow the traditional academic calendar. Dates for adding, dropping, and receiving refunds for these classes may be different from the dates established for traditional classes. Refund and withdrawal dates are listed on the class schedule on the web site under each individual course. 100% and 50% refund amounts are determined by the percentage of course completed based on the beginning and ending dates for each course.

GRADE FORGIVENESS POLICY

North Central State College recognizes that some potentially good students enroll in curricula for which they may not be prepared or suited, resulting in a semester or a number of semesters of poor grades. These students, upon changing curricula or becoming better prepared for their coursework, may become academically successful but are not able to overcome their previously poor academic record. This may result in subsequent semesters of academic probation in spite of good grades.

Because of this, the College permits such a student to petition the Chief Academic Officer for "grade forgiveness". The Grade Forgiveness Request Form is available at the Student Records Office, the office of the Chief Academic Officer. Inquiries regarding this policy should be directed to the office of the Chief Academic Officer.

A student could qualify for this petition process if the student:

- Has been absent from the College for at least six consecutive semesters OR has changed his/her program major: changing from "pre" status to its associated major does not constitute a change of program major; changing from UNDECLARED to a program does not constitute a change of major AND
- Has completed at least 24 credit hours after re-enrolling at the College or changing majors (at least 12 of which must be either basic or technical courses in the student's declared curriculum), AND
- Has received a grade of "C-" or higher in each course included in the above-named 24 credit hours, AND
- Has a cumulative grade point average of at least 2.00 since re-enrolling or changing the major.

Other factors may also determine qualifications.

If a student qualifies for grade forgiveness, all the grades earned prior to the absence from the College or the change in technology or program major that are either "NP" or less than "C-" will be forgiven. This results in those grades being replaced on the student's transcript with a code that denotes forgiveness. The courses with forgiven grades will continue to appear on the student's transcript but will not be calculated in the grade point average. Once an associate degree has been earned at North Central State College, the Grade Forgiveness Policy cannot be used towards any course in that degree.

Students may use this policy only once. Courses for which the grade has been forgiven will not count toward graduation. This policy does not alter any departmental policies on academic dismissal. Appeals in relation to this policy may be directed to the Chief Academic Officer, who will make a determination and contact the student.

GRADES

Students receive a report of grades at the end of each semester. The report is available through "My NC" on the College web site. The report will show two grade point averages. These are semester grade point averages, reflecting the results of the semester just completed, and an accumulative grade point average, which reflects all academic work completed at NC State and is used to determine academic status. No student grade information will be distributed verbally over the phone.

GRADE APPEAL POLICY

Any student wishing to have a course grade reviewed by the College must register an appeal within six weeks of the end of the semester in which the grade was given or, if the grade originally given was an incomplete, within six weeks of the issuing of the final grade. The appeal should be registered first with the faculty member who gave the grade. If satisfaction is not obtained from the faculty member, the student may appeal to the appropriate division dean. If the appeal (perceived mistreatment and requested remedy) has not yet been put in writing, it must be at this point. The dean's response must also be in writing. The final level of appeal is to the Chief Academic Officer, who will respond in writing. During a grade appeal, the student is responsible for producing any course work that was returned to him/her that is relevant to the case.

GRADE REPLACEMENT POLICY

A student may retake a course as many times as he/she wishes. Only the most recently earned grade (A, B, C, D, F, P, NP) will count for credit or in the student's accumulative average. However, an indication that the student attempted the course more than once will remain on the transcript. This policy does not alter any departmental policies on academic dismissal.

GRADING SYSTEM

North Central State College uses the standard 4-point-scale letter grade system (with pluses and minuses). A student must earn at least a 2.00 grade point average to graduate. Student achievement is measured according to the following system.

Letter Grade	Point Value	Quality of Work
A	4.0	Superior
A-	3.67	Superior
B+	3.33	Above Average
B	3.00	Above Average
B-	2.67	Above Average
C+	2.33	Average
C	2.00	Average
C-	1.67	Average
D+	1.33	Below Average
D	1.00	Below Average
D-	0.67	Below Average
F	0.0	Failure

Recommended grading scale on North Central State College Master Syllabi:

Percentage	Letter Grade
93-100	A
90-92	A-
87-89	B+
83-86	B
80-82	B-
77-79	C+
73-76	C
70-72	C-
67-69	D+
63-66	D
60-62	D-
0-59	F

FAILING - Credit for a course in which a failing grade has been received can be obtained only by repeating the course and earning a "D-" or higher grade.

INCOMPLETE - An incomplete grade indicates that a student has not completed a small part of the course requirements due to uncontrollable circumstances. Incomplete grades are given at the discretion of the faculty member. An incomplete grade may be removed from the student's record

if the student arranges with his/her instructor to have the course completed at the earliest possible time – not later than six weeks following the semester in which the "I" grade was received. If the "I" grade is not completed within the six week period of time, the "I" grade automatically will be changed to a failing grade and the course must be repeated. Students must complete with the course faculty member the Incomplete Grade Agreement.

P/NP - PASS/NO PASS - Courses graded in this manner count as credit hours only and are not considered in determining the grade point average. A passing grade (P) represents "C-" or higher.

W - WITHDRAWAL - Students may withdraw from any course at the College up until the deadline as stated in the College calendar and receive a grade of "W". Withdrawals from a course are not normally permitted after eight weeks. A student may withdraw through Monday of the second week of the semester without any grade placed on his/her permanent record. Flexibly scheduled classes may have different withdrawal dates. See the Student Records Office for specific details.

K - TRANSFER CREDIT - This mark is used for work credited from other colleges, institutions, and service schools. "K" credit is counted as hours only and is not considered in determining a student's grade point average.

X - PROFICIENCY CREDIT - This mark indicates credit awarded on the basis of a written examination, division evaluation, portfolio evaluation, or high school articulation agreement. The level of achievement required of the student is determined by the College division involved but is never less than a "C-". Proficiency credit is not awarded to a student for a course in which a letter grade or P/NP grade has been received at the College. "X" credit is counted as hours only and is not considered in determining a student's grade point average.

R - AUDIT - This mark is used when a student is taking a course for interest only and not for credit. Changes from audit to credit or credit to audit are allowed only within the official Add period of each semester.

NR - NOT REPORTED - Grade has not reported by faculty member by grade submission deadline date. All NR grades are eventually changed once the grades are reported.

GRADUATION

Graduation ceremonies are held at the end of Spring semester. A student may take part in these ceremonies upon a satisfactory review of the student's academic file to determine eligibility for graduation. This procedure is initiated by the completion of a Petition to Graduate form with the Student Records Office. This Petition is approved if the student has successfully completed (or is presently enrolled in) all courses required for his/her program, is in good standing academically (not on probation), and has fulfilled all financial obligations to the College.

A student must earn at least a 2.00 cumulative grade point average to graduate and must receive credit for MATH0074 Beginning Algebra or any math course above MATH0074, or a COMPASS algebra score of above 30, or an ACT math score above 20. Students who have graduated in the current year's Summer and Fall semesters are invited to participate in the Spring graduation ceremonies.

Each semester there may be students who, though they have petitioned, do not graduate. Reasons may include: course failure, inability to submit a transcript from another college in a timely manner, inability to complete credit for life experience, failure to fulfill financial obligations to the College, or an "I" incomplete grade. Students, except those with failing grades, will be given six weeks from the end of the semester in which they have petitioned to rectify the situation in order to receive a degree for that semester. Problems not rectified will necessitate re-petitioning with the result of the degree being conferred in a later semester. There is no charge to re-petition.

Following completion of all coursework in a given discipline, a student will have one year to petition. After the one-year period, a student wishing to petition must receive the approval of the Petition Review Committee (PRC). The PRC will be called by the Registrar who will serve as chair. The Committee shall consist of the Dean of Liberal Arts and one faculty member representing the academic major program as designated by the Dean of the appropriate major technology. The PRC shall have the obligation to determine if all academic requirements have been fulfilled within a program and shall have the right to specify any additional coursework which might be necessary to fulfill program requirements to ensure that conferred degrees will reflect the current course program within each technology.

INDEPENDENT/DIRECTED STUDY

Independent Study, also known as Directed Study, is a learning method whereby mature, self-directed students can acquire competencies as specified in a course outline and syllabus. Under the direction of a faculty member who serves as a resource person, a student pursues a plan of study to acquire the prescribed competencies. In addition to regular tuition and fees, a nonrefundable per credit hour surcharge fee is charged for courses taken by independent study. A student who wishes to take a course via the independent study method should contact the appropriate division dean. A number of restrictions apply.

MEDICAL INSURANCE

The College strongly recommends that students be covered by medical insurance, which can be purchased either through a private carrier or through the College-sponsored insurance program. To obtain an application for the College-sponsored insurance program, contact the Admissions Office at 419-755-4761.

NON-CREDIT COURSES

In order to better meet the educational needs of the community, NC State offers noncredit courses in specific areas. Noncredit courses are open for general student enrollment and follow no particular academic calendar. These courses are often short in duration and may be held either on or off campus. Fees are charged on an individual class basis consistent with course length and content.

PREREQUISITES, COURSE

Students are required to have successfully completed course prerequisites as listed in each course description. If a student registers for a course without having successfully completed the prerequisite, the instructor/college has the right to withdraw the student from the course.

Student Engagement

Student engagement is based on the "active pursuit" of learning which can be measured by class attendance, class participation (in class or online), taking required quizzes/examinations, and submission of work assignments or papers. Student engagement consists of a student attending at least 60% of the class sessions (there should be attendance throughout the term) and/or completing 75% of the assignments listed on the syllabus at the midpoint in the term. Exceptions can be made when there is on-going communication between the student and faculty member. The communication must be documented and the faculty member and student must be in agreement regarding the exception. Student not meeting the exception will be administratively withdrawn from the class. If a student believe he/she was administratively withdrawn in error, he/she may file an appeal. Being administratively withdrawn may have program and financial aid implication.

TRANSCRIPTS, GRADES

Official transcripts may be requested online by clicking "request transcript" on NC State's main webpage under the drop-down menu. Transcripts are processed by Parchment, a third-party servicer. As such, students will create an account that is separate from any NC State login in order to request a transcript. Official transcripts cost $5.00 each for normal processing. Transcripts can be physically mailed, sent electronically, and also expedited if physically shipped, but may cost extra.

Unofficial transcripts can be requested by the student at no cost. Contact Student Records for the process of obtaining.

WITHDRAWING FROM A COURSE

All students are expected to attend class. Any student who is unable or chooses not to attend class or is unable to keep up with the requirements of a course needs to officially drop the class at the Student Records Office. The official last day to drop a class will vary according to the length of the class. The last day to officially drop a class is listed on the schedule on the web site under each individual course.

Failure to attend classes does not constitute withdrawal. Any student who leaves the College without completing the withdrawal procedure will receive a grade of "F" in all courses for that term and will forfeit any right to a refund of fees.

Withdrawals must be processed through NC State student email or in person including proper documentation. Students receiving financial aid who wish to withdraw from the College are strongly suggested to contact the Financial Aid Office before the withdrawal is processed to understand any financial repercussions that could result.

COMMUNITY PARTNERSHIPS AND PROGRAMS

APPRENTICESHIP PROGRAM

North Central State College is a Registered Apprenticeship Sponsor which can register apprenticeships for companies in hundreds of occupations. The college will process paperwork, compliance and standards through the State, thus making apprenticeships attainable for any company. Financial assistance with apprentice education costs may be available.

For more information, visit the Workforce Development web page at www.ncstatecollege.edu/workforce.

MOTORCYCLE OHIO

Through a partnership with Motorcycle Ohio, North Central State College hosts a three-day basic rider course (BRC) for new riders and a one-day returning rider course (RRC) for the rider with more experience. The courses run weekly March through November at a cost of $50.

This course is required by the State of Ohio for riders between the ages of 15½ and 17. Students must have a valid temporary motorcycle learner's permit (TIPIC) or valid motorcycle endorsement. Motorcycles and helmets will be provided and no experience is needed. Upon successful completion of the knowledge and skills tests within the course, students will earn a BMV skill test waiver for a motorcycle endorsement.

For more information and to register for a course, visit Motorcycle Ohio website at www.motorcycle.ohio.gov.

OTDN - OHIO TALENT DEVELOPMENT NETWORK

North Central State College is a member of the Ohio Talent Development Network (OTDN). The network is a comprehensive human capital development solution that works for both human resource professionals and individuals. The key is identifying skill levels and preferences to match the right person with the right job.

- Job Profiling – Characteristics and qualities required for performance
- Assessment – Discover what jobs best match your company employees' skills, abilities, and preferences
- Skill Gap Analysis – Find out which skills need improvement
- Job Matching – Placing the right person in the right position
- Training Referrals – We help you find the right education and training for your employees
- Skill Certification – Consultants will verify your competencies

WORKFORCE DEVELOPMENT

The Workforce Development department at North Central State College is committed to meeting the training needs of business and industry. With technology rapidly changing in almost every field, employee development and training has become an ongoing requirement in the workplace. The Workforce Development department partners with business and industry to design customized hands-on and online training programs that are designed to improve an employee's knowledge and teach him or her the skills needed to increase productivity and performance on the job.

Our workforce team collaborates with small companies and large corporations, including both public and private employers, to create customized hands-on and/or online training opportunities with high quality, industry-relevant, college-level learning experiences. Each training program can be customized to meet specific productivity goals, strategic plans or contractual agreements of individual companies. Trainees also have the option of earning college credit for most training which can be applied toward an associate degree or certificate program.

The benefits of North Central State College training include:

- Programs tailored to meet your company's needs and delivered both on and off site.
- Programs can incorporate a blend of job-related, hands-on, online and hybrid training.
- Flexible programming to meet business/industry schedules.
- Reduced travel costs and time; increased convenience for employers and employees.
- Follow-up evaluation after training.
- Credit or non-credit, short and long-term training available.
- Opportunity for contract training and partnership with your local college.
- Funding assistance may be available.

Leadership and management skills are also in great demand in today's ever-changing workforce. In addition to customized training, our workforce program has offerings that can be brought to your company and delivered in easy to manage modules. Content includes:

- Leadership/Supervision
- Communication
- Conflict Resolution
- Emotional Intelligence
- Teamwork
- Feedback and Coaching
- Delegation and Time Management

For more information, visit the Workforce Development web page at www.ncstatecollege.edu/workforce.

CODE OF STUDENT CONDUCT

3357:13-15-01 Code of Student Conduct

A. Introduction and purpose. North Central State College is a learning community in which all persons--students, faculty, administration and staff--share responsibility for its growth and continued welfare. The Code of Student Conduct is established to foster and protect the core missions of the College, to foster the scholarly and civic development of the College's students in a safe and secure learning environment, and to protect the people, properties and processes that support the College and its missions. As members of the College community, students can reasonably expect that the following rights will be respected by all College offices, programs, employees, and organizations.

1. Academic Pursuits: Students have the right to accurate and plainly stated information relating to maintenance of acceptable academic standing, graduation requirements, and individual course objectives and requirements. Students can expect instruction from designated instructors at appointed class times and reasonable access to those instructors. Students have the responsibility to attend class and know their appropriate academic requirements.

2. Quality Environment: Students have the right to expect a reasonably safe environment supportive of the College's mission and their own educational goals. Students have the responsibility to protect and maintain that environment and to protect themselves from all hazards to the extent that reasonable behavior and precaution can avoid risk.

3. Non-Discrimination: Students have the right not to be discriminated against by North Central State College for reasons of race, color, religion, national origin, creed, service in the uniformed services (as defined in state and federal law), veteran status, sex, age, political ideas, marital or family status, pregnancy, physical or mental disability, genetic information, gender identity, gender expression, or sexual orientation.

4. Speech/Expression: Students have the right to express themselves freely on any subject provided they do so in a manner that does not violate the Code of student conduct. Students in turn have the responsibility to respect the rights of all members of the College to exercise these freedoms. This Code of student conduct shall not be construed or applied to restrict academic freedom at the College, nor shall it be construed to restrict constitutionally protected expression, even though such expression may be offensive, unpleasant, or even hateful.

5. Confidentiality: Students have the right to access and control access to their education records as provided in the federal Family Educational Rights and Privacy Act of 1974, also known as the Buckley Amendment. These include the rights to review and challenge the content of education records, to control disclosure of education records to third parties, and to limit the routine disclosure of all or some information defined as "directory information" by the Act.*

    a. Please note that there are specified exceptions to FERPA, and therefore the student's right to access and privacy is not absolute.

    b. *The above statement is also true for international students except where specified by the legislation, rules, and regulations governing the particular visa status.

6. Students have the responsibility to keep name, address, telephone and other demographic information correct and up to date and to notify the College immediately of any changes to this information.

7. Religion/Association: Students have the right to exercise their religious convictions and associate with religious, political, or other organizations of their choice, provided they do so in a manner that respects the rights of other members of the community and complies with the Code of Student Conduct. Students have the responsibility to respect the rights of other members of the College community to free exercise of their religious convictions and to free association with organizations of their choice.

B. Jurisdiction. The Student Code of Conduct at North Central State College will apply to conduct that occurs on College premises or College property, at any location at College sponsored activities, and in off-campus buildings occupied by students by virtue of their association with a group/organization given formal registration by the College. The Student Code of Conduct may also apply off-campus, when the administration determines that the off-campus conduct affects a substantial College interest.

1. A substantial College interest is defined to include:

    a. Academic course requirements or any credit-bearing experiences, such as internships, clinical or practicum experience, field trips, or student teaching;

    b. Any activity supporting pursuit of a degree, such as research at another institution or a professional practice assignment;

    c. Any activity sponsored, conducted, or authorized by the College or by registered student organizations; or

    d. Any activity that causes destruction of property belonging to the College or members of the College community or causes serious harm to the health or safety of him/herself or members of the College community.

2. Each student will be responsible for his or her conduct from the time he or she applies for admission until the actual awarding of a degree, including during the academic year, during breaks and between academic terms, before classes begin and after classes end, during periods between terms of actual enrollment, and including conduct whether or not discovered until after a

degree is awarded. The Student Code of Conduct will apply to a student's conduct even if the student withdraws from school while a matter is pending.

3. The Student Code of Conduct applies to guests of community members, whose student hosts may be held accountable for the misconduct of their guests. Visitors to and guests of the College may initiate grievances for violations of the Student Code of Conduct committed against them.

4. Student organizations may be charged with violations of the Code for behavior occurring on or off campus. A student organization and its officers may be held collectively or individually responsible when violations of the Code by those associated with the group or organization have received the tacit or overt consent or encouragement of the leaders, officers, or spokespersons. While student organizations not registered by the College are exempt from this Code, student members of such organizations may be held accountable for their behavior under this Code. When considering allegations involving collective responsibility, the College may make individual findings with respect to the involvement of each student.

5. The College will treat an attempt to commit a violation listed in the Student Code of Conduct as if the attempted conduct had been completed.

6. Students continue to be subject to city, state, and federal laws while at the College, and violations of those laws may also constitute violations of the Code. In such instances, the College reserves the right to initiate an allegation and to initiate conduct proceedings without a formal allegation by the victim or witnesses of misconduct and may impose sanctions for violation of the Code even if such criminal proceeding is not yet resolved or is resolved in the student's favor.

7. NCSC will not tolerate intentional false reporting of incidents. It is a violation of the Student Code of Conduct to make a false report of any policy violation or violation of any federal, state, or local law.

8. The College encourages the reporting of Conduct Code violations. To this end, and at the sole discretion of designated College officials, a student who may have conduct violations related to an incident and who self-reports violations related to that incident may receive a lesser sanction for conduct violations related to that incident.

9. Behavior conducted online, such as harassment delivered by e-mail, can subject students to Code of student conduct violations. Students should be aware that blogs, web pages, social networking sites and other modes of electronic communication are in the public sphere, are not private, and can subject a student to allegations of misconduct. NCSC does not seek out this information, but may take action if and when such information is brought to the attention of NCSC officials.

10. Any question of interpretation or application of the Student Code of Conduct shall be referred to the Dean of Students & Enrollment Management or designee for final determination.

11. The Student Code of Conduct shall be reviewed periodically under the direction of the Dean of Students & Enrollment Management or designee. Recommendations for changes will be submitted to Shared Governance as needed.

C. Authority

1. The President shall have the final responsibility and authority for the discipline of all students of the College. This responsibility and authority has been delegated by the President to the Chief Academic Officer in cases of academic misconduct and to the Chief Student Conduct Officer in cases of non-academic misconduct. The Chief Student Conduct Officer is also charged with responsibility for promulgation of rules governing student conduct, subject to approval by the College's Board of Trustees.

2. The North Central State College Code of student conduct is an official publication of the College. All petitions for revision and amendment of this Code of student conduct should be submitted through the office of the Chief Student Conduct Officer. Proposed revisions to the Code shall be reviewed, in draft form, by the Student Government, Faculty Caucus, Staff Caucus, and Management Advisory Council, President's Staff, with final approval granted by the College's Board of Trustees. No revision shall become effective unless approved by the President's Staff, and Board of Trustees, and until printed notice of such revisions is made available to students.

D. Definitions

1. The term "NCSC", "College", or "the College" means North Central State College.

2. The term "student", for the express purposes of the Student Code of Conduct, includes: all persons taking courses at or through NCSC, persons who withdraw after allegedly violating the Student Code of Conduct, persons who are not officially enrolled for a particular term but who have a continuing relationship with NCSC, persons who have been notified of their acceptance for admission, and persons who have applied for admission to the College but have not yet been notified of acceptance.

3. For purposes of this policy, the term "faculty member" means any person hired by NCSC to conduct classroom or teaching activities, or who is otherwise considered by NCSC to be a member of its faculty.

4. The term "NCSC official" includes any person employed by NCSC, performing assigned administrative, academic or professional responsibilities.

5. The terms "member of NCSC community" or "NCSC community" or "College community" may be used interchangeably and include any person (or persons collectively) who is a student, faculty member, administrator, staff member, and any other

person employed by NCSC. A person's status in a particular situation will be determined by the Dean of Students Services & Enrollment Management.

6. The term "NCSC premises" includes all land, buildings, facilities, and other property in the possession of or owned, used, leased or controlled by NCSC including adjacent streets and sidewalks.
7. The term "NCSC property" includes vehicles, equipment, furniture, identification badges, parking passes and other similar items owned, used or controlled by NCSC.
8. The term "President's Staff" includes the President of the College and Vice Presidents.
9. The term "student organization" means any number of persons who have complied with the formal requirements for NCSC registration through the Student Activities and Athletics Office.
10. The term "hearing board" means the Student Conduct Committee.
11. The term "conduct officer" or "hearing officer" means a NCSC official authorized on an ongoing or case-by-case basis by the Dean of Students Services & Enrollment Management to make determinations including but not limited to, the hearing procedures, whether a student's behavior violates the Student Code of Conduct, the conduct's impact upon the NCSC community, recommendations for responsibility by the student, recommendations for sanctions.
12. The term "will" is used in the imperative sense.
13. The term "may" is used in the permissive sense.
14. The term "policy" means the written regulations of NCSC found in, but not limited to, the student handbook, College catalog, and the enacted College policies and procedures.
15. The term "preponderance of evidence" means information that would lead a reasonable person to conclude that it is more likely than not that a student's behavior occurred and/or violated the Student Code of Conduct.
16. For purposed of this policy and its procedures, the term "advisor" refers to the individual who assists a student or student organization with hearing preparation and process. An advisor may be any member of NCSC community.
17. The term "interim action" means temporary exclusion from NCSC premises and/or NCSC events and/or other sponsored activities imposed by the Dean of Students and Enrollment Management.

E. Non-Academic Misconduct is defined as any activity by a student which violates College/campus rules and regulations (excluding academic misconduct) and/or which tends to jeopardize the orderly operation of the College/campus. Prohibited conduct under this section includes, but is not limited to:

1. Violation of the College's Discrimination, Harassment, Sexual Misconduct, Stalking, and Retaliation Policy 15-03 (Discrimination Policy) is a violation of this Code of Student Conduct. The definitions of discrimination, harassment, sexual misconduct, domestic violence, and stalking are contained in the Discrimination Policy. Violations of the Discrimination Policy include retaliation against an individual for taking any of the actions in support of the Discrimination Policy.
2. Destruction of property- actual or threatened damage, misuse or destruction of College property or resources, or property or resources of others, whether done intentionally or with reckless disregard.
3. Dangerous weapons or devices- illegal or unauthorized possession, use or unauthorized storage of firearms, fireworks, ammunition, dangerous chemicals, switchblade knives, knives with blades three inches or more, other weapons, or realistic replicas of weapons on College premises or use of any such item, even if it is legally possessed, in a manner that harms, threatens, or causes fear of physical safety to others.
4. Dishonest conduct- dishonest conduct, including, but not limited to, knowingly reporting a false emergency; knowingly making false accusation of misconduct; misuse or falsification of College documents by actions such as forgery, alteration, or improper transfer; submission to a College official of information known by the submitter to be false. Other dishonest conduct includes but is not limited to improper disclosure of confidential information. Other than public information, the disclosure of information that is privileged and/or confidential, including information pertaining to patients and their care, research subjects, clients, or other students that is accessible to the student through association with North Central State College, its clinical, practicum or affiliated sites.
5. Financial Responsibilities - failure to promptly meet financial responsibilities to the institution, including, but not limited to: knowingly passing a worthless check or money order in payment to the institution or to an official of the College acting in an official capacity.
6. Theft/unauthorized use of property -theft or attempted theft, or the unauthorized use or possession of College property or services, or the property of others.
7. Failure to comply with College or civil authority- failure to comply with legitimate directives of authorized College officials, law enforcement or emergency personnel, identified as such, in the performance of their duties, including failure to identify oneself when so requested; or violation of the terms of an action plan or disciplinary sanction.
8. Use, possession, or distribution of a narcotic, inhalant or other controlled substances, as well as drug paraphernalia, except as expressly permitted by law.

9. Abuse or misuse of prescriptions or over-the-counter medications.

10. Alcohol use, production, distribution, sale, or possession of alcohol in a manner prohibited under law or applicable College policy. Alcoholic beverages may not in any circumstance be used by, possessed by, or distributed to any person under twenty-one (21) years of age.

11. Unauthorized presence -unauthorized entrance to or presence in or on College premises.

12. Disorderly or disruptive behavior- includes but is not limited to violence or threat of violence against self or any member or guest of the College, obstruction of teaching, research, administration, disciplinary proceedings or other College activities, including its public service functions on or off campus, or of other authorized non-College activities when the conduct occurs on College premises. Disruption is an action or combination of actions by an individual or a group, which unreasonably interferes with, hinders, obstructs, or prevents the right of others to freely participate in the College's programs, services, or academic settings. This may include, but is not limited to a disruption by the use of pagers, cell phones or any other communication devices. (NOTE: Faculty may determine that disruptive conduct on the part of one or more students is interfering with the activities of the classroom. If this occurs, the faculty member may direct the student(s) to leave the classroom for the remainder of the class period. When necessary, the faculty member may ask a campus security officer to escort disorderly or disruptive student(s) from the classroom. Suspension for more than one class period requires formal disciplinary action.)

13. Unauthorized gambling for money or other items of value, including the unauthorized exchange of currency or items of value through betting or games.

14. Threatening or causing physical harm, which includes but is not limited to: physical contact that puts a person in fear for his/her physical safety, or causes the person to suffer actual physical injury; and, threatening behavior which is defined as written or verbal conduct that causes a reasonable expectation of injury to the health or safety of any person or damage to any property.

15. Bullying-any act of intimidation (implied threats or acts that cause a reasonable fear of harm in another), coercion (pressuring another unreasonably until an act is not truly voluntary) or menacing (knowingly cause another to believe that the offender will cause physical harm to the person or property of the other person).

16. Hazing- doing any act or coercing another, including the victim, to do any act of initiation into any student or other organization that causes or creates a substantial risk of causing mental or physical harm to any person.

17. Judicial system abuse- abuse of any College judicial system, including but not limited to:

    a. Failure to obey the summons of a judicial body or College official;

    b. Falsification, distortion, or misrepresentation of information before a judicial body;

    c. Disruption or interference with the orderly conduct of a judicial proceeding;

    d. Institution of a judicial proceeding knowingly without cause;

    e. Attempting to discourage an individual's proper participation in, or use of, a College judicial system;

    f. Attempting to influence the impartiality of a member of a judicial body prior to, and/or during the course of a judicial proceeding;

    g. Harassment (verbal or physical) and/or intimidation of a member of a judicial body prior to, during, and/or after a judicial proceeding;

    h. Failure to comply with one or more sanctions imposed under the Code of Student Conduct; and

    i. Influencing or attempting to influence another person to commit an abuse of a College judicial system.

18. Violation of College rules- violation of other published College regulations, policies, or rules, or violations of federal, state, or local law. These College regulations, policies, or rules include, but are not limited to, those which prohibit the misuse of computing resources, rules for student groups or organizations, and rules specific to an academic program as specified in the program handbook.

19. Riotous Behavior- participation in a disturbance with the purpose to commit or incite any action that presents a clear and present danger to others, causes physical harm to others, or damages property. Proscribed behavior in the context of a riot includes but is not limited to:

    a. Knowingly engaging in conduct designed to incite another to engage in riotous behavior; and

    b. Actual or threatened damage to or destruction of College property or property of others, whether done intentionally or with reckless disregard; and

    c. Failing to comply with a directive to disperse by College officials, law enforcement or emergency personnel; and

    d. Intimidating, impeding, hindering or obstructing a College official, law enforcement or emergency personnel in the performance of their duties.

This rule shall not be interpreted as proscribing peaceful demonstrations, peaceful picketing, a call for a peaceful boycott, or other forms of peaceful dissent.

20. Arrest - failure of any student to accurately report the student's arrest by any law enforcement agency to the Office of the Dean of Students and Enrollment Management within seventy-two (72) hours of for any felony crime that occurs 1) on College premises, 2) at College sponsored activities, or 3) off-campus. A felony crime is a crime for which more than one year in prison may be imposed.

F. College Judicial Committee - The College Judicial Committee hears cases of non-academic misconduct referred by the Chief Student Conduct Officer. The Committee may also hear cases referred by the Committee on Academic Misconduct.

1. The Committee consists of:

a. Two (2) faculty members recommended by the Faculty Caucus and appointed by the Chief Academic Officer for three-year terms which begin with the summer semester;

b. Two (2) staff members as recommended by the Management Advisory Council for three-year terms which begin with the summer semester;

c. Two (2) staff members as recommended by the Staff Caucus for three-year terms which begin with the summer semester; and

d. One (1) student member, appointed by the Student Government or, when the Student Government is not functioning, appointed by the Chief Student Conduct Officer.

Faculty, professional staff, and support staff members serving on the committee should have at least three years of experience at the College.

Student members should have completed at least two terms at the College and must be in good academic standing. Students will be appointed by the Chief Student Conduct Officer in consultation with the Student Government. During times when Student Government is not functioning, students shall be appointed by the Chief Student Conduct Officer.

2. The committee will establish a member to serve as coordinator. Student members shall not serve in this role.

3. A simple majority of the Committee shall constitute a quorum.

G. Procedures

1. A written complaint alleging a violation of the Code of student conduct must be filed with the College within six (6) months of the violation. Absent extraordinary circumstances, the College may initiate charges, if any, within one year of the filing of the complaint.

2. Initiation and investigation of Code violations

a. Initiation. Person(s) witnessing or experiencing what they believe to be a possible Code violation should provide an authorized College official with the information. Information and/or complaints about possible Code violations other than academic misconduct should be provided to the Chief Student Conduct Officer. In cases where the alleged activity may involve a violation of criminal law in addition to a violation of the Code, information and/or complaints should be provided to North Central State College/Ohio State University Mansfield campus security officials or other appropriate law enforcement agency. The College will review all information and/or complaints received and may conduct a preliminary investigation of the alleged violation.

b. Investigation. Campus Security or other appropriate law enforcement agency shall have primary responsibility for the investigation of acts that involve suspected violation of federal, state, local laws. The Chief Student Conduct Officer and other designated College personnel may conduct a preliminary investigation of an alleged violation other than those involving academic misconduct. During the investigation, the student allegedly involved in misconduct may be sent a letter describing the alleged violation, requesting the student to make an appointment to discuss the matter, and specifying a date by which the appointment must be made. Any person believed to have information relevant to an investigation may also be contacted and requested to make an appointment to discuss the matter. Failure to comply with such a request to make and keep such an appointment may result in the initiation of charges for judicial system abuse. Upon completion of an investigation, the investigator will decide upon an appropriate course of action, which may include, but is not limited to, taking no further action, deferring further action with or without conditions, initiating an informal admonition, or initiating charges.

3. Students shall be notified of College charges in writing, unless a more effective form of notification is deemed appropriate. Charges may be presented in person or by mail to the student's local or permanent address on file in the office of the College Registrar. All students are required to maintain an accurate and current local and permanent address with the College Registrar. Following notification of charges, students are strongly encouraged to and shall be afforded the opportunity to meet with a College official for the purpose of explaining the College judicial process and discussion of the charges. Failure of the student to respond to the initiation of charges or schedule a preliminary meeting shall in no way prevent the College from scheduling and conducting a hearing in the absence of the student.

4. A student charged with one or more violations of the Code has the right to a hearing. However, in a case where a charged student admits such violations in writing, the student may request in writing to have a decision as to appropriate action made administratively by the Chief Student Conduct Officer or his/her designee rather than have the charges referred for a hearing. In such situations, the student waives the right to a hearing and the related procedural guarantees provided by a committee hearing. Following an administrative decision, the student retains the right to request an appeal of the original decision, but may do so only upon the ground that the sanction is grossly disproportionate to the offense committed.

5. If a hearing is to be held, written notification will be provided. The Chief Student Conduct Officer, on behalf of the College Judicial Committee, will file the charge(s) of non-academic misconduct. Written notification to the student will be delivered to the last known address of the student by certified mail, certificate of mailing, or hand delivered to the student on campus no fewer than seven (7) calendar days prior to the hearing. The notification will include the specific nature of the violation; date, time, and location of the hearing; a statement of the student's rights; and information on the hearing's procedures.

6. The student may request a continuance of up to 30 days for good cause. The student may request a hearing separate from other students who may have been involved in the violation. A request for a continuance or separate hearing must be received in the Office of the Chief Student Conduct Officer at least two (two) calendar days before the 12 scheduled hearing. The Chief Student Conduct Officer will be responsible for reviewing and approving such a request.

H. Hearings - Hearings of the College Judicial Committee are conducted in order to develop the facts and circumstances and to determine whether a violation of the Code has occurred.

Although the procedural requirements are not as formal as those existing in criminal or civil courts of law, to ensure fairness, the following procedures will apply and, unless already provided to the student, be included within the hearing notice:

1. A student charged with non-academic misconduct is expected to appear before the Committee, although a student may waive the right to personally appear.

2. A student charged with academic misconduct may review the file prior to the hearing by contacting the Office of the Chief Student Conduct Officer. However, consistent with state and federal law, the College is permitted to redact information from the file prior to the student viewing it.

3. A simple majority of the Committee membership shall constitute a quorum. A quorum of the Committee must be present to conduct a hearing. The coordinator or his/her designee will coordinate hearing activities.

4. Attendance at hearings is limited to those directly involved or those requested by the College Judicial Committee to attend. The coordinator of the Committee will take reasonable measures to assure an orderly hearing, including removal of persons who impede or disrupt proceedings.

5. The charged student may have an advisor throughout the hearing. The advisor may only counsel the student and may not actively participate in the hearing, unless clarification is needed as determined by the coordinator of the Committee.

6. The charged student may submit a written statement, may invite relevant witnesses to attend, may ask questions of witnesses called by others, and will be notified of potential witnesses to be called. The College may present witnesses as well as question those presented by the charged student.

7. Written statements may be used if, for good reason, a witness cannot attend the hearing. Written statements must be notarized, absent other clear evidence of authenticity.

8. In cases requiring special expertise, the coordinator of the Committee may appoint individuals with appropriate expertise to serve as consultants to the committee. The consultants may be present and provide information as called upon during the hearing but will not vote.

9. Hearings held by the College Judicial Committee, unlike proceedings of courts of law, do not require conclusive proof. Instead a preponderance of the evidence is sufficient for the Committee to make a decision.

10. A majority vote of Committee members present will be required to find the student responsible for a violation of the Code as charged. In the event of a tie, the committee will continue to deliberate. If after the committee determines that exhaustive deliberations have occurred and a majority decision is not reached the student will be found not responsible.

I. Findings, Recommendations and Range of Sanctions - A written report of the Committee's findings and recommendations shall be forwarded by the coordinator to the Chief Student Conduct Officer within seven (7) calendar days of the conclusion of the proceedings. The Committee will base any recommendations for sanctions on the approved College sanctions outlined in section VII of this document. Based on this report, the Chief Student Conduct Officer will determine the appropriate sanction(s), where appropriate.

J. Student Notification and Imposition of Sanctions - Within 7 days of the Committee's report, the Chief Student Conduct Officer will notify the student in writing of the Committee's findings, as well as sanctions and date that sanctions will take effect, and the student's right to appeal.

K. Appeal procedure - A student who has been found to have violated the Code has the right to appeal the findings and/or the assigned sanctions. The College reserves the right to impose the sanction retroactively to the date cited in the original notification from the Chief Student Conduct Officer.

1. The student may submit a written appeal to the President's Staff within seven days of receipt of the notification letter.

2. President's Staff may grant for good cause an extension not to exceed thirty calendar days for the filing of an appeal.
3. An appeal hearing shall be scheduled by President's Staff within ten calendar days after the institution receives the appeal.
4. The student will meet with the President's Staff to present his/her appeal.
5. A simple majority of the President's Staff membership will constitute a quorum.
6. President's Staff will review the record and facts of the matter and any other relevant information. By majority vote, President's Staff may affirm, overturn, or modify the previous decision or refer the issue back to the Chief Student Conduct Officer for a new hearing. The Chief Student Conduct Officer will abstain from voting in this matter. An appeal cannot result in a more severe sanction being imposed.
7. The President's Staff will notify the student in writing of the decision within 10 calendar days of the hearing.
8. The decision of the President's Staff is final.

L. Attendance - Because the most accurate and fair review of the facts can best be accomplished when all parties are present, the charged student is expected to attend and participate. If an individual does not choose to attend a hearing, the charges will be reviewed as scheduled on the basis of the information available, and a decision will be made. Although no inference may be drawn against a student for failing to attend a hearing or remaining silent, the hearing will proceed and the conclusion will be based on the evidence presented. No decision shall be based solely on the failure of the charged student to attend the hearing or answer the charges.

M. Record of proceedings - A single record consisting of written notes, tape recording, or other method selected by the Committee will be made of all hearings. Such record will remain the property of the College but will be made available to the charged student for review during the appeal period, and can be copied at his or her expense.

N. College Sanctions. Definitions and guidelines for sanctions - Sanctions should be commensurate with the violation(s) found to have occurred. In recommending the sanction(s) to be imposed, the committee should take into account any mitigating circumstances and any aggravating factors including, but not limited to, any provocation by the subject of the conduct that constituted the violation, any past misconduct by the student, any failure of the student to comply fully with previous sanctions, the actual and potential harm caused by the violation, the degree of intent and motivation of the student in committing the violation, and the severity and pervasiveness of the conduct that constituted the violation. Impairment resulting from voluntary use of alcohol or drugs (i.e., other than medically necessary) will be considered an aggravating, and not a mitigating, factor. Sanctions are effective upon date of first notice, whether oral or written, unless specified within such notice. One or more of the following sanctions may be imposed upon any student or student organization found to have violated one or more provisions of the Code:

1. Disciplinary Warning. A disciplinary warning to a student represents a formal written admonition for a specific conduct violation, and is considered a disciplinary sanction. A student under warning shall continue to exercise the right and privileges of a student in good standing.
2. Conduct probation. This probationary condition is for a specified period of time but without loss of privileges as a student in good standing. Further violation of College policies during the probationary period will be viewed not only as the act itself, but also as a violation of the probation, which could result in further sanctions including but not limited to disciplinary probation, suspension or dismissal.
3. Disciplinary probation. This probationary condition is in effect for a specified period of time and may involve the loss of specified privileges. Further violation of College policies during the probationary period will be viewed not only as a violation based upon the act itself but also as a violation of the probation, which shall result in further sanction up to and including suspension or dismissal.
4. Suspension. Suspension is a sanction that terminates the student's enrollment at the College for a specified period of time. Satisfactory completion of specified stipulations may be required for readmission at the end of the suspension period.
5. Expulsion. Expulsion is a sanction which permanently separates a student from the College without opportunity to re-enroll in the future.

   Conditions of suspension and expulsion- A student who has been suspended or dismissed from the College shall be denied all privileges afforded a student and shall be required to vacate campus at a time determined by the committee. In addition, after vacating campus property, a suspended or dismissed student may not enter upon campus and/or other College property at any time, for any purpose.

6. Restitution- Restitution is a sanction that requires the student to make reimbursement for damages to, destruction of, or misappropriation of College or campus property or the property of any person. This sanction may be ordered in lieu of or in connection with another sanction.
7. Other sanctions- Other appropriate sanctions may be imposed singularly or in combination with any of the above-listed sanctions. Examples include, but are not limited to, lowering a grade (in the case of academic misconduct), administrative removal from a specific course or courses, removal from an academic program or technology, removal from a practicum or internship worksite, research assignments, community service projects, special workshop participation, and/or referral to medical resources or counseling personnel.

8. Revocation of admission or degree - Admission to or a degree awarded from the College may be revoked for fraud, misrepresentation, or other violation of College standards in obtaining the degree, or for other serious violations committed by a Student prior to graduation.

9. Withholding degree - The College may withhold awarding a degree otherwise earned until the completion of the process set forth in this Student Code of Conduct, including the completion of all sanctions imposed, if any.

O. Suspension or Dis-Enrollment Based on Risk of Substantial Harm - Interim Suspension-When the Chief Student Conduct Officer or the Chief Academic Officer (or designee) has reasonable cause to believe that the student's presence on College premises or at a College-related or registered student organization activity poses a significant risk of substantial harm to the health or safety of others or to property, the student may be immediately suspended from all or any portion of College premises, College-related activities or registered student organization activities, and is not permitted to participate in, or complete academic coursework. This temporary suspension will be confirmed by a written statement and shall remain in effect until the conclusion of a full hearing or administrative decision, without undue delay, in accordance with the rules of North Central State College. The student may, within three (3) working days of the imposition of the suspension, petition the Chief Officer imposing the suspension for reinstatement. The petition must be in writing, and must include supporting documentation or evidence that the student does not pose, or no longer poses, a significant risk of substantial harm to the health or safety of others or to property. A hearing on such petition will be conducted without undue delay by the Chief Officer imposing the suspension or his/her designee.

1. Administrative dis-enrollment and other restrictions - A student may be dis-enrolled from the College; prohibited from all or any portion of College premises, College-related activities or registered student organization activities; and/or permitted to remain only under specified conditions when Chief Student Conduct Officer or the Chief Academic Officer (or designee) finds that there is clear and convincing evidence that:

    a. The student's continued presence poses a significant risk of substantial harm to the health or safety of themselves, others, or to property; or

    b. The student, as a direct result of an apparent health condition, is engaged in substantial, continuing disruption of teaching, learning, research, administration or other College-related activities. Before making such a determination, the Chief Student Conduct Officer or the Chief Academic Officer (or designee) shall notify the student in writing of the reasons that dis-enrollment or other action is being considered, provide the student with an opportunity to respond, and consult with appropriate College personnel. The Chief Student Conduct Officer or the Chief Academic Officer (or designee) may also choose to consult with any other persons deemed appropriate under the circumstances.

2. In those cases under paragraph (O)(1)(a) of this rule in which it appears that the risk posed by the student is a result of a health condition or a disability as defined by the Americans with Disabilities Act, and in all cases under paragraph (O)(1)(b) of this rule, the Chief Student Conduct Officer or the Chief Academic Officer (or designee) shall also determine whether the risk or disruption can be eliminated or sufficiently reduced through reasonable accommodation and, if so, shall take appropriate steps to ensure that accommodation is made. The Chief Student Conduct Officer or the Chief Academic Officer (or designee) may request the student to undergo an appropriate examination, as specified by the Chief Student Conduct Officer or the Chief Academic Officer (or designee), to determine whether any such condition exists and whether any such accommodation is possible. If the student fails to undergo such an examination, and if the other available evidence supports a finding under either paragraph (O)(1)(a) or (O)(1)(b), the Chief Student Conduct Officer or the Chief Academic Officer (or designee) shall, to the extent reasonably possible, take the least restrictive measure or combination of measures necessary to resolve the risk or disruption.

3. A student who has been dis-enrolled; prohibited from College premises, College-related activities or registered student organization activities; or permitted to remain only under specified conditions may petition the Chief Student Conduct Officer or the Chief Academic Officer (or designee) for revision of that status. The petition must include supporting documentation or evidence that:

    a. The conditions found to have existed under paragraph (O)(1)(a) or (O)(1)no longer exist and will not recur, and

    b. The student meets all normal and appropriate standards for admission and enrollment in any academic unit in which the student seeks to re-enroll. Upon receipt of such a petition, the Chief Student Conduct Officer or the Chief Academic Officer (or designee) shall evaluate the evidence and may consult with the student, any appropriate College personnel, and any other persons whom Chief Student Conduct Officer or the Chief Academic Officer (or designee) deems appropriate. The Chief Student Conduct Officer or the Chief Academic Officer (or designee) may deny the petition, grant the petition in whole or in part under specified conditions, or grant the petition in whole or in part without condition.

P. The Code of Student Conduct is maintained by Office of the Student Conduct Officer.

Effective: December 1, 2015
Expires: December 1, 2020
Review Dates: 8/1/08, 12/1/15

CAMPUS POLICIES AND PROCEDURES

ALCOHOL AND DRUG POLICY

North Central State College is a learning community. Its students, faculty, staff and guests interact in a wide variety of intellectual and social activities that extend outside of the classroom. We value and promote an alcohol-free environment, but we recognize alcoholic beverages may be available at some campus activities. Such activities are consistent with the College's cultural values when they foster moderation and safety in alcohol consumption. Illegal use of drugs is strictly prohibited.

The College prohibits the illegal use of alcohol and complies fully with federal, state and local regulations regarding the sale, possession and consumption of alcoholic beverages. All members of the College community are held responsible for their behavior and for respecting the rights of others. The College, in partnership with the Ohio State University – Mansfield, is committed to providing the community with education regarding high risk alcohol use and to making health-enhancing experiences a priority.

Unlawful possession, use, production, distribution or sale of alcohol or drugs by any student or employee is prohibited on College property or as any part of College activities. It is a violation of the Code of Student Conduct, city, state and federal codes, and subject to applicable sanctions.

Please see the full Alcohol & Drug Policy at www.ncstatecollege.edu/documents/policies-manual/Final%20PDFs/16-22.pdf for further information.

CAMPUS SEX CRIMES ACT PREVENTION INFORMATION

In reading the following information, please be mindful of the fact that North Central State College is located on a campus that is open to the public, that the College maintains an "open door" admission policy, and that the College serves students from a variety of counties in Ohio.

The federal Campus Sex Crimes Prevention Act requires institutions of higher education to issue a statement advising the campus community where law enforcement agency information provided by a State concerning registered sex offenders may be obtained. It also requires sex offenders already required to register in a State to provide notice, as required under State law, of each institution of higher education in that State at which the person is employed, carries on a vocation, or is a student.

Information regarding individuals who are required to register as sex offenders can be obtained from the following sources:

E-SORN

The Ohio Bureau of Criminal Identification and Investigation, with the assistance of the office of the Ohio Attorney General, has created a public database on the Internet called Electronic Sexual Offender Registration Notification or e-SORN. The e-SORN database can be accessed at www.icrimewatch.net/index.php?AgencyID=55149.

According to a statement released 12-18-03 by State Attorney General Jim Petro, "users who visit e-SORN will find the name, address, type of offense and photo of each convicted sex offender that the Attorney General's office is permitted by law to include. The website is searchable by offender name, county, zip code and school district. It also provides links to county sheriff's offices websites. By law, the e-SORN public website may only contain information on offenders who have been convicted in adult criminal court."

COUNTY SHERIFF'S OFFICES

North Central State College is located in Richland County:

- Richland County Sheriff's Office - 419-774-5881
- Ashland County Sheriff's Office - 419-281-3911
- Crawford County Sheriff's Office - 419-562-7906
- Holmes County Sheriff's Office - 330-674-1936
- Huron County Sheriff's Office - 419-668-6912
- Knox County Sheriff's Office - 740-397-3333
- Morrow County Sheriff's Office - 419-946-6991
- Wayne County Sheriff's Office - 330-287-5750

CHILDREN ON CAMPUS

North Central State College strives to maintain an environment conducive to teaching and learning. Therefore, whenever children are brought to the campus they must remain with their parents, guardians, or caretakers in all areas of the College. Whether or not a child can be brought into a classroom is at the discretion of each faculty member.

COLLEGE/CAMPUS CLOSINGS

Only in extremely rare circumstances will the College close due to inclement weather. There will be a number of times when the public schools might close, but the campus will remain open. Also, the campus might close only for morning classes and reopen for afternoon and evening classes. In the event of a forced cancellation, announcements will be made on every major radio station surrounding the five or six county area. The stations will be notified by 7 a.m. Students are encouraged not to call the College switchboard, but instead, listen carefully to the announcement for specific instructions on your local radio or television stations. Also, if the college closes, NC State will post an announcement on Twitter at "tweetsatncsc."

Please see the full College/Campus Closings Policy at www.ncstatecollege.edu/documents/policies-manual/Final%20PDFs/18-13.pdf for further information.

COMPUTER AND NETWORK RESOURCE USE

North Central State College computer and network resources are privileges provided to conduct the legitimate business of the College and to support the mission of the institution. The purpose of this statement is to outline the policies and procedures that promote the security and integrity of the College's computer systems and the information contained on those systems and that provide a framework for responsible access to computing resources. The President of the College, the Chief Academic Officer, deans, or instructors may elect to impose additional requirements or restrictions. North Central State College extends these principles and guidelines to systems outside the College which are accessed via the College's facilities. Computing or network providers outside of North Central State College may impose their own additional conditions of appropriate use, for which users at North Central State College are responsible.

Please see the full Computer & Network Use Policy at www.ncstatecollege.edu/documents/policies-manual/Final%20PDFs/19-20.pdf for further information. Please see the full Wireless Access Policy at www.ncstatecollege.edu/documents/policies-manual/Final%20PDFs/19-24.pdf for further information

DISCRIMINATION, HARASSMENT, SEXUAL MISCONDUCT, STALKING, AND RETALIATION POLICY

North Central State College is committed to providing an environment that emphasizes the dignity and worth of every member of its community and that is free from harassment and discrimination based upon race, color, religion, national origin, creed, service in the uniformed services (as defined in state and federal law), veteran status, sex, age, political ideas, marital or family status, pregnancy, physical or mental disability, genetic information, gender identity, gender expression, or sexual orientation. Such an environment is necessary to a healthy learning, working, and living atmosphere because discrimination and harassment undermine human dignity and the positive connection among all people at the College. Acts of discrimination, harassment, sexual misconduct, stalking, and retaliation will be addressed consistent with this policy.

This policy applies in cases where the student complaint involves discrimination or harassment. A student filing a complaint that does NOT involve discrimination or harassment must follow the College's Student Complaint Policy found at www.ncstatecollege.edu/documents/policies-manual/Final%20PDFs/15-02.pdf.

Please contact the Title IX Coordinator/EO at 419-755-4538, or see the full Discrimination, Harassment, Sexual Misconduct, Stalking, and Retaliation Policy at www.ncstatecollege.edu/documents/policies-manual/Final%20PDFs/15-03.pdf.

DISCRIMINATION GRIEVANCE PROCEDURES

The purpose of these procedures is to provide a prompt and equitable resolution for complaints or reports of discrimination based upon race, color, religion, national origin, creed, service in the uniformed services (as defined in state and federal law), veteran status, sex, age, political ideas, marital or family status, pregnancy, physical or mental disability, genetic information, gender identity, gender expression, or sexual orientation. The industry standard designation for these kinds of violations as well as the office of responsibility for the reporting and handling of these matters is identified by the term "EO".

Any person believing that they have been subjected to discrimination or harassment on any of these bases may file a complaint or report with the College "EO". These procedures address all complaints or reports of alleged discrimination or harassment, including conduct that violates the Discrimination, Harassment, Sexual Misconduct, Stalking and Retaliation Policy (hereinafter referred to as "Policy Violations"). The procedures also address complaints or reports of retaliation against those who have opposed practices forbidden under the policy, those who have filed complaints or reports under the policy, and those who have testified or otherwise participated in enforcement of the policy.

Please contact the Title IX Coordinator/EO at 419-755-4538, or see the full Discrimination Grievance Procedures at www.ncstatecollege.edu/documents/President/PoliciesProcedures/PolicyManual/Final%20PDFs/15-031.pdf for further information.

FAMILY EDUCATION RIGHTS AND PRIVACY ACT (FERPA)

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

- You have the right to inspect and review your educational records within 45 days of the day the College receives a request for access.
- You have the right to request the amendment of any part of your educational record that you believe is inaccurate or misleading.
- You have the right to consent to disclosure of personally identifiable information contained in your education records, except to the extent that FERPA authorizes disclosure without consent.
- You have the right to file a complaint with the U.S. Department of Education concerning alleged failures by North Central State College to comply with the requirements of FERPA.

The name and address of the office that administers FERPA is:

Family Policy Compliance Office
U.S. Department of Education
400 Maryland Avenue, SW
Washington, DC 20202-4605

Please contact the Registrar at 419-755-4824 or see the full Family Educational Rights and Privacy Act (FERPA) Policy at www.ncstatecollege.edu/documents/policies-manual/Final%20PDFs/17-50.pdf for further information.

FIREARMS

Law enforcement officers authorized to carry concealed weapons or dangerous ordnance and acting within the scope of their duties must do the following:

- Prior to the start of class, a student shall present a letter from their commanding officer to the Registrar indicating they are required to carry a weapon, even when not on duty, as part of their overall duties as a peace officer.
- Prior to employment, an employee shall present a letter from their commanding officer to the Director of Human Resources indicating they are required to carry a weapon, even when not on duty, as part of their overall duties as a peace officer.
- Notify their instructor, supervisor, etc. that they are peace officers required to carry a weapon.

FUNDRAISING DRIVES AND CANVASING

Canvassing or solicitation for funds, sales, or subscriptions are prohibited in campus buildings unless written permission has been granted. A written request should be sent to the Director for Student Engagement for main campus or to the NCSC Facilities Manager for the Kehoe Center who may seek recommendation(s) regarding requests from appropriate campus offices. The request should be made at least 10 working days prior to the event.

The sale of merchandise of any kind whatsoever, or publications or service in campus buildings, other than by the regularly authorized stores, food service, departments, or divisions of the campus, is likewise prohibited except upon written permission. A written request should be sent to the Director for Student Engagement for main campus or to the NCSC Facilities Manager for the Kehoe Center at least 10 working days prior to the event.

Any person violating this rule shall be subject, upon proper notice, to eviction from campus property or arrest.

GUEST SPEAKERS

It is the policy of the Campus to foster a spirit of free inquiry and to encourage the timely discussion of the broad range of issues which concern our nation, provided that the views expressed are stated openly and are subject to critical evaluation. Within our prevailing standards of decency and honesty, this policy shall be construed to mean that no topic is too controversial for intelligent discussion on the campus. Restraints on free inquiry should be held to that minimum which is consistent with preserving an organized society in which change is accomplished by peaceful democratic means.

To this end, a registered student organization, after consulting with and prior approval of its faculty advisor, may invite guest speakers to the campus to address meetings, subject to the following provisions:

- Sponsorship must be by a registered student organization.
- Proper arrangements for the use of College facilities must be made.
- It must be clear that the student organization, not the College, is extending the invitation and that any views the speaker may express are his or her own and not those of the College.
- The student organization must take whatever steps are necessary to insure that the meeting is conducted in an orderly manner.
- The student organization must provide means for critical evaluation of the speaker's view, which must include as a minimum, an open question period following the speaker's presentation.
- The student organization must comply with any and all conditions for the orderly and scholarly conduct of the meeting.

A speaker invited by a student organization must not advocate action or urge the audience to take action which is illegal under the laws of the United States, the state of Ohio, or which is prohibited by the rules of the College or the Student Code of Conduct. It is the responsibility of the student organization to inform speakers in writing of this prohibition.

The maximum penalties to be assessed against a student organization for a failure to observe the provisions of Section 2 or for sponsoring a speaker who violates the prohibition of Section 3 of this rule shall be (a) for a single violation (including, as a single violation, multiple violations relating to the same meeting) in any academic year, suspension of the right of the student organization to invite a guest speaker to the campus for a twelve month period and (b) for more than one violation in any academic year, termination of the student organization's registered status.

Students, either as individuals or as members of recognized student organizations, who act in violation of the provisions of this rule shall be subject to disciplinary procedures and actions as outlined in the Student Code of Conduct.

Faculty and others entitled to sponsor a meeting involving the use of College facilities shall observe this rule.

POSTING POLICY

It is important for campus offices and student organizations to have adequate opportunities to publicize their events. It is also important to maintain an attractive campus, free of unnecessary litter. Guidelines for posting materials on the campus may be found in the NC State/OSU Mansfield Campus Posting Procedure. This procedure is designed to achieve those objectives.

Please see the full NC State/OSU Mansfield Posting Procedure at www.ncstatecollege.edu/documents/policies-manual/Final%20PDFs/18-041.pdf for further information.

ROLLERBLADES AND SKATEBOARDS

Roller blades and skateboard may be used as transportation on walks throughout campus, if used courteously, respecting the right of way of pedestrians. They may also be used for recreation in parking lot #8 and on the bike path, except when motorcycle classes or other approved activities are being conducted.

Stunting is dangerous to skaters, to campus property, and to bystanders, and is strictly prohibited anywhere on campus. Students in violation of skating rules may be subjected to disciplinary actions. Safety equipment is highly recommended for skaters to provide for personal safety.

Please see the full Roller Blades, In-Line Skates, and Skateboard Policy at www.ncstatecollege.edu/documents/policies-manual/Final%20PDFs/18-20.pdf for further information.

SELECTIVE SERVICE REQUIREMENTS

As a publicly funded, associate degree granting college, North Central State College is required to collect information from all male students regarding their selective service status. Forms used for collecting this information are included with NC State applications and also distributed during registration. Completed forms should be returned to the Office of Student Records. Failure to comply with this request will result in the assessment of the "out-of-state" tuition surcharge and the loss of certain financial aid benefits.

SMOKING POLICY

The Ohio State University at Mansfield Tobacco-Free Campus Policy, the North Central State College Nonsmoking Policy and the Ohio State Smoke-Free Workplace Law (ORC 3794) are in effect at the Mansfield Campus.

Please see full Non-Smoking Policy at www.ncstatecollege.edu/documents/policies-manual/Final%20PDFs/18-19.pdf for further information.

STUDENT COMPLAINT PROCEDURES

North Central State College encourages student communication with the administration, faculty, and staff regarding College operations, policies, and procedures and encourages students to use existing policies, personnel, and departmental offices to express specific concerns. Should a student deem that the existing policies, personnel, and departmental offices cannot address his/her specific concern or complaint, North Central State College accepts and maintains records of formal written complaints filed with the office of the Department Supervisor, Assistant Dean, Dean, or Vice President.

North Central State College is committed to fair and equitable decision-making regarding all policies and practices of the College. When decisions are rendered regarding the application of policies, the college is committed to resolving disagreements over the outcome through an appeals method adhering to the principles of due process.

Please see the full Student Complaint and Appeal Policy at www.ncstatecollege.edu/documents/policies-manual/Final%20PDFs/15-02.pdf for further information.

GENERAL EDUCATION

DEFINITION

General education is the foundation of a student's education. It is intended to impart core knowledge, intellectual skills, and attitudes that every educated person should possess and integrate into their personal and professional lives.

PHILOSOPHY

While students graduating from North Central State College must be educated within their chosen technical field, they must also have an educational experience that enables them to be conversant and interested in areas beyond the scope of their technical areas.

In addition to sparking an interest in self-directed and lifelong learning, general education should enable students to think about their technical areas in relation to what is going on in the society around them, make them more involved in developing their own sense of self, and think about their role as an educated person in society.

There are three major and equally important components of general education:

1. Core areas of knowledge – A broad base of concepts outside of the student's chosen technical field including, but not limited to, the arts, humanities, philosophy, and science.
2. Intellectual skills – The personal and professional skills required to understand, apply, and communicate general and technical concepts.
3. Attitudes – Concepts needed for the development of positive, personal perspectives as related to self and others.

General education courses should be introduced as early as possible in the curriculum and in a manner which is educationally sound. They should develop skills and/or knowledge that is common to and permeates all other courses within the degree program.

GOALS

General education at North Central State College is designed to provide all students the opportunity to achieve each of the following goals.

CORE KNOWLEDGE

- To understand concepts of ethics, philosophy, history, and aesthetics.
- To understand concepts of social science, law, politics, and economics.
- To understand concepts of literature, performing arts, and visual arts.
- To understand concepts of science and technology.

INTELLECTUAL SKILLS

- To develop the ability to read with comprehension, to communicate effectively in writing and speech, and to work effectively in groups.
- To develop the ability to comprehend and apply mathematical concepts.
- To develop the ability to research a problem or a topic by using library skills, computer skills, and community resources.
- To become independent planners, creative problem solvers, effective decision makers, and independent critical thinkers, using mathematics, computers, and communication skills as appropriate.

ATTITUDES

- To develop self-respect, personal responsibility, and social responsibility.
- To develop sensitivity to other people by recognizing the common elements of the human condition.
- To develop the desire to be lifelong and self-directed learners.

GENERAL EDUCATION COURSES

WRITTEN COMMUNICATION

ENGL 1010 - English Composition I	3 Credit(s)
ENGL 1030 - English Composition II	3 Credit(s)
ENGL 2050 - American Literature I	3 Credit(s)
ENGL 2070 - American Literature II	3 Credit(s)
ENGL 2090 - Introduction to Fiction	3 Credit(s)
ENGL 2110 - Creative Writing	3 Credit(s)
ENGL 2130 - Introduction to Film	3 Credit(s)
ENGL 2150 - Technical Writing	3 Credit(s)
ENGL 2180 - British Literature I	3 Credit(s)
ENGL 2190 - British Literature II	3 Credit(s)

ORAL COMMUNICATION

COMM 1010 - Speech	3 Credit(s)

MATHEMATICS AND STATISTICS

MATH 1070 - Applied Geometry & Trigonometry	3 Credit(s)
MATH 1110 - College Algebra	4 Credit(s)
MATH 1130 - Trigonometry	4 Credit(s)
MATH 1150 - Calculus I	5 Credit(s)
MATH 1151 - Calculus II	5 Credit(s)
MATH 2000 - Discrete Mathematics	3 Credit(s)
MATH 2010 - Calculus III	4 Credit(s)
STAT 1010 - Probability and Statistics	3 Credit(s)
STAT 1030 - Statistical Analysis	3 Credit(s)

SCIENCE ELECTIVES

BIOL 1050 - Principles of Biology	3 Credit(s)
BIOL 1070 - Lifetime Wellness	3 Credit(s)
BIOL 1101 - Nutrition	2 Credit(s)
BIOL 1230 - Biology I	4 Credit(s)
BIOL 1231 - Biology II	4 Credit(s)
BIOL 1550 - Microbiology for Health Professionals	3 Credit(s)
BIOL 1710 - Introduction to Anatomy and Physiology	3 Credit(s)
BIOL 1730 - Basic Anatomy and Physiology	4 Credit(s)
BIOL 2751 - Human Anatomy and Physiology I	4 Credit(s)
BIOL 2752 - Anatomy and Physiology II	4 Credit(s)
CHEM 1010 - Introduction to Chemistry	3 Credit(s)
CHEM 1030 - Chemistry	3 Credit(s)
GEOL 1010 - Physical Geology	4 Credit(s)
GEOL 1030 - Historical Geology	4 Credit(s)
PHYS 1010 - Introductory Physics	3 Credit(s)
PHYS 1050 - Physics for Artists	3 Credit(s)
PHYS 1110 - General Physics I	4 Credit(s)
PHYS 1130 - General Physics II	4 Credit(s)

HUMANITIES ELECTIVES

ARTS 1010 - Drawing I	3 Credit(s)
HIST 1010 - American History I	3 Credit(s)
HIST 1030 - American History II	3 Credit(s)
HIST 1050 - Western Civilization I	3 Credit(s)
HIST 1070 - Western Civilization II	3 Credit(s)
HUMA 1010 - Introduction to the Humanities	3 Credit(s)
HUMA 1030 - Leadership and the Classics	3 Credit(s)
HUMA 2999 - Special Topics Humanities	3 Credit(s)
MUSC 1010 - Music Appreciation	3 Credit(s)
PHIL 1010 - Western Philosophy	3 Credit(s)
PHIL 1110 - Ethics	3 Credit(s)
THEA 1010 - Introduction to Theatre	3 Credit(s)

SOCIAL SCIENCE ELECTIVES

COMM 2010 - Group Communication	3 Credit(s)
COMM 2030 - Interpersonal Communication	3 Credit(s)
COMM 2250 - Interviewing	3 Credit(s)
COMM 2999 - Special Topics in Communication	3 Credit(s)
HMSV 1190 - Death and Dying	3 Credit(s)
POLT 1010 - American National Government	3 Credit(s)
PSYC 1010 - Introduction to Psychology	3 Credit(s)
PSYC 1070 - Introduction to Women's Studies	3 Credit(s)
PSYC 2010 - Human Growth and Development	3 Credit(s)
PSYC 2030 - Child Psychology	3 Credit(s)
PSYC 2050 - Abnormal Psychology	3 Credit(s)
PSYC 2090 - Social Psychology	3 Credit(s)
PSYC 2100 - Personality Theory	3 Credit(s)
PSYC 2170 - Forensic Psychology	3 Credit(s)
PSYC 2999 - Special Topics in Psychology	3 Credit(s)
SOCY 1010 - Introduction to Sociology	3 Credit(s)
SOCY 2010 - Cultural Diversity and Racism	3 Credit(s)

HONORS COLLEGE

Honors studies at North Central State College are a little different than a lot of institutions. We challenge students to explore their interests and expand their boundaries.

NC State Honor Students are encouraged to break out of the classroom and interact with the community. They design projects and research under the mentorship of dedicated honors faculty members, submit their concepts for approval for honors credit, and go to work on their project. These experiences of integrated learning are equal parts inspiring, practical, meaningful and empowering. The honors experience is also personally rewarding for many students.

Each month the NC State Honor Students are invited to participate in an exclusive Honors Colloquium. The colloquia serve as important networking opportunities with business, industry, education, and government representatives who share their personal insight into leadership, civic engagement, character development, and global awareness.

At the end of Fall and Spring Semester, Honor Students display and present their projects at the Honors Exhibition in the Conard Common on the main campus. Students, faculty, administration, members of the Board of Trustees, and the community are invited to attend and share in the celebration of exceptional learning.

Credits for honors studies are included on student transcripts. Students who complete a minimum of 4 course projects and 15 hours of honors coursework will receive special recognition at graduation and be identified as a graduate of the Honors College on their transcript.

For more information on the Honors College at North Central State College, contact the Honors College Director in the Office of the Dean of Liberal Arts at 419-755-4876, or email HonorsCollege@ncstatecollege.edu.

MISSION STATEMENT

The North Central State Honors College will provide enhanced learning opportunities for talented students in both academic and career programs in an effort to enable them to develop to their fullest potential.

GUIDING PRINCIPLES

- To offer challenges and opportunities to highly-motivated, academically-talented, and committed students.
- To provide students with engaging intellectual environments to facilitate the growth of strong academic skills.
- To provide special recognition and rewards for outstanding students.
- To attract and retain students of excellence.
- To provide an intellectually stimulating context in which students can explore connections between theory and practice.
- To provide a context in which students learn to connect or integrate ideas and methods across disciplines.
- To impart to students a lasting love and enthusiasm for learning, problem solving, service, leadership, and critical thinking.

ADMISSIONS

AUTOMATIC ADMISSION

On the first day of each semester, all students with a cumulative grade point average of 3.5 or higher (college or high school) are automatically members of the North Central State College Honors College. These students are notified of their admission by email on the first day of the term and by follow-up letter to their home. All Honors Students may earn honors credit in the college-level courses of their choice and/or participate in all Honors College sponsored functions. However, only Honors Students who successfully complete an Honors Project, attend a mandatory Honors Colloquium, participate in the Honors Exhibition, and earn a grade of B or better in the course will earn honors credit for the term.

ADMISSION BY APPLICATION

Students with cumulative grade point averages between 3.2 and 3.5 are invited to apply for admission to the Honors College. These students must complete an application and return it to the Honors College Director in the Office of the Dean of Liberal Arts before the second Friday of the term. The Honors Council will review the application and render an admission status decision.

ADMISSION BASED ON SPECIAL CIRCUMSTANCES

Students who seek admission to the Honors College and believe they have special or unique circumstances must complete an application and return it to the Honors College Director in the Office of the Dean of Liberal Arts before the second Friday of the term.

REQUIREMENTS

Striving for Excellence

1. Obtain a Letter of Qualification from the Honors College Director in the Office of the Dean of Liberal Arts and present the Letter to the professor for the class(es) desired for honors credit.
2. Submit a completed project proposal form to the professor of the class in which they wish to pursue honors credit by the second Friday of the semester.
3. Collaborate with the instructor to develop an honors project and sign an honors contract created by the instructor. The contract must be received in the Office of the Dean of Liberal Arts by the third Friday of the semester.
4. Complete the project as detailed in the contract.
5. Attend at least one honors colloquium during the term and present a certificate of attendance to the honors instructor.

6. Report the honors project in the form of an academic poster demonstration.
7. Submit the poster to the honors instructor for review by the project deadline. The poster will be evaluated using the poster rubric. The approved poster must receive a passing score to enter the poster exhibition.
8. If approved, the poster must be displayed at the Honors College Poster Exhibition from 8:00 am - 6:00 pm on the scheduled date.
9. The student must complete the course with a grade of "B" or better.

THE HONORS CONTRACT

COMPLETION OF AN APPROVED HONORS PROJECT

The honors project must be completed through a contract between the honor student and the honors faculty member. The contract must also be approved by the Honors College Director. The project should be completed by the student as an extension to their regular expectations for the course, ranging between 20 and 25 clock hours of personal commitment. The project must exceed the regular course learning objectives, be detailed by clearly articulated embedded learning objectives in the course and incorporate a community engagement component. Honors projects are not graded and do not affect the course grade.

WHAT IT IS...

Diving deeper into the subject through creative and innovative approaches such as service learning, civic engagement, peer support and mentoring, shadowing, assisting with research, and other progressive approaches to learning.

WHAT IT IS NOT...

Read an extra book, write an extra paper, and/or give an extra speech.

BENEFITS OF HONOR COLLEGE

- Expand Studies on Topic of Interest
- Enhance Resume & College Transcript
- Network with Recognized Leaders
- Heighten Skills in Global Awareness & Leadership
- Enrich character development
- Develop Your Educational Opportunities
- Qualify for Transfer Scholarships
- Receive Special Recognition

IMPORTANT TERMS

Honors Colloquia are networking opportunities with business, industry, education, and government representatives sharing insight on leadership, character development, and global competencies. The colloquia are held monthly for Honors students. Each Honors student seeking credit must attend at least one colloquium per semester. Honors students not seeking credit are also encouraged, but not required, to attend.

Honors Contract is the agreement reached between the Honors student and the Honors faculty detailing the Honors Project. The contract is completed by the Honors faculty. The learning outcomes are measurable, detailed, and beyond the scope of the course.

Honors Exhibition is the culminating celebration of successful Honors Projects of the semester whereby the students are required to present their work through an academic poster demonstration to the community.

Honors Project is a required co-curricular activity requiring approximately 20-25 clock hours whereby the student explores the learning objectives of the course beyond the scope of the course and at a deeper depth. Service learning, civic engagement, shadowing, and applied/integrated learning is strongly encouraged. Writing an extra paper or giving an extra speech will not be accepted as an honors project. For more information about developing honors projects, feel free to contact the Honors College Director in the Office of the Dean of Liberal Arts. Projects do not impact course grades.

OVERVIEW OF ACADEMIC PROGRAMS

ASSOCIATE OF ARTS/ASSOCIATE OF SCIENCE

The Associate of Arts and the Associate of Science degree programs are designed for students who are planning to transfer to a four-year college or university and pursue baccalaureate degree programs. The curriculum fulfills the freshman and sophomore general education requirements of most four-year colleges and universities. Effective general education helps students gain competence in the exercise of independent intellectual inquiry and also stimulates their examination of understanding of personal, social and civic values. In addition, these degrees will fulfill the requirements for the Ohio Transfer Module at other public colleges and universities. In essence, upon completion of the Associate of Arts or the Associate of Science, students will have a well-rounded general education to augment the final two years required for a Bachelor's degree.

The Associate of Arts is awarded with the following focus areas:

- Business Administration Focus
- Communication Focus
- Criminal Justice Focus
- Education Focus
- English Focus
- Liberal Arts Focus
- Psychology Focus
- Social Work Focus

The Associate of Science is awarded with the following focus areas:

- Business Administration and Management Focus
- Mathematics Focus
- Pre-Health Professional Focus
- Pre-Mortuary Science Focus
- Pre-Professional Studies Focus
- SCI-MED Academy

ASSOCIATE OF APPLIED BUSINESS

The Associate of Applied Business Degree is awarded in the following programs:

- Accounting
- Business Administration – Business Management
- Business Administration – Marketing
- Visual Communications Media and Technology - Graphic Design

ASSOCIATE OF APPLIED SCIENCE

The Associate of Applied Science Degree is awarded in the following programs:

- Associate Degree Nursing
- Bioscience
- Criminal Justice
- Criminal Justice - Corrections
- Criminal Justice – Law Enforcement
- Criminal Justice – Law Enforcement Fastrack
- Engineering Technology – Integrated Engineering Technology
- Engineering Technology - Mechanical Engineering Technology
- Health Information Technology
- Health Services Technology
- Human Services
- Industrial Technology – Manufacturing Technology Operations Management
- Information Technology - Cyber Security
- Information Technology – Networking
- Occupational Therapy Assistant
- Physical Therapist Assistant
- Radiological Sciences
- Respiratory Care

ASSOCIATE OF TECHNICAL STUDIES (ATS)

The Technical Studies program allows a student who has specific needs that are not met by any single program at the College to combine elements of several technologies in a meaningful and logical way. Appropriate administrators and faculty will assist the student in formulating a course of study that closely matches his/her goals and needs. The course of study will be documented and upon successful completion of the program, the student will be awarded the Associate of Technical Studies degree.

To pursue Technical Studies, a student must complete a special Technical Studies application form available from any academic division office. A student will be considered admitted to the Technical Studies program only after his/her course of study has been formulated and approved by the appropriate administration and faculty.

BACHELOR OF APPLIED SCIENCE

The Bachelor of Applied Science is awarded in the following programs.

- Mechanical Engineering Technology

CERTIFICATES

North Central State College offers certificate programs which are designed to allow students to complete a cluster of coordinated courses in a shorter period of time than an associate degree. Students in associate degree programs may benefit from adding a certificate to their areas of expertise. Upon successful completion of a certificate program, a "Certificate Request" form must be completed in the Office of Student Records in order to receive a certificate.

Certificates are awarded upon completion of prescribed courses of study in:

- Advanced Manufacturing
- Agriculture Management
- Certified Bookkeeper
- Community Health Worker
- CNC Operations and Programming
- Cyber Security Network Defense
- Dental Assisting
- Electrical Maintenance
- Emergency Medical Technician
- Help Desk/Desktop Support
- Industrial Design
- Manufacturing Tool and Die
- Microsoft Applications
- Network Administration/Management
- Network Security Essentials
- Network Support
- Operations Management
- Paramedic
- Pharmacy Technician
- Phlebotomy and EKG
- Police Academy
- Practical Nursing (One-year Certificate of Achievement)
- Project Management
- Security Essentials
- State Tested Nurse Assistant
- Supervision
- Surgical Technology
- Visual Communications Media and Technology
- Windows Server Administration
- Wireless Network Support

Some certificates have a special admission procedure or require special prerequisites. Detailed information is available in the Admissions Office. There is no limit on the number of certificates a student may request, but a new form must be completed for each. Please note - a minimum of a 2.00 grade point average must be obtained for all required courses in order to receive any certificate at North Central State College.

CURRICULUM LENGTH

NC State's associate degree programs are designed so that a student who begins a program in the fall can complete that program within two years of full-time attendance following the recommended course load each semester.

A certificate program, like Practical Nursing, will require a year of full-time, daytime study, while shorter term certificate programs, like Real Estate, may require less than a year. Students attending on a part-time basis can expect to spend three to five years or more in completing an associate degree. In some programs, the course sequence and the prerequisites for courses can dictate the length of time necessary to complete the program. For further details regarding the curriculum and prerequisites for a specific program, contact the Student Success and Transition Center.

BACKGROUND CHECK AND DRUG SCREENING

An acceptable Bureau of Criminal Identification and Investigation (BCI&I) report/FBI background check is required to enter the clinical or practicum sequence of many of the health science programs and the Police Academy. Some programs also require drug screening. Contact the specific Program Directors for current information.

CPR

Program CPR requirements can be met by taking the appropriate non-credit coursework or HLST 1010 - CPR/First Aid.

MEDICAL INSURANCE

The College strongly recommends that students be covered by medical insurance, which can be purchased either through a private carrier or through the College-sponsored insurance program. To obtain an application for the College-sponsored insurance program, contact the Admissions Office at 419-755-4761.

HEALTH PHYSICAL AND REQUIRED IMMUNIZATIONS

Bioscience, Health Services Technology, Occupational Therapy Assistant, Physical Therapist Assistant, Practical Nursing, Radiological Sciences, Registered Nursing, and Respiratory Care programs all require an acceptable health physical and verification of immunizations/immunities in order to participate in the program clinical, practicum, or lab activities. Contact the specific Program Directors for current information.

LIABILITY INSURANCE

Students in Bioscience, Health Services Technology, Human Services, Nursing (R.N. and P.N.), Occupational Therapy Assistant, Physical Therapist Assistant, Radiological Sciences, and Respiratory Care programs are required to purchase professional liability insurance. Over the past several years, there have been a number of nationwide liability claims involving students enrolled in health technologies. These claims include error, negligence and omission, as well as personal torts. A student in one of these technologies has personal responsibility for his/her own actions in contact with patients, even though the student is not yet licensed, registered, or otherwise accredited for his/her profession. Coverage for students pays up to $1,000,000 for each claim and up to a total of $3,000,000 aggregate. The premium is assessed and paid through student fees. No student is permitted to attend a clinical facility or practicum unless covered by the student liability insurance program.

SPECIAL ACADEMIC POLICIES

The Associate Degree Nursing, Bioscience, Practical Nursing, Occupational Therapy Assistant, Radiological Sciences, Respiratory Care, Physical Therapist Assistant, Human Services, and Criminal Justice departments publish student handbooks. These student handbooks delineate specific department/program policies which are not explained in the general catalog. The specific policies as described in the department student handbooks take precedence over any general policy outlined in the College catalog. Copies may be requested through divisional offices.

ACADEMIC PROGRAMS AND DESCRIPTION

ACCOUNTING, AAB

Accounting graduates advise and assist management in controlling the financial operations of a business and in planning for its growth. They prepare accounting entries from source documents as well as post and summarize that information into meaningful financial statements. Accounting is well-suited to persons who like their problem solving skills to be challenged and enjoy working with detail.

Accountants provide professional services as advisors to management on financial matters affecting the firm in the areas of planning, forecasting, cost control, taxes, and inventory control. They prepare federal, state, and local income and payroll tax reports. An important part of the management team, accountants today work primarily in an environment that includes using professionally prepared accounting, tax, and payroll computer programs. They also use spreadsheet programs to assemble information and prepare reports.

The Accounting curriculum at North Central State College provides the student with the basic tools in all areas of accounting and expertise in the area of assembling information to prepare meaningful reports. Accounting students at North Central take numerous courses including accounting principles, managerial accounting, intermediate accounting, principles of finance, taxation, governmental accounting, auditing, and a capstone course. Students are also exposed to the two key software programs used in the industry. Students have the opportunity to complete a cooperative work experience to gain practical work experience.

Students are also introduced to a wide variety of basic subjects which accountants need to know to function well in today's complex business world. Each Accounting student must take two writing courses, one oral communications course, and one general course.

Program graduates are well qualified for entry level accounting positions in business and industry. Some graduates choose to pursue a four-year baccalaureate degree while others pursue the C.P.A. (Certified Public Accountant) designation. Contact the Ohio CPA Board in Columbus for details.

The Associate of Applied Business degree is awarded for the completion of this program. Long-range plans for the department will be reviewed and updated. The Accounting program is accredited by the Accreditation Council for Business Schools and Programs (ACBSP).

PROGRAM LEARNING OUTCOMES

Upon completion of the program, graduates will:

1. Demonstrate competency with basic financial and managerial accounting principles.
2. Use accounting software applications to record financial transactions and prepare financial statements.
3. Prepare general journal entries, including adjusting and closing entries, for both business and governmental entities covering an entire accounting cycle according to accounting standards.
4. Prepare correct financial statements from a general ledger.
5. Prepare correct taxation documents, including tax returns and payroll records.
6. Summarize a company's financial position using accounting and finance data.
7. Demonstrate competency with successfully managing a business: finance, economics, and word processing/spreadsheet applications.

YEAR ONE - FALL SEMESTER

ACCT 1010 - Financial Accounting	4 Credit(s)
BUSM 1010 - Intro to Business & Entrepreneurship	3 Credit(s)
CISS 1210 - Microsoft Word	2 Credit(s)
CISS 1220 - Microsoft Excel	2 Credit(s)
ENGL 1010 - English Composition I	3 Credit(s)
STAT 1010 - Probability and Statistics	3 Credit(s)

YEAR ONE - SPRING SEMESTER

ACCT 1030 - Managerial Accounting	4 Credit(s)
ACCT 1052 - Computerized Accounting	2 Credit(s)
ACCT 1070 - Payroll Accounting	2 Credit(s)
BUSM 1110 - Business Law & Ethics	3 Credit(s)
COMM 1010 - Speech	3 Credit(s)
ENGL 1030 - English Composition II OR BUSM 1170 - Business Communications	3 Credit(s)

YEAR TWO - FALL SEMESTER

ACCT 2012 - Taxation I	3 Credit(s)
ACCT 2030 - Intermediate Accounting I	3 Credit(s)
ACCT 2050 - Governmental Accounting	3 Credit(s)
CISS 1280 - Microsoft Excel Advanced	2 Credit(s)
ECON 1510 - Microeconomics OR ECON 2510 - Macroeconomics	3 Credit(s)

YEAR TWO - SPRING SEMESTER

ACCT 1090 - Certified Bookkeeper Prep	2 Credit(s)
ACCT 2016 - Taxation II	3 Credit(s)
ACCT 2031 - Intermediate Accounting II	3 Credit(s)
ACCT 2060 - Principles of Finance	3 Credit(s)
ACCT 2092 - Accounting Capstone OR ACCT 2095 - Cooperative Work Experience AND ACCT 2096 - Seminar	2 Credit(s)
HIST 1010 - American History I OR HIST 1030 - American History II OR PHIL 1010 - Western Philosophy OR PHIL 1110 - Ethics	3 Credit(s)

TOTAL CREDIT HOURS: 64

ACCOUNTING CERTIFICATES

CERTIFIED BOOKKEEPING, CERT

This certificate prepares a student to pass the Certified Bookkeeper exam, administered by the American Institution of Professional Bookkeepers (AIPB). AIPB administers the exam, please see their website for more details.

The classes in this certificate are built from the Accounting degree; therefore, the opportunity is present for students to complete the degree without losing credit hours.

REQUIRED COURSES

ACCT 1010 - Financial Accounting	4 Credit(s)
ACCT 1052 - Computerized Accounting	2 Credit(s)
ACCT 1070 - Payroll Accounting	2 Credit(s)
ACCT 1090 - Certified Bookkeeper Prep	2 Credit(s)
ACCT 2012 - Taxation I	3 Credit(s)
CISS 1220 - Microsoft Excel	2 Credit(s)
CISS 1280 - Microsoft Excel Advanced	2 Credit(s)

TOTAL CREDIT HOURS: 17

BIOSCIENCE, AAS

Bioscience covers a wide selection of scientific disciplines that aims to improve the quality of life of humans, plants, and animals. Biotechnology is an old area of study. Earliest examples include selective breeding to produce livestock and crops with desired physical traits and the use of microorganisms to produce foods such as cheese and select beverages.

One important aspect of the bioscience industry is stability. According to Cleveland State University's Center for Economic Development, overall employment opportunities within the state of Ohio have fallen. However, the bioscience or biotechnology sector has continued to grow and add jobs.

The successful student will be a dedicated individual who will acquire the technical skills and attention to detail necessary to carry out complex tests and procedures in a wide variety of laboratory settings. Work settings include medical research, agricultural research, product testing, pharmacology, forensics, and manufacturing.

Areas of study included in the curriculum include microbiology, histology, plant, and animal bioscience, genetics, pharmacology, and toxicology. In addition, good laboratory practices are emphasized along with proper laboratory notebook composition.

The Associate of Science degree is awarded at the completion of the program. A minimum grade of C is required in BIOL 1230, BIOL 1231, BIOL 1550, HLST 1010, MATH 1110, CHEM 1210, and all BIOS courses in order to meet education and graduation requirements.

PROGRAM LEARNING OUTCOMES

1. Students will demonstrate competence in standard laboratory techniques and use of technology and equipment.
2. Students will demonstrate the ability to research and communicate (visually, orally and in writing) credible scientific information from a variety of sources.
3. Students will collect, analyze and interpret data using the scientific method.
4. Students will calculate, analyze, solve, interpret, and graph quantitative data.

YEAR ONE - FALL SEMESTER

BIOL 1230 - Biology I	4 Credit(s)
BIOS 1010 - Introduction to Bioscience Lab Technique	4 Credit(s)
BIOS 1030 - Environmental Science	4 Credit(s)
MATH 1110 - College Algebra	4 Credit(s)

YEAR ONE - SPRING SEMESTER

BIOL 1231 - Biology II	4 Credit(s)
BIOS 1210 - Histology	4 Credit(s)
BIOS 2440 - Introduction to Agricultural Science	4 Credit(s)
ENGL 1010 - English Composition I	3 Credit(s)

YEAR TWO - FALL SEMESTER

BIOL 1550 - Microbiology for Health Professionals	3 Credit(s)
BIOS 2410 - Advance Bioscience Techniques	4 Credit(s)
CHEM 1210 - Chemistry I	5 Credit(s)
ENGL 1030 - English Composition II	3 Credit(s)
HLST 1010 - CPR/First Aid	1 Credit(s)

YEAR TWO - SPRING SEMESTER

BIOS 2530 - Genetics	4 Credit(s)
BIOS 2550 - Pharmaceutical & Toxicology Bioscience	4 Credit(s)
BIOS 2590 - Bioscience Internship/Seminar	2 Credit(s)
Social Science Elective	3 Credit(s)

TOTAL CREDIT HOURS: 60

SOCIAL SCIENCE ELECTIVES

COMM 2010 - Group Communication	3 Credit(s)
COMM 2030 - Interpersonal Communication	3 Credit(s)
COMM 2250 - Interviewing	3 Credit(s)
ECON 1010 - Introduction to Economics	3 Credit(s)
POLT 1010 - American National Government	3 Credit(s)
PSYC 1010 - Introduction to Psychology	3 Credit(s)
PSYC 1070 - Introduction to Women's Studies	3 Credit(s)
PSYC 1090 - Death and Dying	3 Credit(s)
PSYC 2050 - Abnormal Psychology	3 Credit(s)
SOCY 1010 - Introduction to Sociology	3 Credit(s)
SOCY 2010 - Cultural Diversity and Racism	3 Credit(s)
SOCY 2030 - Marriage and Family	3 Credit(s)

WATER TECHNOLOGY, CERT

The water technology certificate program will prepare prospective water operators and technicians for a rewarding career in the fields of water and wastewater treatment. Upon completion of the certificate curriculum, students will be able to sit for either the Class 1 Ohio EPA Water or Wastewater Treatment Certification exam. In addition, the certificate will stack into the Associates of Science degree in Bioscience.

REQUIRED COURSES

BIOS 1010 - Introduction to Bioscience Lab Technique	4 Credit(s)
BIOS 1030 - Environmental Science	4 Credit(s)
BIOS 1130 - Water Treatment	3 Credit(s)
BIOS 1150 - Wastewater Treatment	3 Credit(s)
CHEM 1030 - Chemistry	3 Credit(s)
ENGL 1010 - English Composition I	3 Credit(s)
MATH 1110 - College Algebra	4 Credit(s)

TOTAL CREDIT HOURS: 24

BUSINESS ADMINISTRATION - BUSINESS ANALYTICS, AAB

Business Analytics is a highly practical, immediately applicable major, which combines business knowledge (i.e. economics, management and marketing) with the use of the latest technologies, processes and applications such as Microsoft Business Intelligence suite. The program exposes students to the skills needed to improve business decision making through data analysis. There is a strong emphasis on strengthening the student's oral and written communication skills, as well as critical thinking and problem-solving. Students have the opportunity to complete internships to gain hands-on, real-world business experience.

YEAR ONE - FALL SEMESTER

ACCT 1010 - Financial Accounting	4 Credit(s)
BUSM 1010 - Intro to Business & Entrepreneurship	3 Credit(s)
CISS 1210 - Microsoft Word	2 Credit(s)
CISS 1220 - Microsoft Excel	2 Credit(s)
ENGL 1010 - English Composition I	3 Credit(s)
STAT 1010 - Probability and Statistics	3 Credit(s)

YEAR ONE - SPRING SEMESTER

BUSM 1110 - Business Law & Ethics	3 Credit(s)
BUSM 1050 - Management	3 Credit(s)
BUSM 1170 - Business Communications OR ENGL 1030 - English Composition II	3 Credit(s)
CISS 1230 - Microsoft Access	2 Credit(s)
CISS 1280 - Microsoft Excel Advanced	2 Credit(s)
ECON 1510 - Microeconomics	3 Credit(s)

HUMANITIES ELECTIVES

HIST 1010 - American History I	3 Credit(s)
HIST 1030 - American History II	3 Credit(s)
PHIL 1010 - Western Philosophy	3 Credit(s)
PHIL 1110 - Ethics	3 Credit(s)

YEAR TWO - FALL SEMESTER

BUSM 1150 - Marketing	3 Credit(s)
BUSM 2010 - Introduction to Data Management for Business	3 Credit(s)
CISS 1290 - Microsoft Excel Business Intelligence	2 Credit(s)
COMM 1010 - Speech	3 Credit(s)
STAT 1040 - Statistics for Business Analytics	3 Credit(s)

YEAR TWO - SPRING SEMESTER

BUSM 2320 - Business Analytics for Data Driven Decisions	3 Credit(s)
BUSM 2272 - Case Studies in Business OR BUSM 2280 - Cooperative Work Experience AND BUSM 2285 - Seminar	2 Credit(s)
CISS 1240 - Microsoft Office Workplace Technology	2 Credit(s)
ECON 2510 - Macroeconomics	3 Credit(s)
Humanities Elective	3 Credit(s)

TOTAL CREDIT HOURS: 60

BUSINESS ADMINISTRATION - BUSINESS MANAGEMENT, AAB

The Business Management program at North Central State College is designed to be an academically rigorous, highly practical, and immediately applicable course of study. This program provides students with the broad range of essential business skills, which are considered prerequisites to success and advancement by contemporary business organizations. The Business Management program at North Central State College is designed to be an academically rigorous, highly practical, and immediately applicable course of study. This program provides students with the broad range of essential business skills, which are considered prerequisites to success and advancement by contemporary business organizations.

The necessity of a positive business ethical perspective is an underlying theme within this curriculum. Common ethical issues are interwoven and discussed within the study of the various technical disciplines of marketing, personnel management, and computerized information technology. Demand for successful business graduates comes from all segments of the economy. Non-profit institutions, as well as profit-oriented organizations in the manufacturing, service, transportation, healthcare, and government sector, continue to experience a growing need for personnel who possess essential business expertise. Students have the opportunity to complete a cooperative work experience to gain practical work experience.

The Business Management program at NC State provides an ideal foundation for those who seek the flexibility of obtaining an immediate marketable skill as well as the necessary academic prerequisites for advanced collegiate achievements at the baccalaureate level and beyond.

The Associate of Applied Business degree is awarded for the completion of this program. The long-range plan for this department is reviewed, modified, and updated on an annual basis. The Business Administration program is accredited by the Accreditation Council for Business Schools and Programs (ACBSP).

PROGRAM LEARNING OUTCOMES

Graduates will:

1. Distinguish and summarize basic accounting concepts
2. Distinguish and summarize basic marketing concepts.
3. Distinguish and summarize basic economic concepts.
4. Distinguish and summarize basic management concepts.
5. Identify and apply appropriate computer applications to record business data and presenting business information for operational use.

YEAR ONE - FALL SEMESTER

ACCT 1010 - Financial Accounting	4 Credit(s)
BUSM 1010 - Intro to Business & Entrepreneurship	3 Credit(s)
CISS 1210 - Microsoft Word	2 Credit(s)
ENGL 1010 - English Composition I	3 Credit(s)
STAT 1010 - Probability and Statistics OR MATH 1110 - College Algebra	3-4 Credit(s)

YEAR ONE - SPRING SEMESTER

BUSM 1050 - Management	3 Credit(s)
BUSM 1110 - Business Law & Ethics	3 Credit(s)
CISS 1220 - Microsoft Excel	2 Credit(s)
COMM 1010 - Speech	3 Credit(s)
ECON 1510 - Microeconomics	3 Credit(s)
ENGL 1030 - English Composition II OR BUSM 1170 - Business Communications	3 Credit(s)

YEAR TWO - FALL SEMESTER

ACCT 1030 - Managerial Accounting	4 Credit(s)
BUSM 1150 - Marketing	3 Credit(s)
BUSM 1270 - Quality	3 Credit(s)
BUSM 2050 - Entrepreneurship and Small Business	3 Credit(s)
BUSM 2090 - Logistics	3 Credit(s)
CISS 1280 - Microsoft Excel Advanced	2 Credit(s)

YEAR TWO - SPRING SEMESTER

BUSM 2030 - Human Resource Management	3 Credit(s)
BUSM 2272 - Case Studies in Business OR BUSM 2280 - Cooperative Work Experience AND BUSM 2285 - Seminar	2 Credit(s)
ECON 2510 - Macroeconomics	3 Credit(s)
PHIL 1110 - Ethics	3 Credit(s)
Technical Elective	3 Credit(s)

TOTAL CREDIT HOURS: 64-65

TECHNICAL ELECTIVES

BUSM 1030 - Supervision	3 Credit(s)
BUSM 1130 - Principles of Selling and Customer Service	3 Credit(s)
BUSM 1260 - Project Management	3 Credit(s)
BUSM 2110 - Promotion and Advertising	3 Credit(s)

BUSINESS ADMINISTRATION - MARKETING, AAB

The Marketing program at North Central State College is designed to be an academically rigorous, highly practical, and immediately applicable course of study. This program provides students with the broad range of essential skills necessary to be successful in business from designing products to researching the needs of the target audience.

The academic foundation for success in the contemporary marketplace is presented in courses such as economics, management and marketing. Advanced courses, such as e-commerce, customer service, promotion, advertising, and selling, continue to build upon this foundation. Strong emphasis is placed upon strengthening and enhancing the student's oral and written communication skills to a professional level. Case studies, involving critical thinking and problem solving skills, are an important part of this curriculum. Students have the opportunity to complete a cooperative work experience to gain practical work experience.

The necessity of a positive business ethical perspective is an underlying theme within this curriculum. Common ethical issues are interwoven and discussed within the study of the various technical disciplines of marketing, personnel management, and computerized information technology. Demand for successful business graduates comes from all segments of the economy. Non-profit institutions, as well as profit-oriented organizations in the manufacturing, service, transportation, healthcare, and government sector, continue to experience a growing need for personnel who possess marketing skills.

The Associate of Applied Business is awarded for the completion of this program. The long-range plan for this department is reviewed, modified, and updated on an annual basis. The Business Administration program is accredited by the Accreditation Council for Business Schools and Programs (ACBSP).

PROGRAM LEARNING OUTCOMES

Graduates will:

1. Distinguish and summarize basic accounting concepts
2. Distinguish and summarize basic marketing concepts.
3. Distinguish and summarize basic economic concepts.
4. Distinguish and summarize basic management concepts.
5. Identify and apply appropriate computer applications to record business data and presenting business information for operational use.

YEAR ONE - FALL SEMESTER

BUSM 1010 - Intro to Business & Entrepreneurship	3 Credit(s)
CISS 1210 - Microsoft Word	2 Credit(s)
ACCT 1010 - Financial Accounting	4 Credit(s)
ENGL 1010 - English Composition I	3 Credit(s)
ARTS 1070 - Digital Photography	3 Credit(s)

YEAR ONE - SPRING SEMESTER

COMM 1010 - Speech	3 Credit(s)
BUSM 1110 - Business Law & Ethics	3 Credit(s)
CISS 1220 - Microsoft Excel	2 Credit(s)
ECON 1510 - Microeconomics	3 Credit(s)
BUSM 1170 - Business Communications	3 Credit(s)

YEAR TWO - FALL SEMESTER

VCMT 1050 - Imaging I	3 Credit(s)
VCMT 1085 - Visual Communications I	3 Credit(s)
BUSM 1150 - Marketing	3 Credit(s)
BUSM 2110 - Promotion and Advertising	3 Credit(s)
CISS 1280 - Microsoft Excel Advanced	2 Credit(s)
STAT 1010 - Probability and Statistics OR MATH 1110 - College Algebra	3-4 Credit(s)

YEAR TWO - SPRING SEMESTER

BUSM 2310 - Digital Marketing Analytics	3 Credit(s)
BUSM 1130 - Principles of Selling and Customer Service	3 Credit(s)
BUSM 2272 - Case Studies in Business OR BUSM 2280 - Cooperative Work Experience AND BUSM 2285 - Seminar	2 Credit(s)
PHIL 1110 - Ethics	3 Credit(s)
VCMT 1190 - Video Production I	3 Credit(s)

TOTAL CREDIT HOURS: 63-65

BUSINESS ADMINISTRATION FOCUS, AA

The Associate of Arts and the Associate of Science degree programs are designed for students who are planning to transfer to a four-year college or university and pursue baccalaureate degree programs. The curriculum fulfills the freshman and sophomore general education requirements of most four-year colleges and universities. Effective general education helps students gain competence in the exercise of independent intellectual inquiry and also stimulates their examination of understanding of personal, social and civic values. In addition, these degrees will fulfill the requirements for the Ohio Transfer Module at other public colleges and universities. In essence, upon completion of the Associate of Arts or the Associate of Science, students will have a well-rounded general education to augment the final two years required for a Bachelor's degree. In addition to the general education courses, this degree offers students the opportunity to study basic business principles of accounting, management, business law and ethics and economics.

YEAR ONE - FALL SEMESTER

BUSM 1010 - Intro to Business & Entrepreneurship	3 Credit(s)
CISS 1020 - Digital Literacy and Applications	3 Credit(s)
ENGL 1010 - English Composition I	3 Credit(s)
PSYC 1010 - Introduction to Psychology OR SOCY 1010 - Introduction to Sociology	3 Credit(s)
STAT 1010 - Probability and Statistics	3 Credit(s)

YEAR ONE - SPRING SEMESTER

ACCT 1010 - Financial Accounting	4 Credit(s)
COMM 1010 - Speech	3 Credit(s)
ENGL 1030 - English Composition II	3 Credit(s)
PHIL 1110 - Ethics OR MATH 1110 - College Algebra	3-4 Credit(s)
POLT 1010 - American National Government	3 Credit(s)

YEAR TWO - FALL SEMESTER

Business Elective	3-4 Credit(s)
Business Elective	3 Credit(s)
BIOL 1230 - Biology I OR GEOL 1010 - Physical Geology	4 Credit(s)
ECON 1510 - Microeconomics	3 Credit(s)
HIST 1010 - American History I OR ENGL 2050 - American Literature I	3 Credit(s)

YEAR TWO - SPRING SEMESTER

Business Elective	3-4 Credit(s)
BIOL 1231 - Biology II OR GEOL 1030 - Historical Geology	4 Credit(s)
COMM 2070 - Intercultural Communication OR SOCY 2010 - Cultural Diversity and Racism	3 Credit(s)
HIST 1030 - American History II OR ENGL 2070 - American Literature II	3 Credit(s)

TOTAL CREDIT HOURS: 60-62

BUSINESS ELECTIVES (CHOOSE AT LEAST 9 CREDIT HOURS)

ACCT 1030 - Managerial Accounting	4 Credit(s)
BUSM 1050 - Management	3 Credit(s)
BUSM 1110 - Business Law & Ethics	3 Credit(s)
BUSM 1150 - Marketing	3 Credit(s)
ECON 2510 - Macroeconomics	3 Credit(s)

BUSINESS ADMINISTRATION & MANAGEMENT FOCUS, AS

The Associate of Arts and the Associate of Science degree programs are designed for students who are planning to transfer to a four-year college or university and pursue baccalaureate degree programs. The curriculum fulfills the freshman and sophomore general education requirements of most four-year colleges and universities. Effective general education helps students gain competence in the exercise of independent intellectual inquiry and also stimulates their examination of understanding of personal, social and civic values. In addition, these degrees will fulfill the requirements for the Ohio Transfer Module at other public colleges and universities. In essence, upon completion of the Associate of Arts or the Associate of Science, students will have a well-rounded general education to augment the final two years required for a Bachelor's degree. In addition to the general education courses, this degree offers students the opportunity to study basic business principles of accounting, management, business law and ethics and economics. (Ohio Guaranteed Transfer Pathways (OGTP) approved degree)

YEAR ONE - FALL SEMESTER

ENGL 1010 - English Composition I	3 Credit(s)
MATH 1110 - College Algebra	4 Credit(s)
ACCT 1010 - Financial Accounting	4 Credit(s)
PSYC 1010 - Introduction to Psychology	3 Credit(s)

YEAR ONE - SPRING SEMESTER

MATH 1130 - Trigonometry	4 Credit(s)
COMM 1010 - Speech	3 Credit(s)
ACCT 1030 - Managerial Accounting	4 Credit(s)
ECON 1510 - Microeconomics	3 Credit(s)
BUSM 1170 - Business Communications	3 Credit(s)

YEAR TWO - FALL SEMESTER

BUSM 1150 - Marketing	3 Credit(s)
MATH 1150 - Calculus I	5 Credit(s)
PHIL 1110 - Ethics	3 Credit(s)
STAT 1010 - Probability and Statistics	3 Credit(s)
PHYS 1010 - Introductory Physics	3 Credit(s)

YEAR TWO - SPRING SEMESTER

MUSC 1010 - Music Appreciation	3 Credit(s)
CHEM 1030 - Chemistry	3 Credit(s)
BUSM 1050 - Management	3 Credit(s)
BUSM 1110 - Business Law & Ethics	3 Credit(s)
ECON 2510 - Macroeconomics	3 Credit(s)

TOTAL CREDIT HOURS: 63

BUSINESS ANALYTICS, CERT

Business Analytics is a highly practical, immediately applicable certificate, in which students learn to use the latest technologies, processes and applications, such as Microsoft Business Intelligence suite, that today's high-tech businesses utilize. The program exposes students to the skills needed to improve business decision making through data analysis.

REQUIRED COURSES

BUSM 1010 - Intro to Business & Entrepreneurship	3 Credit(s)
BUSM 2010 - Intro to Data Management for Business	3 Credit(s)
BUSM 2320 - Business Analytics for Data Driven Decisions	3 Credit(s)
CISS 1220 - Microsoft Excel	2 Credit(s)
CISS 1230 - Microsoft Access	2 Credit(s)
CISS 1240 - Microsoft Office Workplace Technology	2 Credit(s)
CISS 1280 - Microsoft Excel Advanced	2 Credit(s)
CISS 1290 - Microsoft Excel Business Intelligence	2 Credit(s)

TOTAL CREDIT HOURS: 16

MICROSOFT APPLICATIONS, CERT

REQUIRED COURSES

CISS 1210 - Microsoft Word	2 Credit(s)
CISS 1220 - Microsoft Excel	2 Credit(s)
CISS 1230 - Microsoft Access	2 Credit(s)
CISS 1240 - Microsoft Office Workplace Technology	2 Credit(s)
CISS 1250 - Microsoft PowerPoint	2 Credit(s)
CISS 1270 - Microsoft Word Advanced	2 Credit(s)
CISS 1280 - Microsoft Excel Advanced	2 Credit(s)
CISS 1290 - Microsoft Excel Business Intelligence	2 Credit(s)

TOTAL CREDIT HOURS: 16

OPERATIONS MANAGEMENT, CERT

REQUIRED COURSES

ACCT 1010 - Financial Accounting	4 Credit(s)
BUSM 1010 - Intro to Business & Entrepreneurship	3 Credit(s)
BUSM 1030 - Supervision OR BUSM 1050 - Management	3 Credit(s)
BUSM 1270 - Quality	3 Credit(s)
BUSM 2090 - Logistics	3 Credit(s)
CISS 1220 - Microsoft Excel	2 Credit(s)

TOTAL CREDIT HOURS: 18

PROJECT MANAGEMENT, CERT

This course provides the student with the required education contact hours to satisfy the Project Management Institute (PMI) prerequisites for the Project Management Professional Certification (PMP)® or Certified Associate in Project Management (CAPM)® test. Other prerequisites and testing for those certifications are governed by the Project Management Institute.

REQUIRED COURSES

BUSM 1260 - Project Management	3 Credit(s)

TOTAL CREDIT HOURS: 3

SUPERVISION, CERT

REQUIRED COURSES

BUSM 1030 - Supervision	3 Credit(s)
BUSM 1250 - Customer Service	3 Credit(s)
BUSM 1260 - Project Management	3 Credit(s)
BUSM 2030 - Human Resource Management	3 Credit(s)
CISS 1210 - Microsoft Word	2 Credit(s)
CISS 1220 - Microsoft Excel	2 Credit(s)

TOTAL CREDIT HOURS: 16

COMMUNICATION FOCUS, AA

Through the Associate of Arts degree in Communication, students develop confidence and competence in communicating verbally, in a variety of settings. This degree prepares students, through continued study toward a bachelor's degree in communication, for careers requiring communication and collaboration skills. Students complete general education courses in the Ohio Transfer Module aimed at developing competence in the exercise of independent intellectual inquiry and stimulating their examination of understanding of personal, social and civic values. The focus on communication courses prepares students in this program to analyze and create effective messages, overcome communication barriers, and understand and embrace diverse perspectives.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, graduates will:

1. Apply communication principles/models of communication to personal, professional, social, and/or cultural situations and issues.
2. Demonstrate an understanding of the communication principles to plan, organize, and make oral presentations.
3. Identify and explain the major communication concepts and theoretical perspectives.

YEAR ONE - FALL SEMESTER

COMM 1010 - Speech	3 Credit(s)
ENGL 1010 - English Composition I	3 Credit(s)
PSYC 1010 - Introduction to Psychology	3 Credit(s)
STAT 1010 - Probability and Statistics	3 Credit(s)
THEA 1010 - Introduction to Theatre OR HUMA 1010 - Introduction to the Humanities OR MUSC 1010 - Music Appreciation	3 Credit(s)

YEAR ONE - SPRING SEMESTER

COMM 2070 - Intercultural Communication	3 Credit(s)
ENGL 1030 - English Composition II	3 Credit(s)
PHIL 1010 - Western Philosophy OR PHIL 1110 - Ethics	3 Credit(s)
POLT 1010 - American National Government	3 Credit(s)
PSYC 1070 - Introduction to Women's Studies OR SOCY 2010 - Cultural Diversity and Racism	3 Credit(s)

YEAR TWO - FALL SEMESTER

BIOL 1230 - Biology I OR GEOL 1010 - Physical Geology	4 Credit(s)
COMM 2010 - Group Communication	3 Credit(s)
COMM 2030 - Interpersonal Communication	3 Credit(s)
HIST 1010 - American History I OR HIST 1050 - Western Civilization I	3 Credit(s)
SPAN 1010 - Beginning Spanish I	3 Credit(s)

YEAR TWO - SPRING SEMESTER

BIOL 1231 - Biology II OR GEOL 1010 - Physical Geology	4 Credit(s) 4 Credit(s)
COMM 2050 - Introduction to Communication Theory	3 Credit(s)
COMM 2250 - Interviewing	3 Credit(s)
HIST 1030 - American History II OR HIST 1070 - Western Civilization II	3 Credit(s)
SPAN 1020 - Beginning Spanish II	3 Credit(s)

TOTAL CREDIT HOURS: 62

CRIMINAL JUSTICE, AAS

Graduates of the Criminal Justice program may find employment within city, county, private, and state agencies who are involved with the enforcement of laws, the investigation of criminal acts, corrections, and probation. Positions are also available in the private industry where security and loss prevention are paramount. Some graduates will continue to pursue a bachelor's degree, which expands the employment market to include federal agencies and state agencies.

The qualities that a person should have to be successful include keen powers of observation, mental alertness, emotional stability, ability to work within prescribed rules and regulations, and the ability to handle responsibility and discipline. As the field of criminal justice becomes more sophisticated and complex, advanced training and education become more critical. The two-year curriculum includes courses in forensic science, juvenile delinquency, drugs and narcotics, family violence, criminal and constitutional law, criminology, and criminal investigations.

INDIVIDUALS WITH A FELONY AND/OR DOMESTIC VIOLENCE CONVICTION OR DRUG CONVICTIONS MAY EXPERIENCE DIFFICULTY GAINING EMPLOYMENT IN THE CRIMINAL JUSTICE FIELD. Students with misdemeanor convictions should seek advice from an advisor in the Criminal Justice program. A fingerprint check is required for CRMJ 2190 Practicum and Seminar.

The Associate of Applied Science degree is awarded for the completion of this program.

PROGRAM LEARNING OUTCOMES

By the end of the Associate Degree program students will be able to:

1. Apply the core criminal justice foundation concepts of juvenile justice, criminology, constitutional law, corrections, private security, and U.S. Judicial and Criminal Justice systems in solving and defending logical arguments and applications in the field.
2. Demonstrate the ability to communicate effectively in writing and speech.
3. Demonstrate well-developed analytical and problem solving skills.
4. Demonstrate proper standards of criminal justice professionalism, morals and ethics.

YEAR ONE - FALL SEMESTER

CRMJ 1010 - Intro to Criminal Justice & US Judicial Systems	3 Credit(s)
CRMJ 1070 - Family Violence	3 Credit(s)
ENGL 1010 - English Composition I	3 Credit(s)
PSYC 1010 - Introduction to Psychology	3 Credit(s)
STAT 1010 - Probability and Statistics	3 Credit(s)

YEAR ONE - SPRING SEMESTER

COMM 1010 - Speech	3 Credit(s)
CRMJ 1090 - Juvenile Delinquency	4 Credit(s)
CRMJ 1110 - Criminal Investigation I	3 Credit(s)
CRMJ 1130 - Introduction to Corrections	3 Credit(s)
SOCY 1010 - Introduction to Sociology OR SOCY 2010 - Cultural Diversity and Racism	3 Credit(s)

YEAR TWO - FALL SEMESTER

Basic Elective	3 Credit(s)
BIOL 1101 - Nutrition OR PSYC 2170 - Forensic Psychology	2-3 Credit(s)
CRMJ 1050 - Criminal and Constitutional Law	4 Credit(s)
CRMJ 2010 - Criminology	3 Credit(s)
CRMJ 2036 - Report Writing for Criminal Justice Professional	3 Credit(s)

YEAR TWO - SPRING SEMESTER

Basic Elective	3 Credit(s)
Basic Elective	3 Credit(s)
CRMJ 2110 - Private Security I	3 Credit(s)
CRMJ 2130 - Community Based Corrections	3 Credit(s)
CRMJ 2190 - Practicum and Seminar	3 Credit(s)
HUMA 1010 - Introduction to the Humanities OR PHIL 1110 - Ethics	3 Credit(s)

TOTAL CREDIT HOURS: 65

BASIC ELECTIVES

CRMJ 1150 - Success Skills for Criminal Justice Prof	3 Credit(s)
CRMJ 2032 - Gangs Cults and Terrorism	3 Credit(s)
CRMJ 2050 - Drug Recognition	3 Credit(s)
CRMJ 2115 - Criminal Investigations II	3 Credit(s)
CRMJ 2150 - Forensic Science/Criminalistics I	3 Credit(s)
CRMJ 2152 - Forensic Science/Criminalistics II	3 Credit(s)
CRMJ 2154 - Forensic Science/Criminalistics III	3 Credit(s)
PSYC 2050 - Abnormal Psychology	3 Credit(s)

CRIMINAL JUSTICE (ONLINE), AAS

Graduates of the Criminal Justice program may find employment within city, county, private, and state agencies who are involved with the enforcement of laws, the investigation of criminal acts, corrections, and probation. Positions are also available in the private industry where security and loss prevention are paramount. Some graduates will continue to pursue a bachelor's degree, which expands the employment market to include federal agencies and state agencies.

The qualities that a person should have to be successful include keen powers of observation, mental alertness, emotional stability, ability to work within prescribed rules and regulations, and the ability to handle responsibility and discipline. As the field of criminal justice becomes more sophisticated and complex, advanced training and education become more critical. The two-year curriculum includes courses in forensic science, juvenile delinquency, drugs and narcotics, family violence, criminal and constitutional law, criminology, and criminal investigations.

INDIVIDUALS WITH A FELONY AND/OR DOMESTIC VIOLENCE CONVICTION OR DRUG CONVICTIONS MAY EXPERIENCE DIFFICULTY GAINING EMPLOYMENT IN THE CRIMINAL JUSTICE FIELD. Students with misdemeanor convictions should seek advice from an advisor in the Criminal Justice program. A fingerprint check is required for CRMJ 2190 - Practicum and Seminar.

The Associate of Applied Science degree is awarded for the completion of this program.

PROGRAM LEARNING OUTCOMES

By the end of the Associate Degree program students will be able to:

1. Apply the core criminal justice foundation concepts of juvenile justice, criminology, constitutional law, corrections, private security, and U.S. Judicial and Criminal Justice systems in solving and defending logical arguments and applications in the field.
2. Demonstrate the ability to communicate effectively in writing and speech.
3. Demonstrate well-developed analytical and problem solving skills.
4. Demonstrate proper standards of criminal justice professionalism, morals and ethics.

YEAR ONE - FALL SEMESTER

CRMJ 1010 - Intro to Criminal Justice & US Judicial Systems	3 Credit(s)
CRMJ 1070 - Family Violence	3 Credit(s)
ENGL 1010 - English Composition I	3 Credit(s)
PSYC 1010 - Introduction to Psychology	3 Credit(s)
STAT 1010 - Probability and Statistics	3 Credit(s)

YEAR ONE - SPRING SEMESTER

COMM 1010 - Speech	3 Credit(s)
CRMJ 1090 - Juvenile Delinquency	4 Credit(s)
CRMJ 1110 - Criminal Investigation I	3 Credit(s)
CRMJ 1130 - Introduction to Corrections	3 Credit(s)
SOCY 1010 - Introduction to Sociology OR SOCY 2010 - Cultural Diversity and Racism	3 Credit(s)

YEAR TWO - FALL SEMESTER

CRMJ 1050 - Criminal and Constitutional Law	4 Credit(s)
CRMJ 1150 - Success Skills for Criminal Justice Prof	3 Credit(s)
CRMJ 2010 - Criminology	3 Credit(s)
CRMJ 2036 - Report Writing for Criminal Justice Professional	3 Credit(s)
CRMJ 2050 - Drug Recognition	3 Credit(s)

YEAR TWO - SPRING SEMESTER

BIOL 1101 - Nutrition OR PSYC 2170 - Forensic Psychology	2-3 Credit(s)
CRMJ 2032 - Gangs Cults and Terrorism	3 Credit(s)
CRMJ 2110 - Private Security I	3 Credit(s)
CRMJ 2130 - Community Based Corrections	3 Credit(s)
CRMJ 2190 - Practicum and Seminar	3 Credit(s)
HUMA 1010 - Introduction to the Humanities OR PHIL 1010 - Western Philosophy	3 Credit(s)

TOTAL CREDIT HOURS 64-65

CRIMINAL JUSTICE - CORRECTIONS (FASTRACK ONLINE), AAS

The Criminal Justice Department offers an online* program for correctional officers. This online coursework allows the student to set a schedule around both work and personal life.

Individuals who have a certificate from the Ohio Department of Rehabilitation and Correction Training Academy can complete an Associate degree at North Central State College in less than two years by completing 13 courses in this fast track, online program.

To be admitted into this program, students must provide a copy of their Certificate of Completion of the Corrections Academy from the Ohio Department of Rehabilitation and Corrections Training Academy when applying to the college in order to enroll in the Corrections program.

The Associate of Applied Science degree is awarded upon completion of this program.

**Students are permitted to enroll in seated sections if they so choose.*

PROGRAM LEARNING OUTCOMES

By the end of the Associate Degree program students will be able to:

1. Apply the core criminal justice foundation concepts of juvenile justice, criminology, constitutional law, corrections, private security, and U.S. Judicial and Criminal Justice systems in solving and defending logical arguments and applications in the field.
2. Demonstrate the ability to communicate effectively in writing and speech.
3. Demonstrate well-developed analytical and problem solving skills.
4. Demonstrate proper standards of criminal justice professionalism, morals, and ethics.

SUMMER SEMESTER

ENGL 1010 - English Composition I	3 Credit(s)
PSYC 1010 - Introduction to Psychology	3 Credit(s)
STAT 1010 - Probability and Statistics	3 Credit(s)
SOCY 1010 - Introduction to Sociology OR SOCY 2010 - Cultural Diversity and Racism	3 Credit(s)

FALL SEMESTER

BIOL 1101 - Nutrition OR PSYC 2170 - Forensic Psychology 3 Credit(s)	2-3 Credit(s)
CRMJ 1050 - Criminal and Constitutional Law	4 Credit(s)
CRMJ 1070 - Family Violence	3 Credit(s)
CRMJ 1150 - Success Skills for Criminal Justice Prof	3 Credit(s)
CRMJ 2010 - Criminology	3 Credit(s)

SPRING SEMESTER

COMM 1010 - Speech	3 Credit(s)
CRMJ 1090 - Juvenile Delinquency	4 Credit(s)
CRMJ 1110 - Criminal Investigation I	3 Credit(s)
HUMA 1010 - Introduction to the Humanities OR PHIL 1110 - Ethics	3 Credit(s)

PROFICIENCY CREDIT GRANTED (24 CREDITS)

CRMJ 1010 - Intro to Criminal Justice & US Judicial Systems	3 Credit(s)
CRMJ 1130 - Introduction to Corrections	3 Credit(s)
CRMJ 2036 - Report Writing for Criminal Justice Professional	3 Credit(s)
CRMJ 2090 - Defensive Tactics	2 Credit(s)
CRMJ 2110 - Private Security I	3 Credit(s)
CRMJ 2130 - Community Based Corrections	3 Credit(s)
CRMJ 2190 - Practicum and Seminar	3 Credit(s)
CRMJ 2250 - Peace Officer Academy Firearms	4 Credit(s)

TOTAL CREDIT HOURS: 64-65

Please refer to the listing in *General Education* for Humanities and Social Sciences electives.

CRIMINAL JUSTICE - LAW ENFORCEMENT (ONLINE), AAS

This program is designed for students seeking careers in entry level positions in law enforcement agencies in the State of Ohio. These agencies include city police departments, village or township police departments, or county Sheriff departments. While it is not required, it is an added benefit for those seeking careers in probation.

The Ohio Revised Code enables North Central State College to incorporate The Ohio Peace Officer's Training Academy into the Criminal Justice Associate Degree program. The academy requirements are included in nine of the required courses for an Associate Degree of Applied Science in Criminal Justice. Upon completion of the academy requirements, the student will be eligible to take the State certification examination to become a peace officer in the State of Ohio.

Day and night academies are offered. Both academies begin in the Fall Semester and end Spring Semester of each academic year. Students must complete an academy application in order to be considered for this program. The applications for both academies are available at the mandatory orientation which normally occurs the first week of July. All students must pre-register online in order to be accepted to attend the mandatory orientation. The open registration will begin the first Monday of April and conclude the last week of June. Students must visit North Central State College's Criminal Justice webpage to locate the registration link. The academy must be completed on a full-time basis. In addition, students will be required to pass a physical examination, a state certification exam, and be capable of being hired by a law enforcement agency.

There is also a Police Academy Certificate option available and consists of ten academic courses.

INDIVIDUALS WITH A FELONY AND/OR DOMESTIC VIOLENCE CONVICTION OR DRUG CONVICTIONS ARE NOT PERMITTED TO ENTER THE CRIMINAL JUSTICE: LAW ENFORCEMENT PROGRAM. An acceptable Bureau of Criminal Identification and Investigation (BCI&I) report and an FBI report is required to enter the Peace Officer Academy. This fingerprint check is part of the official application process during mandatory orientation.

Students must successfully pass a drug screening within 90 days of the start of this academy. The cost of the test is at the expense of the student. This is part of the official application process during the mandatory orientation. Students must pass a Physical Fitness Assessment Test (1.5 mile run, push-ups, sit-ups) at the 15% level of the OPOTA standards.

The following are the disqualifiers for entry into the police academy:

- No person can enroll or participate in a police academy if such person has any felony conviction.
- In addition to the above, those who fall under any of the below disqualifiers cannot attend:
    - Any person currently registering as a sex offender, child-victim offender, or arson offender;
    - Any person under indictment or otherwise charged with an offense under ORC Chapter 2925, Drug Offenses; Chapter 3719, Controlled Substances, or Chapter 4729, Dangerous Drugs, that involves the illegal possession, use, sale, administration, or distribution of or trafficking in a drug of abuse – if convicted of that offense, they are disqualified for a three year period;
    - Any person under indictment or otherwise charged with a misdemeanor offense of violence – if convicted of that offense, they are disqualified for a three year period
    - Any person under indictment or otherwise charged with a violation of ORC 2903.14, Negligent Assault;
    - Any person convicted of or pleaded guilty to an offense under ORC Chapter 2913, Theft and Fraud, or a municipal ordinance that is substantially similar is disqualified for a three year period.

Ohio Administrative Code section 109:2-1-03

The Police Academy program of North Central State College has a reputation for excellence. Employers across Ohio have indicated our graduates are well prepared for the challenges they face as they embark on their profession. The Associate of Applied Science degree is awarded for the completion of this program.

PROGRAM LEARNING OUTCOMES

By the end of the police academy, students will be able to:

1. Apply the core criminal justice foundation concepts of juvenile justice, criminology, constitutional law, corrections, private security, and U.S. Judicial and Criminal Justice systems in solving and defending logical arguments and applications in the field.
2. Demonstrate the ability to communicate effectively in writing and speech.
3. Demonstrate well-developed analytical and problem solving skills.
4. Demonstrate proper standards of criminal justice professionalism, morals, and ethics.

CRIMINAL JUSTICE - LAW ENFORCEMENT (ONLINE), AAS

SUMMER SEMESTER

COMM 1010 - Speech	3 Credit(s)
ENGL 1010 - English Composition I	3 Credit(s)
HUMA 1010 - Introduction to the Humanities OR PHIL 1110 - Ethics	3 Credit(s)

FALL SEMESTER

CRMJ 1050 - Criminal and Constitutional Law	4 Credit(s)
CRMJ 2010 - Criminology	3 Credit(s)
PSYC 1010 - Introduction to Psychology	3 Credit(s)
STAT 1010 - Probability and Statistics	3 Credit(s)

SPRING SEMESTER

BIOL 1101 – Nutrition OR PSYC 2170 - Forensic Psychology	2 Credit(s)
CRMJ 1090 - Juvenile Delinquency	4 Credit(s)
CRMJ 1150 - Success Skills for Criminal Justice Prof	3 Credit(s)
SOCY 1010 - Introduction to Sociology OR SOCY 2010 - Cultural Diversity and Racism	3 Credit(s)

PROFICIENCY CREDITS GRANTED (29 CREDITS)

CRMJ 1010 - Intro to Criminal Justice & US Judicial Systems	3 Credit(s)
CRMJ 1070 - Family Violence	3 Credit(s)
CRMJ 1110 - Criminal Investigation I	3 Credit(s)
CRMJ 2090 - Defensive Tactics	2 Credit(s)
CRMJ 2170 - Terrorism and Homeland Security	3 Credit(s)
CRMJ 2210 - Intro to Police Operations and Report Writing	3 Credit(s)
CRMJ 2230 - Police Skills I	4 Credit(s)
CRMJ 2240 - Police Skills II	4 Credit(s)
CRMJ 2250 - Peace Officer Academy Firearms	4 Credit(s)

TOTAL CREDIT HOURS 63-64

Students must present a copy of a Certificate of Completion from any Basic Police Academy when applying to the College in order to enroll in the Law Enforcement Online program. Those eligible will receive 29 semester hours of credit towards the Associates Degree (see *Proficiency Credits Granted* above). Students may email the copy of the certificate of completion to: bdunmire@ncstatecollege.edu

CRIMINAL JUSTICE - LAW ENFORCEMENT (POLICE ACADEMY), AAS

This program is designed for students seeking careers in entry level positions in law enforcement agencies in the State of Ohio. These agencies include city police departments, village or township police departments, or county Sheriff departments. While it is not required, it is an added benefit for those seeking careers in probation.

The Ohio Revised Code enables North Central State College to incorporate The Ohio Peace Officer's Training Academy into the Criminal Justice Associate Degree program. The academy requirements are included in nine of the required courses for an Associate Degree of Applied Science in Criminal Justice. Upon completion of the academy requirements, the student will be eligible to take the State certification examination to become a peace officer in the State of Ohio.

Day and night academies are offered. Both academies begin in the Fall Semester and end Spring Semester of each academic year. Students must complete an academy application in order to be considered for this program. The applications for both academies are available at the mandatory orientation which normally occurs the first week of July. All students must pre-register online in order to be accepted to attend the mandatory orientation. The open registration will begin the first Monday of April and conclude the last week of June. Students must visit North Central State College's Criminal Justice webpage to locate the registration link. The academy must be completed on a full-time basis. In addition, students will be required to pass a physical examination, a state certification exam, and be capable of being hired by a law enforcement agency.

There is also a Police Academy Certificate option available and consists of ten academic courses.

INDIVIDUALS WITH A FELONY AND/OR DOMESTIC VIOLENCE CONVICTION OR DRUG CONVICTIONS ARE NOT PERMITTED TO ENTER THE CRIMINAL JUSTICE: LAW ENFORCEMENT PROGRAM. An acceptable Bureau of Criminal Identification and Investigation (BCI&I) report and an FBI report is required to enter the Peace Officer Academy. This fingerprint check is part of the official application process during mandatory orientation.

Students must successfully pass a drug screening within 90 days of the start of this academy. The cost of the test is at the expense of the student. This is part of the official application process during the mandatory orientation. Students must pass a Physical Fitness Assessment Test (1.5 mile run, push-ups, sit-ups) at the 15% level of the OPOTA standards.

The following are the disqualifiers for entry into the police academy:

- No person can enroll or participate in a police academy if such person has any felony conviction.
- In addition to the above, those who fall under any of the below disqualifiers cannot attend:
    - Any person currently registering as a sex offender, child-victim offender, or arson offender;
    - Any person under indictment or otherwise charged with an offense under ORC Chapter 2925, Drug Offenses; Chapter 3719, Controlled Substances, or Chapter 4729, Dangerous Drugs, that involves the illegal possession, use, sale, administration, or distribution of or trafficking in a drug of abuse – if convicted of that offense, they are disqualified for a three year period;
    - Any person under indictment or otherwise charged with a misdemeanor offense of violence – if convicted of that offense, they are disqualified for a three year period
    - Any person under indictment or otherwise charged with a violation of ORC 2903.14, Negligent Assault;
    - Any person convicted of or pleaded guilty to an offense under ORC Chapter 2913, Theft and Fraud, or a municipal ordinance that is substantially similar is disqualified for a three year period.

Ohio Administrative Code section 109:2-1-03

The Police Academy program of North Central State College has a reputation for excellence. Employers across Ohio have indicated our graduates are well prepared for the challenges they face as they embark on their profession. The Associate of Applied Science degree is awarded for the completion of this program.

PROGRAM LEARNING OUTCOMES

By the end of the police academy, students will be able to:

1. Apply the core criminal justice foundation concepts of juvenile justice, criminology, constitutional law, corrections, private security, and U.S. Judicial and Criminal Justice systems in solving and defending logical arguments and applications in the field.
2. Demonstrate the ability to communicate effectively in writing and speech.
3. Demonstrate well-developed analytical and problem solving skills.
4. Demonstrate proper standards of criminal justice professionalism, morals, and ethics.

CRIMINAL JUSTICE - LAW ENFORCEMENT (POLICE ACADEMY), AAS

YEAR ONE - FALL SEMESTER

Basic Electives	3 Credit(s)
Basic Electives	3 Credit(s)
ENGL 1010 - English Composition I	3 Credit(s)
PSYC 1010 - Introduction to Psychology	3 Credit(s)
STAT 1010 - Probability and Statistics	3 Credit(s)

YEAR ONE - SPRING SEMESTER

BIOL 1101 - Nutrition OR PSYC 2170 - Forensic Psychology	2-3 Credit(s)
COMM 1010 - Speech	3 Credit(s)
CRMJ 1090 - Juvenile Delinquency	4 Credit(s)
HUMA 1010 - Introduction to the Humanities OR PHIL 1110 - Ethics	3 Credit(s)
Social Sciences Elective OR SOCY 2010 - Cultural Diversity and Racism	(3 credits)

YEAR TWO - FALL SEMESTER

CRMJ 1010 - Intro to Criminal Justice & US Judicial Systems	3 Credit(s)
CRMJ 1070 - Family Violence	3 Credit(s)
CRMJ 2174 - Current Issues in the Criminal Justice Profession	1 Credit(s)
CRMJ 2230 - Police Skills I	4 Credit(s)
CRMJ 2250 - Peace Officer Academy Firearms	4 Credit(s)

YEAR TWO - SPRING SEMESTER

CRMJ 1110 - Criminal Investigation I	3 Credit(s)
CRMJ 2090 - Defensive Tactics	2 Credit(s)
CRMJ 2170 - Terrorism and Homeland Security	3 Credit(s)
CRMJ 2210 - Intro to Police Operations and Report Writing	3 Credit(s)
CRMJ 2240 - Police Skills II	4 Credit(s)

TOTAL CREDIT HOURS: 60-62

BASIC ELECTIVES

CRMJ 1050 - Criminal and Constitutional Law	4 Credit(s)
CRMJ 1130 - Introduction to Corrections	3 Credit(s)
CRMJ 2010 - Criminology	3 Credit(s)
CRMJ 2036 - Report Writing for Criminal Justice Professional	3 Credit(s)
CRMJ 2050 - Drug Recognition	3 Credit(s)
CRMJ 2110 - Private Security I	3 Credit(s)
CRMJ 2130 - Community Based Corrections	3 Credit(s)
CRMJ 2150 - Forensic Science/Criminalistics I	3 Credit(s)
CRMJ 2154 - Forensic Science/Criminalistics III	3 Credit(s)
CRMJ 2152 - Forensic Science/Criminalistics II	3 Credit(s)

SOCIAL SCIENCES ELECTIVES

COMM 2010 - Group Communication	3 Credit(s)
COMM 2030 - Interpersonal Communication	3 Credit(s)
COMM 2250 - Interviewing	3 Credit(s)
ECON 1010 - Introduction to Economics	3 Credit(s)
POLT 1010 - American National Government	3 Credit(s)
PSYC 1070 - Introduction to Women's Studies	3 Credit(s)
PSYC 1090 - Death and Dying	3 Credit(s)
PSYC 2010 - Human Growth and Development	3 Credit(s)
PSYC 2030 - Child Psychology	3 Credit(s)
PSYC 2050 - Abnormal Psychology	3 Credit(s)
PSYC 2090 - Social Psychology	3 Credit(s)
PSYC 2100 - Personality Theory	3 Credit(s)
PSYC 2170 - Forensic Psychology	3 Credit(s)
SOCY 1010 - Introduction to Sociology	3 Credit(s)
SOCY 2010 - Cultural Diversity and Racism	3 Credit(s)
SOCY 2030 - Marriage and Family	3 Credit(s)

CRIMINAL JUSTICE - LAW ENFORCEMENT (FASTRACK ONLINE), AAS

The Criminal Justice Department offers a Fastrack Program for Police Officers. This online coursework* allows the student to set a schedule around both work and personal life.

Individuals that have a Certificate of Completion from any basic Ohio Peace Officer Training Academy can complete an Associate Degree at North Central State College as an online student in less than two years. There are only 11 online classes for peace officers enrolled in the Fastrack Program. After completion of the 11 courses, you graduate with an Associate Degree.

To be admitted into the Fastrack program, students must provide proof of their completion of a basic Ohio Peace Officer Training Academy at the time of application to the college. Proof of completion must be submitted to the Assistant Dean of Education, Professional and Public Service in Fallerius, Room 150B. Permission must be granted by the Criminal Justice Department to enroll in this program.

The Associate of Applied Science degree is awarded upon completion of this program.

**Students are permitted to enroll in seated sections if they so choose.*

Program Learning Outcomes

By the end of the Associate Degree program students will be able to:

1. Apply the core criminal justice foundation concepts of juvenile justice, criminology, constitutional law, corrections, private security, and U.S. Judicial and Criminal Justice systems in solving and defending logical arguments and applications in the field.
2. Demonstrate the ability to communicate effectively in writing and speech.
3. Demonstrate well-developed analytical and problem solving skills.
4. Demonstrate proper standards of criminal justice professionalism, morals, and ethics.

YEAR ONE - FALL SEMESTER

Basic Elective	3 Credit(s)
Basic Elective	3 Credit(s)
ENGL 1010 - English Composition I	3 Credit(s)
PSYC 1010 - Introduction to Psychology	3 Credit(s)
STAT 1010 - Probability and Statistics	3 Credit(s)

YEAR ONE - SPRING SEMESTER

BIOL 1101 - Nutrition	2 Credit(s)
COMM 1010 - Speech	3 Credit(s)
CRMJ 1090 - Juvenile Delinquency	4 Credit(s)
CRMJ 1150 - Success Skills for Criminal Justice Prof	3 Credit(s)
HUMA 1010 - Introduction to the Humanities OR PHIL 1110 - Ethics	3 Credit(s)
SOCY 1010 - Introduction to Sociology OR SOCY 2010 - Cultural Diversity and Racism	3 Credit(s)

PROFICIENCY CREDIT GRANTED

CRMJ 1010 - Intro to Criminal Justice & US Judicial Systems	3 Credit(s)
CRMJ 1070 - Family Violence	3 Credit(s)
CRMJ 1110 - Criminal Investigation I	3 Credit(s)
CRMJ 2090 - Defensive Tactics	2 Credit(s)
CRMJ 2170 - Terrorism and Homeland Security	3 Credit(s)
CRMJ 2210 - Intro to Police Operations and Report Writing	3 Credit(s)
CRMJ 2230 - Police Skills I	4 Credit(s)
CRMJ 2240 - Police Skills II	4 Credit(s)
CRMJ 2250 - Peace Officer Academy Firearms	4 Credit(s)

TOTAL CREDIT HOURS: 60-64

CRIMINAL JUSTICE FOCUS, AA

The Associate of Arts and the Associate of Science degree programs are designed for students who are planning to transfer to a four-year college or university and pursue baccalaureate degree programs. The curriculum fulfills the freshman and sophomore general education requirements of most four-year colleges and universities. Effective general education helps students gain competence in the exercise of independent intellectual inquiry and also stimulates their examination of understanding of personal, social and civic values. In addition, these degrees will fulfill the requirements for the Ohio Transfer Module at other public colleges and universities. In essence, upon completion of the Associate of Arts or the Associate of Science, students will have a well-rounded general education to augment the final two years required for a Bachelor's degree.

YEAR ONE - FALL SEMESTER

COMM 1010 - Speech	3 Credit(s)
CRMJ 1010 - Intro to Criminal Justice & US Judicial Systems	3 Credit(s)
ENGL 1010 - English Composition I	3 Credit(s)
PSYC 1010 - Introduction to Psychology	3 Credit(s)
SOCY 1010 - Introduction to Sociology	3 Credit(s)

YEAR ONE - SPRING SEMESTER

CRMJ 1130 - Introduction to Corrections	3 Credit(s)
ENGL 1030 - English Composition II	3 Credit(s)
HUMA 1010 - Introduction to the Humanities	3 Credit(s)
SOCY 2010 - Cultural Diversity and Racism	3 Credit(s)
STAT 1010 - Probability and Statistics	3 Credit(s)

YEAR TWO - FALL SEMESTER

BIOL 1230 - Biology I OR GEOL 1010 - Physical Geology	4 Credit(s)
CRMJ 2010 - Criminology	3 Credit(s)
HIST 1010 - American History I OR HIST 1050 - Western Civilization I	3 Credit(s)
POLT 1010 - American National Government	3 Credit(s)
SPAN 1010 - Beginning Spanish I OR ENGL 2050 - American Literature I	3 Credit(s)

YEAR TWO - SPRING SEMESTER

BIOL 1231 - Biology II OR GEOL 1030 - Historical Geology	4 Credit(s)
CRMJ 1090 - Juvenile Delinquency	4 Credit(s)
HIST 1030 - American History II OR HIST 1070 - Western Civilization II	3 Credit(s)
PSYC 2050 - Abnormal Psychology OR PSYC 2170 - Forensic Psychology	3 Credit(s)
SPAN 1020 - Beginning Spanish II OR ENGL 2070 - American Literature II	3 Credit(s)

TOTAL CREDIT HOURS: 63

POLICE ACADEMY, CERT

Day and night academies are offered. Both academies begin each in the Fall Semester and end Spring Semester of each academic year. Students must complete an Academy application in order to be considered for this program. The applications for both academies are available at the mandatory orientation which normally occurs the first week of July. All students must pre-register online in order to be accepted to attend the mandatory orientation. The open registration will begin the first Monday of April and conclude the last week of June. Students must visit North Central State College's Criminal Justice webpage to locate the registration link. The academy must be completed on a full-time basis. In addition, students will be required to pass a physical examination, a state certification exam, and be capable of being hired by a law enforcement agency.

INDIVIDUALS WITH A FELONY AND/OR DOMESTIC VIOLENCE CONVICTION OR DRUG CONVICTIONS ARE NOT PERMITTED TO ENTER THE CRIMINAL JUSTICE: LAW ENFORCEMENT PROGRAM. An acceptable Bureau of Criminal Identification and Investigation (BCI&I) report and an FBI report is required to enter the Peace Officer Academy. This fingerprint check is part of the official application process during mandatory orientation.

Students must successfully pass a drug screening within 90 days of the start of this academy. The cost of the test is at the expense of the student. This is part of the official application process during the mandatory orientation. Students must pass a Physical Fitness Assessment Test (1.5 mile run, push-ups, sit-ups) at the 15% level of the OPOTA standards.

The following are the disqualifiers for entry into the police academy:

- No person can enroll or participate in a police academy if such person has any felony conviction.
- In addition to the above, those who fall under any of the below disqualifiers cannot attend:
    - Any person currently registering as a sex offender, child-victim offender, or arson offender;
    - Any person under indictment or otherwise charged with an offense under ORC Chapter 2925, Drug Offenses; Chapter 3719, Controlled Substances, or Chapter 4729, Dangerous Drugs, that involves the illegal possession, use, sale, administration, or distribution of or trafficking in a drug of abuse – if convicted of that offense, they are disqualified for a three year period;
    - Any person under indictment or otherwise charged with a misdemeanor offense of violence – if convicted of that offense, they are disqualified for a three year period
    - Any person under indictment or otherwise charged with a violation of ORC 2903.14, Negligent Assault;
    - Any person convicted of or pleaded guilty to an offense under ORC Chapter 2913, Theft and Fraud, or a municipal ordinance that is substantially similar is disqualified for a three year period.

Ohio Administrative Code section 109:2-1-03

FALL SEMESTER

CRMJ 1010 - Intro to Criminal Justice & US Judicial Systems	3 Credit(s)
CRMJ 1070 - Family Violence	3 Credit(s)
CRMJ 2174 - Current Issues in the Criminal Justice Profession	1 Credit(s)
CRMJ 2230 - Police Skills I	4 Credit(s)
CRMJ 2250 - Peace Officer Academy Firearms	4 Credit(s)

SPRING SEMESTER

CRMJ 1110 - Criminal Investigation I	3 Credit(s)
CRMJ 2090 - Defensive Tactics	2 Credit(s)
CRMJ 2170 - Terrorism and Homeland Security	3 Credit(s)
CRMJ 2210 - Intro to Police Operations and Report Writing	3 Credit(s)
CRMJ 2240 - Police Skills II	4 Credit(s)

TOTAL CREDIT HOURS: 30

EDUCATION FOCUS, AA

The Associate of Arts in Education program is the first step in the path toward becoming a teacher. The curriculum encompasses a broad range of liberal arts, including literature, history, English, statistics, and the natural sciences, as the first two years toward a bachelor's degree in education. Transfer opportunities are available to state universities throughout Ohio, where students can specialize in early childhood education (pre K-5) or middle childhood education (grades 5-9).

PROGRAM LEARNING OUTCOMES

Upon completion of this program, graduates will:

1. Demonstrate familiarity with the historical philosophical, governmental, economic, and professional contexts of the American educational system.
2. Describe the relationships between schools, families, and communities in promoting students' optimal educational outcomes and well-being.

YEAR ONE - FALL SEMESTER

COMM 1010 - Speech	3 Credit(s)
EDUT 1070 - Introduction to Child Development	3 Credit(s)
ENGL 1010 - English Composition I	3 Credit(s)
POLT 1010 - American National Government	3 Credit(s)
PSYC 1010 - Introduction to Psychology	3 Credit(s)

YEAR ONE - SPRING SEMESTER

COMM 2070 - Intercultural Communication	3 Credit(s)
EDUT 1010 - Introduction to Education	3 Credit(s)
EDUT 1370 - Educational Technology	3 Credit(s)
ENGL 1030 - English Composition II	3 Credit(s)
STAT 1010 - Probability and Statistics	3 Credit(s)

YEAR TWO - FALL SEMESTER

BIOL 1230 - Biology I OR GEOL 1010 - Physical Geology	4 Credit(s)
EDUT 2080 - Individuals with Exceptionalities	3 Credit(s)
EDUT 2150 - Educational Psychology	3 Credit(s)
HIST 1010 - American History I	3 Credit(s)
SPAN 1010 - Beginning Spanish I OR ENGL 2050 - American Literature I OR ENGL 2090 - Introduction to Fiction	3 Credit(s)

YEAR TWO - SPRING SEMESTER

EDUT 2090 - Families Communities & Schools	3 Credit(s)
HIST 1030 - American History II	3 Credit(s)
BIOL 1231 - Biology II OR GEOL 1030 - Historical Geology	4 Credit(s)
MUSC 1010 - Music Appreciation OR THEA 1010 - Introduction to Theatre OR HUMA 1010 - Introduction to the Humanities	3 Credit(s)
SPAN 1020 - Beginning Spanish II OR ENGL 2070 - American Literature II OR ENGL 2090 - Introduction to Fiction OR	3 Credit(s)

TOTAL CREDIT HOURS: 62

ENGLISH FOCUS, AA

The Associate of Arts degree in English is a degree that helps students to develop writing, critical thinking, and problems solving skills. Students may study rhetoric, critical analysis, literature, creative writing, and technical writing. This degree prepares students, through continued study toward a bachelor's degree in English, for careers requiring strong writing, research, and analytical skills. Students complete general education courses in the Ohio Transfer Module aimed at developing competence in the exercise of independent intellectual inquiry and stimulating their examination of understanding of personal, social and civic values. Continued study of English at a bachelor's or graduate level prepares students to work as teachers, editors, grant writers, and technical writers.

PROGRAM LEARNING OUTCOME

Upon completion of this program, graduates will:

1. Demonstrate an understanding of the writing process and its recursive nature, including the ability to plan, organize, and develop written compositions in a variety of expository and argumentative modes.

YEAR ONE - FALL SEMESTER

COMM 1010 - Speech	3 Credit(s)
ENGL 1010 - English Composition I	3 Credit(s)
PSYC 1010 - Introduction to Psychology	3 Credit(s)
STAT 1010 - Probability and Statistics	3 Credit(s)
THEA 1010 - Introduction to Theatre OR HUMA 1010 - Introduction to the Humanities OR MUSC 1010 - Music Appreciation	3 Credit(s)

YEAR ONE - SPRING SEMESTER

ENGL 1030 - English Composition II	3 Credit(s)
ENGL 2090 - Introduction to Fiction ENGL 2130 - Introduction to Film	3 Credit(s)
PHIL 1010 - Western Philosophy	3 Credit(s)
POLT 1010 - American National Government	3 Credit(s)
PSYC 1070 - Introduction to Women's Studies OR SOCY 2010 - Cultural Diversity and Racism	3 Credit(s)

YEAR TWO - FALL SEMESTER

BIOL 1230 - Biology I GEOL 1010 - Physical Geology	4 Credit(s)
ENGL 2050 - American Literature I	3 Credit(s)
ENGL 2110 - Creative Writing	3 Credit(s)
ENGL 2180 - British Literature I	3 Credit(s)
HIST 1010 - American History I OR HIST 1050 - Western Civilization I	3 Credit(s)

YEAR TWO - SPRING SEMESTER

BIOL 1231 - Biology II OR GEOL 1030 - Historical Geology	4 Credit(s)
ENGL 2070 - American Literature II	3 Credit(s)
ENGL 2150 - Technical Writing	3 Credit(s)
ENGL 2190 - British Literature II	3 Credit(s)
HIST 1030 - American History II OR HIST 1070 - Western Civilization II	3 Credit(s)

TOTAL CREDIT HOURS: 63

HEALTH INFORMATION TECHNOLOGY, AAS

Health Information Technology encompasses the use of existing records and information in the treatment of patients, as well as the updating and storage of that information in a secure environment. Analysis of information may also be a key role in some employment situations. Currently health information technology professionals work in 40 different settings under 125 different job titles. They often facilitate communication between clinical, operational and administrative functions within the practice, hospital or company.

Health Information Technology is a pathway with credentials that expand as your education progresses. Students who complete the first five terms of coursework may take the national exam to receive a Certified Coding Associated (CCA) credential. Many students begin working as a CCA while continuing their work toward their associate degree. When they receive their associate degree, they may become a Registered Health Information Technician (after successfully completing the RHIT Certification Examination).

Transfer opportunities exist to continue toward a bachelor's degree. Students with a bachelor's degree will be eligible to take the Registered Health Information Administrator (RHIA) certification exam.

This program is provided in partnership with Marion Technical College. All participants will have to apply to Marion Technical College to receive the final Health Information Technology Associate Degree.

YEAR ONE - FALL SEMESTER

BIOL 1730 - Basic Anatomy and Physiology	4 Credit(s)
CISS 1020 - Digital Literacy and Applications	3 Credit(s)
HIT 1200* - Health Records Management I	2 Credit(s)
HLTH 1150 - Medical Terminology	2 Credit(s)
ITEC 1610 - IT Essentials	3 Credit(s)

YEAR ONE - SPRING SEMESTER

ALH 1120* - Human Diseases	3 Credit(s)
ENGL 1010* - English Composition I	3 Credit(s)
HIT 1301* - Clinical Classifications ICD-10-CM/PCS	4 Credit(s)
HIT 1302* - Current Procedural Terminology	3 Credit(s)
HIT 1400* - Healthcare Reimbursement	2 Credit(s)

YEAR ONE - SUMMER SEMESTER

COMM 1010 - Speech	3 Credit(s)
HIT 1500* - Advanced Clinical Classification Systems	3 Credit(s)
MATH 1110 - College Algebra	4 Credit(s)

YEAR TWO - FALL SEMESTER

BUSM 1260 - Project Management	3 Credit(s)
HIT 2000* - HIT Legal Issues	2 Credit(s)
HIT 2100* - Health Record Management II	4 Credit(s)
HIT 2200* - Health Information Tech Systems	4 Credit(s)

YEAR TWO - SPRING SEMESTER

HIT 2300* - HIT Statistical Analysis	2 Credit(s)
HIT 2350* - Project Management for HIT	3 Credit(s)
HIT 2400* - HIT Quality Assessment	2 Credit(s)
HIT 2900* - HIT Professional Practice II	2 Credit(s)
PSYC 1010 - Introduction to Psychology	3 Credit(s)

TOTAL CREDIT HOURS: 64

** Offered through Marion Technical College. All Marion Technical College classes for this degree are offered online.*

HEALTH SERVICES TECHNOLOGY, AAS

North Central State College's Health Services Technology degree program is designed for students wanting to be cross-trained in several healthcare skills. Graduating students will be able to perform more than one healthcare function in the ever changing health care delivery system. Students will be required to complete at least one full area of specialization beyond the general education requirements and the core health technology courses. Certificates by State, National, and certifying organizations will show competency in the specialized areas. Those areas include:

- Community Health Worker
- Dental Assisting
- Electrocardiography Technologist
- Emergency Medical Technician
- Paramedic
- Phlebotomy Technician
- State Tested Nurse Assistant
- Surgical Technology
- Pharmacy Technician

Since there are many combinations of specialization, students should contact the program director to discuss their career goals and plan for their individualized curriculum. Students must complete a minimum of 64 credits as follows:

- 15 credits from general education core courses
- 19 credits from basic core courses
- 30 credits from technical electives, including the completion of at least one full area of specialization (up to 9 credits may be chosen from a list of related electives)

Students who are seeking another degree option or who already have a health technology degree may enroll in additional specialization areas to obtain certification. The Associate of Applied Science degree is awarded for the completion of this program.

Please Note: Many of the Health Services Technology courses/programs are offered as "flex" courses and may not follow the college's term calendar. For information on class schedules and times, please contact the Health Sciences Office at 419-755-4805. Contact your faculty advisor to establish an educational plan.

PROGRAM LEARNING OUTCOMES

2. Students will demonstrate the technical skills needed for the specialized areas of the program.
3. Students will demonstrate professionalism as needed for the specialized areas of the program.
4. Students will demonstrate attainment of the knowledge needed for the specialized areas of the program.

YEAR ONE - FALL SEMESTER

BIOL 1550 - Microbiology for Health Professionals	3 Credit(s)
BIOL 1730 - Basic Anatomy and Physiology OR BIOL 2751 - Human Anatomy and Physiology I	4 Credit(s)
ENGL 1010 - English Composition I	3 Credit(s)
STAT 1010 - Probability and Statistics	3 Credit(s)

YEAR ONE - SPRING SEMESTER

Health Tech Course Elective	6 Credit(s)
ENGL 1030 - English Composition II	3 Credit(s)
CHEM 1030 - Chemistry OR BIOL 2752 - Anatomy and Physiology II	3-4 Credit(s)

YEAR ONE - SUMMER SEMESTER

Health Tech Course Electives	6 Credit(s)
CISS 1020 - Digital Literacy and Applications	3 Credit(s)
COMM 1010 - Speech	3 Credit(s)

YEAR TWO - FALL SEMESTER

Health Tech Course Electives	9 Credit(s)
HUMA 1010 - Introduction to the Humanities OR PHIL 1110 - Ethics 3 Credit(s)	3 Credit(s)

YEAR TWO - SPRING SEMESTER

Health Tech Course Electives	9 Credit(s)
SOCY 1010 - Introduction to Sociology OR SOCY 2010 - Cultural Diversity and Racism	3 Credit(s)

TOTAL CREDIT HOURS: 61-62

HEALTH TECHNICAL ELECTIVES

CHWR 2710 - Community Health Worker I	3 Credit(s)
CHWR 2730 - Health Care Across the Lifespan	3 Credit(s)
CHWR 2750 - CHWR Directed Practice/Seminar	3 Credit(s)
DENT 1010 - Introduction to Dental Assisting	8 Credit(s)
DENT 1030 - Dental Assisting Procedures I	8 Credit(s)
DENT 1050 - Dental Assisting Procedures II	8 Credit(s)
EMTP 1010 - Emergency Medical Technician - Basic	6 Credit(s)
EMTP 2030 - EMT Paramedic	6 Credit(s)
EMTP 2031 - EMT Paramedic	6 Credit(s)
EMTP 2032 - EMT Paramedic	6 Credit(s)
EMTP 2033 - EMT Paramedic	3 Credit(s)
HLST 1010 - CPR/First Aid	1 Credit(s)
ELKG 1110 - Electrocardiographic (EKG) Technician	4 Credit(s)
PHLB 1110 - Phlebotomy	2 Credit(s)
PHLB 1210 - Phlebotomy Directed Practice	2 Credit(s)
PHLB 1250 - Phlebotomy Seminar	1 Credit(s)
PHRM 2100 - Pharmacy Tech Training Part A	8 Credit(s)
PHRM 2200 - Pharmacy Tech Training Part B	7 Credit(s)
STNA 1110 - State Tested Nurse Assistant	3 Credit(s)
STNA 1150 - State Tested Nurse Asst CPR/First Aid	1 Credit(s)
STNA 1250 - State Tested Nurse Assistant Directed Practice	2 Credit(s)
SURG 1030 - Fundamentals of Surgical Technology	12 Credit(s)
SURG 1070 - Surgical Technology Procedures	16 Credit(s)

COMMUNITY HEALTH WORKER, CERT

Students who complete this certificate program are eligible to be certified by the Ohio Board of Nursing as a Community Health Worker (CHW). The CHW will work in the community as an outreach resource assisting clients in six major areas: healthcare, community resources, communication skills, individual and community advocacy, health education, and skills and responsibilities. Practicum experiences in the community will be a major component of the certificate.

A minimum grade of C- is required in all CHWR courses and an overall certificate grade point average of 2.00. An acceptable Bureau of Criminal Identification and Investigation (BCI&I) report is required. Various practicum sites for CHWR 2750 may have specific background check and drug testing requirements. CHWR 2710, CHWR 2730, and CHWR 2750 must be completed within a two year period (exceptions require approval of the Dean of Health Sciences).

CHWR 2710 will count as a technical elective in the Human Services program.

REQUIRED COURSES

CHWR 2710 - Community Health Worker I	3 Credit(s)
CHWR 2730 - Health Care Across the Lifespan	3 Credit(s)
CHWR 2750 - CHWR Directed Practice/Seminar	3 Credit(s)

TOTAL CREDIT HOURS: 9

DENTAL ASSISTING, CERT

Students who complete the program are eligible to be certified by the CODA as a Dental Assistant. Some specific tasks that may be performed may include assisting the dentist to provide oral healthcare during a variety of procedures, exposing and processing x-rays, preparing and sterilizing instruments and equipment, and educating patients in various post-operative care and treatment.

REQUIRED COURSES

DENT 1010 - Introduction to Dental Assisting	8 Credit(s)
DENT 1030 - Dental Assisting Procedures I	8 Credit(s)
DENT 1050 - Dental Assisting Procedures II	8 Credit(s)

TOTAL CREDIT HOURS: 24

EMERGENCY MEDICAL TECHNICIAN, CERT

Students who complete the program are eligible to be certified by the State of Ohio Certification as an Emergency Medical Technician (EMT). Emphasis is on accurate observations, evaluation of emergency situations, effective communications with the medical network, and high skill proficiency. This class also serves as a required building block to the Paramedic classes.

REQUIRED COURSES

EMTP 1010 - Emergency Medical Technician - Basic	6 Credit(s)

TOTAL CREDIT HOURS: 6

INTRODUCTION TO SURGICAL TECHNOLOGY, CERT

The program introduces the role and responsibilities of the surgical technologist in effective communication, legal, ethical, and moral aspects of care, preparation of the patient for surgery, preparation of the OR for surgery, aseptic techniques, patient care procedures, environmental safety, and supply/equipment preparation and use. This program will allow for additional education pathways if the student desires.

REQUIRED COURSES

BIOL 1550 - Microbiology for Health Professionals	3 Credit(s)
HLTH 1150 - Medical Terminology	2 Credit(s)
SURG 1030 - Fundamentals of Surgical Technology	12 Credit(s)

TOTAL SEMESTER HOURS 17

PARAMEDIC, CERT

Students who complete the program are eligible to be certified by the National Registry as a Paramedic. Emphasis is on managing medical emergencies including patient assessment, medical-legal issues, airway management, fluid therapy and pharmacology, geriatric care and management of respiratory emergencies, assessment and management of cardiac emergencies as well as assessment and advanced management of trauma.

REQUIRED COURSES

EMTP 1010 - Emergency Medical Technician - Basic	6 Credit(s)
EMTP 2030 - EMT Paramedic	6 Credit(s)
EMTP 2031 - EMT Paramedic	6 Credit(s)
EMTP 2032 - EMT Paramedic	6 Credit(s)
EMTP 2033 - EMT Paramedic	3 Credit(s)

TOTAL CREDIT HOURS: 27

PHARMACY TECHNICIAN, CERT

Students who complete the program are eligible to be certified by the Ohio Pharmacy Technical Board as a Pharmacy Technician. This program will prepare you to assist the pharmacist in various healthcare facilities.

REQUIRED COURSES

PHRM 2100 - Pharmacy Tech Training Part A	8 Credit(s)
PHRM 2200 - Pharmacy Tech Training Part B	7 Credit(s)

TOTAL CREDIT HOURS: 15

PHLEBOTOMY AND EKG, CERT

Students who complete the program are eligible to be certified by the American Medical Technologists (AMT) as a Phlebotomy Technician. EKG technologist will complete heart testing which can then be read by a physician. The phlebotomist will be able to draw blood and obtain samples of other body fluids to be processed by a laboratory.

REQUIRED COURSES

ELKG 1110 - Electrocardiographic (EKG) Technician	4 Credit(s)
PHLB 1110 - Phlebotomy	2 Credit(s)
PHLB 1210 - Phlebotomy Directed Practice	2 Credit(s)
PHLB 1250 - Phlebotomy Seminar	1 Credit(s)

TOTAL CREDIT HOURS: 9

STATE TESTED NURSE ASSISTANT, CERT

Students who complete the program are eligible to be certified by the Ohio Board of Health as a State Tested Nurse Assistant (STNA). The STNA will assist the Licensed Practical and Registered Nurse in providing basic care to patients in all types of health facilities and home health.

REQUIRED COURSES

STNA 1110 - State Tested Nurse Assistant	3 Credit(s)
STNA 1150 - State Tested Nurse Asst CPR/First Aid	1 Credit(s)
STNA 1250 - State Tested Nurse Assistant Directed Practice	2 Credit(s)

TOTAL CREDIT HOURS: 6

SURGICAL TECHNICIAN, CERT

This is the first step for students wishing to be certified by the AST as a Surgical Technician. The program emphasized the role and responsibilities of the surgical technologist in effective communication, legal, ethical, and moral aspects of care, preparation of the patient for surgery, preparation of the OR for surgery, aseptic techniques, patient care procedures, environmental safety, and supply/equipment preparation and use.

REQUIRED COURSES

SURG 1030 - Fundamentals of Surgical Technology	12 Credit(s)
SURG 1070 - Surgical Technology Procedures	16 Credit(s)

TOTAL CREDIT HOURS: 28

HUMAN AND SOCIAL WORK SERVICES, AAS

The Associate degree human service professional is recognized as an important member of a team of professionals working to assist persons with a variety of disabilities or problems. Employment opportunities exist in various settings in both public and private sectors. Specific roles vary from agency to agency and are as broad as human needs are.

The successful student will be a caring individual who will acquire the skills necessary to provide services or opportunities to a variety of persons in many different situations. Work settings include: mental health centers, developmental disability agencies, drug and alcohol programs, public schools, domestic violence shelters, juvenile and adult correction facilities, nursing homes, social welfare agencies, and the like.

In addition to the technical courses in this program, the student will have opportunities to learn and apply the learned skills in actual situations through two scheduled practicums and a directed practice for a total of 578 hours of hands-on experiences. Graduates of the Human Services program qualify to apply to the Ohio Social Worker, Marriage and Family Therapists Board to become Social Worker Assistants.

An acceptable Bureau of Criminal Identification and Investigation (BCI&I) report is required in order to begin the practicum sequence. Various practicum sites have specific background check requirements. Individuals with a felony and/or domestic violence conviction may not be permitted to complete practicum experiences at some specific sites. There is no waiting list to enter into the program and enrollment is not limited to a particular number of students.

The Human Services Department publishes a student handbook which delineates specific department/program policies that are not explained in the general catalog. The specific policies as described in the department's student handbook take precedence over any general policy outlined in the College catalog. A copy of the handbook is available for review in the Admissions Office. A minimum grade of C- is required in all courses in order to receive a certificate of registration to practice as a Social Work Assistant. The Associate of Applied Science degree is awarded for the completion of this program.

PROGRAM LEARNING OUTCOMES

1. Graduates of the program will be proficient in the helping process at the micro, mezzo and macro levels with Human Services.
2. Graduates will demonstrate professional attitudes, behaviors and ethics.
3. Graduates will have effective written, verbal and nonverbal communication skills.

YEAR ONE - FALL SEMESTER

ENGL 1010 - English Composition I	3 Credit(s)
HMSV 1020 - Introduction to Social Work Services	3 Credit(s)
HMSV 1030 - Human Services Assessments	3 Credit(s)
PSYC 1010 - Introduction to Psychology	3 Credit(s)
STAT 1010 - Probability and Statistics	3 Credit(s)

YEAR ONE - SPRING SEMESTER

ENGL 1030 - English Composition II	3 Credit(s)
HMSV 1090 - Group Work in Human Services	3 Credit(s)
HMSV 1150 - Introduction to Chemical Dependency	3 Credit(s)
HMSV 1170 - Directed Practice/Seminar	3 Credit(s)
PSYC 2010 - Human Growth and Development	3 Credit(s)

YEAR TWO - FALL SEMESTER

HMSV 2030 - Introduction to Case Management	3 Credit(s)
HMSV 2050 - Social Problems	3 Credit(s)
HMSV 2070 - Practicum/Seminar II	4 Credit(s)
Basic Elective	3 Credit(s)
BIOL 1050 - Principles of Biology OR BIOL 1230 - Biology I	3 Credit(s)

YEAR TWO - SPRING SEMESTER

HMSV 2090 - Treatment Modalities/Crisis Intervention	3 Credit(s)
HMSV 2110 - Poverty and Social Welfare	3 Credit(s)
HMSV 2270 - Practicum/Seminar III	4 Credit(s)
Basic Elective	3 Credit(s)
Humanities Elective	3 Credit(s)

TOTAL CREDIT HOURS: 62-63

BASIC ELECTIVES

CRMJ 1070 - Family Violence	3 Credit(s)
CRMJ 1090 - Juvenile Delinquency	4 Credit(s)
HMSV 1190 - Death and Dying	3 Credit(s)
HMSV 2120 - Human Disabilities	3 Credit(s)
HMSV 2150 - Substance Abuse & Treatment	3 Credit(s)
HMSV 2160 - Substance Abuse Counseling: Core Functions	3 Credit(s)
PSYC 2050 - Abnormal Psychology	3 Credit(s)
SOCY 1010 - Introduction to Sociology	3 Credit(s)
SOCY 2010 - Cultural Diversity and Racism	3 Credit(s)

HUMANITIES ELECTIVES

HIST 1010 - American History I	3 Credit(s)
HIST 1030 - American History II	3 Credit(s)
PHIL 1010 - Western Philosophy	3 Credit(s)
PHIL 1110 - Ethics	3 Credit(s)

SUBSTANCE ABUSE STUDIES, CERT

The Substance Abuse Studies Certificate provides an embedded certificate and alternative path for students interested in having a concentration on Substance Abuse Studies, as well as allows students to obtain their CDCA through the Ohio Chemical Dependency Professionals Board.

REQUIRED COURSES

HMSV 1030 - Human Services Assessments	3 Credit(s)
HMSV 1090 - Group Work in Human Services	3 Credit(s)
HMSV 1150 - Introduction to Chemical Dependency	3 Credit(s)
HMSV 1170 - Directed Practice/Seminar	3 Credit(s)
HMSV 2150 - Substance Abuse & Treatment	3 Credit(s)
HMSV 2160 - Substance Abuse Counseling: Core Functions	3 Credit(s)

TOTAL SEMESTER HOURS 18

INFORMATION TECHNOLOGY - CYBER SECURITY, AAS

North Central State College's Cyber Security degree is a great starting point for a successful and exciting career in Information Technology - Cyber Security. Students learn how to detect and defend against network infrastructure attacks by learning how to think like a hacker and how to use the tools hackers use to penetrate network defenses. Successful students can earn the following information technology and security certifications:

- EC-Council - Certified Ethical Hacker, Computer Hacking Forensic Investigator
- Cisco - CCENT
- CompTIA - Cloud+(CV0-002), Linux+, Security+
- Microsoft - Installation, Storage, and Compute with Windows Server 2016 (70-740)

Graduates of this program develop problem solving and communication skills necessary to function effectively with end-users and decision makers throughout all levels of the organization. Our graduates develop life-long learning skills -- the key to success in the exciting and dynamic field of Cyber Security.

NCSC graduates are employed as incident handlers, security auditors, security specialists, penetration testers, and other related positions within the information security realm. Graduates work in private, public, and government sectors for businesses and industries that require security practitioners to meet government regulations or to help safeguard company resources and data. The Associate of Applied Science degree is awarded for the completion of this program.

PROGRAM LEARNING OUTCOMES

Students earning an IT Cyber Security degree from NCSC are prepared to:

1. Use ethical hacking to perform penetration testing, and perform digital forensics to collect information about cyber incidents.
2. Compare and contrast common network security components and devices and their use throughout the IT infrastructure.
3. Implement and administer SMB network security: identify and remediate threats and secure data and network communication.
4. Implement the concepts of confidentiality, availability and integrity in information assurance, including physical, software, devices, policies, and people.
5. Attain Cisco®, CompTIA®, EC-Council©, or VMware® certification.

YEAR ONE - FALL SEMESTER

ENGL 1010 - English Composition I	3 Credit(s)
ITEC 1420 - Introduction to Information Security OR ITEC 1610 - IT Essentials	3 Credit(s)
ITEC 1640 - Introduction to Networks CCNA1	2 Credit(s)
ITEC 1645 - Switching, Routing, & Wireless Essentials CCNA2	2 Credit(s)
ITEC 1650 - Linux Fundamentals (Linux+)	3 Credit(s)
STAT 1010 - Probability and Statistics	3 Credit(s)

YEAR ONE - SPRING SEMESTER

BUSM 1260 - Project Management	3 Credit(s)
ENGL 1030 - English Composition II	3 Credit(s)
ITEC 1690 - Network Security (Security+)	3 Credit(s)
ITEC 1810 - Microsoft Office for IT Professional	3 Credit(s)
ITEC 1840 - Ethics in Information Age	3 Credit(s)

YEAR TWO - FALL SEMESTER

COMM 1010 - Speech	3 Credit(s)
ITEC 1430 - Certified Ethical Hacker (CEH)	3 Credit(s)
ITEC 1860 - Introduction to Programming	3 Credit(s)
ITEC 2420 - Advanced Network Security	3 Credit(s)
ITEC 2610 - Implementing Window Server	3 Credit(s)

YEAR TWO - SPRING SEMESTER

HIST 1010 - American History I	3 Credit(s)
ITEC 2450 - Computer Hacking Forensic Investigator (CHFI)	3 Credit(s)
Certification Technical Elective	1 Credit(s)
ITEC 2460 - Cloud Computing	3 Credit(s)
ITEC 2500 - Capstone for Cyber Security Professional OR ITEC 2980 - Cooperative Work Experience AND ITEC 2990 - Seminar	2-3 Credit(s)
SOCY 2010 - Cultural Diversity and Racism	3 Credit(s)

TOTAL CREDIT HOURS: 61-62

CERTIFICATION TECHNICAL ELECTIVES

ITEC 2701 - Cert Prep for A+	1 Credit(s)
ITEC 2702 - Cert Preparation for Security+	1 Credit(s)
ITEC 2703 - Cert Prep for Linux+	1 Credit(s)
ITEC 2705 - Cert Preparation for CCNA Routing & Switching	1 Credit(s)
ITEC 2706 - Cert Preparation for Vmware (vca)	1 Credit(s)
ITEC 2707 - Cert Preparation for Windows Server Exam (I)	1 Credit(s)
ITEC 2708 - Cert Preparation for Windows Server Exam (II)	1 Credit(s)
ITEC 2709 - Cert Preparation for CWNA Wireless	1 Credit(s)
ITEC 2710 - Cert Preparation for CCNA Security	1 Credit(s)
ITEC 2711 - Cert Preparation for Certified Ethical Hacker (CEH)	1 Credit(s)
ITEC 2712 - Cert Preparation for Computer Hacking Forensic Investigator (CHFI)	1 Credit(s)

INFORMATION TECHNOLOGY - NETWORKING, AAS

North Central State College's Networking degree prepares students for a successful career in Information Technology (IT). Students learn how to create, administer and secure servers and networking infrastructures while earning information technology certifications such as:

- Cisco - CCENT, CCNA, CCNA Wireless
- Microsoft - Installation, Storage, and Compute with Windows Server 2016 (70-740), Identity with Windows Server 2016 (70-742)
- CompTIA - A+, Cloud+ (CV0-002), Linux+, Security+

Graduates of this program develop problem solving and communication skills necessary to function and communicate effectively with end-users and decision makers throughout all levels of the organization. Our graduates develop life-long learning skills—the key to success in the exciting and dynamic information technology field.

Students earning a Networking degree are engaged as data communications and help desk support specialists, network and computer technicians, and Windows and Linux server administrators. Graduates are employed by local and regional businesses, government agencies, and educational institutions.

Information Technology (ITEC) students are expected to have a minimum competency in the computer environment upon entering the program, as evaluated by using the Computer Literacy assessment. Students who do not meet the minimum standards are required to take additional preparatory coursework. ITEC students must maintain a grade of C- or higher in their technical courses to continue in the program. Those not achieving the required grade must retake those courses and earn the minimum grade. The Associate of Applied Science degree is awarded for the completion of this program.

PROGRAM LEARNING OUTCOMES

Students earning a degree in IT Networking from NCSC are prepared to:

1. Design, implement, and administer small and midsize business (SMB) networks.
2. Install and administer SMB server and workstation operating systems (NOS/OS).
3. Implement and administer SMB network security: identify and remediate threats and secure data and network communication confidentiality, integrity, and availability.
4. Troubleshoot and remediate SMB computer and network hardware, software, and communications issues.
5. Attain Cisco®, CompTIA®, Microsoft®, and VMware® certifications.

YEAR ONE - FALL SEMESTER

ENGL 1010 - English Composition I	3 Credit(s)
ITEC 1610 - IT Essentials OR ITEC 1420 - Introduction to Information Security	3 Credit(s)
ITEC 1640 - Introduction to Networks CCNA1	2 Credit(s)
ITEC 1645 - Switching, Routing, & Wireless Essentials CCNA2	2 Credit(s)
ITEC 1650 - Linux Fundamentals (Linux+)	3 Credit(s)
STAT 1010 - Probability and Statistics	3 Credit(s)

YEAR ONE - SPRING SEMESTER

BUSM 1260 - Project Management	3 Credit(s)
ENGL 1030 - English Composition II	3 Credit(s)
ITEC 1620 - Wireshark 101	2 Credit(s)
ITEC 1665 - Enterprise Networking, Security, & Automation CCNA3	2 Credit(s)
ITEC 1690 - Network Security (Security+)	3 Credit(s)
ITEC 1840 - Ethics in Information Age	3 Credit(s)

YEAR TWO - FALL SEMESTER

COMM 1010 - Speech	3 Credit(s)
ITEC 1810 - Microsoft Office for IT Professional	3 Credit(s)
ITEC 1860 - Introduction to Programming	3 Credit(s)
ITEC 2610 - Implementing Window Server	3 Credit(s)
ITEC 2665 - Wireless & Business Technologies	3 Credit(s)

YEAR TWO - SPRING SEMESTER

ECON 2510 - Macroeconomics OR SOCY 2010 - Cultural Diversity and Racism	3 Credit(s) 3 Credit(s)
HIST 1010 - American History I	3 Credit(s)
Certification Technical Elective	1 Credit(s)
ITEC 2460 - Cloud Computing	3 Credit(s)
ITEC 2670 - Administering Windows Server	3 Credit(s)
ITEC 2700 - Capstone for Networking Professionals OR ITEC 2980 - Cooperative Work Experience AND ITEC 2990 - Seminar	2-3 Credit(s)

TOTAL CREDIT HOURS: 62-63

CERTIFICATION TECHNICAL ELECTIVES

ITEC 2701 - Cert Prep for A+	1 Credit(s)
ITEC 2702 - Cert Preparation for Security+	1 Credit(s)
ITEC 2703 - Cert Prep for Linux+	1 Credit(s)
ITEC 2705 - Cert Preparation for CCNA Routing & Switching	1 Credit(s)
ITEC 2707 - Cert Preparation for Windows Server Exam (I)	1 Credit(s)
ITEC 2708 - Cert Preparation for Windows Server Exam (II)	1 Credit(s)
ITEC 2709 - Cert Preparation for CWNA Wireless	1 Credit(s)
ITEC 2711 - Cert Preparation for Certified Ethical Hacker (CEH)	1 Credit(s)
ITEC 2712 - Cert Preparation for Computer Hacking Forensic Investigator (CHFI)	1 Credit(s)
ITEC 2713 - Cert Preparation for Cloud+	1 Credit(s)

CYBER SECURITY NETWORK DEFENSE, CERT

YEAR ONE - FALL SEMESTER

ITEC 1420 - Introduction to Information Security	3 Credit(s)
ITEC 1610 - IT Essentials	3 Credit(s)
ITEC 1640 - Introduction to Networks CCNA1	2 Credit(s)
ITEC 1645 - Switching, Routing, & Wireless Essentials CCNA2	2 Credit(s)
ITEC 1860 - Introduction to Programming	3 Credit(s)

YEAR ONE - SPRING SEMESTER

ITEC 1690 - Network Security (Security+)	3 Credit(s)

YEAR TWO - FALL SEMESTER

ITEC 1430 - Certified Ethical Hacker (CEH)	3 Credit(s)
ITEC 1620 - Wireshark 101	2 Credit(s)
ITEC 1650 - Linux Fundamentals (Linux+)	3 Credit(s)

YEAR TWO - SPRING SEMESTER

ITEC 2460 - Cloud Computing	3 Credit(s)
ITEC 2670 - Administering Windows Server	3 Credit(s)
ITEC 2450 - Computer Hacking Forensic Investigator (CHFI)	3 Credit(s)

TOTAL CREDIT HOURS: 33

HELP DESK/DESKTOP SUPPORT, CERT

REQUIRED COURSES

ITEC 1610 - IT Essentials	3 Credit(s)
ITEC 1620 - Wireshark 101	2 Credit(s)
ITEC 1640 - Introduction to Networks CCNA1	2 Credit(s)
ITEC 1645 - Switching, Routing, & Wireless Essentials CCNA2	2 Credit(s)
ITEC 1690 - Network Security (Security+)	3 Credit(s)
ITEC 1810 - Microsoft Office for IT Professional	3 Credit(s)

TOTAL CREDIT HOURS: 15

NETWORK ADMINISTRATION/MANAGEMENT, CERT

YEAR ONE - FALL SEMESTER

ITEC 1610 - IT Essentials	3 Credit(s)
ITEC 1640 - Introduction to Networks CCNA1	2 Credit(s)
ITEC 1645 - Switching, Routing, & Wireless Essentials CCNA2	2 Credit(s)
ITEC 1650 - Linux Fundamentals (Linux+)	3 Credit(s)

YEAR ONE - SPRING SEMESTER

ITEC 1690 - Network Security (Security+)	3 Credit(s)

YEAR TWO - FALL SEMESTER

ITEC 1620 - Wireshark 101	2 Credit(s)
ITEC 2610 - Implementing Window Server	3 Credit(s)

YEAR TWO - SPRING SEMESTER

ITEC 2460 - Cloud Computing	3 Credit(s)
ITEC 2670 - Administering Windows Server	3 Credit(s)

TOTAL CREDIT HOURS: 31

NETWORK SECURITY ESSENTIALS, CERT

REQUIRED COURSES

ITEC 1610 - IT Essentials	3 Credit(s)
ITEC 1620 - Wireshark 101	2 Credit(s)
ITEC 1640 - Introduction to Networks CCNA1	2 Credit(s)
ITEC 1645 - Switching, Routing, & Wireless Essentials CCNA2	2 Credit(s)
ITEC 1690 - Network Security (Security+)	3 Credit(s)

TOTAL CREDIT HOURS: 12

NETWORK SUPPORT, CERT

REQUIRED COURSES

ITEC 1610 - IT Essentials	3 Credit(s)
ITEC 1620 - Wireshark 101	2 Credit(s)
ITEC 1640 - Introduction to Networks CCNA1	2 Credit(s)
ITEC 1645 - Switching, Routing, & Wireless Essentials CCNA2	2 Credit(s)

TOTAL CREDIT HOURS: 13

SECURITY ESSENTIALS, CERT

REQUIRED COURSES

ITEC 1610 - IT Essentials	3 Credit(s)
ITEC 1690 - Network Security (Security+)	3 Credit(s)

TOTAL CREDIT HOURS: 6

WINDOWS SERVER ADMINISTRATION, CERT

REQUIRED COURSES

ITEC 1610 - IT Essentials	3 Credit(s)
ITEC 1620 - Wireshark 101	2 Credit(s)
ITEC 1640 - Introduction to Networks CCNA1	2 Credit(s)
ITEC 1645 - Switching, Routing, & Wireless Essentials CCNA2	2 Credit(s)
ITEC 1690 - Network Security (Security+)	3 Credit(s)
ITEC 2610 - Implementing Window Server	3 Credit(s)
ITEC 2670 - Administering Windows Server	3 Credit(s)

TOTAL CREDIT HOURS: 18

WIRELESS NETWORK SUPPORT, CERT

REQUIRED COURSES

ITEC 1610 - IT Essentials	3 Credit(s)
ITEC 1620 - Wireshark 101	2 Credit(s)
ITEC 1640 - Introduction to Networks CCNA1	2 Credit(s)
ITEC 1645 - Switching, Routing, & Wireless Essentials CCNA2	2 Credit(s)

TOTAL CREDIT HOURS: 12

INTEGRATED ENGINEERING TECHNOLOGY, AAS

The Integrated Engineering Technology program readies students to diagnose and repair industrial equipment problems using proper technical assessment skills as well as core mechanical and electrical skills. The program provides students with a base knowledge in both the electrical and mechanical side of engineering technology. For this reason, Integrated Engineering Technology is also known as Electro-Mechanical Engineering Technology, or Mechatronics. Students are provided with a base knowledge in advanced skills such as programmable logic controllers (PLC's), electronics and digital applications, robotics, and process control.

Students completing the Integrated Engineering program will be suited for jobs as maintenance repair technicians, electrical maintenance technicians, or mechanical maintenance technicians. Students who continue to pursue a bachelor's degree will be suited for jobs as electrical or mechanical engineering technologists or jobs that require both. See the program webpage for transfer opportunities.

Any individual that has an interest in knowing how things work, determining how to fix things and make them run better and has an interest in problem solving may find the Integrated Engineering Technology program an approachable career choice. The individual should have an interest in and an aptitude for mathematics and science. The Associate of Applied Science degree is awarded upon completion of this program.

PROGRAM LEARNING OUTCOMES

Upon completion of the program, the student will be able to:

1. Demonstrate an ability to apply the knowledge, techniques, skills, and modern tools of integrated engineering to narrowly defined troubleshooting activities.
2. Apply a knowledge of mathematics, science, engineering, and technology to problems that require limited application of principles but extensive practical knowledge.
3. Interpret, edit, and troubleshoot automation hardware, systems and software.

YEAR ONE - FALL SEMESTER

ELET 1510 - DC Electricity	3 Credit(s)
ENGL 1010 - English Composition I	3 Credit(s)
ENGR 1010 - Introduction to Engineering	2 Credit(s)
MATH 1110 - College Algebra	4 Credit(s)
MECT 1150 - Fundamentals of Engineering Design	2 Credit(s)

YEAR ONE - SPRING SEMESTER

ELET 1520 - AC Electricity	3 Credit(s)
ENGL 1030 - English Composition II	3 Credit(s)
ENRD 2150 - Computer Aided Design I	3 Credit(s)
MATH 1130 - Trigonometry	4 Credit(s)
PHYS 1110 - General Physics I	4 Credit(s)

YEAR TWO - FALL SEMESTER

ELET 1530 - Digital Principles	4 Credit(s)
MECT 2230 - Engineering Materials	3 Credit(s)
MECT 2330 - Statics OR MECT 2335 - Engineering Statics	3 Credit(s)
PHYS 1130 - General Physics II	4 Credit(s)
PHIL 1110 - Ethics	3 Credit(s)

YEAR TWO - SPRING SEMESTER

CHEM 1030 - Chemistry	3 Credit(s)
ELET 2240 - Programmable Logic Controllers	3 Credit(s)
ELET 2450 - Electronics	3 Credit(s)
MECT 2440 - Strength of Materials	3 Credit(s)
MECT 2910 - Mechanical Design Project	1 Credit(s)
SOCY 2010 - Cultural Diversity and Racism	3 Credit(s)

TOTAL CREDIT HOURS: 64

LIBERAL ARTS FOCUS, AA

The Associate of Arts degree in Liberal Arts exposes students to a wide variety of topics while building their ability to write creatively, research extensively, debate ideas, and apply critical thinking to any situation. The Liberal Arts courses are Ohio Transfer Module courses and transfer individually to colleges and universities within the University System of Ohio. As Liberal Arts students continue their education, they can begin a wide range of careers in writing, management, teaching at all levels (elementary, secondary, and post-secondary), government, international relations, law, politics, sales, marketing, and public relations.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, graduates will:

1. Demonstrate critical thinking skills—explore ideas and reach conclusions without preconceived positions.
2. Demonstrate written communication skills—clearly and effectively express and support ideas in writing.
3. Demonstrate intercultural knowledge and competence—place racial justice and ethnic experiences in historical and cultural contexts.

YEAR ONE - FALL SEMESTER

COMM 1010 - Speech	3 Credit(s)
ENGL 1010 - English Composition I	3 Credit(s)
PSYC 1010 - Introduction to Psychology	3 Credit(s)
STAT 1010 - Probability and Statistics	3 Credit(s)
THEA 1010 - Introduction to Theatre OR HUMA 1010 - Introduction to the Humanities OR MUSC 1010 - Music Appreciation	3 Credit(s)

YEAR ONE - SPRING SEMESTER

ENGL 1030 - English Composition II	3 Credit(s)
PHIL 1010 - Western Philosophy	3 Credit(s)
POLT 1010 - American National Government	3 Credit(s)
SOCY 1010 - Introduction to Sociology	3 Credit(s)
SOCY 2010 - Cultural Diversity and Racism	3 Credit(s)

YEAR TWO - FALL SEMESTER

BIOL 1230 - Biology I OR GEOL 1010 - Physical Geology	4 Credit(s)
COMM 2070 - Intercultural Communication OR PSYC 1070 - Introduction to Women's Studies	3 Credit(s)
ENGL 2050 - American Literature I	3 Credit(s)
HIST 1050 - Western Civilization I	3 Credit(s)
SPAN 1010 - Beginning Spanish I	3 Credit(s)

YEAR TWO - SPRING SEMESTER

BIOL 1231 - Biology II OR GEOL 1030 - Historical Geology	4 Credit(s)
ENGL 2070 - American Literature II	3 Credit(s)
HIST 1070 - Western Civilization II	3 Credit(s)
PHIL 1110 - Ethics	3 Credit(s)
SPAN 1020 - Beginning Spanish II	3 Credit(s)

TOTAL CREDIT HOURS: 62

LIBERAL ARTS FOCUS, EARLY COLLEGE, AA

The Liberal Arts, Early College, program allows students to complete an associate of arts degree while completing their last two years of high school. Students go on to complete a bachelor's degree in a variety of areas. The program builds students' ability to write creatively, research extensively, debate ideas, and apply critical thinking to any situation. The Liberal Arts courses are Ohio Transfer Module courses and transfer individually to colleges and universities within the University System of Ohio. As Liberal Arts students continue their education, they may enter a wide range of careers in writing, management, teaching at all levels (elementary, secondary, and post-secondary), government, international relations, law, politics, sales, marketing, and public relations.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, graduates will:

1. Demonstrate critical thinking skills—explore ideas and reach conclusions without preconceived positions.
2. Demonstrate written communication skills—clearly and effectively express and support ideas in writing.
3. Demonstrate intercultural knowledge and competence—place racial justice and ethnic experiences in historical and cultural contexts.

YEAR ONE - FALL SEMESTER

COMM 1010 - Speech	3 Credit(s)
ENGL 1010 - English Composition I	3 Credit(s)
FYEX 1000 - CCP College and Career Success	2 Credit(s)
MATH 1110 - College Algebra	4 Credit(s)
MUSC 1010 - Music Appreciation	3 Credit(s)
PSYC 1010 - Introduction to Psychology	3 Credit(s)

YEAR ONE - SPRING SEMESTER

ENGL 1030 - English Composition II	3 Credit(s)
HUMA 1010 - Introduction to the Humanities	3 Credit(s)
MATH 1130 - Trigonometry	4 Credit(s)
PSYC 2010 - Human Growth and Development	3 Credit(s)
SOCY 1010 - Introduction to Sociology	3 Credit(s)

YEAR TWO - FALL SEMESTER

BIOL 1230 - Biology I OR GEOL 1010 - Physical Geology	4 Credit(s)
ENGL 2050 - American Literature I	3 Credit(s)
POLT 1010 - American National Government	3 Credit(s)
SOCY 2010 - Cultural Diversity and Racism	3 Credit(s)
SPAN 1010 - Beginning Spanish I	3 Credit(s)

YEAR TWO - SPRING SEMESTER

BIOL 1231 - Biology II OR GEOL 1030 - Historical Geology	4 Credit(s)
SPAN 1020 - Beginning Spanish II	3 Credit(s)
HIST 1070 - Western Civilization II	3 Credit(s)
ENGL 2070 - American Literature II	3 Credit(s)

TOTAL CREDIT HOURS 63

MANUFACTURING TECHNOLOGY OPERATIONS MANAGEMENT, AAS

A graduate of the Manufacturing Technology Operations Management program will be involved in the production and/or maintenance of various types of production dies. The technician may work in a job shop, maintenance shop, or directly on the production floor. Troubleshooting and problem-solving skills will be a requirement of this position due to the complex nature of the computerized machines used today.

Most graduates will find employment in both large and small manufacturing companies. They may also find work in government and military agencies, service organizations, or research and development. The individual that has an interest in knowing how things work, determining how to repair and improve processes and equipment, as well as an interest in problem-solving may find manufacturing technology an appropriate career choice. The individual should have an interest in and an aptitude for mathematics.

The student in the Manufacturing Technology Operations Management program will study machine technology, manufacturing AutoCAD, CAD/CAM/CNC programming and operations, super abrasive cutting and grinding, tool and die design, die mechanics, press technology, and applied die construction. The Associate of Applied Science degree is awarded for the completion of this program.

PROGRAM LEARNING OUTCOMES

Graduates will:

1. Demonstrate effective oral communication and written communication skills.
2. Use computers in solving technical problems.
3. Demonstrate safe work habits along with care and maintenance of equipment.
4. Develop mathematical skills in algebra and trigonometry using analytical problem solving methods.
5. Demonstrate principles of technical physics.
6. Demonstrate the use of computer aided engineering design using 2D and 3D, drawings, sketching, solid modeling along with a basic understanding of machining processes used in manufacturing.
7. Apply basic computer numerical control programming and machining elements. Fundamental application of CNC code generated by PC software.
8. Problem based application dealing with press technology and metal stamping dies. Basic press set-up and presses used in the manufacturing industry.
9. Demonstration of correct die and applications needed.
10. Basic knowledge of course content and applied learning through lab trainers in: Electrical, Mechanical, Hydraulics, Pneumatics, and Program Logic Controllers.
11. Demonstrate ability in chemistry as it relates to atomic structure, compounds, solutions, acids, bases, salts, solvents, plastics and plating.
12. Demonstrate an understanding of fluid control concepts that are important to die construction.
13. Industrial skills required for manufacturing based operations in both methods and application of skill sets required to improve efficiency and effectiveness of area business.

YEAR ONE - FALL AND SPRING SEMESTERS

CHOOSE ONE OF THE FOLLOWING:

Advanced Manufacturing Certificate	30 Credit(s)
CNC Operations and Programming Certificate	32 Credit(s)
Electrical Maintenance Certificate	31 Credit(s)
Industrial Design Certificate	31 Credit(s)
Manufacturing Tool and Die Certificate	32 Credit(s)

YEAR TWO - FALL SEMESTER

BUSM 1010 - Introduction to Business & Entrepreneurship	3 Credit(s)
BUSM 1270 - Quality	3 Credit(s)
ECON 1010 - Introduction to Economics	3 Credit(s)
ENGL 1010 - English Composition I	3 Credit(s)
ENGR 1010* - Introduction to Engineering	2 Credit(s)

YEAR TWO - SPRING SEMESTER

ACCT 1010 - Financial Accounting	4 Credit(s)
BUSM 1050 - Management	3 Credit(s)
CISS 1220 - Microsoft Excel	2 Credit(s)
ENGL 2150 - Technical Writing	3 Credit(s)
PHYS 1010 - Introductory Physics	3 Credit(s)

TOTAL CREDIT HOURS: 59-61

*ENGR 1010 is included in the Advanced Manufacturing Certificate

MANUFACTURING TECHNOLOGY CERTIFICATES

ADVANCED MANUFACTURING, CERT

FALL SEMESTER

ENRD 2260 - Solid Modeling	3 Credit(s)
MATH 1070 - Applied Geometry & Trigonometry	3 Credit(s)
MECT 2230 - Engineering Materials	3 Credit(s)
MFGT 1010 - Industrial Blueprint Reading	2 Credit(s)
MFGT 1110 - Manufacturing Processes	3 Credit(s)
MFGT 2100 - Quality Control and SPC	2 Credit(s)

SPRING SEMESTER

EMMT 1710 - Introduction to Robotics	2 Credit(s)
ENRD 2150 - Computer Aided Design I	3 Credit(s)
MFGT 1640 - Computer Aided Manufacturing I	2 Credit(s)
MFGT 2010 - Jig and Fixture Design	3 Credit(s)
MFGT 2220 - Manufacturing and Prototypes	2 Credit(s)
MFGT 2640 - Computer Aided Manufacturing II	2 Credit(s)

SUMMER SEMESTER

MFGT 1120 - Advanced Machining	2 Credit(s)

TOTAL CREDIT HOURS: 32

CNC OPERATIONS AND PROGRAMMING, CERT

MasterCam offers a certification exam. NIMS certification opportunities are available in MFGT 1120, MFGT 1640 and MFGT 2100.

FALL SEMESTER

EMMT 1710 - Introduction to Robotics	2 Credit(s)
ENRD 2260 - Solid Modeling	3 Credit(s)
MATH 1070 - Applied Geometry & Trigonometry	3 Credit(s)
MFGT 1010 - Industrial Blueprint Reading	2 Credit(s)
MFGT 1110 - Manufacturing Processes	3 Credit(s)
MFGT 2100 - Quality Control and SPC	2 Credit(s)

SPRING SEMESTER

ENRD 2150 - Computer Aided Design I	3 Credit(s)
MFGT 1550 - CNC Setup and Operations	1 Credit(s)
MFGT 1640 - Computer Aided Manufacturing I	2 Credit(s)
MFGT 2010 - Jig and Fixture Design	3 Credit(s)
MFGT 2220 - Manufacturing and Prototypes	2 Credit(s)
MFGT 2640 - Computer Aided Manufacturing II	2 Credit(s)

SUMMER SEMESTER

MFGT 1120 - Advanced Machining	2 Credit(s)

TOTAL CREDIT HOURS: 30

ELECTRICAL MAINTENANCE, CERT

FALL SEMESTER

EMMT 1010 - Industrial Electricity	3 Credit(s)
EMMT 1020 - Mechanical Systems	2 Credit(s)
EMMT 1030 - OSHA Safety Regulations	2 Credit(s)
EMMT 1050 - Fundamentals of Fluid Power Systems	3 Credit(s)
EMMT 2300 - The National Electric Code	2 Credit(s)
MATH 1070 - Applied Geometry & Trigonometry	3 Credit(s)

SPRING SEMESTER

ELET 2240 - Programmable Logic Controllers	3 Credit(s)
EMMT 1100 - Power Distribution	2 Credit(s)
EMMT 1540 - Ladder Diagrams	1 Credit(s)
EMMT 2100 - Advanced Fluid Power Systems	3 Credit(s)
EMMT 2120 - DC/AC Drives	2 Credit(s)
EMMT 2150 - Motor Controls	2 Credit(s)
MFGT 1110 - Manufacturing Processes	3 Credit(s)

TOTAL CREDIT HOURS: 31

INDUSTRIAL DESIGN, CERT

Student in the certificate curriculum will be eligible to take the Autodesk certification in specific Autodesk software at an Autodesk Certified Training Center. Mastercam offers a certification exam. NIMS certification opportunities available in MFGT 2100.

FALL SEMESTER

ENRD 2260 - Solid Modeling	3 Credit(s)
ENRD 2670 - Intro to 3 D Architectural Design	3 Credit(s)
MATH 1070 - Applied Geometry & Trigonometry	3 Credit(s)
MFGT 1010 - Industrial Blueprint Reading	2 Credit(s)
MFGT 1110 - Manufacturing Processes	3 Credit(s)
MFGT 2100 - Quality Control and SPC	2 Credit(s)

SPRING SEMESTER

ARTS 1010 - Drawing I	3 Credit(s)
ENRD 2150 - Computer Aided Design I	3 Credit(s)
MFGT 2010 - Jig and Fixture Design	3 Credit(s)
MFGT 2220 - Manufacturing and Prototypes	2 Credit(s)
MFGT 2250 - Stamping Operations and Die Design	3 Credit(s)
MFGT 2640 - Computer Aided Manufacturing II	2 Credit(s)

TOTAL CREDIT HOURS: 32

MANUFACTURING TECHNOLOGY CERTIFICATES

MANUFACTURING FOUNDATIONS, CERT

The coursework for this certificate uses Project-based learning to prepare you for entry-level positions in the high demand field of manufacturing. Upon completion of the program, you will be able to:

1. Use a commercially available CAD system to create and read engineering drawings including: dimensions and tolerances; multiple views and projections; assemblies and bill of materials; and 3D models.
2. Apply fundamental knowledge of engineering materials and why they are used in particular applications. Students will demonstrate an understanding of material composition; processes for manufacturing of steels and alloying; cold and hot working processes; and material hardness, modulus of elasticity, tensile strength, yield strength, and shear strength.
3. Apply their knowledge of materials to manufacturing processes and demonstrate an understanding of:
    a. processes such as material removal, forging, casting, forming, finishing; fabrication processes such as welding, adhesives, and fasteners;
    b. production efficiencies (e.g., speed and feeds); and
    c. safety procedures and methods.
4. Work as a member of a team to communicate effectively, solve problems, and improve productivity.

In addition to entering the workforce, you will be prepared to pursue additional education and training toward an associate degree, or Bachelor's degree in Mechanical Engineering Technology. Students may also pursue additional certificates that can be "stacked" toward earning an associate or bachelor's degree.

The Manufacturing Foundation Certificate is supported by the Ohio Engineering Technology Educators Association and the Ohio Manufacturers' Association.

REQUIRED COURSES

ENGL 1010 - English Composition I	3 Credit(s)
ENRD 2150 - Computer Aided Design I	3 Credit(s)
MATH 1110 - College Algebra	4 Credit(s)
MECT 1150 - Fundamentals of Engineering Design	2 Credit(s)
MECT 2230 - Engineering Materials	3 Credit(s)
MFGT 1110 - Manufacturing Processes	3 Credit(s)

TOTAL CREDIT HOURS: 18

MANUFACTURING TOOL AND DIE, CERT

YEAR ONE - FALL SEMESTER

MATH 1070 - Applied Geometry & Trigonometry	3 Credit(s)
MECT 1150 - Fundamentals of Engineering Design	2 Credit(s)
MFGT 1110 - Manufacturing Processes	3 Credit(s)

YEAR ONE - SPRING SEMESTER

MFGT 1300 - Welding and Welding Equipment	2 Credit(s)
MFGT 2010 - Jig and Fixture Design	3 Credit(s)

YEAR ONE - SUMMER SEMESTER

MFGT 1120 - Advanced Machining	2 Credit(s)

YEAR TWO - FALL SEMESTER

MFGT 1640 - Computer Aided Manufacturing I	2 Credit(s)
MECT 2230 - Engineering Materials	3 Credit(s)

YEAR TWO - SPRING SEMESTER

EMMT 1050 - Fundamentals of Fluid Power Systems	3 Credit(s)
MFGT 2250 - Stamping Operations and Die Design	3 Credit(s)
PHYS 1010 - Introductory Physics	3 Credit(s)

TOTAL CREDIT HOURS: 30

MATHEMATICS FOCUS, AS

The Associate of Science degree in Mathematics is for students who like problem solving, puzzles, analogies, analysis, logic, and explanations in mathematical terms. This degree prepares students for a bachelor's or graduate degrees in mathematics, education, actuarial science, statistics, business analysis, economics, logistics, engineering, and science. The AS degree provides students with a strong foundation in mathematics as well as general education courses in the Ohio Transfer Module aimed at developing competence in the exercise of independent intellectual inquiry and stimulating their examination of understanding of personal, social and civic values. Continued study of mathematics at a bachelor's or graduate level prepares students to work in high-demand career areas of education, business, industry, government, research, and science.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, graduates will:

1. Collect and organize data, summarize and interpret statistical results, and present findings in a neat and concise format.
2. Demonstrate proficiency in solving problems which represent the essence of mathematical science including, but not limited to, optimization, velocity, acceleration, volume, work, series, growth, and decay.

YEAR ONE - FALL SEMESTER

BIOL 1230 - Biology I OR GEOL 1010 - Physical Geology	4 Credit(s)
ENGL 1010 - English Composition I	3 Credit(s)
MATH 1150 - Calculus I	5 Credit(s)
MUSC 1010 - Music Appreciation OR HUMA 1010 - Introduction to the Humanities OR THEA 1010 - Introduction to Theatre	3 Credit(s)

YEAR ONE - SPRING SEMESTER

BIOL 1231 - Biology II OR GEOL 1030 - Historical Geology	4 Credit(s)
COMM 1010 - Speech	3 Credit(s)
ENGL 1030 - English Composition II	3 Credit(s)
MATH 1151 - Calculus II	5 Credit(s)
PHIL 1110 - Ethics OR PHIL 1010 - Western Philosophy	3 Credit(s)

YEAR TWO - FALL SEMESTER

CHEM 1210 - Chemistry I	5 Credit(s)
MATH 2010 - Calculus III	4 Credit(s)
PHYS 1110 - General Physics I	4 Credit(s)
PSYC 1010 - Introduction to Psychology OR SOCY 1010 - Introduction to Sociology	3 Credit(s)

YEAR TWO - SPRING SEMESTER

CHEM 1220 - Chemistry II	5 Credit(s)
MATH 2000 - Discrete Mathematics	3 Credit(s)
PHYS 1130 - General Physics II	4 Credit(s)
SOCY 2010 - Cultural Diversity and Racism	3 Credit(s)

TOTAL CREDIT HOURS: 64

MECHANICAL ENGINEERING TECHNOLOGY, BAS

North Central State College's Bachelor's program in Mechanical Engineering Technology (BASMET) is the advanced practical application of engineering and scientific principles for the purpose of designing and manufacturing quality products and systems. The program utilizes Project Based Learning to provide students working individually and in teams, hands on learning. Additionally, training in cutting edge computer software is complemented with instruction in mathematics, science, and engineering analysis to provide our graduates with a solid foundation for implementation of design and manufacturing solutions. Graduates of the (BASMET) program are prepared to compete in a competitive job market and assume a wide range of responsibilities in industry.

YEAR ONE - FALL SEMESTER

ENGL 1010 - English Composition I	3 Credit(s)
ENGR 1010 - Introduction to Engineering	2 Credit(s)
MATH 1110 - College Algebra	4 Credit(s)
MECT 1150 - Fundamentals of Engineering Design	2 Credit(s)
MFGT 1110 - Manufacturing Processes	3 Credit(s)

YEAR ONE - SPRING SEMESTER

CHEM 1030 - Chemistry	3 Credit(s)
ENRD 2150 - Computer Aided Design I	3 Credit(s)
MATH 1130 - Trigonometry	4 Credit(s)
MECT 1750 - Hydraulics and Pneumatics	3 Credit(s)
MECT 1910 - Introduction to Project Design	1 Credit(s)
PHYS 1110 - General Physics I	4 Credit(s)

YEAR TWO -FALL SEMESTER

MATH 1150 - Calculus I	5 Credit(s)
MECT 2230 - Engineering Materials	3 Credit(s)
MECT 2330 - Statics OR MECT 2335 - Engineering Statics	3 Credit(s)
MECT 2905 - Design Project I	1 Credit(s)
PHYS 1130 - General Physics II	4 Credit(s)

YEAR TWO - SPRING SEMESTER

ENGR 2010 - Engineering Programming Robotics & PLC	3 Credit(s)
ENGR 2850 - Engineering Economics & Organization	3 Credit(s)
MATH 1151 - Calculus II	5 Credit(s)
MECT 2440 - Strength of Materials	3 Credit(s)
PSYC 1010 - Introduction to Psychology	3 Credit(s)
MECT 2910 - Mechanical Design Project OR ENGR 2980 - Cooperative Work Experience I AND ENGR 2990 - Cooperative Work Experience Seminar I	1-2 Credit(s)

NOTE: The Cooperative Work Experience and the Seminar may be taken during Spring or Summer of Year Two or Fall of Year Three. The student may choose to take either MECT2950 and MECT3910 (Fall Year Three) or the Cooperative Work Experience the Seminar.

YEAR THREE - FALL SEMESTER

ELET 1510 - DC Electricity	3 Credit(s)
MECT 3031 - Technical Thermodynamics	3 Credit(s)
MECT 3910 - Design Project II	1 Credit(s)

Only required for students NOT completing the Cooperative Work Experience (ENGR2980 & ENGR 2990)

MECT 3010 - Applied Dynamics	3 Credit(s)
ENGL 1030 - English Composition II	3 Credit(s)
MFGT 1640 - Computer Aided Manufacturing I	2 Credit(s)

YEAR THREE - SPRING SEMESTER

ENGR 3030 - Measurement & Instrumentation	3 Credit(s)
MECT 3050 - Mechanical Design I	3 Credit(s)
MECT 3171 - Applied Thermodynamics	3 Credit(s)
ELET 1520 - AC Electricity	3 Credit(s)
PHIL 1010 - Western Philosophy	3 Credit(s)
MECT 3950 - Design Project III OR ENGR 3980 - Cooperative Work Experience II AND ENGR 3990 - Cooperative Work Experience Seminar II	1-2 Credit(s)

NOTE: The Cooperative Work Experience and the Seminar may be taken during Spring or Summer of Year Three or Fall of Year Four. The student may choose to take either MECT3950 and MECT4910 (Fall Year Three) or the Cooperative Work Experience and the Seminar.

YEAR FOUR - FALL SEMESTER

MECT 4010 - Applied Fluid Mechanics	4 Credit(s)
MECT 4050 - Mechanical Design II	3 Credit(s)
PHIL 1110 - Ethics	3 Credit(s)
SOCY 1010 - Introduction to Sociology	3 Credit(s)
MECT 4910 - Design Project IV	1 Credit(s)

NOTE: Only required for students NOT completing the Cooperative Work Experience (ENGR3980 & ENGR3990).

YEAR FOUR - SPRING SEMESTER

ENGR 4010 - Advanced PLC and Robotics	3 Credit(s)
ENGR 4050 - Senior Technology Capstone	3 Credit(s)
ENGR 4210 - Design of Engineering Experiments	3 Credit(s)
SOCY 2010 - Cultural Diversity and Racism	3 Credit(s)

TOTAL CREDIT HOURS: 123

MECHANICAL ENGINEERING TECHNOLOGY, AAS

The mechanical engineering technician may be involved with a variety of tasks on the job. These tasks might involve preparing design specifications, production analysis, and the installation, maintenance, and operation of machines, tools, products, and devices used in manufacturing, processing or power generation. Other job functions may include working as a laboratory assistant, designer, estimator, or technical sales.

Although most mechanical engineering technicians find jobs in manufacturing industries, they may also work for government agencies or in research and development activities. Jobs may be situated in the production shop, the design engineering offices, research laboratories, in the field traveling to on-site locations, or in technical sales.

The individual that has an interest in knowing how things work, determining how things may work better, and who has an interest in problem solving may find Mechanical Engineering Technology an appropriate career choice. The individual should also have an interest in and aptitude for mathematics and science.

The student in Mechanical Engineering Technology will study engineering drawing, mechanical design technology, machine design technology, and materials science. The student will also be introduced to computer-aided drafting, industrial electricity and electronics, alternative energy, and manufacturing processes. In addition, this program is the first two years of the North Central State College Bachelor's Degree in Mechanical Engineering Technology. The Associate of Applied Sciences degree is awarded upon completion of this program.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, graduate will:

1. Demonstrate the use of computer aided engineering design, suing 2D and 3D drawings, sketching and solid modeling.
2. Properly select materials based on their physical properties.
3. Properly select machine elements using analysis of stress and properties for structure, frames, beams, and columns.
4. Demonstrate an understanding of fluid mechanics.
5. Demonstrate basic understanding of industrial electricity applied to power, circuits and programming controllers.
6. Work in teams to apply critical thinking skills and engineering concepts to complete real world projects.
7. Apply computer programming that generates code to operate robotic equipment.

YEAR ONE - FALL SEMESTER

ENGL 1010 - English Composition I	3 Credit(s)
ENGR 1010 - Introduction to Engineering	2 Credit(s)
MATH 1110 - College Algebra	4 Credit(s)
MECT 1150 - Fundamentals of Engineering Design	2 Credit(s)
MFGT 1110 - Manufacturing Processes	3 Credit(s)

YEAR ONE - SPRING SEMESTER

CHEM 1030 - Chemistry	3 Credit(s)
ENRD 2150 - Computer Aided Design I	3 Credit(s)
MATH 1130 - Trigonometry	4 Credit(s)
MECT 1750 - Hydraulics and Pneumatics	3 Credit(s)
MECT 1910 - Introduction to Project Design	1 Credit(s)
PHYS 1110 - General Physics I	4 Credit(s)

YEAR TWO - FALL SEMESTER

ELET 1510 - DC Electricity	3 Credit(s)
MECT 2230 - Engineering Materials	3 Credit(s)
MECT 2330 - Statics OR MECT 2335 - Engineering Statics	3 Credit(s)
MECT 2905 - Design Project I	1 Credit(s)
PHIL 1110 - Ethics	3 Credit(s)
PHYS 1130 - General Physics II	4 Credit(s)

YEAR TWO - SPRING SEMESTER

ENGL 1030 - English Composition II	3 Credit(s)
ENGR 2010 - Engineering Programming Robotics and PLC	3 Credit(s)
SOCY 2010 - Cultural Diversity and Racism	3 Credit(s)
MECT 2910 - Mechanical Design Project	1 Credit(s)
MECT 2440 - Strength of Materials	3 Credit(s)
ENGR 2850 - Engineering Economics & Organization	3 Credit(s)

TOTAL CREDIT HOURS: 65

NURSING, AAS

A registered nurse (RN) deals with people - sick, injured, and well. They are present at the most critical times in a person's life - at birth and death, and at times of joy and sorrow. They work in a variety of settings including hospitals, long-term care centers, home health agencies, hospices, group medical practices, and community-related programs. In addition to providing direct patient care, the RN often coordinates the healthcare team.

This career is suited to persons who are caring and sensitive to others' thoughts and feelings. Honesty, compassion, intelligence, and motivation are important qualities for the RN, as well as leadership, organization, and attention to detail. Students take courses in anatomy/physiology, psychology, social sciences, as well as gerontological, medical-surgical, psychiatric, pediatric, and obstetrical nursing. Upon completion of the program, the graduate is eligible to take the licensing exam for registered nurses (NCLEX). NC State graduates have an outstanding success rate of passing the licensing examination.

The Associate Degree Nursing program is a five-semester program that is approved by the Ohio Board of Nursing and the National League for Nursing. Specific information about the program accreditation may be obtained from the National League for Nursing Accrediting Commission (NLNAC), 3343 Peachtree Road NE, Suite 850, Atlanta, Georgia 30326.

LPN to Associate Degree RN: LPNs may articulate into the RN program to complete their Associate Degree in Nursing. Students who have successfully completed BIOL 1101, BIOL 2751, BIOL 2752, PSYC 1010, PSYC 2010, and STAT 1010, or who have received transfer credit, qualify to take RNUR 1125 - Transition Concepts in Nursing. (CHEM 1030 and PSYC 1010 may be taken concurrently). Following successful completion of RNUR 1125, students may enroll in second-level RNUR courses: RNUR 2030, RNUR 2050, and RNUR 2070.

Enrollment in the Associate Degree Nursing program is limited. There is a special admission procedure. PNUR to RNUR articulation programs are also available. Please contact the Admissions Office for details. The Board of Nursing may, at its discretion, refuse to accept the application for licensure of any person who has been convicted or has charges pending against them for a felony or who has been convicted of a misdemeanor resulting from or related to the use of drugs or alcohol.

The Associate Degree Nursing department publishes a student handbook which delineates specific department/program policies which are not explained in the general catalog. The specific policies as described in the department's student handbook take precedence over any general policy outlined in the College catalog. A copy of the handbook is available for review in the Admissions Office. A minimum grade of 77% is required in all non-RNUR courses (BIOL 1101, BIOL 2751, BIOL 2752, BIOL 1550, ENGL 1010, CHEM 1030, PSYC 1010, and PSYC 2010) and all RNUR classes in order to meet prerequisite and graduation requirements.

The Associate Degree Nursing program contains a sequence of clinical classes that begin in the Fall Semester each year. Entrance into this clinical sequence is limited to students who have successfully completed the entrance requirements. Copies of the entrance requirements are available from the Admissions Office. An acceptable health physical and verification of immunizations/immunities are required. Students may begin non-RNUR courses any semester. An acceptable Bureau of Criminal Identification and Investigation (BCI&I) report/FBI background check and drug screening is required in order to enter the clinical sequence. The department also requires that students attend an NCLEX review course as a required component of the last nursing course and successfully complete a comprehensive exit examination. The Associate of Applied Science degree is awarded for the completion of this program.

PROGRAM LEARNING OUTCOMES

Upon completion of the program, graduates will be able to:

1. Demonstrates critical thinking in the role of provider of care, manager of care and member of the discipline of nursing.
2. Integrates the nursing process to meet basic human needs of individuals and of groups with common health issues in a variety of settings.
3. Safely performs technical procedures using judgment based on knowledge of biopsychosocial principles.
4. Establishes therapeutic relationships with clients and families as an integral part of nursing care.
5. Facilitates cooperative, interpersonal relationships with co-workers as a member of the health care team.
6. Assumes responsibility for self-direction in the ongoing process of learning.
7. Incorporates knowledge of ethical and legal responsibilities and individual limitations in nursing practice.

YEAR ONE - FALL SEMESTER

BIOL 2751 - Human Anatomy and Physiology I	4 Credit(s)
PSYC 1010 - Introduction to Psychology	3 Credit(s)
RNUR 1010 - Basic Concepts in Nursing	6 Credit(s)
RNUR 1030 - Pharmacology	2 Credit(s)

YEAR ONE- SPRING SEMESTER

BIOL 1101 - Nutrition	2 Credit(s)
BIOL 2752 - Anatomy and Physiology II	4 Credit(s)
PSYC 2010 - Human Growth and Development	3 Credit(s)
RNUR 1050 - Intermediate Concepts in Nursing I	7 Credit(s)

YEAR ONE - SUMMER SEMESTER

ENGL 1010 - English Composition I	3 Credit(s)
RNUR 1070 - Intermediate Concepts in Nursing II	5 Credit(s)
STAT 1010 - Probability and Statistics	3 Credit(s)

YEAR TWO - FALL SEMESTER

BIOL 1550 - Microbiology for Health Professionals	3 Credit(s)
RNUR 2030 - Advanced Concepts in Nursing I OR RNUR 2050 - Advanced Concepts in Nursing II	8 Credit(s)

YEAR TWO - SPRING SEMESTER

CHEM 1030 - Chemistry	3 Credit(s)
RNUR 2030 - Advanced Concepts in Nursing I OR RNUR 2050 - Advanced Concepts in Nursing II	8 Credit(s)
RNUR 2070 - Nursing Trends and Transitions	1 Credit(s)

TOTAL CREDIT HOURS: 65

NURSING ARTICULATION OPTION, AAS

The Practical Nursing Articulation Option of the Associate Degree Nursing program contains a sequence of clinical classes that begins in the Summer semester each year. Entrance into this clinical sequence is limited to students who have successfully completed the entrance requirements. Copies of the entrance requirements are available from the Admissions Office. An acceptable Bureau of Criminal Identification and Investigation (BCI&I) report/FBI background check and drug screening are required in order to enter the clinical sequence.

The Nursing Department publishes a Program Policy and Procedure Manual which delineates specific department/ program policies which are not explained in the general catalog. The specific policies as described in the department's Policy and Procedure Manual take precedence over any general policy outlined in the College catalog. A copy of the Policy and Procedure Manual is available in the Admissions Office.

Students may begin non-RNUR courses any semester. A minimum grade of 77% is required in all non-RNUR courses (BIOL 1101, BIOL 2751, BIOL 2752, BIOL 1550, ENGL 1010, CHEM 1030, PSYC 1010, PSYC 2010, and STAT 1010) and all RNUR classes in order to meet prerequisite and graduation requirements. The Associate of Applied Science degree is awarded for the completion of this program.

PROGRAM LEARNING OUTCOMES

1. Upon completion of the program, graduates will be able to:
2. Demonstrates critical thinking in the role of provider of care, manager of care and member of the discipline of nursing.
3. Integrates the nursing process to meet basic human needs of individuals and of groups with common health issues in a variety of settings.
4. Safely performs technical procedures using judgment based on knowledge of biopsychosocial principles.
5. Establishes therapeutic relationships with clients and families as an integral part of nursing care.
6. Facilitates cooperative, interpersonal relationships with co-workers as a member of the health care team.
7. Assumes responsibility for self-direction in the ongoing process of learning.
8. Incorporates knowledge of ethical and legal responsibilities and individual limitations in nursing practice.

THE FOLLOWING COURSES MUST BE COMPLETED PRIOR TO ENROLLMENT IN RNUR 1125

BIOL 1101 - Nutrition	2 Credit(s)
BIOL 2751 - Human Anatomy and Physiology I	4 Credit(s)
BIOL 2752 - Anatomy and Physiology II	4 Credit(s)
PSYC 1010 - Introduction to Psychology	3 Credit(s)
PSYC 2010 - Human Growth and Development	3 Credit(s)
RNUR 1030 - Pharmacology	2 Credit(s)

SUMMER SEMESTER

ENGL 1010 - English Composition I	3 Credit(s)
RNUR 1125 - Transition Concepts in Nursing	7 Credit(s)
STAT 1010 - Probability and Statistics	3 Credit(s)

FALL SEMESTER

BIOL 1550 - Microbiology for Health Professionals	3 Credit(s)
RNUR 2030 - Advanced Concepts in Nursing I OR RNUR 2050 - Advanced Concepts in Nursing II	8 Credit(s)

SPRING SEMESTER

CHEM 1030 - Chemistry	3 Credit(s)
RNUR 2030 - Advanced Concepts in Nursing I OR RNUR 2050 - Advanced Concepts in Nursing II	8 Credit(s)
RNUR 2070 - Nursing Trends and Transitions	1 Credit(s)

TOTAL CREDIT HOURS: 54

NURSING CERTIFICATES

PRACTICAL NURSING, CERT

Practical Nurses are prepared to give skillful, bedside care that may include procedures such as assisting individuals with hygiene needs, nutrition and elimination needs, assessing vital functions, administering medications, and performing wound care. The Licensed Practical Nurse (LPN) functions under the supervision of the registered nurse, physician, dentist, podiatrist, or optometrist. There are employment opportunities that provide satisfying and rewarding work in hospitals, extended care facilities, nursing homes, rehabilitation units, medical offices, and private or home nursing.

Practical nursing is best suited to individuals who are interested in people and enjoy assisting others. In addition to having a caring manner, the nurse must develop technical skills that require manual dexterity. The curriculum of the Practical Nursing program is designed to include a blend of classroom activities and clinical experiences to provide the graduate with the knowledge and skills needed to assist individuals with health care needs. Experiences are provided in various health care agencies in the community. The program is approved by the Ohio Board of Nursing and by the Ohio Board of Regents. Upon completion, the graduate is eligible to take the licensing examination for practical nurses (NCLEX). The Board of Nursing may, at its discretion, refuse to accept the application for licensure of any person who has been convicted or has charges pending against them for a felony or who has been convicted of a misdemeanor resulting from or related to the use of drugs or alcohol. Enrollment in the Practical Nursing program is limited. There is a special admission procedure. Please contact the Admissions Office for details.

The Practical Nursing department publishes a student handbook which delineates specific department/program policies that are not explained in the general catalog. The specific policies as described in the department's student handbook take precedence over any general policy outlined in the College catalog. A copy of the handbook is available for review in the Admissions Office. An acceptable health physical and verification of immunizations/immunities is required. An acceptable Bureau of Criminal Identification and Investigation (BCI&I) report/FBI background check and drug screening is required in order to enter the clinical sequence. A minimum grade of 77% is required in all non-PNUR courses (BIOL 1101, BIOL 1730, and BIOL 1550) and all PNUR courses in order to meet prerequisite and graduation requirements. The Practical Nursing Certificate requires a 2.3 or better cumulative grade point average either in the required courses or the overall GPA.

The Practical Nursing program contains a sequence of clinical classes that begin in the Fall Semester each year. Entrance into this clinical sequence is limited to students who have successfully completed the entrance requirements. Copies of the entrance requirements are available from the Admissions Office. Students may begin non-PNUR courses any semester. Students who plan to articulate into the Associate Degree Nursing program may wish to substitute the Human Anatomy and Physiology courses (BIOL 2751 and BIOL BIOL 2752) for the Basic Anatomy and Physiology courses. BIOL 2752 must be completed prior to entrance into PNUR2010.

PROGRAM LEARNING OUTCOMES

1. Upon completion of the program, graduates will be able to:
2. Function as a health team member under appropriate supervision.
3. Utilizes the nursing process when assisting the patient/client to reach optimal state of wellness throughout the life span.
4. Safely performs technical procedures based on knowledge of scientific and humanistic principles.
5. Utilizes various communication methods in maintaining relationships with patients, families, and coworkers.
6. Adjusts to changes occurring in society in relation to health care needs.

FALL SEMESTER

BIOL 1101 - Nutrition	2 Credit(s)
BIOL 1730 - Basic Anatomy and Physiology	4 Credit(s)
PNUR 1012 - Fundamentals of Practical Nursing	6 Credit(s)
PNUR 1030 - Pharmacology	2 Credit(s)

SPRING SEMESTER

BIOL 1550 - Microbiology for Health Professionals	3 Credit(s)
PNUR 2012 - Advanced Concepts of Practical Nursing I	6 Credit(s)
PNUR 2032 - Advanced Concept of Practical Nursing II	6 Credit(s)
PNUR 2050 - Professionalism & Trends in Practical Nursing	1 Credit(s)

TOTAL CREDIT HOURS: 30

OCCUPATIONAL THERAPY ASSISTANT, AAS

Occupational Therapy is a well-recognized health profession that assists people of all ages to gain the skills needed to complete meaningful daily activities known as occupations, such as eating, dressing, completing homecare, working, playing, and participating in school, leisure or social activities. When an individual's life is disrupted because of a developmental or learning disability, a physical injury or illness, aging and/or social and psychological challenges, an occupational therapy professional may help by teaching new skills, adapting or resolving barriers to independent functioning.

An occupational therapy assistant works under the supervision of an occupational therapist to assist in the evaluation process and they may collaborate with the occupational therapist and other health care professionals such as doctors, nurses, physical therapy professionals and social workers to develop a treatment plan. The occupational therapy assistant then implements the treatment plan as outlined by the occupational therapist.

The Occupational Therapy Assistant program is part of the Health Science Division with limited yearly enrollment. Applications must be completed by January of each year for admission to the program for the following Fall semester. You must contact the office of Health Science to schedule and attend an OTA program selection information session (OTAPSIS). Students may begin non-OTAP courses any semester. Students in the Occupational Therapy Assistant program must maintain a 2.0 cumulative grade point average while in the OTAP program. A minimum grade of 77% is required in BIOL 2751, BIOL 2752, HLTH 1150, PSYC 1010, PSYC 2010, PSYC 2050, and all OTAP courses in order to meet prerequisite requirements.

The NCSC Occupational Therapy Assistant program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), located at 4720 Montgomery Lane, Bethesda, MD 20814-3449. ACOTE's telephone number c/o AOTA is (301) 652-AOTA. Graduates of the program will be eligible to sit for the national certification examination for the occupational therapy assistant administered by the National Board for Certification in Occupational Therapy (NBCOT). After successful completion of this exam, the individual will be a Certified Occupational Therapy Assistant (COTA). In addition, most states require licensure in order to practice; however, state licenses are usually based on the results of the NBCOT Certification Examination. Note that a felony conviction may affect a graduate's ability to sit for the NBCOT certification examination or attain state licensure.

The Occupational Therapy Assistant program publishes a student handbook that outlines specific program policies that are not explained in the general catalog. The specific policies as described in the handbook take precedence over any general policy outlined in the college catalog. A copy of the handbook is available for review in the OTA program director's office. An acceptable health physical and verification of immunization are required. Some fieldwork sites may require an acceptable Bureau of Criminal Identification and Investigation (BCI&I) report and drug screening. The Associate of Applied Science is awarded upon completion of this program.

PROGRAM LEARNING OUTCOMES

Upon completion of the program, graduates will:

1. Have acquired an educational foundation in liberal arts and science, including a focus on issues related to diversity.
2. Be educated as a generalist with a broad exposure to the delivery models and systems used in settings where occupational therapy is currently practiced and where it is emerging as a service.
3. Have achieved entry-level competence through a combination of academic and fieldwork education.
4. Be prepared to articulate and apply occupational therapy principles and intervention tools to achieve expected outcomes as related to occupation.
5. Be prepared to articulate and apply therapeutic use of occupations with individuals or groups for the purpose of participation in roles and situations in home, school, workplace, community, and other settings.
6. Be able to apply occupational therapy interventions to address the physical, cognitive, psychosocial, sensory, and other aspects of performance in a variety of contexts and environments to support engagement in everyday life activities that affect health, well-being and quality of life.
7. Be prepared to be a lifelong learner and keep current with best practice.
8. Demonstrate an understanding and abide by the code of ethics established for state licensure and those established by the American Occupational Therapy Association during academic and fieldwork education.
9. Understand the distinct roles and responsibilities of the occupational therapist and occupational therapy assistant in the supervisory process.
10. Be prepared to effectively communicate and work inter-professionally with those who provide care for individuals and/or populations in order to clarify each member's responsibility in executing components of an intervention plan.
11. Be prepared to advocate as a professional for the occupational therapy services offered and for the recipients of those services

OCCUPATIONAL THERAPY ASSISTANT, AAS

YEAR ONE - FALL SEMESTER

BIOL 2751 - Human Anatomy and Physiology I	4 Credit(s)
ENGL 1010 - English Composition I	3 Credit(s)
OTAP 1015 - Introduction to OTA	1 Credit(s)
OTAP 1020 - Foundations I: Activity Analysis	2 Credit(s)
OTAP 1021 - Foundations II: Therapeutic Relationships	2 Credit(s)
PSYC 1010 - Introduction to Psychology	3 Credit(s)

YEAR ONE - SPRING SEMESTER

BIOL 2752 - Anatomy and Physiology II	4 Credit(s)
OTAP 1022 - OTA Kinesiology	3 Credit(s)
OTAP 1030 - Process I: Developmental	3 Credit(s)
OTAP 1031 - Practice I: Developmental	2 Credit(s)
PSYC 2010 - Human Growth and Development	3 Credit(s)

YEAR ONE - SUMMER SEMESTER

HLTH 1150 - Medical Terminology	2 Credit(s)
OTAP 2040 - Process II Adult Physical Dysfunction	3 Credit(s)
OTAP 2041 - Practice II Adult Physical Dysfunction	2 Credit(s)
PSYC 2050 - Abnormal Psychology	3 Credit(s)
STAT 1010 - Probability and Statistics	3 Credit(s)

YEAR TWO - FALL SEMESTER

COMM 1010 - Speech	3 Credit(s)
OTAP 2050 - Process III: Community and Aging	4 Credit(s)
OTAP 2051 - Practice III: Community and Aging	2 Credit(s)
OTAP 2065 - Current Practice Trends	2 Credit(s)
PHIL 1110 - Ethics	3 Credit(s)

YEAR TWO - SPRING SEMESTER

OTAP 2080 - Directed Practice: FWIIA	3 Credit(s)
OTAP 2081 - Directed Practice: FWIIB	3 Credit(s)
OTAP 2085 - Seminar: FWII	1 Credit(s)

TOTAL CREDIT HOURS: 64

PHYSICAL THERAPIST ASSISTANT, AAS

As a physical therapist assistant, you will provide the hands-on treatment for individuals that have experienced a traumatic illness or injury, under the direction of a physical therapist. This treatment may take place in numerous health care settings including hospitals, outpatient clinics, sports medicine clinics, private offices, individual homes, nursing homes, or school systems. This career path will provide knowledge in the use of modern technology and specialized techniques including exercise to improve muscle strength, balance, flexibility and coordination, gait training with devices, and application of heat, cold, water, or electricity thus motivating the individual towards physical independence. This career choice may be a steppingstone to further professional development in medicine.

The Physical Therapist Assistant program has achieved the highest standard in accreditation from the Commission on Accreditation in Physical Therapy Education (3030 Potomac Avenue, Suite 100, Alexandria, Virginia 22305-3085, 800-999-2782) since November 2, 1994. North Central State College re-confirms the position of total support through human resources and fiscal measures towards the accreditation process.

Enrollment in the Physical Therapist Assistant program is limited. There is a special admission procedure. Please contact the Admissions Office for details. The program is a five-semester sequence that starts every Fall Semester. Students must successfully complete the entrance requirements and have been selected through a selective point system. Pre-Physical Therapist Assistant status does not guarantee admission into the Physical Therapist Assistant courses or program. Students may begin non-PHTA courses any semester.

The Physical Therapist Assistant program publishes a student handbook delineating specific program policies that are not explained in the general catalog. The specific policies as described in the program handbook take precedence over any general policy outlined in the College catalog. A copy of the handbook is available for review in the PTA Program Director's Office and the Admissions Office. An acceptable health physical and verification of immunizations are required. Bureau of Criminal Identification and Investigation (BCI&I) report/FBI background check and drug screening are required. A minimum grade of 77% is required in BIOL 2751, BIOL 2752, STAT 1010, HLTH 1150 and all PHTA courses in order to meet prerequisite and graduation requirements. The Associate of Applied Science degree is awarded for the completion of this program.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, graduates will:

1. Competently perform interventions under the supervision of the Physical Therapist in an ethical, legal, safe and effective manner.
2. Accurately utilize data collection skills to assist the Physical Therapist.
3. Effectively communicate with the patient, patient's family, caregivers and members of the health care team.
4. Correctly document patient interventions.
5. Educate health care providers, the community and government as it relates to physical therapy as required by the given situation.
6. Consistently support patients with regard for individual, cultural and economic differences.
7. Routinely display self-direction for career development and the ongoing process of learning.
8. Recognize the importance of research as it relates to physical therapy.

PHYSICAL THERAPIST ASSISTANT, AAS

YEAR ONE - FALL SEMESTER

BIOL 2751 - Human Anatomy and Physiology I	4 Credit(s)
PHTA 1010 - Intro to Physical Therapy	1 Credit(s)
PHTA 1040 - Physical Agents Theory and Practice	4 Credit(s)
PHTA 1070 - Functional Anatomy	3 Credit(s)
PHYS 1010 - Introductory Physics	3 Credit(s)

YEAR ONE - SPRING SEMESTER

BIOL 2752 - Anatomy and Physiology II	4 Credit(s)
ENGL 1010 - English Composition I	3 Credit(s)
PHTA 1090 - Therapeutic Exercise	4 Credit(s)
PHTA 1110 - Neuromuscular Rehabilitation	4 Credit(s)

YEAR ONE - SUMMER SEMESTER

COMM 1010 - Speech	3 Credit(s)
HLTH 1150 - Medical Terminology	2 Credit(s)
PHTA 2110 - Practicum I	1.5 Credit(s)
PHTA 2115 - Seminar I	1 Credit(s)
PSYC 1010 - Introduction to Psychology	3 Credit(s)
STAT 1010 - Probability and Statistics	3 Credit(s)

HUMANITIES ELECTIVES

HIST 1010 - American History I	3 Credit(s)
HIST 1030 - American History II	3 Credit(s)
HIST 1050 - Western Civilization I	3 Credit(s)
HIST 1070 - Western Civilization II	3 Credit(s)
HUMA 1010 - Introduction to the Humanities	3 Credit(s)
HUMA 1030 - Leadership and the Classics	3 Credit(s)
MUSC 1010 - Music Appreciation	3 Credit(s)
PHIL 1010 - Western Philosophy	3 Credit(s)
PHIL 1110 - Ethics	3 Credit(s)
THEA 1010 - Introduction to Theatre	3 Credit(s)

YEAR TWO - FALL SEMESTER

Humanities Elective	3 Credit(s)
PHTA 2070 - Pathophysiology and Interventions	3 Credit(s)
PHTA 2090 - Orthopedic Conditions and Interventions	3 Credit(s)
PHTA 2170 - Professional Research	2 Credit(s)
PSYC 2010 - Human Growth and Development	3 Credit(s)

YEAR TWO - SPRING SEMESTER

PHTA 2130 - Practicum II	2 Credit(s)
PHTA 2135 - Seminar II	1 Credit(s)
PHTA 2150 - Directed Practice	3.5 Credit(s)
PHTA 2155 - Seminar III	1 Credit(s)

TOTAL CREDIT HOURS: 65

PRE-HEALTH PROFESSIONAL FOCUS, AS

The Associate of Arts and the Associate of Science degree programs are designed for students who are planning to transfer to a four-year college or university and pursue baccalaureate degree programs. The curriculum fulfills the freshman and sophomore general education requirements of most four-year colleges and universities. Effective general education helps students gain competence in the exercise of independent intellectual inquiry and also stimulates their examination of understanding of personal, social and civic values. In addition, these degrees will fulfill the requirements for the Ohio Transfer Module at other public colleges and universities. In essence, upon completion of the Associate of Arts or the Associate of Science, students will have a well-rounded general education to augment the final two years required for a Bachelor's degree.

YEAR ONE - FALL SEMESTER

BIOL 1550 - Microbiology for Health Professionals	3 Credit(s)
BIOL 2751 - Human Anatomy and Physiology I	4 Credit(s)
CISS 1020 - Digital Literacy and Applications	3 Credit(s)
ENGL 1010 - English Composition I	3 Credit(s)
HLTH 1150 - Medical Terminology	2 Credit(s)
STAT 1010 - Probability and Statistics	3 Credit(s)

YEAR ONE - SPRING SEMESTER

BIOL 2752 - Anatomy and Physiology II	4 Credit(s)
CHEM 1030 - Chemistry	3 Credit(s)
ENGL 1030 - English Composition II	3 Credit(s)
HLTH 1010 - Legal & Ethical Aspects of Health Care	2 Credit(s)
MATH 1110 - College Algebra	4 Credit(s)

YEAR TWO - FALL SEMESTER

BIOL 1230 - Biology I OR BIOL 1730 - Basic Anatomy and Physiology	4 Credit(s)
CHEM 1210 - Chemistry I OR PHYS 1010 - Introductory Physics	3-5 Credit(s)
COMM 1010 - Speech	3 Credit(s)
PSYC 1010 - Introduction to Psychology	3 Credit(s)

YEAR TWO - SPRING SEMESTER

BIOL 1101 - Nutrition	2 Credit(s)
BIOL 1231 - Biology II	4 Credit(s)
HLTH 2900 - Natural Science Transfer Capstone	1 Credit(s)
PSYC 2010 - Human Growth and Development	3 Credit(s)
SOCY 2010 - Cultural Diversity and Racism OR PSYC 2050 - Abnormal Psychology	3 Credit(s)

TOTAL CREDIT HOURS: 65

HUMANITIES ELECTIVES*

HIST 1010 - American History I	3 Credit(s)
HIST 1030 - American History II	3 Credit(s)
HIST 1050 - Western Civilization I	3 Credit(s)
HIST 1070 - Western Civilization II	3 Credit(s)
HUMA 1010 - Introduction to the Humanities	3 Credit(s)
HUMA 1030 - Leadership and the Classics	3 Credit(s)
MUSC 1010 - Music Appreciation	3 Credit(s)
PHIL 1010 - Western Philosophy	3 Credit(s)
PHIL 1110 - Ethics	3 Credit(s)
THEA 1010 - Introduction to Theatre	3 Credit(s)

*Courses will require grades of 77% or C+ to be acceptable in most of the North Central State College Health Programs.

PRE-MORTUARY SCIENCE FOCUS, AS

The Associate of Science degree program in Pre-Mortuary Science is designed for students who are planning to transfer to a four-year bachelor's degree program in Mortuary Science. The curriculum fulfills the general education requirements of most bachelor degree programs but also is specifically designed to prepare students for the challenging mortuary science program. Upon completion of the bachelor's degree in Mortuary Science, the new funeral service professional will be eligible to take the qualifying exam for Certification in Thanatology (CT) from the Association of Death Education and Counseling and the Thanatology Association. Combining the thanatology certification with funeral director and embalmer licensure is empowering the funeral service professional to meet the challenges of the 21st century.

PROGRAM LEARNING OUTCOMES

1. Upon completion of this program, graduates will:
2. Demonstrate skills in supporting the bereaved by describing the grieving process and its relationship to healing.
3. Explain individual and cultural differences in attitudes tow death, grieving, mourning, loss, assessment and intervention, and traumatic death and death education.
4. Demonstrate preparation for transfer to a bachelor's degree program by completing foundational courses and thanatology with no loss of credits upon transfer.

YEAR ONE - FALL SEMESTER

CHEM 1030 - Chemistry OR CHEM 1210 - Chemistry I	3-5 Credit(s)
ENGL 1010 - English Composition I	3 Credit(s)
HIST 1010 - American History I	3 Credit(s)
MATH 1110 - College Algebra	4 Credit(s)

YEAR ONE - SPRING SEMESTER

BIOL 1230 - Biology I	4 Credit(s)
COMM 1010 - Speech	3 Credit(s)
ENGL 1030 - English Composition II	3 Credit(s)
MSCI 1070 - Thanatology	3 Credit(s)
SOCY 1010 - Introduction to Sociology	3 Credit(s)

YEAR TWO - FALL SEMESTER

BIOL 2751 - Human Anatomy and Physiology I	4 Credit(s)
BUSM 1010 - Introduction to Business and Entrepreneurship	3 Credit(s)
COMM 2030 - Interpersonal Communication	3 Credit(s)
PSYC 1010 - Introduction to Psychology	3 Credit(s)
SOCY 2010 - Cultural Diversity and Racism	3 Credit(s)

YEAR TWO - SPRING SEMESTER

ACCT 1010 - Financial Accounting	4 Credit(s)
BIOL 2752 - Anatomy and Physiology II	4 Credit(s)
BUSM 1110 - Business Law & Ethics	3 Credit(s)
MUSC 1010 - Music Appreciation	3 Credit(s)
PSYC 1090 - Death and Dying	3 Credit(s)

TOTAL CREDIT HOURS: 62-64

PRE-PROFESSIONAL STUDIES FOCUS, AS

The Associate of Arts and the Associate of Science degree programs are designed for students who are planning to transfer to a four-year college or university and pursue baccalaureate degree programs. The curriculum fulfills the freshman and sophomore general education requirements of most four-year colleges and universities. Effective general education helps students gain competence in the exercise of independent intellectual inquiry and also stimulates their examination of understanding of personal, social and civic values. In addition, these degrees will fulfill the requirements for the Ohio Transfer Module at other public colleges and universities. In essence, upon completion of the Associate of Arts or the Associate of Science, students will have a well-rounded general education to augment the final two years required for a Bachelor's degree.

YEAR ONE - FALL SEMESTER

BIOL 1230 - Biology I GEOL 1010 - Physical Geology	4 Credit(s)
CISS 1020 - Digital Literacy and Applications	3 Credit(s)
COMM 1010 - Speech	3 Credit(s)
ENGL 1010 - English Composition I	3 Credit(s)
PSYC 1010 - Introduction to Psychology OR SOCY 1010 - Introduction to Sociology	3 Credit(s)

YEAR ONE - SPRING SEMESTER

BIOL 1231 - Biology II OR GEOL 1030 - Historical Geology	4 Credit(s)
ENGL 1030 - English Composition II	3 Credit(s)
MATH 1110 - College Algebra	4 Credit(s)
POLT 1010 - American National Government	3 Credit(s)
SOCY 2010 - Cultural Diversity and Racism OR PSYC 1070 - Introduction to Women's Studies OR COMM 2070 - Intercultural Communication	3 Credit(s)

YEAR TWO - FALL SEMESTER

CHEM 1210 - Chemistry I	5 Credit(s)
HIST 1010 - American History I OR HIST 1050 - Western Civilization I OR ENGL 2050 - American Literature I OR SPAN 1010 - Beginning Spanish I	3 Credit(s)
MATH 1130 - Trigonometry	4 Credit(s)
PHYS 1110 - General Physics I	4 Credit(s)

YEAR TWO - SPRING SEMESTER

ASCI 2900 - Associate of Science Capstone	1 Credit(s)
CHEM 1220 - Chemistry II	5 Credit(s)
HIST 1030 - American History II OR HIST 1070 - Western Civilization II OR ENGL 2070 - American Literature II OR SPAN 1020 - Beginning Spanish II	3 Credit(s)
MUSC 1010 - Music Appreciation OR THEA 1010 - Introduction to Theatre	3 Credit(s)
PHYS 1130 - General Physics II	4 Credit(s)

TOTAL CREDIT HOURS: 65

PSYCHOLOGY FOCUS, AA

The Psychology program provides a strong foundation of psychology and general education coursework for students planning on continuing their education by obtaining a bachelor's or graduate degrees in psychology.

The Psychology program provides educational experiences and exposure that will allow you to work in entry-level jobs requiring broad-based knowledge and skills such as office assistance and administration, tutoring, research assistance, and public relations. However, most Psychology students continue their education to earn bachelor's and graduate degrees, allowing them to develop a specialty focus in psychology, expand their knowledge, and enhance future earnings.

Courses in the Psychology program meet the requirements of the Ohio Transfer Module and Transfer Assurance Guides, and thus they transfer individually to all colleges and universities within the University System of Ohio. In addition, NC State has many agreements with four-year colleges and universities to provide a smooth transition to bachelor's degree programs.

YEAR ONE - FALL SEMESTER

COMM 1010 - Speech	3 Credit(s)
ENGL 1010 - English Composition I	3 Credit(s)
PSYC 1010 - Introduction to Psychology	3 Credit(s)
STAT 1010 - Probability and Statistics	3 Credit(s)
THEA 1010 - Introduction to Theatre OR HUMA 1010 - Introduction to the Humanities OR MUSC 1010 - Music Appreciation	3 Credit(s)

YEAR ONE - SPRING SEMESTER

COMM 2010 - Group Communication OR COMM 2030 - Interpersonal Communication OR POLT 1010 - American National Government	3 Credit(s)
ENGL 1030 - English Composition II	3 Credit(s)
PHIL 1010 - Western Philosophy	3 Credit(s)
PSYC 1070 - Introduction to Women's Studies OR COMM 2070 - Intercultural Communication OR SOCY 2010 - Cultural Diversity and Racism	3 Credit(s)
PSYC 2010 - Human Growth and Development	3 Credit(s)

YEAR TWO - FALL SEMESTER

BIOL 1230 - Biology I OR GEOL 1010 - Physical Geology	4 Credit(s)
HIST 1010 - American History I OR HIST 1050 - Western Civilization I	3 Credit(s)
PSYC 2050 - Abnormal Psychology	3 Credit(s)
PSYC 2090 - Social Psychology	3 Credit(s)
SPAN 1010 - Beginning Spanish I	3 Credit(s)

YEAR TWO - SPRING SEMESTER

BIOL 1231 - Biology II OR GEOL 1030 - Historical Geology	4 Credit(s)
HIST 1030 - American History II OR HIST 1070 - Western Civilization II	3 Credit(s)
PHIL 1110 - Ethics	3 Credit(s)
PSYC 2100 - Personality Theory	3 Credit(s)
SPAN 1020 - Beginning Spanish II	3 Credit(s)

TOTAL CREDIT HOURS: 62

RADIOLOGICAL SCIENCES, AAS

A radiographer uses learned skills to produce images of the body using ionizing radiation. During the course of a day, a radiographer could be involved in general radiographic exams (hands, chest, feet, abdomen), trauma exams (car accidents, falls), or specialized exams (involving the use of contrast agents). Radiographers need to be adaptable, creative, and personable. There is a high degree of patient involvement. The radiographer must use effective communication and problem-solving skills to gain cooperation of their patients.

The goal of the Radiological Sciences program is to provide a well-balanced, educational and clinical experience. A hybrid delivery system is used for courses in radiologic procedures and imaging. Students remotely use the Canvas Learning Management System and Zoom for the lecture segment of the courses, then come to the radiology lab on campus for hands-on practice and face-to-face instruction. The clinical education component occurs at one of our hospital affiliates. The program provides the students with the theory and labs to augment their practical/clinical experience. During the five semester clinical sequence, students receive instruction in diagnostic imaging and are given short rotations in CT, MRI, Nuclear Medicine, Ultrasound and Radiation Oncology. Some evenings are included as part of clinical education for additional trauma experience. Courses include Radiographic Procedures, Patient Care, Anatomy and Physiology, Radiation Biology, Radiographic Exposure, Pathology, Special Procedures, Digital Imaging, and Image Analysis.

The program is accredited by the Ohio Department of Health and The Joint Review Committee on Education in Radiologic Technology (JRCERT, 20 North Wacker Drive, Suite 2850, Chicago, Illinois 60606-2901, 312-704-5300). The JRCERT is recognized by the U.S. Department of Education as an accreditation agency and evaluates programs using standards endorsed by the American Society of Radiographic Technologists. North Central State College re-confirms the position of total support through human resources and fiscal measures towards the accreditation process. For information on the JRCERT follow this link: https://www.jrcert.org/. An Associate of Applied Science degree is awarded for successful completion of the program.

PROGRAM MISSION

The mission of the radiography program sponsored by North Central State College is to produce competent radiologic technologists.

PROGRAM GOALS AND STUDENT LEARNING OUTCOMES

Goal 1: Students will demonstrate clinical competence

Student Learning Outcomes:

1. Students will produce diagnostic radiographs
2. Students will provide age-appropriate patient care

Goal 2: Students will demonstrate critical thinking and problem-solving skills

Student Learning Outcomes:

1. Students will effectively evaluate radiographic images
2. Students will perform exams requiring adaptive positioning

Goal 3: Students will communicate effectively in the clinical setting

Student Learning Outcomes:

1. Students will communicate professionally with patients and staff.
2. Students will demonstrate effective communication with atypical patients (pediatric, geriatric, and patients with physical or cognitive disability)

WHERE YOU COULD GO

Employment settings include hospitals, outpatient imaging centers, clinics, private offices, and mobile services. NC State has over 40 agreements with four-year colleges and universities, to provide a smooth transition for students who want to pursue a bachelor's degree. Through university partnerships, some four-year courses are also offered on the NC State campus or online.

ENROLLMENT

The Radiological Sciences program is part of the Health Sciences Division with limited enrollment of 22 students per year. Application and observation hours must be completed by February of each year for admission to the program for the following Fall semester.

The program contains a sequence of clinical and radiology classes that begin in the Fall Semester each year. Entrance into this program is limited to students who have successfully completed the entrance requirements and have been selected through the program's admission process. The entrance and admission policies can be found at this link Radiology Admission Procedures (PDF) and copies are available in Room 201 of the Health Sciences Building and in the Admissions Office. Students may begin non-RADS courses any semester. A minimum grade* of C+ (77%) is required in all non-RADS courses (BIOL 2751, BIOL 2752, ENGL 1010, ENGL 1030, COMM 1010, HUMA elective, SOCY 2010, STAT 1010, HLTH 1010, HLTH 1150) and all RADS courses in order to meet prerequisite and graduation requirements.

CLINICAL OBLIGATIONS**

For students to enter the clinical education sequence the following is required:

- Bureau of Criminal Identification and Investigation (BCI&I) report/FBI background check
- Drug screening
- CPR certification
- An acceptable health physical
- Verification of immunizations/immunities
- Influenza vaccine (each Fall)
- Medical scrubs and acceptable footwear

- Reliable transportation
- Liability Insurance
- Evening Clinical Assignments
- Travel to geographically dispersed clinical facilities

** More information is provided upon acceptance into the program

The Radiological Sciences department publishes a student Policy and Procedure Manual which delineates specific department/program policies which are not explained in the general catalog. The Radiological Sciences Policy and Procedure Manual may be found at https://ncstatecollege.edu/wp-content/uploads/2021/07/PPM-2021.pdf.

NATIONAL CERTIFICATION

Upon successful completion of the program graduates must complete and pass a national Registry examination to practice in the field of Radiology. Our graduates have a 100% job placement rate over the last five years.

PROGRAM EFFECTIVENESS DATA

https://ncstatecollege.edu/documents/Academics/Assessment/Accreditation/Program%20Level/RADS/6.16.2021%20RADS%20effectiveness%20data%20template%20for%20web%202020.pdf

TRANSFER AGREEMENTS

Courses from North Central State's Radiological Program transfer to many colleges throughout Ohio. Additionally, NCSC has specific articulation agreements with the following programs:

- Bachelor of Radiation Science Technology (online) at the University of Cincinnati (PDF)

YEAR ONE - FALL SEMESTER

BIOL 2751 - Human Anatomy and Physiology I	4 Credit(s)
HLTH 1150 - Medical Terminology	2 Credit(s)
RADS 1120 - Clinical Practicum I	1 Credit(s)
RADS 1140 - Radiologic Procedures/Seminar I	3 Credit(s)
RADS 1160 - Imaging Science 1	3 Credit(s)
STAT 1010 - Probability and Statistics	3 Credit(s)

YEAR ONE - SPRING SEMESTER

BIOL 2752 - Anatomy and Physiology II	4 Credit(s)
ENGL 1010 - English Composition I	3 Credit(s)
HLTH 1010 - Legal & Ethical Aspects of Health Care	2 Credit(s)
RADS 1220 - Clinical Practicum 2	1 Credit(s)
RADS 1240 - Radiologic Procedures/Sem 2	3 Credit(s)
RADS 1260 - Imaging Science 2	3 Credit(s)

YEAR ONE - SUMMER SEMESTER

Humanities Elective	3 Credit(s)
ENGL 1030 - English Composition II	3 Credit(s)
RADS 2321 - Clinical Practicum 3	1 Credit(s)
RADS 2340 - Radiologic Procedures/Seminar 3	1.5 Credit(s)
RADS 2360 - Imaging Science 3	1.5 Credit(s)

YEAR TWO - FALL SEMESTER

COMM 1010 - Speech	3 Credit(s)
RADS 2420 - Clinical Practicum 4	2 Credit(s)
RADS 2440 - Radiologic Procedures/Seminar 4	3 Credit(s)
RADS 2460 - Imaging Science 4	3 Credit(s)
SOCY 2010 - Cultural Diversity and Racism	3 Credit(s)

YEAR TWO - SPRING SEMESTER

RADS 2520 - Clinical Practicum 5	3 Credit(s)
RADS 2540 - Radiologic Procedures/Seminar 5	3 Credit(s)
RADS 2560 - Imaging Science 5	3 Credit(s)

TOTAL CREDIT HOURS: 65

HUMANITIES ELECTIVES

HIST 1010 - American History I	3 Credit(s)
HIST 1030 - American History II	3 Credit(s)
HIST 1050 - Western Civilization I	3 Credit(s)
HIST 1070 - Western Civilization II	3 Credit(s)
HUMA 1010 - Introduction to the Humanities	3 Credit(s)
HUMA 1030 - Leadership and the Classics	3 Credit(s)
MUSC 1010 - Music Appreciation	3 Credit(s)
PHIL 1010 - Western Philosophy	3 Credit(s)
PHIL 1110 - Ethics	3 Credit(s)
THEA 1010 - Introduction to Theatre	3 Credit(s)

RESPIRATORY CARE, AAS

ACCREDITATION

North Central State College's Respiratory Care Program (Program Number 200335) is accredited by the Commission on Accreditation for Respiratory Care. www.coarc.com.

- "CoARC accredits respiratory therapy education programs in the United States. To achieve this end, it utilizes an 'outcomes based' process. Programmatic outcomes are performance indicators that reflect the extent to which the educational goals of the program are achieved and by which program effectiveness is documented."
- Program Outcomes can be viewed by accessing CoARC'S outcomes webpage at https://coarc.com/students/programmatic-outcomes-data/.

According to the American Association for Respiratory Care (AARC), Respiratory Care is: "a healthcare specialty under medical direction in the assessment, treatment, management, diagnostic evaluation, and care of patients with deficiencies and abnormalities of the cardiopulmonary system." There are more than 185,000 respiratory care practitioners in the United States. Respiratory Therapists are members of the allied healthcare team.

In a recent study conducted by the AARC, seventy-five percent of respiratory care practitioners work in hospitals side-by-side with physicians and nurses as a vital part of the health care team. They work in intensive care, the emergency department, medical-surgical floors, and labor and delivery. The additional twenty-five percent of practicing therapists work in laboratories, home care settings, skilled nursing facilities, physician offices, in sales, education and research. Respiratory therapists are highly motivated individuals. They are intelligent, caring, able to employ critical thinking skills, and are willing to grow with the profession. You may learn more about the Respiratory Care profession by contacting the AARC or the Ohio Society for Respiratory Care.

WHAT TO EXPECT

The Respiratory Care program of North Central State College provides the student with a strong background in the use of respiratory equipment, patient assessment, cardiopulmonary anatomy and physiology, and pathophysiology. The student receives direct hands-on patient care experience in various hospitals and facilities throughout their clinical education.

Graduates are eligible and well-prepared to begin the National Board for Respiratory Care (NBRC) examination process to become a Registered Respiratory Therapist and to attain the Respiratory Care license in the state of Ohio. North Central State College re-confirms the position of total support through human resources and fiscal measures towards the accreditation process.

CONTACT INFORMATION

Enrollment in the Respiratory Care program is limited. There is a special admission procedure. Please contact the Admissions Office at 419-755-4761 or the Health Sciences Office at 419-755-4805 for details.

The Respiratory Care department publishes a student handbook which delineates specific department/program policies which are not explained in the general catalog. The specific policies as described in the department's student handbook take precedence over any general policy outlined in the College catalog. A copy of the handbook is available for review in the Admissions Office. An acceptable health physical and verification of immunizations/immunities are required. A Bureau of Criminal Identification and Investigation (BCI&I) report/FBI background check and drug screening are required in order to enter the technical (RESP) clinical sequence.

The Respiratory Care program contains a sequence of technical (RESP) classes that begin in the Fall Semester each year. Entrance into this sequence is limited to students who have successfully completed the entrance requirements. Copies of the entrance requirements are available from the Admissions Office. Persons who are currently Certified Respiratory Therapy Technicians by the National Board for Respiratory Care may apply for advanced standing in the program. A minimum grade of 77% is required in BIOL 1730, BIOL 1550, CHEM 1030, ENGL 1010, STAT 1010, and all RESP classes in order to meet prerequisite and graduation requirements. The Associate of Applied Science degree is awarded for successful completion of this program.

PROGRAM LEARNING OUTCOMES

1. Upon completion of the program, students will comprehend, apply, and evaluate clinical information relevant to their roles as registered respiratory care therapists.
2. Upon completion of the program, students will demonstrate technical proficiency in all the skills necessary to fulfill their roles as an registered respiratory care therapist.
3. Upon completion of the program, students will demonstrate professional behavior consistent with employer expectations as an registered respiratory care therapist.

RESPIRATORY CARE, AAS

YEAR ONE - FALL SEMESTER

BIOL 1730 - Basic Anatomy and Physiology	4 Credit(s)
CHEM 1030 - Chemistry	3 Credit(s)
RESP 1110 - Respiratory Care Equipment and Procedures I	5 Credit(s)
RESP 1140 - Pharmacology	2 Credit(s)
RESP 1190 - Practicum I	0.5 Credit(s)

YEAR ONE - SPRING SEMESTER

ENGL 1010 - English Composition I	3 Credit(s)
RESP 1220 - Respiratory Care Equipment & Procedure II	5 Credit(s)
RESP 1250 - Cardiopulmonary Anatomy & Physiology	4 Credit(s)
RESP 1270 - Physician's Seminar I	2 Credit(s)
RESP 1290 - Practicum II	2.5 Credit(s)

YEAR ONE - SUMMER SEMESTER

RESP 2310 - Respiratory Care Equipment & Procedures III	2 Credit(s)
RESP 2330 - Advanced Life Support Procedures	1 Credit(s)
RESP 2390 - Practicum III	2.5 Credit(s)
STAT 1010 - Probability and Statistics	3 Credit(s)

HUMANITIES ELECTIVES

HIST 1010 - American History I	3 Credit(s)
HIST 1030 - American History II	3 Credit(s)
HIST 1050 - Western Civilization I	3 Credit(s)
HIST 1070 - Western Civilization II	3 Credit(s)
HUMA 1010 - Introduction to the Humanities	3 Credit(s)
HUMA 1030 - Leadership and the Classics	3 Credit(s)
MUSC 1010 - Music Appreciation	3 Credit(s)
PHIL 1110 - Ethics	3 Credit(s)
THEA 1010 - Introduction to Theatre	3 Credit(s)

YEAR TWO - FALL SEMESTER

BIOL 1550 - Microbiology for Health Professionals	3 Credit(s)
COMM 1010 - Speech	3 Credit(s)
RESP 2410 - Respiratory Care Equipment & Procedures IV	3 Credit(s)
RESP 2470 - Physician's Seminar II	2 Credit(s)
RESP 2490 - Practicum IV	2.5 Credit(s)

YEAR TWO - SPRING SEMESTER

Humanities Elective	3 Credit(s)
COMM 2070 - Intercultural Communication	3 Credit(s)
RESP 2570 - Respiratory Care Administration	2 Credit(s)
RESP 2590 - Practicum V	2.5 Credit(s)
RESP 2599 - Respiratory Care Review	1.5 Credit(s)

TOTAL CREDIT HOURS: 65

SCI-MED ACADEMY FOCUS, AS

Sci-Med Academy provides students the opportunity to complete as many science-focused courses as possible in the two years that they are on our campus. It is not designed as a terminal degree, meaning that the exclusive purpose of the program is for transfer to a 4-year institution upon completion. Students have the opportunity to complete one of two curriculum tracks. The Health track allows students to focus on courses that will prepare them for a career in health care. In addition to the curriculum shared between the two tracks, students will complete one full year (2 courses) of Human Anatomy and Physiology. The Natural Sciences (also termed Science Education) track allows students to get as many science-based pre-requisites completed prior to attending a 4-year institution, such as General Physics I and II. Most courses are Ohio Transfer 36 or Transfer Assurance Guide (TAG) for transfer credit to any public institution in Ohio. Example careers of students that complete this program and continue their education towards a Bachelor's degree include physical therapist, registered nurse, medical doctor, or a research scientist.

YEAR ONE - FALL SEMESTER

BIOL 1230 - Biology I	4 Credit(s)
ENGL 1010 - English Composition I	3 Credit(s)
MATH 1110 - College Algebra	4 Credit(s)
POLT 1010 - American National Government	3 Credit(s)

YEAR ONE - SPRING SEMESTER

BIOL 1231 - Biology II	4 Credit(s)
BIOL 1570 - Microbiology OR BIOL 1730 - Basic Anatomy and Physiology	4 Credit(s)
ENGL 1030 - English Composition II	3 Credit(s)
MATH 1130 - Trigonometry	4 Credit(s)

YEAR TWO - FALL SEMESTER

BIOL 2751 - Human Anatomy and Physiology I OR PHYS 1110 - General Physics I	4 Credit(s)
CHEM 1210 - Chemistry I	5 Credit(s)
ECON 1010 - Introduction to Economics	3 Credit(s)
MATH 1150 - Calculus I	5 Credit(s)

YEAR TWO - SPRING SEMESTER

BIOL 2752 - Anatomy and Physiology II OR PHYS 1130 - General Physics II	4 Credit(s)
CHEM 1220 - Chemistry II	5 Credit(s)
PHIL 1010 - Western Philosophy OR PHIL 1110 - Ethics	3 Credit(s)
PSYC 1010 - Introduction to Psychology OR SOCY 1010 - Introduction to Sociology	3 Credit(s)

TOTAL CREDIT HOURS: 61

All students entering the degree must be college ready needing no developmental courses. All students must have completed high school Chemistry or CHEM 1010 at North Central State College with C- or better. All students must complete the curriculum courses in the sequence of semesters indicated.

All courses must receive a final grade of "C" or better to continue in the program.

Two Pathways are possible in this degree program as follows.

Health = BIOL 1570, BIOL 2751, and BIOL 2752

Science = BIOL 1730, PHYS 1110, and PHYS 1130

SOCIAL WORK FOCUS, AA

Social Work is a profession that focuses on helping children, adolescents, and adults with a variety of needs, such as mental health, substance abuse, physical disabilities, and more. The Associate of Arts degree in Social Work is for students who want to transfer after earning their associate's degree and continue their education toward earning a bachelor's/master's degree in social work. In this program, students build a strong foundation in science, communication, psychology, statistics, and humanities. They also develop strong technical skills to assist individuals and groups and become familiar with social problems, client assessments, case management, and treatment modalities. Continued study in social work at a bachelor's or graduate level prepares students for rewarding careers in a variety of settings.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, graduates will:

1. Apply the helping process at the micro, mezzo, and macro levels with Human Services.
2. Demonstrate professional attitudes, behaviors, and ethics.
3. Demonstrate effective written, verbal, and non-verbal communication skills.

YEAR ONE - FALL SEMESTER

ENGL 1010 - English Composition I	3 Credit(s)
HMSV 1020 - Introduction to Social Work Services	3 Credit(s)
HMSV 1030 - Human Services Assessments	3 Credit(s)
PHIL 1010 - Western Philosophy OR PHIL 1110 - Ethics	3 Credit(s)
THEA 1010 - Introduction to Theatre OR HUMA 1010 - Introduction to the Humanities OR MUSC 1010 - Music Appreciation	3 Credit(s)

YEAR ONE - SPRING SEMESTER

ENGL 1030 - English Composition II	3 Credit(s)
HMSV 1150 - Introduction to Chemical Dependency	3 Credit(s)
PSYC 1010 - Introduction to Psychology	3 Credit(s)
SOCY 1010 - Introduction to Sociology	3 Credit(s)
STAT 1010 - Probability and Statistics	3 Credit(s)

YEAR TWO - FALL SEMESTER

BIOL 1230 - Biology I	4 Credit(s)
HIST 1010 - American History I	3 Credit(s)
HMSV 2030 - Introduction to Case Management	3 Credit(s)
HMSV 2050 - Social Problems	3 Credit(s)
SOCY 2010 - Cultural Diversity and Racism	3 Credit(s)

YEAR TWO - SPRING SEMESTER

HIST 1030 - American History II	3 Credit(s)
HMSV 1170 - Directed Practice/Seminar	3 Credit(s)
HMSV 2110 - Poverty and Social Welfare	3 Credit(s)
POLT 1010 - American National Government	3 Credit(s)
BIOL 1231 - Biology II OR GEOL 1030 - Historical Geology	4 Credit(s)

TOTAL CREDIT HOURS: 62

VISUAL COMMUNICATIONS MEDIA & TECHNOLOGY-GRAPHIC DESIGN, AAB

The Graphic Design Major of Visual Communications Media and Technology focuses on graphic design and print skills but includes multimedia, video production and web design. The Graphic Design track has a balance of design theory, practice, and production. Class work focuses on typography, digital image manipulation, and printing. Students will gain experience utilizing a variety of software applications, design techniques, as well as learning about the creative process. Classes will cover design skills, technical training, problem solving and critical thinking skills. Students must have a mastery of computer operational skills.

Students graduating with skills in Graphic Design may seek careers in the traditional advertising and printing fields, and web design. Traditional print media careers include graphic designer, desktop publisher and image specialist, photo retoucher, prepress technician, and print production.

In order to graduate all VCMT and ARTS courses must be completed with a C- or better. The Associate of Applied Business degree is awarded for the completion of this program.

PROGRAM LEARNING OUTCOMES

1. Students are able to use multimedia technology to assemble graphics, text, sound, and video into a meaningful production.
2. Students will demonstrate software skills using multimedia software currently used in industry.
3. Students will follow the graphics design process and be able to produce original, complex digital graphics.
4. Graduates will have a strong sampling of a variety of graphic arts skills in their technical area in their portfolio.
5. Graduates will be able to perform effectively in a job interview.
6. Students will develop oral and written skills to communicate effectively.
7. Visual Communications Media and Technology majors will demonstrate knowledge, skills, professionalism, and creativity in graphic design.

YEAR ONE - FALL SEMESTER

ARTS 1010 - Drawing I	3 Credit(s)
ARTS 1070 - Digital Photography	3 Credit(s)
ENGL 1010 - English Composition I	3 Credit(s)
VCMT 1050 - Imaging I	3 Credit(s)
VCMT 1085 - Visual Communications I	3 Credit(s)

YEAR ONE - SPRING SEMESTER

BUSM 1170 - Business Communications	3 Credit(s)
HUMA 1010 - Introduction to the Humanities	3 Credit(s)
STAT 1010 - Probability and Statistics	3 Credit(s)
VCMT 1190 - Video Production I	3 Credit(s)
VCMT 1280 - Visual Communication II & Typography	3 Credit(s)
VCMT 1550 - Imaging II	3 Credit(s)

YEAR TWO - FALL SEMESTER

BUSM 2110 - Promotion and Advertising	3 Credit(s)
ECON 1510 - Microeconomics	3 Credit(s)
VCMT 2070 - Web Design I	3 Credit(s)
VCMT 2280 - Editing & Publishing for Visual	3 Credit(s)
VCMT 2550 - Imaging III	3 Credit(s)

YEAR TWO - SPRING SEMESTER

ARTS 1770 - Digital Photography II OR ITEC 1810 - Microsoft Office for IT Professional	3 Credit(s)
BUSM 1150 - Marketing	3 Credit(s)
PSYC 1010 - Introduction to Psychology	3 Credit(s)
VCMT 2060 - Principles of Printing Technology	3 Credit(s)
VCMT 2700 - Capstone Multimedia Portfolio	2 Credit(s)
VCMT 2800 - Cooperative Work Experience	1 Credit(s)
VCMT 2850 - Seminar	1 Credit(s)

TOTAL CREDIT HOURS: 64

VISUAL COMMUNICATIONS MEDIA AND TECHNOLOGY, CERT

REQUIRED COURSES

ARTS 1010 - Drawing I	3 Credit(s)
ARTS 1070 - Digital Photography	3 Credit(s)
BUSM 2110 - Promotion and Advertising	3 Credit(s)
VCMT 1050 - Imaging I	3 Credit(s)
VCMT 1085 - Visual Communications I	3 Credit(s)
VCMT 1190 - Video Production I	3 Credit(s)
VCMT 1280 - Visual Communication II & Typography	3 Credit(s)
VCMT 1550 - Imaging II	3 Credit(s)
VCMT 2060 - Principles of Printing Technology OR VCMT 2550 - Imaging III OR ENRD 2260 - Solid Modeling	3 Credit(s)
VCMT 2070 - Web Design I	3 Credit(s)

TOTAL CREDIT HOURS: 30

COURSE DESCRIPTIONS

These course syllabi are included in the catalog in order to provide general information about courses. The information contained in each course description and syllabus are the most accurate available at the time of publication. Modifications in course content may be made based upon unique needs and/or abilities of students enrolled in a class. Courses are in alphabetical order by prefix.

The North Central State College catalog is neither a contract nor an offer to contract. North Central State College reserves the right to make changes in any material contained herein as deemed necessary without notice.

TRANSFER ASSURANCE GUIDES (TAGS)

Courses marked as a TAG course are guaranteed to transfer and apply directly to the major at any state college or university in the state of Ohio.

ACCOUNTING

ACCT 1000 - PERSONAL FINANCE
3 Credit(s); 3 Lecture Hour(s)
This course is an overview of personal and family financial planning with an emphasis on financial record keeping, planning your spending, tax planning, consumer credit, making purchase/lease decisions, purchasing insurance, selecting investments, and retirement and estate planning.

ACCT 1010 - FINANCIAL ACCOUNTING
4 Credit(s); 4 Lecture Hour(s)
This is an introductory course of study in financial accounting and financial reporting for business entities. (TAG# OBU010)

ACCT 1030 - MANAGERIAL ACCOUNTING
4 Credit(s); 4 Lecture Hour(s)
This course provides information for assisting the management of a business entity in making decisions and for evaluating the effectiveness of those decisions by developing a student's understanding of managerial accounting principles. (TAG# OBU011)
Required Prerequisite Course(s): *Take ACCT 1010*

ACCT 1052 - COMPUTERIZED ACCOUNTING
2 Credit(s); 2 Lecture Hour(s)
A comprehensive approach to teaching accounting concepts in a software environment utilizing data files designed to simulate real-world businesses so that students gain "hands-on" experience with performing accounting activities, producing financial statements, and analyzing company performance.
Required Prerequisite Course(s): *Take ACCT 1010*

ACCT 1070 - PAYROLL ACCOUNTING
2 Credit(s); 2 Lecture Hour(s)
This course covers federal and state laws pertaining to wages, payroll taxes, payroll tax forms, and journal and general ledger transactions. Emphasis is placed on computing wages; calculating social security, income, and unemployment taxes; preparing appropriate payroll tax forms; and journalizing/posting transactions. Upon completion, students should be able to analyze data, make appropriate computations, complete forms, and prepare accounting entries using appropriate technology.
Required as Prerequisite or Concurrent Course(s): *Take ACCT 1052*

ACCT 1090 - CERTIFIED BOOKKEEPER PREP
2 Credit(s); 2 Lecture Hour(s)
This review course is designed to prepare students to sit for the Certified Bookkeeper exam administered by American Institute of Professional Bookkeepers.
Required Prerequisite Course(s): *Take ACCT 1010, ACCT 2012, CISS 1220*
Required as Prerequisite or Concurrent Course(s): *Take ACCT 1070*

ACCT 2012 - TAXATION I
3 Credit(s); 3 Lecture Hour(s)
Income tax concepts will be stressed in the course, such as income, exclusions, deductions, adjusted gross income, capital gains and losses, exemptions, tax credits, and determination of income from business, trade, or profession. Attention is given to the reasoning behind major tax regulations and their effects upon the business firm and the impact of tax regulations upon managerial decision-making.

ACCT 2016 - TAXATION II
3 Credit(s); 3 Lecture Hour(s)
This course is a continuation of Taxation I. Special emphasis is placed on taxation of corporate entities, partnerships, and sub-chapter S corporations. Other specific topics will include state and local income taxes and wealth planning.
Required Prerequisite Course(s): *ACCT 2012*

ACCT 2030 - INTERMEDIATE ACCOUNTING I
3 Credit(s); 3 Lecture Hour(s)
An analysis of current accounting treatments of financial statement items. Emphasis is given to an evaluation of the theory underlying modern accounting practices, as well as to the comprehensive study of the accounting techniques involved.
Required Prerequisite Course(s): *Take ACCT 1010*

ACCT 2031 - INTERMEDIATE ACCOUNTING II
3 Credit(s); 3 Lecture Hour(s)
An analysis of current accounting treatments of financial statement items. Emphasis is given to an evaluation of the theory underlying modern accounting practices, as well as to the comprehensive study of the accounting techniques involved.
Required Prerequisite Course(s): *Take ACCT 2030*

ACCT 2050 - GOVERNMENTAL ACCOUNTING
3 Credit(s); 3 Lecture Hour(s)
The topics in this course include the principles and operation of fund accounting including financial reporting and budgetary control for state and local governments.
Required Prerequisite Course(s): *Take ACCT 1010*

ACCT 2060 - PRINCIPLES OF FINANCE
3 Credit(s); 3 Lecture Hour(s)
An introduction to the basics of finance with an emphasis on the structure of financial statements, taxes, cash flows, ratio analysis, time-value-of-money, annuities, bond valuation, stock valuation, and capital budgeting.
Required Prerequisite Course(s): *Take ACCT 1010*

ACCT 2070 – AUDITING
3 Credit(s); 3 Lecture Hour(s)
This course helps students develop an understanding of auditing theory and procedures and practices of independent examinations of financial records. Lectures and hypothetical cases provide experience in preparation of various auditing work papers, including evaluations of internal control systems.
Required Prerequisite Course(s): *Take ACCT 2030*

ACCT 2092 - ACCOUNTING CAPSTONE
2 Credit(s); 2 Lecture Hour(s)
Students will demonstrate their accounting knowledge through various class projects. Students will complete a portfolio and a presentation analyzing a major company.
Required Prerequisite Course(s): *Take ACCT 2030 and ENGL 1010*
Required as Prerequisite or Concurrent Course(s): *Take ACCT 2070 and ACCT 2060*

ACCT 2095 - Cooperative Work Experience

1 Credit(s); 1 Cooperative Work Hour(s)

The cooperative work experience is an opportunity for students to obtain practical work experience in the Accounting field while earning college credit. This on or off campus employment experience can be paid or unpaid. The work experience is coordinated by a faculty member who visits the job site for a conference with the student and the supervisor at least once per semester. Students must complete 150 hours of work experience. This class is Pass/No Pass (P/NP).

Required Prerequisite Course(s): *Must be concurrent with ACCT 2096 - Seminar. Student must have completed 20 semester credit hours of ACCT classes with a C- or better. Students should have a 2.0 GPA. All forms required for the Cooperative Work Experience must be submitted upon registering for this class. Students are required to attend an orientation class the first week of the semester. Students must get permission of the instructor in order to enroll in this class.*

Required Concurrent Course(s): *Take ACCT 2096*

ACCT 2096 – Seminar

1 Credit(s); 1 Seminar Hour(s)

This course is taken concurrently with ACCT 2095 - Cooperative Work Experience. Students will discuss their work place experiences that occur during their Co-op Work Experience. Students must get permission of the instructor in order to enroll in this class. This class is Pass/No Pass (P/NP).

Required Concurrent Course(s): *Take ACCT 2095*

AGRICULTURE

AGRI 1010 - Agriculture Production Processing & Nutrition

4 Credit(s); 4 Lecture Hour(s)

An introductory course of how American Agriculturalist produces the food we use in our daily lives. This course examines the production food from farm, the processes that are required to make it to table and influences of consumer choice. This course will include units on food nutrition, quality of food, milk industry, meat industry, poultry production, aquaculture, grain production, vegetable and fruit production, beverage industry, food packaging and preservation. Semesters Available: Sp – Eve

AGRI 1030 - Soil Crop and Greenhouse Management

4 Credit(s); 4 Lecture Hour(s)

This course will cover a variety of different topics dealing with our natural environment and how humans have affected that environment. This course will cover soil erosion, soil drainage, sustainability, manure management, conservation practices, crop propagation, weed control, fertilizer, disease, organic crops, environmental control, invasive species, Integrated Pest Management, hydroponics, greenhouse operations and landscaping. Semesters Available: Sp – Eve

AGRI 1050 - Animal Science Management

3 Credit(s); 3 Lecture Hour(s)

This course introduces students to various species of domestic livestock to develop a deeper appreciation of the animal agriculture industry and animal management. This course will cover animal products, reproduction, breeding and genetics, nutrition, animals and the environment, animal health, animal behavior, issues in animal agriculture and careers in animal agriculture. Semesters Available: Su – Eve

AGRI 1210 - Agriculture Management

3 Credit(s); 3 Lecture Hour(s)

This course is designed to introduce students to Agricultural Management principles in relation to the evolution of agriculture, technology, recording keeping, agricultural laws, urban agriculture, and social issues. Students will create and present a business plan and budget relating to their field of agriculture. Semesters Available: Su – Eve

AGRI 2110 - Agriculture Practicum

2 Credit(s); 14 Practicum Hour(s)

This course involves placement of the student in an actual work environment that will integrate the student's knowledge and skills in the agricultural industry. The student will complete 175 hours of practicum experience at the placement site over 15 weeks. This course is designed to provide the student with hands-on experience within the industry. As part of this course, the student will return to campus and attend a seminar offered concurrently with the fieldwork learning. The purpose of the seminar is to critique the experiences of the student in the site. This class is Pass/No Pass (P/NP). Semesters available: Su – Day

Required Concurrent Course(s): *Take AGRI 2111*

AGRI 2111 - Agriculture Seminar

1 Credit(s); 1 Lecture Hour(s)

The purpose of the seminar is to critique the experiences of the student in the industry. Specifically, the seminar will focus on self-understanding, understanding of the work setting, and the acquisition of knowledge and skills related to being an effective agricultural manager. This course must be taken concurrently with AGRI 2110. Students must get permission from the instructor in order to enroll in this class. Semesters Available: Su – Eve

Required Concurrent Course(s): *Take AGRI 2110*

AGRI 2130 - Capstone Business Plan

1 Credit(s); 1 Lecture Hour(s)

This course will allow students to develop a foundational plan that will allow them to strategically lead the development of a business. This course will address all aspects of a business from establishment including daily decision making to expansion, diversification, and evaluation of the business. Semesters Available: Fa – Eve

Required Prerequisite Course(s): *Take BUSM 2050, BUSM-2210*

ARTS

ARTS 1010 - Drawing I

3 Credit(s); 2 Lab Hour(s), 2 Lecture Hour(s)

This course presents drawing concepts that can serve as a foundation for drawing itself and benefit other visual arts disciplines. The basic fundamentals of drawing, line form, gesture, and spatial illusion, perspective, composition, and use of light & shadow to describe space and volume. Studio practice will emphasize observational drawing to provide concrete and measurable examples of pictorial space. (TAG# OAH001)

ARTS 1070 - Digital Photography

3 Credit(s); 2 Lab Hour(s), 2 Lecture Hour(s)

This hands-on course presents an introduction to the design issues, historical and contemporary approaches, of digital photography as they are applied to print, web, and video production. This course will provide theory and practical aspects of the parts of the camera as well as taking well-composed photographs that visually communicate a message. Other elements such as exposure, lighting, portraiture, print tonal qualities, and style will be introduced. Students must provide a digital camera with manual focus/aperture/shutter capability preferred. (TAG# OAH002)

ARTS 1770 - Digital Photography II

3 Credit(s); 3 Lab Hour(s), 2 Lecture Hour(s)

This hands-on course builds on the principles learned in ARTS 1070 - Digital Photography and applies the retouching and color correction principles learned in VCMT 1050 - Imaging I. Students will develop their skills in different kinds of lighting including the use of natural lighting, continuous lighting, speed lights, and strobe lights for products and portraiture. Posing, working with subjects and equipment, planning for photo sessions, and working with clients will be covered. Post processing of photos will be addressed using Adobe Lightroom. Organizing, customizing, retouching, controlling color, using special effects and ordering prints will be covered. Students will be required to build a photography portfolio of prints from a photo processing lab. Many out-of-class photography projects will be assigned, some of which will require recruiting models and time outside class in the Kehoe photo studio. A digital SLR camera is required.

Required Prerequisite Course(s): *Take ARTS 1070 and VCMT 1050 with a minimum grade C-*

ASSOCIATE OF SCIENCE

ASCI 2900 - Associate of Science Capstone

1 Credit(s); 1 Lecture Hour(s)

This course will assist students transitioning from the community college experience to a four-year educational institution. Students will integrate the knowledge and skills acquired in their general education experiences with those developed in their program specific courses to engage in projects that require them to: think critically about their prior education, explore future academic and career-related paths, and develop skills to enhance their success. Such projects may include research papers, presentations, and/or portfolio development.

Required Prerequisite Course(s): *Must have completed 45 credit hours.*

BIOLOGY

BIOL 1050 - Principles of Biology

3 Credit(s); 2 Lecture Hour(s)

This course is designed as an introduction to biology for non-majors. The course will provide the fundamentals of biology for students as an introduction to further college biology courses. The course will introduce students to the diversity, structure, and interdependence of living organisms with one another and the environment. Students will meet two lecture hours and two lab hours per week.

Required Concurrent Course(s): *Take BIOL 1050L*

BIOL 1050L - Principles of Biology Lab

0 Credit(s); 2 Lab Hour(s)

Required Concurrent Course(s): *Take BIOL 1050*

BIOL 1070 - Lifetime Wellness

3 Credit(s); 3 Lecture Hour(s)

This course examines the application of the components that contribute to the concepts of total body wellness, physical fitness, cardiovascular disease, cancer, disease prevention, addictive behaviors, and sexually transmitted infections. The course provides a comprehensive review of variables that affect our health and explores topics faced daily from fad diets to environmental health to relationships. The student will have an understanding of processes that move toward optimal health and vitality. The course emphasizes individual responsibility for well-being through the practice of self-assessment of the cardio-respiratory system, weight control, physical fitness, personal stress, and the adoption of health-promotion of lifestyle behaviors. Day - Sp

BIOL 1101 - Nutrition

2 Credit(s); 2 Lecture Hour(s)

BIOL 1101 is an introductory course to the principles of nutrition and its relationship to health. Included are practical applications in daily life as well as nutritional assessments of individuals. Emphasis is on essential nutrients, their supply and function, as related to an individual's well-being. Health promotion and chronic disease are explored in relation to today's society. (TAG# OHL016)

BIOL 1230 - Biology I

4 Credit(s); 3 Lab Hour(s), 3 Lecture Hour(s)

This course is an introduction to biology for bioscience majors and students planning to transfer to four-year institutions. The course will introduce fundamental concepts of biology including the scientific method, structure and chemical properties of cells. The course will introduce students to biochemical pathways, bioenergetics, and basic concepts of genetics, heredity and homeostasis. Historical contributions and application of biological principles to biotechnology will be discussed. Students will meet three lecture hours and three lab hours per week. Semesters available: Day - F

Required Prerequisite Course(s): *Take ENGL 0040 and MATH 0084 (minimum grade of C- required for all) OR qualifying placement test scores.*

BIOL 1231 - Biology II

4 Credit(s); 3 Lab Hour(s), 3 Lecture Hour(s)

This course is continuation of BIOL 1230 - Biology I. The course will introduce fundamental concepts of biology including evolution, classification, ecosystems, similarities and differences, among plants, animals and microorganisms in form and function. Historical contributions and application of biological principles to biotechnology will be discussed. Students will meet three lecture hours and three lab hours per week. Semesters Available Day - Sp

Required Prerequisite Course(s): *Take BIOL 1230*

BIOL 1231L - Biology II Lab

0 Credit(s); 2 Lab Hour(s)

Required Concurrent Course(s): *Take BIOL 1231*

BIOL 1550 - Microbiology for Health Professionals

3 Credit(s); 2 Lecture Hour(s)

This course is designed for allied health and nursing majors. It explores the major groups of microorganisms and the role they play in the environment and in disease. The host-parasite relationship, human immunity to disease, epidemiology, and the control of microorganisms are also addressed. Laboratory exercises provide the student with the basic techniques of microbial identification, microscopy, sterile technique, and basic infection control. (OTM approved course for Natural Sciences TMNS) Day - F, Sp Evening – F

Required Concurrent Course(s): *Take BIOL 1550L*

BIOL 1550L – Microbiology Lab

0 Credit(s); 2 Lab Hour(s)

Required Concurrent Course(s): *Take BIOL 1550*

BIOL 1570 - Microbiology

4 Credit(s); 3 Lab Hour(s), 3 Lecture Hour(s)

This course is designed for science majors. It will examine the life of microorganisms to include their organization, functions, metabolic processes, growth, control genetics, evolution, and ecology. A study of diseases caused by various pathogens, the immunological response and the role of microorganisms in the environment and their uses in biotechnology will also be examined. In the laboratory, students will focus on the physical characteristics and biochemical requirements of bacteria. Students will be expected to identify an unknown microorganism using techniques and information learned in lecture and laboratory classes.

Required Prerequisite Course(s): *Take BIOL 1230*

BIOL 1710 - Introduction to Anatomy and Physiology

3 Credit(s); 2 Lab Hour(s), 2 Lecture Hour(s)

This course is an introductory study of life processes and biological principles. Special reference to the human organism is used in describing the nature of life-sustaining functions. Cellular function and the structure and function of the integumentary, skeletal, muscular, nervous, endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive systems are introduced. Laboratory experiences are designed to supplement the lecture topics and include microscopy, the study of models, specimen dissection, cadaver study and physiological experiments. (OTM approved course in Natural Sciences TMNS)

BIOL 1730 - Basic Anatomy and Physiology

4 Credit(s); 3 Lecture Hour(s)

This course presents the basic terms and concepts that deal with the structure and processes of the human body. It involves examination of the body as a whole, the cell, and tissues. The basic structure and physiology of the integumentary, skeletal, muscular, nervous, cardiovascular, lymphatic, respiratory, digestive, urinary, reproductive, and endocrine systems are presented. Laboratory exercises enhance and support the lecture topics and include microscopy, the study of models, specimen dissection, cadaver study, and physiological experiments. Day - F, Sp Evening - F, Sp

Required Prerequisite Course(s): *Take ENGL 0040; (minimum grade of C-); OR qualifying placement test scores*

Required Concurrent Course(s): *Take BIOL 1730L*

BIOL 1730L - Basic Anatomy & Physiology Lab

0 Credit(s); 3 Lab Hour(s)

Required Concurrent Course(s): *Take BIOL 1730*

BIOL 2751 - Human Anatomy and Physiology I

4 Credit(s); 3 Lecture Hour(s)

This course is an in-depth study of the principles of human anatomy and physiology. It includes the study of structure and function of the body as a whole and study of cell biology, histology, the integumentary, skeletal, muscular, endocrine, and nervous systems plus the special senses. Laboratory exercises are designed to supplement lecture topics and include microscopy, the study of models, cat and specimen dissection, cadaver study, and physiological experiments. (OTM approved course in Natural Sciences TMNS)

Required Prerequisite Course(s): *High school chemistry with minimum C minus (C-) grade or CHEM 1010 with minimum C minus (C-) grade; AND ENGL 0040, MATH 0084 (Minimum grade of C- for all); OR qualifying placement test score. If the student has completed BIO121 and BIO122 OR BIOL 1730 with a minimum grade of C, then the student is not required to have high school Chemistry or CHEM 1010.*

Required Concurrent Course(s): *Take BIOL 2751L*

BIOL 2751L - Human Anatomy & Physiology I Lab

0 Credit(s); 3 Lab Hour(s)

Required Concurrent Course(s): *Take BIOL 2751*

BIOL 2752 - Anatomy and Physiology II

4 Credit(s); 3 Lecture Hour(s)

This course is a continuation of BIOL 2751. It includes the study of structure and function of blood and the cardiovascular, lymphatic/immunity, digestive, respiratory, urinary, and reproductive systems. Laboratory exercises are designed to supplement lecture topics and include microscopy, the study of models, cat and specimen dissection, cadaver study, and physiological experiments. (OTM approved course in Natural Sciences TMNS)

Required Prerequisite Course(s): *Take BIOL 2751; Minimum Grade C-*

Required Concurrent Course(s): *Take BIOL 2752L*

BIOL 2752L - Human Anatomy & Physiology II Lab

0 Credit(s); 3 Lab Hour(s)

Required Concurrent Course(s): *Take BIOL 2752*

BIOSCIENCE

BIOS 1010 - Introduction to Bioscience Lab Technique

4 Credit(s); 2 Lecture Hour(s)

Introduction to Bioscience Lab Techniques is designed to give students an introduction to the scientific concepts and laboratory research techniques currently used in the field of biotechnology. Students develop basic laboratory skills by the examination of the various instruments and methods of analysis used in the laboratory today. It will begin with general safety procedures utilized in every lab, and cover more specific issues relating to certain analytical protocol. Critical thinking and communication skills currently used in the biotechnology industry will begin in this course and continue throughout the program. Through reading assignments, laboratory work, and workplace experiences, students will explore and evaluate career opportunities in the field of biotechnology. Semesters available: Day – F

Required Prerequisite Course(s): *Take ENGL 0040, MATH 0084, CHEM 1010 with a minimum grade of C-.*

Required Concurrent Course(s): *Take BIOS 1010L*

BIOS 1010L - Intro to Bioscience Lab Tech Lab

0 Credit(s); 4 Lab Hour(s)

Required Concurrent Course(s): *Take BIOS 1010*

BIOS 1030 - Environmental Science

4 Credit(s); 2 Lecture Hour(s)

Environmental Biotechnology is designed to give students an introduction to the scientific concepts and laboratory research techniques currently used in the field of environmental biotechnology. Students develop laboratory skills, critical thinking, and communication skills currently used in the industry. Topics covered will include environmental pollution monitoring, sewage treatment including domestic, agricultural, and industrial waste, bioremediation, biofuels, other clean biotechnology techniques, laboratory work, and workplace experiences via off-site tours. Semesters available: Day – F

Required Concurrent Course(s): *Take BIOS 1030L*

Required as Prerequisite or Concurrent Course(s): *Take BIOL 1230, BIOS 1010*

BIOS 1030L - Environmental Science Lab

0 Credit(s); 4 Lab Hour(s)

Required Concurrent Course(s): *Take BIOS 1030*

BIOS 1130 - Water Treatment

3 Credit(s); 3 Lecture Hour(s)

The purpose of this course is to provide an introduction to water treatment biotechnology. Students will be introduced to mathematical and chemical concepts that will aid their understandings into the workings of a water treatment facility. Upon completion of the course, students will be able to sit for the Ohio EPA Class 1 water operator certification exam.

Required Prerequisite Course(s): *BIOS 1010, BIOS 1030, MATH 1110*

Required as Prerequisite or Concurrent Course(s): *CHEM 1030*

BIOS 1150 - Wastewater Treatment

3 Credit(s); 3 Lecture Hour(s)

The purpose of this course is to provide an introduction to wastewater treatment biotechnology. Students will be introduced to mathematical and chemical concepts that will aid their understandings into the workings of a wastewater treatment facility. An emphasis upon the management of a wastewater facility will also be discussed in the course. Upon completion of the course, students will be able to sit for the Ohio EPA Class 1 wastewater operator certification exam.

Required Prerequisite Course(s): *BIOS 1010, BIOS 1030, MATH 1110*

Required as Prerequisite or Concurrent Course(s): *CHEM 1030*

BIOS 1210 - Histology

4 Credit(s); 2 Lecture Hour(s)

This course is designed for students who are interested in medicine and human or animal biology. The goal of this course is to introduce students to tissues that make up organs and the basic design of each of the major organs. Students will identify tissues using photographs, microscope slides, photographic slides, videotapes, and the internet (histology sites). In addition, fundamental histological techniques important to the preparation of microscope slides will be included in this course. Students will learn how to prepare tissues, embed tissues, use a microtome, and stain differentially as an aid to the identification of tissues. Finally, students will prepare slides of various tissues.

Required Prerequisite Course(s): *Take BIOS 1010*

Required Concurrent Course(s): *Take BIOS 1210L*

BIOS 1210L – Histology Lab

0 Credit(s); 4 Lab Hour(s)

Required Concurrent Course(s): *Take BIOS 1210*

BIOS 2410 - Advance Bioscience Techniques
4 Credit(s); 2 Lecture Hour(s)

This course will focus on Molecular Biology and will examine the advanced instruments and methods of analysis used in the laboratory today. The course will include a comprehensive review of advanced bioscience laboratory techniques utilized in the field today to include indications, process, advantages, disadvantages, analytical protocols, and performing specific laboratory techniques. Students will complete a semester long research project using a model organism which will encompass some of the major molecular biology techniques. Students will then write up results in the form of a scientific publication.

Required Prerequisite Course(s): *Take BIOS 1010.*
Required as Prerequisite or Concurrent Course(s): *Take CHEM 1210*

BIOS 2410L - Advance Bioscience Techniques Lab
0 Credit(s); 4 Lab Hour(s)

Required Concurrent Course(s): *Take BIOS 2410*

BIOS 2440 - Introduction to Agricultural Science
4 Credit(s); 4 Lab Hour(s), 2 Lecture Hour(s)

This course is required for all students in the Bioscience Program. The course will provide an overview of methods and applications of modern agricultural biotechnology. Molecular techniques specific to genetic-engineering and their analysis will be discussed in this course. It is based on lectures, research and lab. This course contains five parts: the basic science of gene and gene manipulation; valuable genes for agricultural biology, applications of molecular technologies to plant, animal and nutritional scientific research. We will address the ethical, legal and social implications of advances in biotechnology. We will discuss governmental regulation of food, drugs, and biotechnology itself. Biotechnology has been used in food production for thousands of years (e.g. brewing, yogurt, pickling, etc.). The new biotechnology has a high potential in food production and processing. This course will cover the applications of new biotechnology in food production or processing.

Required Prerequisite Course(s): *Take BIOS 1010 BIOL 1230*
Required as Prerequisite or Concurrent Course(s): *Take BIOL 1231*

BIOS 2530 - Genetics
4 Credit(s); 3 Lab Hour(s), 3 Lecture Hour(s)

During this course we will discusses the principles of genetics with application to the study of biological function at the level of molecules, cells, and multicellular organisms, including humans. The topics include: structure and function of genes, chromosomes and genomes, biological variation resulting from recombination, mutation, and selection, population genetics, use of genetic methods to analyze protein function, gene regulation and inherited disease.

Required Prerequisite Course(s): *Take BIOS 2410*
Required as Prerequisite or Concurrent Course(s): *Take BIOS 2590*

BIOS 2550 - Pharmaceutical & Toxicology Bioscience
4 Credit(s); 4 Lab Hour(s), 2 Lecture Hour(s)

This course is intended to give students an overview of basic Pharmaceutical and Toxicology concepts and methods. The overall organization of the course is grouped into three sections: Part I (Introduction), Part II (Methodologies), and Part III (Analysis). Parts I and II comprise approximately one-half the course and Part III the remaining half. This course is based on lectures, labs, and project assignments, and is to help the student (1) understand the various techniques in biotechnology, their applications in the manufacturing of biopharmaceuticals, and biomedical research; (2) gain knowledge in some of the physicochemical properties, pharmacology and the formulation of commonly used biopharmaceuticals; and (3) understand the principles of the mechanism of some biotechnologically derived diagnostic aids/tests.

Required Prerequisite Course(s): *Take BIOS 2410, CHEM 1210*
Required Concurrent Course(s): *Take BIOS 2530*

BIOS 2590 - Bioscience Internship/Seminar
2 Credit(s); 7 Practicum Hour(s), 1 Seminar Hour(s)

This course is designed to provide the student with hands-on experience within the bioscience field. This course involves placement of the student in an actual work environment that will integrate the student's knowledge and laboratory skills acquired within the core coursework of the bioscience program. The student will complete 105 hours of practicum experience at the placement site for 12 weeks. This work experience provides the foundation for developing the student into a competent bioscience laboratory technician. As part of this course the student will return to campus and attend a seminar offered concurrently with the practicum learning. The purpose of the seminar is to critique the experiences of the student in the facility. Specifically, the seminar will focus on professionalism, understanding of the work setting, and the acquisition of knowledge and skills related to obtaining a position as a bio-technician.

Required Prerequisite Course(s): *Take BIOS 2410*

BUSINESS MANAGEMENT

BUSM 1010 - Introduction to Business and Entrepreneurship
3 Credit(s); 3 Lecture Hour(s)

In this course the student is exposed to a broad view of the business enterprise. Special emphasis is placed upon the role and importance of entrepreneurship and small-business management. The student will gain insight into the necessity and mutual interdependence of such key business functions as management, human resources, operations and quality, marketing, accounting, and finance. Additionally, the topics of globalization and economics are introduced. Throughout this course, the student will gain extensive experience in problem solving by means of applying basic business math skills to typical business scenarios.

Required Prerequisite Course(s): *ENGL 0040, (minimum grade of C-), or qualifying placement test score*

BUSM 1030 - Supervision
3 Credit(s); 3 Lecture Hour(s)

This course is an introduction to the supervisor's role in management. Challenges for supervisors include: planning and problem solving; organizing, staffing, training; leading; and working with individuals and teams along with controlling costs and improving results. Supervision provides a basic understanding of the new role requirements in business organizations. A strong focus of this class is application of sound supervisory principals through role-plays and hands-on practice with real-world scenarios.

Required Prerequisite Course(s): *ENGL 0040 (minimum grade of C-), or qualifying placement test score*

BUSM 1050 - Management
3 Credit(s); 3 Lecture Hour(s)

A study of the principles and practices relating to the successful management of modern business. Topics include planning, organizing, designing, and decision making. Ethics and organizational change are also covered. Cases are used to provide practice in the application of management concepts.

Required Prerequisite Course(s): *Take BUSM 1010 or completion of 22 semester credit hours*

BUSM 1110 - Business Law & Ethics
3 Credit(s); 3 Lecture Hour(s)

This course is a study in the legal and ethical environment in which businesses operate. (TAG # OBU004)

BUSM 1130 - Principles of Selling and Customer Service
3 Credit(s); 3 Lecture Hour(s)

This course provides a conceptual understanding of the skills, duties, and responsibilities required of salespeople and those involved with customer service. The selling process and such concepts as relationship selling, trust and connections are presented within a context of ethical behavior. After sales support and effective customer service strategies are described. Negotiation, conflict management and creative problem-solving skills are applied.

Required Prerequisite Course(s): *ENGL 0040 (either with minimum grade of C-), or qualifying placement test score*

BUSM 1150 - Marketing
3 Credit(s); 3 Lecture Hour(s)

Marketing activities, analysis, strategies, and decision making in the context of other business functions. Topics include: integration of product, price, promotion, and distribution activities; research and analysis of markets, environments, competition, and customers; market segmentation and selection of target markets; and emphasis on behavior and perspectives of consumers and organizational customers. Planning and decision making for products and services in profit and nonprofit, domestic and global settings. (TAG# OBU006)

Required Prerequisite Course(s): *Take ECON 1510*

BUSM 1170 - Business Communications
3 Credit(s); 3 Lecture Hour(s)

This course introduces foundational business communication principles and practices. Students will learn to analyze different communication situations; to plan and design oral and written communications; to communicate effectively using appropriate formats, styles, and technologies; and to apply critical thinking and problem-solving skills in order to achieve desired communication objectives.

Required Prerequisite Course(s): *Take ENGL 1010*

BUSM 1230 - E-Commerce
3 Credit(s); 3 Lecture Hour(s)

This course surveys the opportunities and challenges faced in an increasingly digital world. More and more product information and selling strategies are linked to the World Wide Web. Topics include the buying and selling processes supported by electronic means. The exchange process via the Internet has become more customer controlled. Practical exercises will focus on the push/pull market strategies needed to increase sales and complete the exchange process.

BUSM 1250 - Customer Service
3 Credit(s); 3 Lecture Hour(s)

Customer service is about keeping the customers you have and attracting new ones. Providing a level of service to accomplish this mission does not just happen; it's the result of effective strategy. This hands-on course provides practical lessons on how customer service will increase the organization's bottom line.

BUSM 1260 - Project Management
3 Credit(s); 3 Lecture Hour(s)

In this course, students will learn ways to manage all aspects of a project. Project Management (PM) concepts enable projects to be planned, managed, and delivered on time, on budget, and with high quality. This course covers nine major sub-disciplines of Project Management based on the Project Management Institute's PM Book of Knowledge (PMBOK). This course satisfies the education requirement for the Project Management Professional Certification (PMP) or Certified Associate in Project Management (CAPM) test. Certification testing is governed by the Project Management Institute, and this is not a prep class for the exam. PMI Certification is internationally recognized and highly portable to a number of industries and businesses.

BUSM 1270 - Quality
3 Credit(s); 3 Lecture Hour(s)

Quality improvement is recognized as an essential function in any successful organization. Leading corporations have demonstrated that improved quality raises profits, reduces costs, and provides competitive advantage. This course will explore the foundations of quality, tools and methods for analytic study, and administrative systems for quality management.

BUSM 2010 - Introduction to Data Management for Business
3 Credit(s); 2 Lab Hour(s), 2 Lecture Hour(s)

Students are introduced to database management and database tools from a business application perspective. Students will learn the important role that databases play in organizations for strategic decision-making and business intelligence. This introductory course will include the fundamentals of relational database design and provide students with an understanding of the key concepts of Structured Query Language (SQL). Students will create SQL statements for data storage, data collection, data computation, and data analysis and reporting.

BUSM 2030 - Human Resource Management
3 Credit(s); 3 Lecture Hour(s)

Human resource management investigates a variety of functions considered essential to the personnel function of institutions, including legal compliance, job analysis, recruiting, selection, motivation, training, evaluation, compensation, and employee relations/labor relations. A key component of the course is the practical application of HR concepts to a small/medium sized business scenario.

Required Prerequisite Course(s): *Take ENGL 0040 (with minimum grade of C-), or qualifying placement test score.*

BUSM 2050 - Entrepreneurship and Small Business
3 Credit(s); 3 Lecture Hour(s)

This course is designed to expand and enhance the student's entrepreneurial knowledge and small-business leadership skills. The "big-picture" view of the role of the entrepreneur in our economic and social environment is explained and discussed in depth. In-class and personalized student exercises and assistance is a component of this class in which numerous challenges of a start-up business are explored. Each student is assigned the task of exploring entrepreneurship and/or small-business as a career choice. The gamut of essential elements of running a small business is covered in this course. Students will gain practice in the art of decision-making under conditions of uncertainty and incomplete data.

BUSM 2090 - Logistics
3 Credit(s); 3 Lecture Hour(s)

This course explores the essential nature and strategic role of logistical operations for the American business enterprise. Included will be the design and control of the flow of goods, services and personnel to its destination and management of the flow with the supply chain. Focus will include inventory, warehousing, packaging, environmental concerns, and transportation modes. Special attention will be given to the global and web-based context for logistical decision-making.

BUSM 2110 - Promotion and Advertising
3 Credit(s); 3 Lecture Hour(s)

The purpose of this course is to examine advertising as both a science and an art. We will attempt to blend the basic skills as detailed in the textbook with a variety of practical experiences that will culminate in group ad presentations. Topics covered will include the structure of the advertising business, knowing the consumer, selecting appropriate media, the uses of research, the preparation of "ad" copy and design layouts, and the future of advertising. Special attention will be directed to the goals of local advertising. (TAG# OCM012)

Required Prerequisite Course(s): *ENGL 0040 (minimum grade of C-) or qualifying placement test score.*

BUSM 2272 - Case Studies in Business
2 Credit(s); 2 Lecture Hour(s)

An application course in which some of the methods of identifying and solving business problems are applied to case studies. Emphasis is given to qualitative analysis and the application of the material and concepts taught in previous courses.

Required Prerequisite Course(s): *BUSM 1150, ENGL 1030 or BUSM 1170, and a minimum of 45 credit hours completed*

BUSM 2280 - Cooperative Work Experience
1 Credit(s); 10 Cooperative Work Hour(s)

The cooperative work experience is an opportunity for students to obtain practical work experience in the Business field while earning college credit. This on or off campus employment experience can be paid or unpaid. The work experience is coordinated by a faculty member who visits the job site for a conference with the student and the supervisor at least once per semester. Students must complete 150 hours of work experience. This class is Pass/No Pass (P/NP).

Required Concurrent Course(s): *Take BUSM 2285;*

Required as Prerequisite or Concurrent Course(s): *Must be concurrent with BUSM 2285 - Seminar. Student must have completed 20 semester credit hours of BUSM classes with a C- or better. Students should have a 2.0 GPA. All forms required for the Cooperative Work Experience must be submitted upon registering for this class. Students are required to attend an orientation class the first week of the semester. Students must get permission of the instructor in order to enroll in this class.*

BUSM 2285 - SEMINAR
1 Credit(s); 1 Seminar Hour(s)
This course is taken concurrently with BUSM 2280 - Cooperative Work Experience. Students will discuss their work place experiences that occur during their Co-op Work Experience. Students must get permission of the instructor in order to enroll in this class. This class is Pass/No Pass (P/NP).
Required Concurrent Course(s): *Take BUSM 2280;*

BUSM 2310 - DIGITAL MARKETING ANALYTICS
3 Credit(s); 3 Lecture Hour(s)
Digital Marketing Analytics is foundational to digital marketing because it is the language used to optimize and connect results across all digital marketing tactics (search, social media, email, display, video, etc.). This course teaches best practices in carrying out website, organic search, social media, mobile app, email, owned media, paid media and earned media analytics. Students will learn to identify the analytic tool right for their specific needs, to select valid and reliable ways to collect and analyze data, and how to utilize this information for making educated decisions. The Simulation will provide the foundation needed to apply data analytics to real-world situations and challenges that marketers encounter daily.
Required Prerequisite Course(s): *BUSM 1150 and BUSM 2110*

BUSM 2320 - BUSINESS ANALYTICS FOR DATA DRIVEN DECISIONS
3 Credit(s); 3 Lecture Hour(s)
An understanding of data is fundamental to success in the digital age of business. This course provides the theoretical foundation of data analytics as well as the application of data analysis tools. Students will develop competencies to structure data and use data mining techniques in response to business scenario queries. Students will experience how businesses rely on data analysis every day to make relevant, data-driven decisions. Through projects and simulations, this course enables students to apply their technical skillsets to real-world business situations.
Required Prerequisite Course(s): *BUSM 2010 and CISS 1290*

BUSM 2900 - BUSINESS TRANSFER CAPSTONE
1 Credit(s); 1 Lecture Hour(s)
This course will assist students transitioning from the community college experience to a four-year educational institution. Students will integrate the knowledge and skills acquired in their general education experiences with those developed in their program specific courses to engage in projects that require them to: think critically about their prior education, explore future academic and career-related paths, and develop skills to enhance their success. Such projects may include research papers, presentations, and/or portfolio development.
Required Prerequisite Course(s): *Must have completed 45 credit hours*

BUSM 2999 - SPECIAL TOPICS: BUSINESS ADMINISTRATION
3 Credit(s); 3 Lecture Hour(s)
This course enables faculty members in the Business department to present various topics of current interest to students throughout the college on a limited basis. The course may be offered twice before it must be discontinued or added to the curriculum via the required Curriculum Committee process.

CHEMISTRY

CHEM 1010 - INTRODUCTION TO CHEMISTRY
3 Credit(s); 2 Lecture Hour(s)
This course is designed as an introductory course in chemistry for those students who have no previous chemistry background. The factor-unit method of problem solving, mathematical operations used in solving chemistry problems, chemical terminology, and basic laws of chemistry are covered. Chemistry applications to allied medicine will be emphasized. Laboratory exercises will enhance and reinforce lecture topics. Day - F, Sp, Su Evening - Sp
Required Prerequisite Course(s): *MATH 0084 or STAT 0086 (minimum grade of C- for all) or qualifying placement test score*
Required Concurrent Course(s): *Take CHEM 1010L*

CHEM 1010L - INTRODUCTION TO CHEMISTRY LAB
0 Credit(s); 2 Lab Hour(s)
Required Concurrent Course(s): Take CHEM 1010

CHEM 1030 - CHEMISTRY
3 Credit(s); 2 Lecture Hour(s)
The course is to give the Allied Health and Nursing student an appreciation and understanding of general inorganic chemistry. Includes atomic and molecular structure, molecular forces, properties and states of matter, naming of chemical compounds, types and behaviors of solutions, types of reactions, acid base chemistry, carefully chosen organic topics with their applications to specific health problems. Laboratory exercises will enhance and reinforce lecture topics. (OTM approved course in Natural Sciences TMNS)
Required Prerequisite Course(s): *Take CHEM 1010 or high school chemistry AND MATH 0084 with a minimum grade of C-*
Required Concurrent Course(s): *Take CHEM 1030L*

CHEM 1030L – CHEMISTRY LAB
0 Credit(s); 3 Lab Hour(s)
Required Concurrent Course(s): *Take CHEM 1030*

CHEM 1210 - CHEMISTRY I
5 Credit(s); 3 Lab Hour(s), 4 Lecture Hour(s)
This is the first semester of chemistry for science majors or pre-professional students. A quantitative introduction to dimensional analysis with significant figures, atomic structure, the molecule, principles of ionic bonding, stoichiometry, chemical solutions, thermochemistry, classification of elements including periodicity, electron configuration, gases, liquids, and solids. Student will be exposed to applications of chemistry in society. (TAG# OSC008; If combined with CHEM 1220 TAG# OSC023)
Required Prerequisite Course(s): *High School Chemistry (minimum of C- required) -AND- MATH 1110 (minimum of C- required) or qualifying placement test score*

CHEM 1220 - CHEMISTRY II
5 Credit(s); 3 Lab Hour(s), 4 Lecture Hour(s)
This is the second semester of chemistry for science majors or pre-professional students. A quantitative introduction to intermolecular forces, phase changes, colligative properties, chemical kinetics, chemical equilibrium, acid-base equilibria, thermodynamic, electrochemistry, organic chemistry and nuclear chemistry. Student will be exposed to applications of chemistry in society. (TAG# OSC009; If combined with CHEM 1210 TAG# OSC023)
Required Prerequisite Course(s): *Take CHEM 1210*

COMMUNITY HEALTH WORKER

CHWR 2710 - COMMUNITY HEALTH WORKER I
3 Credit(s); 3 Lecture Hour(s)
This course presents an overview of the roles and responsibilities of a community health worker. The hybrid course includes a study of six major competency areas - health care, social services, communication skills, individual & community advocacy, health education, and skills and responsibilities presented in modules. The course curriculum meets requirements by the Ohio Board of Nursing to apply for professional certification as a community health worker. This course is a flex course and may not follow the regular College calendar. The scheduled dates and times vary throughout the year. Semesters available: Offered based on need.
Required as Prerequisite or Concurrent Course(s): *Take CHWR 2730 and CHWR 2750*

CHWR 2730 - HEALTH CARE ACROSS THE LIFESPAN
3 Credit(s); 3 Lecture Hour(s)
This course is designed to assist students in their study of life cycles from conception to old age. The course integrates health promotion, health maintenance, and restorative care in the new healthcare delivery system. Healthcare workers are expected to provide care to individuals in a variety of settings throughout their life span. The course presents these new concepts to students and demonstrates how the complete process of growth and development affects people across their life span. Students will gain an appreciation for individuals in their struggle to maintain, promote, and restore health and apply these principles and concepts to their clinical practice. Semesters available: Offered based on need.
Required as Prerequisite or Concurrent Course(s): *Take CHWR 2710 and CHWR 2750*

CHWR 2750 - CHWR Directed Practice/Seminar

3 Credit(s); 1 Lecture Hour(s), 14 Practicum Hour(s)

The directed practice is designed to broaden student's knowledge and experiences in the community health worker profession through direct work in an agency. With placement in an actual work environment, the student will complete 220 hours of work experience. This course must be taken concurrently with CHWR 2710 and CHWR 2730. The course content meets curriculum requirements by the Ohio Board of Nursing to apply for professional certification as a community health worker. This course is a flex course and may not follow the regular College calendar. The scheduled dates and times vary throughout the year. Semesters available: Offered based on need.

Required as Prerequisite or Concurrent Course(s): *Take CHWR 2710 and CHWR 2730*

COMPUTER INFORMATION SYSTEMS

CISS 1020 - Digital Literacy and Applications

3 Credit(s); 2 Lab Hour(s), 2 Lecture Hour(s)

Introduction to Computers is a course designed to present the basic computer concepts and the Microsoft Office Suite applicable to today's business world. Areas of concentration include Computer Concepts, Windows, Internet Explorer, E-mail, Word, Excel, Access, and PowerPoint. Upon completion, students should be able to demonstrate competency by interfacing with the Windows operating system and the internet, and to produce electronic presentations, written business documents, electronic spreadsheets, relational databases, and electronic mail. TAG course: OBU003

CISS 1210 - Microsoft Word

2 Credit(s); 2 Lab Hour(s), 1 Lecture Hour(s)

This course is an introductory course in word processing using Microsoft Word for Windows. Through a series of hands-on exercises, the student will create, edit, format, and print documents. Topics include: creating, saving, retrieving, formatting, editing, printing, inserting graphic elements, merging, maintaining file organization, and using the help system. Semesters available: Day - F, Sp, Su Evening - F, Sp, Su

Required Prerequisite Course(s): *Take CISS 1020*

CISS 1220 - Microsoft Excel

2 Credit(s); 2 Lab Hour(s), 1 Lecture Hour(s)

This course is an introductory course in spreadsheets using Microsoft Excel for Windows. Through a series of hands-on exercises, the student will create, edit, format, and print worksheets. Topics include: creating, saving, retrieving, formatting, editing, printing, creating formulas, using functions, naming cells and ranges, creating tables, creating charts, defining range names, validating data, sorting and filtering data, maintaining file organization, and using templates. Semesters available: Day - F, Sp, Su Evening - F, Sp, Su

Required Prerequisite Course(s): *Take CISS 1020*

CISS 1230 - Microsoft Access

2 Credit(s); 2 Lab Hour(s), 1 Lecture Hour(s)

This course is an introductory course in databases using Microsoft Access for Windows. Through a series of hands-on exercises, the student will create and manage databases. Topics include: creating, saving, formatting, and editing tables; designing reports; creating formulas; working with records; creating forms; writing queries; and establishing table relations. Semesters available: Day - F, Sp, Su Evening - F, Sp, Su

Required Prerequisite Course(s): *Take CISS 1020*

CISS 1240 - Microsoft Office Workplace Technology

2 Credit(s); 2 Lab Hour(s), 1 Lecture Hour(s)

This course introduces business productivity tools for time management, collaboration, data organization and communication in today's workplace business environment. Cloud-based productivity tools will be used to manage group collaboration, organize and share data, and communicate using real-time collaboration tools and advanced features of electronic mail.

Required Prerequisite Course(s): *Take CISS 1020 or Pass Computer Literacy Assessment*

CISS 1250 - Microsoft PowerPoint

2 Credit(s); 2 Lab Hour(s), 1 Lecture Hour(s)

This course is an introductory course in presentation software using Microsoft PowerPoint for Windows. Through a series of hands-on exercises, the student will create, edit, format, and print presentations. Topics include: creating, saving, retrieving, formatting, editing, printing, and running presentations; inserting graphic elements; applying transitions and animation effects; linking and embedding; and using the Help system. Semesters available: Day - F, Sp, Su Evening - F, Sp, Su

Required Prerequisite Course(s): *Take CISS 1020*

CISS 1270 - Microsoft Word Advanced

2 Credit(s); 2 Lab Hour(s), 1 Lecture Hour(s)

This second level course covers advanced Word features including formatting with special features, enhancing the visual display and clarity of documents, working with multiple documents, creating and merging main documents with data source documents, creating forms, linking and embedding objects, using macros, and modifying the document layout. Semesters available: Day - Sp Evening - Sp

Required Prerequisite Course(s): *Take CISS 1210*

CISS 1280 - Microsoft Excel Advanced

2 Credit(s); 2 Lab Hour(s), 1 Lecture Hour(s)

This second level course covers expert Excel features, including formatting with advanced techniques, working with templates and workbooks, working with lists, using analysis tools, managing and auditing worksheets, collaborating with workgroups, and using advanced format functions. Semesters available: Day - Sp Evening - Sp

Required Prerequisite Course(s): *Take CISS 1220*

CISS 1290 - Microsoft Excel Business Intelligence

2 Credit(s); 2 Lab Hour(s), 1 Lecture Hour(s)

This course introduces the concepts and application of data analytics in business. A hands-on approach of Microsoft Excel and Power BI (Business Intelligence tools) is used for data analysis, data visualization, modeling, creating dashboards with direct connectivity to data sources.

Required as Prerequisite or Concurrent Course(s): *Take CISS 1280*

COMMUNICATION

COMM 1010 - Speech

3 Credit(s); 3 Lecture Hour(s)

This course involves instruction and experience in giving a presentation. Students are taught the principles of speech content and delivery so that they can effectively participate in a variety of practical speaking situations. Presentations will include the informative speech, persuasive speech, visual aid/demonstration speech, impromptu speech, and group presentation. (OTM for Oral Communication TMCOM and TAG# OCM013)

COMM 2010 - Group Communication

3 Credit(s); 3 Lecture Hour(s)

Group Communication explores the many facets of working and communicating in small groups. Emphasis is placed on learning the basic terms, principles, and theories of small group communication thus enabling participants to understand various types of group participation: leadership, roles, goal setting and achieving, conflict management, decision making, and problem solving. Students will analyze, adjust, and improve their own communication behaviors in groups. (This course may NOT be substituted for COMM 1010 - Speech) Semesters available: Offered based on need.

COMM 2030 - Interpersonal Communication
3 Credit(s); 3 Lecture Hour(s)
Interpersonal Communication explores the development, maintenance, and termination of interpersonal (one-on-one) relationships within one's workplace, family, friendships, and love relationships. Emphasis is placed on understanding one's concept of self, perception of others, active listening, handling conflict, learning verbal and nonverbal cues, understanding power and influence, and valuing diversity. Students will analyze, adjust, and improve their communication behaviors by critically applying interpersonal theories in a variety of communication contexts. (This course may NOT be substituted for COMM 1010) TAG# OCM002

COMM 2050 - Introduction to Communication Theory
3 Credit(s); 3 Lecture Hour(s)
This course introduces students to the theories of human communication. Students will learn about major theorists in the field of communication, study the different types of communication in which humans engage, and learn about the various contexts in which human communication takes place. (This course may NOT be substituted for COMM 1010 - Speech) Semesters available: Day - F

COMM 2070 - Intercultural Communication
3 Credit(s); 3 Lecture Hour(s)
Course explores the dynamic role intercultural communication plays in today's ever complex and changing world. Intercultural communication will be viewed through the lenses of individual, interpersonal, organizational, and societal/cultural perspectives to help students understand the context of both their own behavior and the behavior of others. (This course may NOT be substituted for COMM 1010 - Speech). Semesters Available: Based on need.

COMM 2250 - Interviewing
3 Credit(s); 3 Lecture Hour(s)
This course will explore the theory and practice of interviewing; interview structures, questioning techniques and formats, cover letters, resumes, and the different types of interviews. Specific practice in Selection and Workplace interviewing will be emphasized. (This course may NOT be substituted for COMM 1010 - Speech) Semesters available: Day - S Evening - Offered based on need.

COMM 2900 - Communication Capstone
1 Credit(s); 1 Lecture Hour(s)
This course will assist students transitioning from the community college experience to a four-year educational institution. Students will integrate the knowledge and skills acquired in their general education experiences with those developed in their program specific courses to engage in projects that require them to: think critically about their prior education, explore future academic and career-related paths, and develop skills to enhance their success. Such projects may include research papers, presentations, and/or portfolio development.
Required Prerequisite Course(s): *Must have completed 45 credit hours.*

COMM 2999 - Special Topics in Communication
3 Credit(s); 3 Lecture Hour(s)
A particular topic or combination of topics will be covered when there is sufficient student interest. Students will be expected to contribute to discussions on the basis of readings in the selected areas. Course may be repeated on different topic. A specific course may be offered twice before it must be discontinued or added to the curriculum via the required Curriculum Committee process. Semesters available: Offered based on need.

CRIMINAL JUSTICE

CRMJ 1010 - Introduction to Criminal Justice & US Judicial Systems
3 Credit(s); 3 Lecture Hour(s)
This course introduces the student to the American System of Criminal Justice including growth and historical development. Emphasis will be placed on the criminal justice subsystems of law enforcement, corrections, courts, the Ohio court structure, and the juvenile justice system. In addition, this course will examine the ethical, professional, and legal issues confronting the criminal justice professional.

CRMJ 1030 - Photography
2 Credit(s); 2 Lab Hour(s), 1 Lecture Hour(s)
This course will be directed towards small evidence photography, crime scene photography, surveillance photography, accident investigation, and legal aspects. All equipment is furnished by the CJ Department.

CRMJ 1050 - Criminal and Constitutional Law
4 Credit(s); 4 Lecture Hour(s)
This course will examine past and current legal cases and court decisions. Emphasis will be placed on the Bill of Rights and specific amendments that pertain to the criminal justice field. The basic concepts of criminal law will also be examined concerning criminal statutes and elements for selected offenses for the State of Ohio.

CRMJ 1070 - Family Violence
3 Credit(s); 3 Lecture Hour(s)
This course examines the characteristics of the growing number of families "on the fault line" of present-day society in the United States. The causes and solutions that have been proposed to understand, control, and re-address problems of at-risk families are discussed during this course. Topics of discussion include the characteristics of social intervention, domestic violence, sexual violence, child abuse, exploitation and neglect, crimes against the elderly, and victim rights/issues. This course further examines the professional and criminal justice response to these issues.

CRMJ 1090 - Juvenile Delinquency
4 Credit(s); 4 Lecture Hour(s)
This course provides an overview of the current theoretical and methodological issues concerning juvenile delinquency. This course examines the nature, extent, and causes of juvenile delinquency. The course is structured to focus on the social construction of delinquency, the development of the juvenile justice system, theoretical explanations of delinquency, and the current research on juvenile delinquency in the United States. The primary objectives of this course are to foster critical thinking about how we define, address, research, punish, and treat delinquency in America.

CRMJ 1110 - Criminal Investigation I
3 Credit(s); 3 Lab Hour(s), 2 Lecture Hour(s)
This course introduces the student to the study of investigative procedures beginning with the preliminary investigation through the follow-up phase. Additional topics covered within this course include documenting the crime scene, death investigations, interviewing techniques, evidence recognition, identification and collection. The laboratory experience will provide actual investigation situations to enhance student learning.

CRMJ 1130 - Introduction to Corrections
3 Credit(s); 3 Lecture Hour(s)
This course provides students with an overview of the field of corrections including courts, detention, sentencing, adult institutions, and staffing and personnel issues. This course provides the student with a basic working knowledge of the many diverse aspects of the correctional process with emphasis given to the history and development of corrections, the various types of institutions, the correctional process, correctional treatment, and the role of corrections within the field of criminal justice. This course specifically examines the Ohio Correctional System.

CRMJ 1150 - Success Skills for Criminal Justice Prof
3 Credit(s); 3 Lecture Hour(s)
This course provides students with an introduction to personal vision, leadership, and management concepts. This course further introduces to the student, their role and responsibilities in the field of criminal justice and how to balance this with the demands of their personal life. Topics include interpersonal leadership, empathic communication, creative cooperation, self-renewal, and situational leadership concepts that law enforcement professionals and agencies encounter within the criminal justice field.

CRMJ 2010 - Criminology
3 Credit(s); 3 Lecture Hour(s)
The purpose of this course is to study crime and criminality in modern society with an emphasis on the underlying assumptions, propositions, and supporting evidence of crime theories. This course examines the multi-disciplinary science of law-making, law-breaking, and law-enforcing. A major emphasis will be placed on the evolution of criminological theories and review of data that assists in predicting where, when, by whom and against whom crimes happen.

CRMJ 2032 - Gangs Cults and Terrorism
3 Credit(s); 3 Lecture Hour(s)
This course is designed to familiarize the student with the structure, organization, and psychology of gangs. Investigation techniques concerning gang recognition by tattoos, graffiti, and symbols will be included for street, prison and motorcycle gangs. This course will also familiarize the student of the various cult organizations. This course will also examine the structure, and current trends of domestic and international terrorist organizations. Semesters Available: Day - F, SP Eve - F, Sp

CRMJ 2036 - Report Writing for Criminal Justice Professional
3 Credit(s); 3 Lecture Hour(s)
This course will examine and explore the various types of reports utilized in the Criminal Justice System/Field. This course will enable the student to develop report writing skills that are essential to the Criminal Justice Field and Criminal Justice Professionals.

CRMJ 2050 - Drug Recognition
3 Credit(s); 3 Lecture Hour(s)
This course studies the social and physical implications of legal and illegal drugs and substances. Drug and substance usage and its psychological and physiological impacts are also discussed for each of the various categories of substances that are seen in society today.

CRMJ 2090 - Defensive Tactics
2 Credit(s); 2 Lab Hour(s), 1 Lecture Hour(s)
This course provides the student with the basic principles and tactics of unarmed self-defense, and how to defend against physical attack, control aggressive behavior, and how to arrest/subdue an individual using the minimum amount of force. The course is graded pass (P) or no pass (NP). This is course 1 of 5 to meet CTAG articulation# CTBPO

CRMJ 2110 - Private Security I
3 Credit(s); 3 Lecture Hour(s)
This course examines the historical, philosophical, and legal framework of the private security field. Security organization, policies, personnel roles, contract and proprietary security concepts are examined within this course. An emphasis of this course is placed on creating security awareness and relationships with other organizations, discovering security's place/role in the criminal justice system, and examining the practice of privatization in security.

CRMJ 2115 - Criminal Investigations II
3 Credit(s); 3 Lab Hour(s), 2 Lecture Hour(s)
This course requires the student to apply his/her knowledge and training in practical situations relating to criminal investigations/cases. The student will prepare case and lab reports concerning their conclusions and findings of crime specific cases/offenses. The laboratory experience will provide actual investigative learning.

CRMJ 2120 - Private Security II
3 Credit(s); 3 Lecture Hour(s)
This course focuses on the management of private investigation, sources of information, investigative technology, and ethical and public policy considerations related to the field of private security. An overview of school and campus security, hospital security, contract security, proprietary security, retail security, and corporate security will be presented. Students will also receive certification for basic first aid and CPR.

CRMJ 2130 - Community Based Corrections
3 Credit(s); 3 Lecture Hour(s)
This course examines programs for convicted offenders that are used both as alternatives to incarceration and post-incarceration situations. Topics include the types of offenders, diversion, house arrest, restitution, community service, probation and parole, including both public and private participation, and other related topics. This course examines the various programs available as alternatives to incarceration from the perspective of the criminal justice professional, the offender, and the community.

CRMJ 2150 - Forensic Science/Criminalistics I
3 Credit(s); 3 Lab Hour(s), 2 Lecture Hour(s)
This is an introductory course to criminalistics which explores the history and scope of forensic science. Criminalistics is the application of science to those criminal and civil laws that are enforced by police agencies in a criminal justice system. The scope of this course includes discovery at a crime scene, the most important location of evidence; physical evidence; analytical techniques for organic and inorganic materials, fingerprints, unique tool marks, trace evidence and various impressions (e.g., shoe prints, tire prints, etc.).

CRMJ 2152 - Forensic Science/Criminalistics II
3 Credit(s); 3 Lab Hour(s), 2 Lecture Hour(s)
This is an introductory course to criminalistics which explores the scope of forensic science. The scope of this course includes procedures and practices of; Forensic Serology, Toxicology, Presumptive Drug Testing, Paint Analysis, Blood Spatter, and Ballistics. The laboratory experience will provide actual lab situations and scenarios to enhance student learning.

CRMJ 2154 - Forensic Science/Criminalistics III
3 Credit(s); 3 Lab Hour(s), 2 Lecture Hour(s)
This is an introductory course to criminalistics which explores the scope of forensic science. The scope of this course includes; procedures and practices of questioned documents, handwriting analysis, type-writing analysis, anthropology, and odontology. The laboratory experience will provide actual lab situations and scenarios to enhance student learning.

CRMJ 2160 - Computer Forensics
3 Credit(s); 3 Lab Hour(s), 2 Lecture Hour(s)
This course introduces the student to the technology that is used to investigate and establish facts of interest, involving the preservation, identification, extraction and documentation of computer evidence. The course focuses on how to perform an autopsy of a computer hard drive, utilizing the specialized software tools and techniques required to analyze the various levels at which computers store data.

CRMJ 2170 - Terrorism and Homeland Security
3 Credit(s); 3 Lecture Hour(s)
This course will examine the history, structure, and current trends of domestic and international terrorist organizations along with the development and structure of Homeland Security. This is course 2 of 5 to meet CTAG articulation# CTBPO

CRMJ 2174 - Current Issues in the Criminal Justice Profession
1 Credit(s); 1 Lecture Hour(s)
This course introduces the student to the diverse ethical, professional, cultural, and legal issues and dilemmas confronting the field of the criminal justice profession. The course requires the student to create action plans to address the issues.

CRMJ 2190 - Practicum and Seminar

3 Credit(s); 1 Lecture Hour(s), 14 Practicum Hour(s)

This course involves placement of the student into an actual work environment within a setting in the Criminal Justice field. The work experience includes job tasks and assignments providing exposure of the functions of the various Criminal Justice fields. The student will complete 210 hours of work experience at the placement site. This work experience provides the foundation for developing the student into a competent criminal justice worker. This course further involves discussions of the operations, issues and events of the placement of the student in a Criminal Justice work environment. This course is graded as a Pass/No Pass course.

CRMJ 2210 - Introduction to Police Operations and Report Writing

3 Credit(s); 3 Lecture Hour(s)

This course is designed to acquaint the student with the history of policing, police operations and community policing. This course will also acquaint the student with current technology, reporting systems, report writing and various divisions within police organizational structure. This is a TAG course (OSS034).

CRMJ 2230 - Police Skills I

4 Credit(s); 4 Lab Hour(s), 2 Lecture Hour(s)

This course is presented to students in three parts. Part one of this course meets OPOTC requirements for the certification of CPR and basic first aid. Part two of this course introduces the student to community diversity issues as well as the OPOTC requirements for the following topics; domestic violence, child abuse and investigations, crisis intervention, the juvenile justice system, and victims' rights. Part three of this course meets OPOTC requirements for laws of arrest, search & seizure, legal aspects of interview & interrogations, civil liability & use of force, testifying in court, criminal statutes in Title 29 of the ORC, and rules of evidence. All practical exercises related to certification are graded as P/NP. Students must pass all certification exams and practical exercises to successfully pass this course. This is course 3 of 5 to meet CTAG articulation# CTBPO

CRMJ 2240 - Police Skills II

4 Credit(s); 6 Lab Hour(s), 2 Lecture Hour(s)

This course is presented to the student in three parts. Part one of this course meets OPOTC requirements for traffic enforcement technologies and SFST certification. This course also examines the fundamental concepts of traffic accident investigation; protection of the scene, recording of information, collection of evidence, and the analysis of traffic accidents. Part two of this course introduces the student to the knowledge and skills required for OPOTC requirements of defensive driving, pursuit driving, and stops and approaches. Part three of this course meets OPOTC requirements for the needs, purpose and importance of physical conditioning. All practical exercises related to certification are graded as P/NP. Students must pass all certification exams and practical exercises to successfully pass this course. This is course 4 of 5 to meet CTAG articulation# CTBPO

CRMJ 2250 - Peace Officer Academy Firearms

4 Credit(s); 4 Lab Hour(s), 2 Lecture Hour(s)

This course will introduce the student to the historical perspective of firearms, the lawful and unlawful use of weapons under current legal controls, and the restrictions concerning firearms. Thorough training is provided on precision pistol shooting and police combat shooting. All firearm discharges will be conducted in lab sessions at the state approved range site. All students will be required to successfully pass the state qualification standards in order to receive a Pass (P) for this course. This course is graded as pass (P) or no pass (NP). This is course 5 of 5 to meet CTAG articulation# CTBPO

CRMJ 2900 - Criminal Justice Capstone

1 Credit(s); 1 Lecture Hour(s)

This course will assist students transitioning from the community college experience to a four-year educational institution. Students will integrate the knowledge and skills acquired in their general education experiences with those developed in their program specific courses to engage in projects that require them to: think critically about their prior education, explore future academic and career-related paths, and develop skills to enhance their success. Such projects may include research papers, presentations, and/or portfolio development.

Required Prerequisite Course(s): *Take 45 credits;*

CRMJ 2999 - Special Topics in Criminal Justice

3 Credit(s); 3 Lecture Hour(s)

This course enables faculty members in the criminal justice department to present various topics of current interest to students throughout the college on a limited basis. The course may be offered twice before it must be discontinued or added to the curriculum via the required Curriculum Committee process. Semesters available: As Needed

DENTAL ASSISTING

DENT 1010 - Introduction to Dental Assisting

8 Credit(s); 6 Lab Hour(s), 6 Lecture Hour(s)

This is the first of three courses that when successfully completed will comply with all Ohio Dental Board requirements allowing the student to test for the Dental Radiographer License in Ohio and the certification test for Ohio Dental Assistant. This is a multi-facade course that covers introduction to the profession of dental assisting, dental anatomy, infection control, health history of patient, emergency procedures in the dental clinic, and preventive dental assisting procedures. Semesters Available: Fall - Eve

Required Prerequisite Course(s): *Take ENGL 0040 and MATH 0084 (minimum grade of C- required for all); or qualifying placement test scores*

DENT 1030 - Dental Assisting Procedures I

8 Credit(s); 6 Lab Hour(s), 6 Lecture Hour(s)

This is the second of three courses that when successfully completed will comply with all Ohio Dental Board requirements allowing the student to test for the Dental Radiographer License in Ohio and the certification test for Ohio Dental Assistant. This is a multi-facade course that covers dentist chair side assistance, dental specialties, and dental laboratory procedures. Semesters Available: Spring - Eve

Required Prerequisite Course(s): *Take DENT 1010;*

DENT 1050 - Dental Assisting Procedures II

8 Credit(s); 3 Lab Hour(s), 6 Lecture Hour(s), 7 Practicum Hour(s)

This is the third of three courses that when successfully completed will comply with all Ohio Dental Board requirements allowing the student to test for the Dental Radiographer License in Ohio and the certification test for Ohio Dental Assistant. This is a multi-facade course that covers dental business office, radiographic, communication, and professionalism procedures. There will be a practicum and practicum seminar completed with dentist to apply the competencies learned throughout the program. Semesters Available: Summer - EVE

Required Prerequisite Course(s): *Take DENT 1030*

EARLY CHILDHOOD EDUCATION

ECED 1030 - Health Safety and Nutrition

3 Credit(s); 3 Lecture Hour(s)

This course will support candidates understanding of the interrelationships among nutrition, health, and safety for young children; candidates will also gain hands-on application experience and be able to share knowledge gained with children and their families. Candidates will gain a comprehensive understanding of the nutrition, health, and safety needs of young children from birth to school age in diverse populations. Candidates will receive state mandated trainings in communicable disease recognition, prevention and child abuse recognition, first aid, and CPR.

ECED 1040 - Music & Movement

3 Credit(s); 2 Lab Hour(s), 2 Lecture Hour(s)

The course includes the development of movement and musical abilities in the young child and the importance of physical well-being. Techniques for teaching music and movement to young children will be included. Students will learn to use the ukulele and to use music and movement as an instructional classroom management tool.

ECED 1050 - Early Childhood Play and Curriculum

3 Credit(s); 2 Lab Hour(s), 2 Lecture Hour(s)

In this course candidates will realize how children's learning through play is profoundly affected by the social and physical environment they are in. Candidates will discover ways to assist children in meeting outcomes (set forth by the Ohio Department of Education Office of Early Learning and School Readiness) primarily through play. Candidates will also intentionally design environments that provide children with materials, tools, and challenges that allow children's development to flourish as candidates devise appropriate plans to scaffold children's learning. In doing so, candidates identify their role as a facilitator, the children's role, and the environment's role as the third teacher.

ECED 1090 - Math and Science for Young Children

3 Credit(s); 3 Lecture Hour(s)

This course is designed to help teachers create age appropriate active learning environments to support the mathematical development of young children and capitalize on children's natural inquisitiveness to learn the processes and facts about science as they come to appreciate themselves as competent problem-solvers. The Early Learning Content Standards for Mathematics and Science established by the Ohio Department of Education Office of Early Learning and School Readiness (Pre K - grade 3) provides the framework for developing the mathematics and science curriculum.

Required Prerequisite Course(s): *Take ECED 1050, EDUT 1070*

ECED 1210 - Language & Literacy

3 Credit(s); 3 Lecture Hour(s)

This course is designed to give candidates hands on activities that will promote language and literacy skills. Focus will be on theories, the sequence of speech, language development (including differentiating between typical and atypical speech), the teacher as the facilitator of communication development, planning and implementing appropriate language activities, using literature to enhance language development and on providing emotional support and stimulating interest in books. Also, included is the different genres available for use with emerging literacy and how play based curriculum promotes reading readiness.

Required as Prerequisite or Concurrent Course(s): *Take EDUT 1070*

ECED 1330 - Preschool Practicum

1 Credit(s); 7 Practicum Hour(s)

The practicum experience is a "hands-on" experience providing "on the job" opportunities to apply principles acquired in EDUT 1070 and ECED 1050. Candidates plan and implement activities with individuals and small groups of children in the curriculum areas using ODE/ODJFS Early Learning and Development Standards, and NAEYC Professional Preparation Standards. This practicum takes place in a licensed child care facility or a pre-kindergarten program. Candidates work a minimum of 7 hours per week for a total of at least 75 hours.

Required Concurrent Course(s): *Take ECED 1331*

Required as Prerequisite or Concurrent Course(s): *Take ECED 1050 and EDUT 1070*

ECED 1331 - Preschool Seminar

2 Credit(s); 2 Seminar Hour(s)

The practicum seminar is offered concurrently with the practicum itself. The purpose of the seminar is to reflect on the experiences of the candidate in the facility. Specifically, the seminar will focus on self-understanding, lesson planning with awareness of how ODE Early Learning Content Standards influences accountability, assessing, and compliance with the Ohio Child Care Rating System.

Required Concurrent Course(s): *Take ECED 1330*

Required as Prerequisite or Concurrent Course(s): *Take ECED 1050 and EDUT 1070*

ECED 1350 - Literacy Practicum

1 Credit(s); 7 Practicum Hour(s)

This practicum is designed to help candidates implement effective strategies in working with young children by providing positive language and literacy experiences that interconnects speaking, listening, reading and writing concepts. Candidates will thoughtfully and purposefully interact with children to cultivate opportunities in exploring emergent literacy. Candidates will work a minimum of seven (7) hours per week in a licensed child care facility, preschool, or prekindergarten program.

Required Prerequisite Course(s): *Take EDUT 1070, ECED 1050, ECED 1330*

Required Concurrent Course(s): *Take ECED 1351*

ECED 1351 - Literacy Seminar

2 Credit(s); 2 Seminar Hour(s)

This seminar is designed to help candidates develop strategies for providing experiences for young children that helps make young children competent and confident readers and writers. Candidates will identify key components, according to ODE, of an effective early literacy program that includes vocabulary and oral language development; phonological awareness; awareness and knowledge of print; letters and words; comprehension; awareness and knowledge of books, and other texts; and beginning awareness and understanding of the process, composition and conventions of writing. Candidates will thoughtfully and purposefully plan experiences for interaction with children in planned and spontaneous moments to cultivate opportunities in exploring emergent literacy. This seminar is offered concurrently with the practicum itself. The purpose of the seminar is to reflect on the experiences of the candidate in the facility.

Required Prerequisite Course(s): *Take ECED 1050 ECED 1331 EDUT 1070*

Required Concurrent Course(s): *Take ECED 1350*

ECED 2013 - Administration & Professionalism

3 Credit(s); 3 Lecture Hour(s)

This course is designed to familiarize the student with the basic administrative issues related to the operation of a licensed preschool and/or child care facility. The student will become familiar with legal requirements, financial operations, enrollment patterns, and staffing considerations. The student will become familiar with current trends that affect the childcare field and the importance of being an advocate for the rights of all children. The candidates will be registered on the OPDN registry and will become familiar with Ohio's Child Care Rating System. Students will be required to have 30 hours of service learning (16 hours will be as volunteers at the OAEYC conference).

Required Prerequisite Course(s): *Take ECED 1050, EDUT 1070*

ECED 2030 - Uniqueness of Infants & Toddlers

3 Credit(s); 3 Lecture Hour(s)

This course will provide candidates a comprehensive understanding of the uniqueness of infant and toddler development and care with special emphasis on developmentally appropriate practices for adults who work with children ages birth to three. Field/class observations will cover major developmental milestones in infant and toddler growth. Coverage of the indicators of high-quality care and education for infants and toddlers, domains, principles, and components of development as they relate to Piaget's stages of cognitive development and Maslow's hierarchy of needs will be provided. The course will cover Ohio Departments' of Education and Job and Family Services standards and guidelines for infants and toddlers.

ECED 2050 - Social Development Guidance and Management

3 Credit(s); 3 Lecture Hour(s)

This course will help candidates construct developmentally appropriate approaches to guiding children. The candidates will gain knowledge on major theoretical perspectives relating to views of guidance, compare strategies for supporting children's social and emotional learning, analyze children's cognitive developmental processes of perception and memory in understand their views of other people, interpret different parts of children's development and milestones, apply knowledge about theories apply practical methods for observing children in order to make guidance decisions.

Required Prerequisite Course(s): *Take EDUT 1070*

ECED 2110 - Student Teaching Experience

2 Credit(s); 10 Directed Practice Hour(s)

During this directed practice experience the student will function as a staff member of the cooperating agency and will assume major responsibility for planning and implementing the pre-kindergarten program. Students are expected to comply with agency policies and conduct themselves in a professional manner. Students must receive a letter grade of "B" or higher and pass the current Ohio Educator Assessment in order to apply for state licensure. Classroom activities meet current Ohio Departments' of Education and Job and Family Services standards and guidelines. Candidates work an average of 10 hours per week totaling at least 150 hours by the end of the semester.

Required Prerequisite Course(s): *Take ECED 1350, ECED 2050*

Required Concurrent Course(s): *Take ECED 2111*

ECED 2111 - Student Teaching Seminar

2 Credit(s); 2 Seminar Hour(s)

This seminar will meet at least two hours each week to allow students to discuss, evaluate and reinforce their student teaching experience. Expectations of being a professional, current trends and issues in early childhood will also be discussed. Anti-bias education will be examined, including self-understanding and facilitating an anti-bias curriculum. Students must receive letter grade of "B" or higher and pass the current Ohio Educator Assessment in order to apply for state licensure.

Required Prerequisite Course(s): *Take ECED 1351, ECED 2050*

Required Concurrent Course(s): *Take ECED 2110*

ECED 2999 - Special Topics in Early Childhood Education

3 Credit(s); 3 Lecture Hour(s)

This course enables faculty members in the early childhood education department to present various topics of current interest to students throughout the college on a limited basis. The course may be offered twice before it must be discontinued or added to the curriculum via the required Curriculum Committee process. Semesters Available: As Needed

ECONOMICS

ECON 1010 - Introduction to Economics

3 Credit(s); 3 Lecture Hour(s)

This course covers four topic areas: a) basic economic terms in microeconomics, b) basic economic terms in macroeconomics, c) a historical overview of major economic ideas and d) an exploration of a variety of economic issues. This course is recommended for students who desire a one term survey course in economics. In this course students shall be challenged to think critically and to formulate independent and well-considered conclusions about a variety of economic issues and policies at a personal level as well as at the national level. Upon completion of this course students shall be better equipped to rationally participate in current economic policy debates by understanding the historical evolution of economic system, institutions and ideologies. (OTM for Social and Behavioral Sciences TMSBS)

ECON 1510 - Microeconomics

3 Credit(s); 3 Lecture Hour(s)

This course of study focuses upon how the condition of scarcity affects the decisions of individuals, households, and business firms in their roles as producers and consumers. In particular, the price mechanism is addressed at length and explained by the conceptual and graphical representations of supply and demand. Applications of such concepts as elasticity of demand, as well as marginal cost and revenue calculations are used by the student to determine optimum pricing, profit, and revenue strategies for the firm. The advantages and disadvantages of relative economies of scale in both the long-run and short-run are explored. The market conditions of monopoly, oligopoly as well as perfect competition are analyzed with the goal of giving the student an understanding and appreciation of their socio-economic implications. UG OSS004

Required Prerequisite Course(s): *MATH 0084 (minimum grade of C-) or qualifying placement test scores*

ECON 2510 - Macroeconomics

3 Credit(s); 3 Lecture Hour(s)

This course will prepare the student to understand, critique, and predict how the various schools of macro-economic thought would diagnose and attempt to solve questions of national economic interest. Extensive investigation of the underlying principles of Keynesian, Neo-Keynesian, Monetarist, supply-side and Austrian perspectives is accomplished using both an analytical as well as a socio-economic/historical approach. Understanding these perspectives will enable the student to both understand and successfully participate in rational discussion regarding such issues as fiscal policy, monetary policy, trade policy, taxation, taxation theory and economic growth. (TAG# OSS005)

Required Prerequisite Course(s): *MATH 0084 (minimum grade of C-) or qualifying placement test scores*

EDUCATION

EDUT 1010 - Introduction to Education

3 Credit(s); 3 Lecture Hour(s)

This course is designed to help the candidate understand that teaching is a profession from infancy through school age, the need for professionalism, the historical philosophical contexts, the governmental and economic contexts, challenges of meeting students diverse educational needs, curriculum models and instruction, and the major legal issues facing the education community. This course meets the Ohio Transfer Articulation Guidelines.

EDUT 1070 - Introduction to Child Development

3 Credit(s); 3 Lecture Hour(s)

This course addresses both typical and atypical child development from birth through age eight. The course provides an overview of early childhood theorists. Studying early childhood development is essential to becoming an effective teacher of young children. The importance of understanding the interrelationship of the physical, cognitive, social, emotional, language, and aesthetic domains will also be addressed. Developmental domains are presented with examples drawn from diverse cultures. The course also highlights the diversity of child development, preparing professionals to meet the unique needs of children from a wide variety of backgrounds. This multicultural perspective prepares adults to meet the distinct needs of every child. (TAG# OED005)

EDUT 1370 - Educational Technology

3 Credit(s); 3 Lecture Hour(s)

This course is designed to effectively identify, locate, evaluate, design, prepare, and efficiently use educational technology as an instructional resource in the classroom as related to principles of learning and teaching. Candidates will develop increased abilities in knowledge, skills, and dispositions necessary to utilize technology effectively in the classroom. This course meets the INTASC, OELCS, OSTP, ISTE, NETS standards, and the Ohio Assessment for Teacher. (TAG# OED002)

EDUT 2080 - Individuals with Exceptionalities

3 Credit(s); 3 Lecture Hour(s)

This course is designed to cover the identification, developmental characteristics and intervention strategies for exceptional children and youth. An overview of handicapping conditions in young children, issues of normalization and least restrictive environment, individualization of learning programs, working with ancillary services (P.T., O.T., SLP), and experiences in segregated and integrated settings, as well as family and community needs are addressed. The course also focuses on self-understanding, understanding the work setting, and being an effective teacher.

Required Prerequisite Course(s): *EDUT 1070*

EDUT 2090 - Families Communities & Schools

3 Credit(s); 3 Lecture Hour(s)

The course emphasizes the importance of effective communication between parents and program staff. Stress is a factor affecting the home/school relationship and the role of the school or center in establishing a strong working relationship. Emphasis is placed on encouraging active parent participation in the early childhood programs both private and public. The course includes history of education and the impact on families both past and present, the examination of models of the healthy families, diverse families, and the effect of drugs, alcohol, and disabilities on the family unit. The course includes creating written communications with families and any requirements designated by the state and/or school system. (TAG# OED006)

Required Prerequisite Course(s): *Take EDUT 1070*

EDUT 2150 - Educational Psychology

3 Credit(s); 3 Lecture Hour(s)

Educational psychology examines theories of development, learning, and motivation, and similarities and differences in learners and learner populations. Effective instructional strategies and assessment techniques will be examined. Semesters available: Fall - Day, Spring - Eve

Required Prerequisite Course(s): *Take PSYC 1010*

ELECTRICAL ENGINEERING TECHNOLOGY

ELET 1510 - DC ELECTRICITY

3 Credit(s); 2 Lab Hour(s), 2 Lecture Hour(s)

Elements of DC Circuits is an introductory course in direct current circuit theory that includes the basic concepts of voltage, current, resistance and power. (CTAG = CTEET001 and TAG = OET01) Semesters available: Day - F Evening - F

Required as Prerequisite or Concurrent Course(s): *Take MATH 1110*

ELET 1520 - AC ELECTRICITY

3 Credit(s); 2 Lab Hour(s), 2 Lecture Hour(s)

A course covering alternating circuit theory including basic concepts of voltage, current, resistance, impedance, inductance, capacitance, phase angle, and their relationships to each other in an AC circuit. Transformers, resonance and use of AC instruments is also included. OET 003 Semesters available: Day - Sp Evening - Sp

Required Prerequisite Course(s): *Take ELET 1510*

ELET 1530 - DIGITAL PRINCIPLES

4 Credit(s); 2 Lab Hour(s), 3 Lecture Hour(s)

A study of the binary number system, Boolean algebra, Logic and Logic circuits, flip flops, registers, counters, and their interconnection in small systems. This curriculum has been previously approved under the Ohio Board of Regents Career Technical Credit Transfer guide (CTAG) and the Transfer Agreement Guide (TAG) as CTEET002 and OET002 respectively. No changes have been made to the outcomes based on these requirements.

ELET 1710 - INTRODUCTION TO ROBOTICS

2 Credit(s); 2 Lab Hour(s), 1 Lecture Hour(s)

This course covers the basic programming, operation, interfacing, troubleshooting and OSHA safety standards for industrial robots and workcell systems. The primary focus is on the use of automatic parts-handling equipment, contour applications and interfacing with emphasis on design for manufacturing. Topics include the use of conveyors, parts feeders, positioning equipment and safety systems. Hands-on laboratory experiences include operation of robots using the teach pendant. Semesters available: Day - F Evening - F

ELET 2240 - PROGRAMMABLE LOGIC CONTROLLERS

3 Credit(s); 2 Lab Hour(s), 2 Lecture Hour(s)

This course will cover the basic principles behind the operation of programmable controllers, the relationship between PC's and relay ladder logic, programming of PC's, and troubleshooting of programmable controller circuits. (TAG# OET022 CTAG# CTEET003)

ELET 2450 - ELECTRONICS

3 Credit(s); 2 Lab Hour(s), 2 Lecture Hour(s)

This course explores the use of diode applications, bipolar and unipolar transistors, Field Effect Transistors, oscillators, feedback, thyristors and the 555 timer. Topics will include power supplies, multi-stage amplifiers, inverting and non-inverting op-amps, filters, SCRs and Triacs. OET 005 Semesters available: Day - F Evening - F

Required Prerequisite Course(s): *Take ELET 1520*

ELET 2570 - MICROCONTROLLERS

4 Credit(s); 2 Lab Hour(s), 3 Lecture Hour(s)

This course is an exploration of the fascinating world of microcontrollers. The student will learn to program and interface the microcontroller using a variety of real-world applications. These applications will include discrete I/O operations, motor and machine control, environmental sensing and analog measurements. Other projects will involve interfacing to LCD displays, extending I/O, generating sounds and controlling AC appliances. The student will complete the course by designing, building, testing, and troubleshooting a microcontroller consumer application. Semesters available: Day - F Evening – F

Required Prerequisite Course(s): *Take ELET 1530*

ELET 2760 - INSTRUMENTATION AND PROCESS CONTROL

3 Credit(s); 2 Lab Hour(s), 2 Lecture Hour(s)

This course deals with complex instruments and instrumentation systems. Topics covered include instrumentation buses, waveform generation, waveform analysis, transducers, signal conditioning, analog multiplexors, sample and hold circuits, A/D-D/A convertors, micro-computer-controlled data acquisition systems and process control theory. Students will also examine industrial automated process control systems using Data acquisition devices. Emphasis will be on programming, signal conditioning, and data transfer. Semesters available: Day - F Evening - F

Required Prerequisite Course(s): *Take ELET 1530*

ELET 2930 - ELECTRICAL CAPSTONE PROJECT

2 Credit(s); 2 Lecture Hour(s)

A capstone course that challenges the student to put to use previous knowledge gained from other course to research, plan, develop, test and troubleshoot an electrical apparatus, a manufacturing process, a robotic workcell or other industrial application. Semesters available: Day - Sp Evening - Sp

Required Prerequisite Course(s): *Take ELET 2450, ELET 2570, ELET 2240*

ELET 2999 - SPECIAL TOPICS IN ELECT ENGINEERING TECH

3 Credit(s); 3 Lecture Hour(s)

The course presents a specific topic in Electronic Engineering Technology that is not normally covered in the current ELET curriculum. Credit hours and topics will be pre-approved by the academic administration

EKG TECHNICIAN

ELKG 1110 - ELECTROCARDIOGRAPHIC (EKG) TECHNICIAN

4 Credit(s); 4 Lab Hour(s), 2 Lecture Hour(s)

This course provides students with the basic knowledge and skills to perform an electrocardiogram (EKG). It also introduces basic cardiac arrhythmias and medications used to treat them. After completion of the course, students are eligible to take a national certification exam. Semesters available: Offered based on need.

Required Concurrent Course(s): *Take PHLB 1110, PHLB 1210 and PHLB 1250*

ELECTRICAL MAINTENANCE

EMMT 0011 - EMMT AMATROL WEBSITE COST

0 Credit(s); 0 Lecture Hour(s)

EMMT 0011 is a 0-credit hour placeholder course.

EMMT 1010 - INDUSTRIAL ELECTRICITY

3 Credit(s); 2 Lab Hour(s), 2 Lecture Hour(s)

In this course the student will learn to apply the basic concepts of electricity and its use in industry. The student will study DC and AC sources and how circuit components react when under power. Topics will include Ohm's law, Kirchoff's Laws, circuit analysis, electrical measurements, current, voltage, resistance, power, power factor, inductors, capacitors and transformers.

Required Concurrent Course(s): *Take EMMT 0011*

EMMT 1020 - MECHANICAL SYSTEMS

2 Credit(s); 2 Lab Hour(s), 1 Lecture Hour(s)

Fundamentals of mechanical systems includes: introduction to mechanical fasteners, measuring instruments, motors, power transmissions systems. Other topics include: introduction to mechanical fasteners, sensors, and applications of sensors, and piping and piping installation. The laboratory experience consists of hands-on experiments designed to reinforce concepts presented. Contains demonstrations, lab projects and simulations.

Required Concurrent Course(s): *Take EMMT 0011;*

EMMT 1030 - OSHA SAFETY REGULATIONS

2 Credit(s); 2 Lecture Hour(s)

Students will be taught the approved Occupational Safety and Health Administration (OSHA) curriculum for the 30-hour Voluntary Protection Program course on general industry standards. Subjects covered will include: hazard communications, lockout/tagout, machine guarding, electrical standards, hazardous and voluntary protection program compliance.

Required Concurrent Course(s): *Take EMMT 0011;*

EMMT 1050 - Fundamentals of Fluid Power Systems
3 Credit(s); 2 Lab Hour(s), 2 Lecture Hour(s)
An introductory course in fluid power fundamentals, providing a study of system components including pumps, cylinders, valves, and various fluid circuits. Included is an introduction to hydraulic and pneumatic circuit analysis including symbols. Laboratory experience with components is also provided.
Required Concurrent Course(s): *Take EMMT 0011;*

EMMT 1100 - Power Distribution
2 Credit(s); 2 Lab Hour(s), 1 Lecture Hour(s)
This course covers plant single-phase and three-phase power distribution networks from the service substation, through the branch circuits to the loads. Topics include fault interruption, overcurrent devices, overvoltage protection, conduit types, conduit bending and pipefitting.
Required Prerequisite Course(s): *Take EMMT 1010*
Required Concurrent Course(s): *Take EMMT 0011;*

EMMT 1540 - Ladder Diagrams
1 Credit(s); 3 Lab Hour(s)
A study of the practical knowledge required to maintain and troubleshoot industrial control equipment properly by locating and properly identifying the nature and magnitude of a fault or error. This involves the understanding of electrical components, their symbols, and their relationships. Emphasis is placed on reading and understanding elementary ladder logic circuit diagrams based upon electrical standards, and above all else, promoting safety.
Required Prerequisite Course(s): *Take EMMT 1010*
Required Concurrent Course(s): *Take EMMT 0011;*

EMMT 1710 - Introduction to Robotics
2 Credit(s); 2 Lab Hour(s), 1 Lecture Hour(s)
This course covers the basic programming, operation, interfacing, troubleshooting and OSHA safety standards for industrial robots and work-cell systems. The primary focus is on the use of automatic parts-handling equipment, contour applications and interfacing with emphasis on design for manufacturing. Topics include the use of conveyors, parts feeders, positioning equipment and safety systems. Hands-on laboratory experiences include operation of robots using the teach pendant.

EMMT 2100 - Advanced Fluid Power Systems
3 Credit(s); 2 Lab Hour(s), 2 Lecture Hour(s)
Essentials of hydraulics includes: hydraulic power, basic circuits, symbols and principles of pressure and flow, electro-fluid power, hydraulic troubleshooting, piping and piping installation. The laboratory experience consists of hands-on experiments designed to reinforce concepts presented. Contains demonstrations, lab projects and simulations.
Required Prerequisite Course(s): *Take EMMT 1050*
Required Concurrent Course(s): *Take EMMT 0011;*

EMMT 2120 - DC/AC Drives
2 Credit(s); 2 Lab Hour(s), 1 Lecture Hour(s)
This course covers an overview of DC and AC motors used in motion control and electronic devices and circuits used in DC and AC drives. Fixed output and phased controlled DC supplies needed for DC motor speed control and pulse width modulated (PWM) and variable frequency drive (VFD) inverters that provide AC motor speed control are also covered.
Required Concurrent Course(s): *Take EMMT 0011;*

EMMT 2150 - Motor Controls
2 Credit(s); 2 Lab Hour(s), 1 Lecture Hour(s)
A study of the methods and devices used to control and protect DC and AC motors on industrial machinery. The student will understand, develop, interpret, and troubleshoot ladder diagram circuits. The student will gain experience of DC Series, Shunt and Compound motors, single-phase motors, 3- motors, Stepper motors, Servos, and universal motors. The student will learn about OSHA safety regulations regarding Lockout/Tagout procedures and safe shut down procedures. The student will also wire control circuits that utilize soft-start techniques and dynamic braking techniques.
Required Concurrent Course(s): *Take EMMT 0011*

EMMT 2250 - Advanced PLCs
2 Credit(s); 2 Lab Hour(s), 1 Lecture Hour(s)
This class will introduce the student to one of the most advanced programmable logic controllers and a powerful ladder-logic programming and communication software. The student will learn to configure, install, operate, maintain and troubleshoot state-of -the-art hardware. Additional topics will include: program editing and documentation, instruction functionality, software tools (searching, trends, forcing, etc.) memory usage and memory mapping, tags, arrays and aliases.
Required Prerequisite Course(s): *Take ELET 2240*
Required Concurrent Course(s): *Take EMMT 0011*

EMMT 2300 - The National Electric Code
2 Credit(s); 2 Lecture Hour(s)
A study of industrial and commercial code specification. Students will learn selected electrical installation requirements along with some hands-on experience. Chapter 1-4 and Chapter 9 of the NEC, with voltage below 600 volts, will be the main focus of this course. This is an entry level course. Upon completion the student should work only under the direction of a qualified electrician.
Required Concurrent Course(s): *Take EMMT 0011;*

EMMT 2400 - Control Processes
3 Credit(s); 3 Lab Hour(s), 2 Lecture Hour(s)
This course studies the control devices, sensors, transducers, instrumentation and control loop strategies and structures that control applications such as, boilers, chillers, rotating machinery, cooling towers, HVAC, heat exchangers, batch reactors and distillation processes used in industry by chemical plants, oil refineries, steel mills, water treatment plants, drink producers, and waste treatment plants.
Required Concurrent Course(s): *Take EMMT 0011;*
Required as Prerequisite or Concurrent Course(s): *Take EMMT 2250 and EMMT 2300*

EMMT 2500 - Industrial Networks
3 Credit(s); 3 Lecture Hour(s)
This class will introduce students to various types of networking systems used in industry today. Emphasis will be placed on DeviceNet, ControlNet, Data Highway, and Ethernet with hands on labs and troubleshooting. Students will assemble and test a ControlNet cable segment, practice the configuration and troubleshooting of a ControlNet network by a workstation located at any node using the RS Networx software. In addition to learning some of the background concepts and specifications of DeviceNet the participant will identify physical media and devices, connect and commission different devices to the network and learn how to determine if the DeviceNet network is functioning properly. Troubleshooting will involve the use of RSNetworx, interpretation of scanner diagnostics codes and module status indicators, the application of networking concepts and the use of the DeviceNet Troubleshooting Guide.
Required Concurrent Course(s): *Take EMMT 0011;*
Required as Prerequisite or Concurrent Course(s): *Take EMMT 2250*

EMT/PARAMEDIC

EMTP 1010 - Emergency Medical Technician - Basic
6 Credit(s); 6 Lab Hour(s), 4 Lecture Hour(s)
This class is designed to serve as the initial basic emergency care training program which directly follows the National Standard Curriculum and concludes with Ohio State Certification as an Emergency Medical Technician (EMT). Emphasis is on accurate observations, evaluation of emergency situations, effective communications with the medical network, and high skill proficiency. This class also serves as a required building block to the Paramedic classes. This course is a flex course and may not follow the regular College calendar. The scheduled dates and times vary throughout the year. The course is taught off campus. Semesters available: Offered based on need.

EMTP 2030 - EMT PARAMEDIC

6 Credit(s); 6 Lab Hour(s), 3 Lecture Hour(s), 7 Practicum Hour(s)

This course provides theory and skills at the EMT-Paramedic level for managing medical emergencies including patient assessment, medico-legal issues, airway management, fluid therapy and pharmacology, geriatric care and management of respiratory emergencies, assessment and management of cardiac emergencies including rhythm interpretation and dysrhythmia treatment modalities as well as assessment and advanced management of trauma. Also included is management of obstetrical, neonatal and pediatric emergencies. In-hospital training and field internship are included. Successful completion of this course includes certification in Advanced Cardiac Life Support. This course is designed to prepare the student for National Registry Testing. The Paramedic Program is broken into three Phases: Didactic, Clinical, and Field Internship. This course is a flex course and may not follow the regular College calendar. The scheduled dates and times vary throughout the year. The course is taught off campus. Semesters available: Offered based on need.

Required Prerequisite Course(s): *Take EMTP 1010, BIOL 1730 and have current Health Care Provider CPR Certification.*

EMTP 2031 - EMT PARAMEDIC

6 Credit(s); 3 Lab Hour(s), 3 Lecture Hour(s), 14 Practicum Hour(s)

This course is a continuation of EMTP 2030 and provides theory and skills at the EMT-Paramedic level for managing medical emergencies including patient assessment, medico-legal issues, airway management, fluid therapy and pharmacology, geriatric care and management of respiratory emergencies, assessment and management of cardiac emergencies including rhythm interpretation and dysrhythmia treatment modalities as well as assessment and advanced management of trauma. Also included is management of obstetrical, neonatal and pediatric emergencies. In-hospital training and field internship are included. Successful completion of this course includes certification in Advanced Cardiac Life Support. This course is designed to prepare the student for National Registry Testing. The Paramedic Program is broken into three Phases: Didactic, Clinical, and Field Internship. This course is a flex course and may not follow the regular College calendar. The scheduled dates and times vary throughout the year. The course is taught off campus. Semesters available: Offered based on need.

Required Prerequisite Course(s): *Take EMTP 1010 EMTP 2030*

EMTP 2032 - EMT PARAMEDIC

6 Credit(s); 6 Lab Hour(s), 3 Lecture Hour(s), 7 Practicum Hour(s)

This course is a continuation of EMTP 2031 and provides theory and skills at the EMT-Paramedic level for managing medical emergencies including patient assessment, medico-legal issues, airway management, fluid therapy and pharmacology, geriatric care and management of respiratory emergencies, assessment and management of cardiac emergencies including rhythm interpretation and dysrhythmia treatment modalities as well as assessment and advanced management of trauma. Also included is management of obstetrical, neonatal and pediatric emergencies. In-hospital training and field internship are included. Successful completion of this course includes certification in Advanced Cardiac Life Support. This course is designed to prepare the student for National Registry Testing. The Paramedic Program is broken into three Phases: Didactic, Clinical, and Field Internship. This course is a flex course and may not follow the regular College calendar. The scheduled dates and times vary throughout the year. The course is taught off campus. Semesters available: Offered based on need.

Required Prerequisite Course(s): *Take EMTP 2031*

EMTP 2033 - EMT PARAMEDIC

3 Credit(s); 3 Lecture Hour(s)

This class is designed to demonstrate to the student all the aspects and components of a typical Emergency medical Service (EMS) system. This class will include the legislative aspects and laws affecting the EMS practice, medical control and accountability affecting the practice of EMS systems, communications and technology involved with the practice of EMS systems, and an overall description of numerous functioning EMS Systems. Semesters available: Offered based on need.

Required Prerequisite Course(s): *Take EMTP 2032*

ENGLISH

ENGL 0010 - COLLEGE COMPOSITION LAB

1 Credit(s); 2 Lab Hour(s)

This supplementary lab is aimed at providing additional practice and consultation in writing effective, clearly organized essays. The lab provides a review of expository writing skills: paragraph and essay structure; sentence structure; and grammar, spelling, and mechanics to support the sophisticated patterns and variations in paragraphing, planning/writing/revision techniques that are emphasized in ENGL0010.

Required Prerequisite Course(s): *ENGL 0040 (minimum grade of C-); OR qualifying placement test scores*

Required Concurrent Course(s): *Take ENGL 1010*

ENGL 0040 - INTEGRATED READING AND WRITING

4 Credit(s); 2 Lab Hour(s), 3 Lecture Hour(s)

This is a course designed to build thinking skills through reading and writing. It emphasizes that reading assists writing and writing assists reading in repetitive ways. Reading and writing are similar in that both are acts of composing. This is done through planning, drafting, aligning, revising, and monitoring. Close reading teaches students the focus and depth of analysis required by college-level reading. Attentive and close reading of sources as well as critical editing provide a focus on the language of the text. The course helps students to gain access to information and to use this information variously to lead articulate lives and to identify, think through, refine, and solve problems. Classroom instruction integrates writing and reading activities with an emphasis on essays, reading strategies, research, critical thinking, analysis, and metacognition.

ENGL 1010 - ENGLISH COMPOSITION I

3 Credit(s); 3 Lecture Hour(s)

This is a basic course in expository writing and critical reading. Students read a variety of nonfiction works and write summaries, analysis, essays, and a researched argument in response to their reading. Students learn to read actively and accurately and to organize, develop, and revise coherent papers appropriate for a college-educated audience. (OTM for First Writing Course TME001)

Required Prerequisite Course(s): *ENGL 0040; (minimum grade of C-), or qualifying placement test scores*

ENGL 1030 - ENGLISH COMPOSITION II

3 Credit(s); 3 Lecture Hour(s)

This is a course in argument and research writing. Students read issue-based works and write summaries, responses, and an argument and research paper. Students learn to organize research projects, find and evaluate sources, incorporate ideas and quotations from sources, document their sources in MLA and APA style, analyze and use argumentative strategies and persuasive appeals, and prepare and revise effective, coherent papers. (OTM for Second Writing Course TME002)

Required Prerequisite Course(s): *Take ENGL 1010 with a minimum grade of C- or better.*

ENGL 2050 - AMERICAN LITERATURE I

3 Credit(s); 3 Lecture Hour(s)

American Literature I is a survey course that examines the development of American literature in English from the early colonies through the Civil War. Through the use of selected texts, students will become familiar with key authors and works that represent American literature in English and the multiple voices within it. As a survey course, American Literature I is designed to provide students with a foundational understanding of the historical and cultural conditions that influenced the development and formation of American literature. This course will provide the necessary background for a more in-depth understanding of and appreciation for American literature not covered in the course, and it will prepare students for more advanced study of literature in general. (TAG# OAH053)

Required Prerequisite Course(s): *Take ENGL 1030; Minimum Grade C-*

ENGL 2070 - American Literature II
3 Credit(s); 3 Lecture Hour(s)
American Literature II is a survey course that examines the development of American literature in English from the mid-nineteenth century to the present. Through the use of selected texts, students will become familiar with key authors and works that represent American literature in English and the multiple voices within it. As a survey course, American Literature II is designed to provide students with a foundational understanding of the historical and cultural conditions that influenced the development and formation of American literature. This course will provide the necessary background for a more in-depth understanding of and appreciation for American literature not covered in the course, and it will prepare students for more advanced study of literature in general. TAG # OAH054
Required Prerequisite Course(s): *Take ENGL 1030; Minimum Grade C-*

ENGL 2075 - Children's Literature
3 Credit(s); 3 Lecture Hour(s)
This is a survey course in which students study the historical and contemporary elements of literature intended for children, including: picture books, traditional tales, novels of realism and fantasy, nonfiction and poetry. Attention is also paid to content and issues in multicultural and international books for children.
Required Prerequisite Course(s): *Take ENGL 1030 with a minimum Grade of C-.*

ENGL 2090 - Introduction to Fiction
3 Credit(s); 3 Lecture Hour(s)
Introduction to Fiction is a survey course that introduces students to fiction, both the short story and the novel. Students will study the various modes of storytelling, from the historical context to the elements of fiction, through works by major authors from America and around the world. This course will allow students to gain a greater understanding of fiction than available in multi-genre literature courses through the study of the novel and investigation of major authors through readings in the texts. Students will also be introduced to a variety of critical approaches as lenses through which they can view works of fiction.
Required Prerequisite Course(s): *Take ENGL 1010 with a minimum grade of C-*

ENGL 2110 - Creative Writing
3 Credit(s); 3 Lecture Hour(s)
Creative Writing is an introduction to the craft of writing in one or more genres (for example, fiction, poetry, non-fiction, etc). Students will analyze the elements of literature in published works and use those elements in their own work through a variety of in-class and out-of-class assignments and exercises. Students' work will be presented and discussed in class-wide peer workshop format, and based on the responses of the instructor and their peers, students will provide revisions of some of their work by the end of the course.
Required Prerequisite Course(s): *Take ENGL 1010 with a minimum grade of C- or better.*

ENGL 2130 - Introduction to Film
3 Credit(s); 3 Lecture Hour(s)
Introduction to Film is a beginning course designed to provide students with the tools to critically analyze films. The course will cover the history of film, the principles of film form, and the different types and genres of movies. Students will evaluate films viewed together as a class and apply the elements of their studies to these films and others viewed outside of class. Course content will consist of written responses to films, discussion of films and related topics, analytical essays, and exams.
Required Prerequisite Course(s): *Take ENGL 1010 with a minimum grade of C- or better.*

ENGL 2150 - Technical Writing
3 Credit(s); 3 Lecture Hour(s)
Technical Writing is designed to develop design skills in the following written document types: brochures, proposals, research and analytical reports, and workplace correspondence. Skill development may also include summarizing and abstracting information, conducting primary research through interviews, surveys and questionnaires, as well as technical editing. Students will write a resume and cover letter, create a definition newsletter, write instructions, and create a technical marketing brochure. Students will participate in collaborative writing and produce a group oral presentation.
Required Prerequisite Course(s): *Take ENGL 1010; Minimum Grade C-*

ENGL 2180 - British Literature I
3 Credit(s); 3 Lecture Hour(s)
British Literature I is a survey course that examines the development of British literature from the Middle Ages through the early modern period, with emphasis on the development of British literature in the English Language as it evolved through historical periods. Students will study selected works of prose, poetry, drama and fiction in relation to their historical, cultural and linguistic contexts, in order to become familiar with key authors and works that represent this period of British literature and the multiple voices and diverse perspectives and traditions within it. Students will also be introduced to critical perspectives of British literature. As a survey course, British Literature I is designed to provide students with a foundational understanding of the historical and cultural conditions that influenced the development and formation of British literature from the Middle Ages on. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts. This course will provide the necessary background for a more in-depth understanding of and appreciation for British literature not covered in the course, and it will prepare students for more advanced study of literature in general. TAG# OAH055
Required Prerequisite Course(s): *Take ENGL 1030 with a minimum grade of C-*

ENGL 2190 - British Literature II
3 Credit(s); 3 Lecture Hour(s)
British Literature II is a survey course that examines the development of British literature from the Romantic period to the present with emphasis on major writers and periods. Students will study selected works of prose, poetry, drama and fiction in relation to their historical and cultural contexts, in order to become familiar with key authors and works that represent this period of British literature and the multiple voices and diverse perspectives and traditions within it. Students will also be introduced to a variety of critical approaches as lenses through which they can view literature. As a survey course, British Literature II is designed to provide students with a foundational understanding of the historical and cultural conditions that influenced the development and formation of British literature from the Romantic period on. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts. This course will provide the necessary background for a more in-depth understanding of and appreciation for British literature not covered in the course, and it will prepare students for more advanced study of literature in general. TAG# OAH056
Required Prerequisite Course(s): *Take ENGL 1030 with a minimum grade of C-*

ENGL 2900 - English Capstone
1 Credit(s); 1 Lecture Hour(s)
This course will assist students transitioning from the community college experience to a four-year educational institution. Students will integrate the knowledge and skills acquired in their general education experiences with those developed in their program specific courses to engage in projects that require them to: think critically about their prior education, explore future academic and career-related paths, and develop skills to enhance their success. Such projects may include research papers, presentations, and/or portfolio development
Required Prerequisite Course(s): *Must have completed 45 credit hours.*

ENGL 9920 - Combined ENGL1010 & ENGL0010
4 Credit(s); 2 Lab Hour(s), 3 Lecture Hour(s)
This combination of ENGL 0010 - College Composition Lab and ENGL 0010 Lab is designed to provide a supplementary instruction lab for students who do not qualify completely for placement in ENGL 1010 - English Composition I. Students will attend two separate courses ENGL 0010 (2 lab hours) and ENGL 1010 (3 lecture hours).
Required Prerequisite Course(s): *ENGL 0040 (minimum grade of C-); OR qualifying placement test scores*

ENGINEERING

ENGR 1010 - Introduction to Engineering

2 Credit(s); 2 Lab Hour(s), 1 Lecture Hour(s)

This is an introductory course for engineering technology students. Students will develop a deeper understanding and appreciation of engineering, the problems engineers encounter and the contributions made by engineers in various disciplines. The ethics and responsibilities of the engineer will discussed. Lab experience includes the following PC applications: operating systems and hardware, word processors, spreadsheets, and engineering graphing. An introduction to basic language programming is included at the end. Emphasis will be placed on using a PC to solve engineering problems and produce results. TAG: OES001 - INTRODUCTION TO ENGINEERING Semesters available: Day - F, Sp Evening - F, Sp

ENGR 1910 - Engineering Programming

3 Credit(s); 2 Lab Hour(s), 2 Lecture Hour(s)

This course is designed to help students with very little or no computing background learn the basics of building simple interactive applications. The primary method for learning the course material will be to work through multiple "mini-projects". The student will create technical and simple game programs, debug and test programs, and describe and implement the data structures available. The student will also design a simple algorithm using pseudocode and create programs that implement a variety of common algorithms. Semesters Available: Eve - Sp

Required Prerequisite Course(s): *Take ENGR 1010*

ENGR 2010 - Engineering Programming Robotics and PLC

3 Credit(s); 2 Lab Hour(s), 2 Lecture Hour(s)

This course is designed to help students with very little or no computing background, learn the basics of building simple interactive applications. This course will also cover the basic principles behind the operation of programmable controllers, the relationship between PC's and the relay ladder logic, programming of PC's, and troubleshooting of programmable controller circuits. The primary focus is on the use of automatic parts-handling equipment, contour applications and interfacing with emphasis on design for manufacturing. Topics include the use of conveyers, parts feeders, positioning equipment and safety systems. Hands-on laboratory experiences include operation of robots using the teach pendant.

Required Prerequisite Course(s): *Take ENGR 1010 or ENGR 1910*

ENGR 2850 - Engineering Economics & Organization

3 Credit(s); 3 Lecture Hour(s)

A practical introduction to the economic analysis of capital investment. The economic portion of the course covers interest factors for present, annual, and future worth; rates of return; increment and sunk costs; and economic order quantity. The course also covers a broad overview of the operations of an industrial organization, emphasizing the relationship of basic functions and principles essential to efficient and profitable operation of industrial enterprises. Content covers such topics as organizational structure, production planning and control, purchasing, sales, personnel administration, ownership and financing, business ethics and compensation. (TAG# OES005)

Required Prerequisite Course(s): *Take MATH 1110*

ENGR 2930 - Engineering Related Studies I

1 Credit(s); 1 Lecture Hour(s)

This credit is awarded for educational activities directly related to specific engineering technology and maintenance careers and generally classified in an approved area of concentration. Repeatable for a maximum of 10 credits.

ENGR 2980 - Cooperative Work Experience I

1 Credit(s); 10 Cooperative Work Hour(s)

A cooperative work experience provides an opportunity for students to obtain practical work experience in the engineering field while earning college credit. This on or off campus employment experience can be paid or unpaid. The work experience is coordinated by a faculty member who visits the job site for a conference with the student and the supervisor at least once per semester. Students must complete 150 hours of work experience for each hour of credit. This class is Pass/No Pass (P/NP).

Required Prerequisite Course(s): *Students must have completed 20 credit hours of engineering classes (ENGR, ELET, MECT, MFGT or ENRD) with a minimum grade of C- grade or better*

Required Concurrent Course(s): *Take ENGR 2990. Instructor Permission Required*

ENGR 2990 - Cooperative Work Experience Seminar I

1 Credit(s); 1 Seminar Hour(s)

This course is taken concurrently with ENGR 2980 - Cooperative Work Experience I. Students will discuss their workplace experiences, identify the skills required, assess their performance, and present their learning experience and how it prepared them for a career in engineering. Students must obtain permission from the instructor to enroll in this class. This class is Pass/No Pass.

Required Concurrent Course(s): *Take ENGR 2980*

ENGR 2999 - Special Topics in Engineering Technology

3 Credit(s); 3 Lecture Hour(s)

The course presents a specific topic in Engineering Technology that is not normally covered in the current ENGR curriculum. Credit hours and topics will be pre-approved by the academic administration.

ENGR 3030 - Measurement & Instrumentation

3 Credit(s); 2 Lab Hour(s), 2 Lecture Hour(s)

This course presents theory and application of engineering measurement concepts including: static and dynamic measurements of temperature, pressure, acceleration, force, moments, displacement and flow sensing, calibration, statistical and uncertainty analysis, sampling, signal conditioning, dynamic response, and emphasis of computerized data acquisition.

Required Prerequisite Course(s): *Take MATH 1130*

ENGR 3980 - Cooperative Work Experience II

1 Credit(s); 10 Cooperative Work Hour(s)

A cooperative work experience provides an opportunity for students to obtain practical work experience in the engineering field while earning college credit. This on or off campus employment experience can be paid or unpaid. The work experience is coordinated by a faculty member who visits the job site for a conference with the student and the supervisor at least once per semester. Students must complete 150 hours of work experience for each hour of credit. This class is Pass/No Pass (P/NP)

Required Prerequisite Course(s): *Take ENGR 2980. Instructor permission required*

ENGR 3990 - Cooperative Work Experience Seminar II

1 Credit(s); 1 Seminar Hour(s)

This course is taken concurrently with ENGR 3980 - Cooperative Work Experience II. Students will discuss their workplace experiences, identify the skills required, assess their performance, and present their learning experience and how it prepared them for a career in engineering. Students must obtain permission of the instructor to enroll in this class. This class is Pass/No Pass.

Required Concurrent Course(s): *Take ENGR 3980. Instructor permission required.*

ENGR 4010 - Advanced PLC and Robotics

3 Credit(s); 2 Lab Hour(s), 2 Lecture Hour(s)

This course focuses on the use and integration of PLC and Robotic systems with the addition of basic 2D vision systems.

Required Prerequisite Course(s): *Take ENGR 2010*

ENGR 4050 - Senior Technology Capstone

3 Credit(s); 3 Lecture Hour(s)

This course will provide each student with the opportunity to work in a team environment to solve design problems and to utilize his/her knowledge in critical thinking. Students will reach design decisions and will make oral and professional presentations to their peers and to professionals at term's end. Students are expected to show evidence of significant individual contributions to team efforts, as well as due consideration of such design aspects as effectiveness, material selection, ergonomics, safety, cost, effect on the environment, ethics, ease of production, etc.

Required Prerequisite Course(s): *Complete 90 credit hours, MECT 4050, MECT 4910 or ENGR 3980*

Required as Prerequisite or Concurrent Course(s): *Take MECT 4050*

ENGR 4210 - Design of Engineering Experiments

3 Credit(s); 3 Lecture Hour(s)

This course prepares students to analyze statistically designed experiments and their importance in data analysis, industrial experiments, role of randomization, fixed and random effect models and ANOVA, block design, latin square design, factorial and fractional factorial designs and their analysis.

Required Prerequisite Course(s): *Take MATH 1151*

ENGINEERING DESIGN

ENRD 2150 - Computer Aided Design I

3 Credit(s); 2 Lab Hour(s), 2 Lecture Hour(s)

This course is designed to introduce the student to fundamentals of Computer Aided Drafting and 3D Modeling. The student will create single-view, multi-view, sectional, and auxiliary view drawings with dimensions and tolerances. The student will also draw a multiple sheet/multiple part assembly drawing complete with a bill of materials. TAG: OET012CAD - CTAG: CTMET005

ENRD 2160 - Introduction to Architectural Drafting

2 Credit(s); 2 Lab Hour(s), 1 Lecture Hour(s)

This is an introductory level course which uses architectural design exercises beginning with the floor plan, then using step-by-step tutorial lessons, the project is followed through to create Furniture, Fixture & Equipment (FF&E) plans, interior elevations, schedules, and details. Throughout the project, new commands and design concepts are covered at the appropriate time. Focus is placed on the most essential parts of the design concept rather than an exhaustive review of every sub-feature of a particular concept. Semesters available: Day - Sp Evening - Sp

ENRD 2170 - Computer Aided Design II

2 Credit(s); 2 Lab Hour(s), 1 Lecture Hour(s)

This course is designed to introduce the student to fundamentals of Computer Aided 3D Modeling. Topics include solid modeling, surface modeling, analyzing 3D objects, creating 2D drawings from 3D models, creating 3D assemblies and motion studies. Semesters available: Day - F Evening - F

Required Prerequisite Course(s): *Take ENRD 2150*

ENRD 2260 - Solid Modeling

3 Credit(s); 3 Lecture Hour(s)

The student will use current parametric modeling software to create 3D models and produce various drawing views such as orthographic, isometric, sectional and auxiliary views from these models and generate a bill of materials as well as demonstrate the ability to bi-directionally associate between the model and the drawing. The student will also determine the basic physical properties of the model such as area, mass and volume. The student will also apply rigid body animation techniques to a solid model. Semesters available: Day - F Evening - F

ENRD 2670 - Intro to 3 D Architectural Design

3 Credit(s); 2 Lab Hour(s), 2 Lecture Hour(s)

This is a course in Architectural Design using 3D parametric software. The student will create 3D buildings from basic 2D sketches using parametric dimensioning and constraints. Elevation views and cross sections will be created from the 3D building. Lights and furniture will be placed. The student will also create realistic presentation view and plot the finished results.

ENRD 2680 - 3D Design Presentation

3 Credit(s); 3 Lecture Hour(s)

Students will create realistic designs and animations by applying materials, adding lights and shadows to objects they have created or imported. Students will also create animation by using controllers, inverse kinematics, and reactors. The result will be life-like animations that seem to be affected by gravity, magnetism, and the elements of weather, lights and shadows. Semesters available: Day - Sp Evening - Sp

ENRD 2710 - Electro-Mechanical Drafting

2 Credit(s); 2 Lecture Hour(s)

This course begins with an introduction to the CAD software and then the student will use this software to draw wiring diagrams, schematics, and printed circuits. A study of symbols and an introduction to chassis and panel layout and design is included. Semesters available: Day - Sp Evening - Sp

Required as Prerequisite or Concurrent Course(s): *Take ENRD 2150 or ELET 1510;*

ENRD 2800 - Computer Animation

3 Credit(s); 2 Lab Hour(s), 2 Lecture Hour(s)

This course provides an introduction to the concepts, techniques and processes utilized in the production of 3D animation with digital tools. Techniques including thumbnails, storyboarding, and key-frame animation will be introduced. Students will also explore model creation and manipulation, scene construction, and camera and lighting application. Each student will produce a project suitable for portfolio inclusion for either the Engineering Design or the Visual Communications program. Semesters available: Day - Sp Evening - Sp

ENRD 2820 - Capstone Presentation

2 Credit(s); 2 Lab Hour(s), 1 Lecture Hour(s)

The students will use this opportunity to showcase what they have learned by creating their own project. The design can be mechanical, architectural, and electrical or a combination of all, but it must original. The proposal will be treated as though it were an engineering design proposal with cost and time estimates as well as a bill of materials. Students will apply accepted Principles of Project Management from inception to completion of the project, Semesters available: Day - Sp Evening - Sp

Required Prerequisite Course(s): *Must have completed 12 semester hours of ENRD courses*

ENGLISH FOR SPEAKERS OF OTHER LANGUAGES

ESOL 0010 - Elementary Listening/Speaking

3 Credit(s); 3 Lecture Hour(s)

This course helps students to build oral and aural comprehension skills through intensive practice in speaking and understanding American English. Students learn to identify significant aspects of academic lectures and respond appropriately in academic discussions. Particular attention is given to vocabulary, fluency, and pronunciation. Semesters available: Day - F

ESOL 0020 - Elementary Reading/Writing

3 Credit(s); 3 Lecture Hour(s)

This course helps students develop reading and writing skills needed for success in American college classes. Students learn to write varied and correct sentences and to connect sentences into well-formed paragraphs. Students also learn effective reading techniques and vocabulary to increase speed and comprehension beyond the elementary level. Semesters available: Day - F

ESOL 0030 - Elementary Grammar

3 Credit(s); 3 Lecture Hour(s)

This course helps students develop accuracy in using standard American English. Particular attention is devoted to common grammar problem areas for beginning ESOL speakers and writers. Oral and written practice in using appropriate language structures is provided. Semesters Available: Day-F

ESOL 0040 - Elementary Topics in Culture
4 Credit(s); 3 Lecture Hour(s)
This course introduces the relationship of American culture and language. Students will learn to understand and use American idioms and will explore interesting aspects of American culture through browsing news articles, taking weekly field trips to local places of interest (for example, shopping mall, Amish farm, theater, museum, farmers' market) and reporting on discoveries, and discussing observations from daily life. Semesters Available: Day-F

ESOL 0110 - Low Intermediate Listening/Speaking
3 Credit(s); 3 Lecture Hour(s)
This course helps students to build low-intermediate listening and speaking skills important for their success in American college classes. Through intensive practice, students learn to develop better listening and note-taking skills and participate effectively in class discussions. Students also practice correct pronunciation and build their vocabulary skills to aid in listening comprehension and speaking fluency. Semesters available: based on need

ESOL 0120 - Low Intermediate Reading/Writing
3 Credit(s); 3 Lecture Hour(s)
This course helps students develop reading and writing skills needed for success in American college classes. Students learn to write well developed and accurate paragraphs of various types. Students also learn effective reading techniques and vocabulary to increase speed and comprehension at a low-intermediate level. Semesters available: Based on need

ESOL 0130 - Low Intermediate Grammar
3 Credit(s); 3 Lecture Hour(s)
This course helps students develop accuracy in using standard American English at a low-intermediate level. Particular attention is devoted to common grammar problem areas for low intermediate ESOL speakers and writers. Oral and written practice in using appropriate language structures is provided. Semesters available: Based on need

ESOL 0140 - Low Intermediate Topics in Culture
4 Credit(s); 2 Lab Hour(s), 3 Lecture Hour(s)
This course develops the student's understanding of the relationship of American culture and language. Students learn to use American idioms related to particular aspects of American life such as business, politics, shopping, and amusement, explore interesting aspects of American culture through browsing news articles, taking weekly field trips to local places of interest (such as a car dealership, a factory, a hospital, a park), reporting on discoveries, and discussing observations from daily life. Semesters available: Based on need

ESOL 0210 - High Intermediate Listening/Speaking
3 Credit(s); 3 Lecture Hour(s)
This course helps students to build high-intermediate listening and speaking skills important for their success in American college classes. Students practice listening, note-taking and discussion techniques related to subjects that they are likely to study in college-business, media, science, psychology, and art and design. Students also practice pronunciation and build their vocabulary skills to aid in listening comprehension and speaking fluency. Semesters Available: Based on need

ESOL 0220 - High Intermediate Reading/Writing
3 Credit(s); 3 Lecture Hour(s)
This course helps students develop reading and essay writing skills needed for success in American college classes. Students learn to write well organized, well developed and accurate essays of various types (description, comparison-contrast, cause-effect, and classification, Students practice effective reading techniques and expand their vocabulary to increase speed and comprehension at a high-intermediate level. Semesters Available: Based on need

ESOL 0230 - High Intermediate Grammar
3 Credit(s); 3 Lecture Hour(s)
This course helps students develop accuracy in using standard American English at a high intermediate level. Particular attention is devoted to common grammar problem areas for high intermediate ESOL speakers and writers. Oral and written practice in using appropriate language structures is provided. Semesters Available: Based on need

ESOL 0240 - High Intermediate Topics in Culture
4 Credit(s); 2 Lab Hour(s), 3 Lecture Hour(s)
This course introduces aspects of North American culture that contribute to academic success helping students to obtain the personal success strategies and practical skills necessary to reach their educational objectives. Students will explore topics related to academic success: personal responsibility, self-motivation, self-management, interdependence, self-awareness, emotional intelligence, college expectations, time utilization, test-taking, communication skills, study techniques, listening skills, library use, and use of College resources. They will also discuss cultural factors affecting academic achievement through reading, doing Internet research, role playing, lunching with faculty and other students, taking weekly field trips to places related to academic practices and values being examined) and reporting on discoveries. Semesters Available: Offered based on need

ESOL 0310 - Advanced Listening and Speaking
3 Credit(s); 3 Lecture Hour(s)
This course helps students to build advanced listening and speaking skills important for their success in American college classes. Students practice listening, note-taking and discussion techniques related to human behavior topics. Students also practice correct pronunciation and build their vocabulary skills to aid in listening comprehension and speaking fluency. Semesters available: Offered based on need
Required Prerequisite Course(s): *Take ESOL 0210; Minimum grade C-*

ESOL 0320 - Advanced Reading/Writing
3 Credit(s); 3 Lecture Hour(s)
This course helps students develop reading and essay writing skills needed for success in American college classes. Students learn to write well organized, well developed and accurate essays of various types (description, comparison-contrast, cause-effect, and classification, Students practice effective reading techniques and expand their vocabulary to increase speed and comprehension at a high-intermediate level. Semesters available: Offered based on need
Required Prerequisite Course(s): *Take ESOL 0220; Minimum Grade C-*

ESOL 0330 - Advanced Grammar
3 Credit(s); 3 Lecture Hour(s)
This course helps students develop accuracy in using standard American English at an advanced level. Particular attention is devoted to common grammar problem areas for advanced ESOL speakers and writers. Oral and written practice in using appropriate language structures is provided. This course prepares students to perform well in college level classes. Semesters Available: Offered based on need
Required Prerequisite Course(s): *Take ESOL 0230; Minimum Grade C-*

ESOL 0340 - Advanced Topics in Culture
4 Credit(s); 2 Lab Hour(s), 3 Lecture Hour(s)
This course explores American culture through film, literature, and fieldtrips. Students are introduced to aspects of American culture through assigned readings and class viewing of selected movies and weekly fieldtrips to places related to specific values or behaviors being discussed. The course provides an opportunity for students to understand the cultural background of the United States while learning idiomatic expressions and vocabulary and practicing writing, reading, and speaking skills. Semesters Available: Offered based on need
Required Prerequisite Course(s): *Take ESOL 0240; Minimum Grade C-*

FIRST YEAR EXPERIENCE

FYEX 0070 - College and Career Success

2 Credit(s); 2 Lecture Hour(s)

The goal of FYEX 0070 is to increase the student's ability to stay on course in college by examining soft skills necessary for success in life and assisting the student in obtaining the personal success strategies and practical skills necessary to reach his/her educational and life objectives. Topics in the course include personal responsibility, self-motivation, self-management, interdependence, self-awareness, emotional intelligence, college expectations, time utilization, test-taking, communication skills, study techniques, listening skills, library use, and use of College resources. This course is required for all first-time college students.

FYEX 1000 - CCP College and Career Success

2 Credit(s); 2 Lab Hour(s), 1 Lecture Hour(s)

This course is designed to assist students in determining their life course (academic and career). It will have students researching careers and the education/training necessary to attain those careers. Students in FYEX1000 will also look at the soft skills necessary for success in school and life – motivation, goal setting, time management/organization, interdependence, diversity, locus of control, self-efficacy/assertiveness, grit, growth mindset, deep learning, critical thinking, financial literacy, and study skills. This course includes 10 hours of financial literacy that may fulfill the state required high school financial literacy graduation requirement. (To be determined by each high school.)

GEOLOGY

GEOL 1010 - Physical Geology

4 Credit(s); 2 Lab Hour(s), 3 Lecture Hour(s)

Physical Geology is an introductory course describing the fundamental concepts of Geology for Non-Science majors. These fundamental concepts are grouped in 7 modules: Module I (Geology, Earth Science, and the Scientific Method) is an introduction to the science of Geology and its many branches; this module also discusses the steps in the scientific method, and describes the systems approach to geology. Module II (Origin and Evolution of Earth) discusses the formation of the universe and the solar system, and introduces Earth's neighbors in the solar system. Module III (Plate Tectonics and the Dynamic Earth) discusses Earth's internal structure and introduces the theory of plate tectonics, a unifying idea that explains Earth's surface processes and features. Module IV (Earth Materials: Minerals and Rocks) discusses the materials from which Earth is made, as well as their structure and classification. Module V (Structural Geology) describes how Earth's internal and external processes interact to produce earthquakes and mountains. Module VI (Energy Resources) describes the energy resources that the Earth provides us and how they are produced and used. Module VII (Hydrology and Stream Geomorphology) discusses how water shapes the surface of our planet and helps create a multitude of erosional and depositional landforms. TAG# OSC025

GEOL 1030 - Historical Geology

4 Credit(s); 2 Lab Hour(s), 3 Lecture Hour(s)

Historical Geology is an introductory course describing the fundamental concepts of Geology for Non-Science majors. It contains 12 individual lessons grouped in 3 modules. Module I - Fundamental Concepts explains the basic concepts of historical geology including, earth materials and geologic time. Module II - The Evolution of the Earth and Life through Time follows the evolutionary processes of both the solid Earth and biology through time. Module III - A Closer Look into the Major Time Periods is an in depth look into each of the 5 major time periods with the focus on the biologic evolution.

HISTORY

HIST 1010 - American History I

3 Credit(s); 3 Lecture Hour(s)

This American Studies course is an introductory survey course covering the development of American politics, law, religion, philosophy, art and literature from 1600 to 1877. The goal of the course is to help students understand the cultural development of the United States especially in relation to its religion, art, philosophy, law, and political system. (TAG# OHS043 or if combined with HIST1030 OHS010. This course also meets the requirements for the OTM Arts and Humanities - TMAH)

HIST 1030 - American History II

3 Credit(s); 3 Lecture Hour(s)

This American Studies course is an introductory survey course covering the development of American politics, law, religion, philosophy, art and literature from 1877 to the present. The goal of the course is to help students understand the cultural maturity of the United States especially in relation to its religion, art, philosophy, law, and political system. (TAG# OHS044 or if combined with HIST1030 OHS010. This course also meets the requirements for the OTM Arts and Humanities - TMAH)

HIST 1050 - Western Civilization I

3 Credit(s); 3 Lecture Hour(s)

This course presents an overview of European civilization from antiquity to about the year 1600, stressing the chief political, social, cultural, and religious developments within this span of time. This class will help students gain a better understanding of the historical narrative of European civilization, particularly as it relates to political institutions and structures and social and cultural developments; develop improved textual interpretation skills through the careful reading and discussion of ancient and medieval texts; and refine their ability to express ideas and produce convincing arguments through writing essays and short paper.

HIST 1070 - Western Civilization II

3 Credit(s); 3 Lecture Hour(s)

This course presents an overview of European civilization from around 1500 to the present, stressing the chief political, social, cultural, and religious developments within this span of time. This class will help students gain a better knowledge of the historical narrative of European civilization, particularly as it relates to political institutions and structures and social and cultural developments; develop improved textual interpretation skills through the careful reading and discussion of historical texts; and refine their ability to express ideas and produce convincing arguments through writing essays and a short paper.

HEALTH INFORMATION TECHNOLOGY

HITP 1010 - Coding & Billing

7 Credit(s); 7 Lecture Hour(s)

This course is designed as a comprehensive course for the student requiring advanced information in ICD-Coding and CPT-4 coding. The student is introduced to the use of the medical record as a source document. The course continues with coding in all applicable health care areas emphasizing the application of the related skills with accuracy and completeness. This course introduces history and development of clinical vocabularies and classification systems. Principles and guidelines for using the International Classification of Diseases (ICD-10-CM/PCS) to code diagnoses and procedures in a variety of settings are introduced. Disease and procedure coding is presented for selected body system conditions. Examples of patient records and exercises using coding manuals and software tools provide practice in coding and sequencing diagnoses and procedures. Application of coding principles to electronic record systems is explored. Practice using the encoder and reference software is a required component of this course. Hands-on practice using encoder software serves to reinforce coding skills and familiarizes students with a type of tool typically encountered in job settings. This course also is designed as a comprehensive course for the student requiring advanced information in CPT-4 Coding. The student is introduced to the current purposes and uses of CPT-4, applying the basic coding guidelines in evaluation and management services along with surgical and ancillary coding and is completed with practical experience coding from case studies. Students will also be exposed to the coding requirements for Medicare billing and other insurance carriers in the reimbursement process. Students will be introduced to the value of the quality coded data within a data quality improvement plan and for the prevention of fraud and abuse. Semesters Available Eve - F

HITP 1030 - Advanced Coding & Billing

3 Credit(s); 3 Lecture Hour(s)

This course provides the student with advanced knowledge and coding practice in clinical classification systems; in-depth prospective payment system; data quality, fraud and abuse in coding; advanced case studies. This course builds upon concepts learned in ICD-9-CM and CPT coding course. It focuses upon the management of coded data in clinical databases, for use in reimbursement and decision-support in various healthcare settings. SNOMED and additional classification systems are also introduced. The student will also be introduced to the revenue cycle, data presentation and report generation as well as coding quality and coding compliance. Semesters Available: Eve - Sp

Required Prerequisite Course(s): *Take HITP 1010*

HEALTH SERVICES TECHNOLOGY

HLST 1010 - CPR/First Aid

1 Credit(s); 1 Lecture Hour(s)

A practical course in the care and handling of victims of common emergencies; i.e., transportation and household accidents, climate related emergencies. Areas include basic life support, victim assessment, shock, bleeding, bandaging, splinting, burns, poisoning, medical emergencies, rescue and moving victims, triage. Students will receive both Basic Life Support for Heath Care Provider (CPR & AED) and Heart saver First Aid (Adult First Aid/Environmental Emergencies) cards from the American Heart Association. Semesters available: Day - F, Sp, Su Evening - F, Sp, Su

HEALTH

HLTH 1010 - Legal & Ethical Aspects of Health Care

2 Credit(s); 2 Lecture Hour(s)

This course introduces concepts of ethics and along with the structure and function of the American legal system. Students will explore a variety of legal and ethical issues that arise in health care settings. Emphasis is placed on providing quality patient care, reducing liability risks and maintaining confidentiality of patient information. The course meets the outcomes required for OHL021- Legal Aspects (Healthcare Privacy, Confidentiality, Legal and Ethical Issues) and the requirements for CTHIM002.

HLTH 1150 - Medical Terminology

2 Credit(s); 2 Lecture Hour(s)

This course will introduce medical terminology; including common medical root words, prefixes, suffixes, and combining forms. It will include common medical abbreviations, pronunciation, spelling, and definitions of medical terminology related to the human body systems. Students who are pursuing an allied health or nursing degree, or working in health care professions will enhance their knowledge of medical terminology in this course. (TAG# OHL020 and CTAG# CTMT001)

HLTH 2900 - Natural Science Transfer Capstone

1 Credit(s); 1 Lecture Hour(s)

This course provides the capstone experience for the synthesis of theoretical and practical knowledge acquired in the student's natural science education experience. It emphasizes critical thinking, ethical decision-making, problem solving, career and professional planning, and preparation for transfer into a baccalaureate or to an associate nursing or allied health program.

Required Prerequisite Course(s): *Must have completed 45 semester credit hours of Associate of Science Pre-Health Professional Focus.*

HUMAN SERVICES

HMSV 1020 - Introduction to Social Work Services

3 Credit(s); 3 Lecture Hour(s)

This course introduces the learner to the field of social work with emphasis on the "person-in-environment" and attention to a range of practice approaches to understanding and assisting of the human condition. This course is an overview of the history, values, and ethics of the profession as well as various fields of practice in which social workers are employed. TAG# OSS029

HMSV 1030 - Human Services Assessments

3 Credit(s); 2 Lecture Hour(s)

This course provides an overview of the various types of assessing completed in Human Services work. This course presents principles, types, phases, and the recording of interviews used with various types of clients including the Intake and Psychosocial Interview. In addition, various forms of assessments and documentation will be explored.

HMSV 1030L - Human Service Assessments Lab

0 Credit(s); 2 Lab Hour(s)

Required Concurrent Course(s): *Take HMSV 1030*

HMSV 1090 - Group Work in Human Services

3 Credit(s); 2 Lab Hour(s), 2 Lecture Hour(s)

This course places importance on understanding how groups work effectively and ineffectively and in understanding how groups can be used as a change or growth opportunity. Not only is the focus on group process, but the students' ability to increase their interpersonal effectiveness while working with human services clients.

Required Prerequisite Course(s): *Take HMSV 1030*

HMSV 1150 - Introduction to Chemical Dependency

3 Credit(s); 3 Lecture Hour(s)

This course provides an introduction into the field of chemical dependency counseling. This course meets all requirements necessary to apply for the Chemical Dependency Counselor Assistant (CDCA) phase I. This course looks at the essentials of chemical dependency counseling, including the characteristic of a counselor, ethic and legal issues, the process of becoming a counselor, theories of addiction, counseling procedures and strategies, group work, assessment and diagnosis, and treatment planning.

HMSV 1170 - Directed Practice/Seminar

3 Credit(s); 3 Directed Practice Hour(s)

This course will introduce the student to the components of professionalism and the challenges facing those who are in the profession of Human and Social Works Services. This course also provides a practicum orientation to prepare students for the Human Services Program. Students will also complete seventy-five (75) hours of directed practice.

Required Prerequisite Course(s): *Take HMSV 1020 HMSV 1030*

Required as Prerequisite or Concurrent Course(s): *Take ENGL 1010*

HMSV 1190 - Death and Dying

3 Credit(s); 3 Lecture Hour(s)

This course will focus on why and how people experience loss, death and grief. We will investigate the ideas of Kubler-Ross and others and expand our exploration to include the Eastern and Judeo-Christian perspectives. In addition, we will consider a variety of sources of grief (death, divorce, alcoholism, birth of a handicapped child, life-threatening illnesses, etc.) and how people react to such events

HMSV 2030 - Introduction to Case Management

3 Credit(s); 3 Lecture Hour(s)

This course introduces the basic theory and practice of Case Management. It outlines case management as it specifically relates to the fields of developmental disabilities, mental health, and vocational rehabilitation. Topics covered include the roles and functions of a case manager; skills needed to effectively administer and service caseload activity; utilization of community services, and the maintenance of a client-centered approach to case management.

Required Prerequisite Course(s): *Take HMSV 1020, HMSV 1170*

HMSV 2050 - Social Problems

3 Credit(s); 3 Lecture Hour(s)

This course will present an overview of generally recognized social problems by sociological measurement. Definitions of social problems and an understanding of their impact on the quality of life and the social work field will be implemented.

Required Prerequisite Course(s): *Take HMSV 1020, HMSV 1170*

HMSV 2070 - Practicum/Seminar II
4 Credit(s); 2 Lecture Hour(s), 14 Practicum Hour(s)
This course provides students with hands-on experience within the Human and Social Work Services field. This course involves placement of the student into an actual work environment. The student will complete 240 hours of work experience at the placement site. This experience provides the foundation for developing the student into a competent human services worker. In addition, the course provides opportunities for students to further develop their skills and to share their knowledge and viewpoints through a presentation, leadership, and report writing format.
Required Prerequisite Course(s): *Take HMSV 1020 HMSV 1090 HMSV 1170*
Required as Prerequisite or Concurrent Course(s): *Take ENGL 1030*

HMSV 2090 - Treatment Modalities/Crisis Intervention
3 Credit(s); 3 Lecture Hour(s)
This course provides an overview of the typical maturational and situational crises confronting the human service worker. Special emphasis on characteristics and dynamics of a crisis, the assessment process, intervention strategies, the referral process, and available community resources and services for the client in crisis.
Required Prerequisite Course(s): *Take HMSV 2030, HMSV 2050, HMSV 2070*

HMSV 2110 - Poverty and Social Welfare
3 Credit(s); 3 Lecture Hour(s)
Poverty and Social Welfare is a course providing students with an understanding of the relationship between poverty, discrimination, and economics. Students will gain a perspective of the institutional forces that impact the vulnerable populations of society. Student will learn the history behind the development of social welfare and social services in United States, as well as understand how social welfare policies affect the delivery of social services from a state and federal level. Student will show development in the areas of social services ideologies, values, and ethics. TAG # OSS030
Required Prerequisite Course(s): *Take ENGL 1030*

HMSV 2120 - Human Disabilities
3 Credit(s); 3 Lecture Hour(s)
This course will explore causes of disability and behavioral health issues, characteristics, economic implications, social and emotional impact on the individual. How society deals with difference and the impact on society will also be explored.

HMSV 2150 - Substance Abuse & Treatment
3 Credit(s); 3 Lecture Hour(s)
This course examines the biological, psychological, and societal forces that encourage the use, misuse, abuse and addiction to drugs. Specific drug classifications and the effect of these drugs on the individual will be explored. Theories and models of addition and treatment will be explored as will DSM5 criteria. Assessments used in the field will be introduced. The need for generalist training in the field of Human Services will be emphasized.
Required Prerequisite Course(s): *Take HMSV 1150*

HMSV 2160 - Substance Abuse Counseling: Core Functions
3 Credit(s); 3 Lecture Hour(s)
This course will demonstrate the base of knowledge and skills necessary for addictions counseling. Students will develop and demonstrate knowledge of the 12 core functions of a substance abuse counselor. It will prepare students for further education in the specialized field of addictions counseling.
Required Prerequisite Course(s): *Take HMSV 2150*

HMSV 2270 - Practicum/Seminar III
4 Credit(s); 2 Lecture Hour(s), 21 Practicum Hour(s)
This course is designed to provide the student with hands-on experience within the Human and Social Work Services field. This course involves placement of the student in an actual work environment. This work experience provides the student with the foundation to be a competent worker within the Human and Social Work Services field. The student will complete a minimum of 210 physical hours at an approved site. The student will also attend a weekly seminar providing an opportunity to share their experiences and learned skills with others.
Required Prerequisite Course(s): *Take HMSV 2030 HMSV 2050 HMSV 2070*

HMSV 2999 - Special Topics in Human Services
3 Credit(s); 3 Lecture Hour(s)
This course enables faculty members in the human services department to present various topics of current interest to students throughout the college on a limited basis. The course may be offered twice before it must be discontinued or added to the curriculum via the required Curriculum Committee process. Semesters available: As Needed

HUMANITIES

HUMA 1010 - Introduction to the Humanities
3 Credit(s); 3 Lecture Hour(s)
This course is a genre-based introduction to the humanities and the fine arts. The student will explore the six major means of artistic expression within the fine arts: painting, literature, drama, film, photography, and sculpture. The course focuses on an understanding of the genre itself as well as the various critical theories that apply to the fine arts, including but not necessarily limited to mimesis, formalism, didacticism, and postmodernism. Field trips are required in the course. This course meets the requirements for OTM in Arts and Humanities TMAH.

HUMA 1030 - Leadership and the Classics
3 Credit(s); 3 Lecture Hour(s)
This course is designed to provide learners with a fundamental awareness of leadership qualities and to help identify their personal leadership philosophies. The course is an interdisciplinary study that explores the relationships that exist among philosophy, history, meta-history, literature, drama, film, and visual art as they reveal examples of and standards for leadership. Semesters available: Day - F Evening - Offered based on need.

HUMA 2999 - Special Topics Humanities
3 Credit(s); 3 Lecture Hour(s)
This course enables faculty members in Humanities to present various topics of current interest to students throughout the college on a limited basis. The course may involve participation in required field trips. Course may be repeated on different topic. The course may be offered twice before it must be discontinued or added to the curriculum via the required Curriculum Committee process. The course meets the humanities elective requirements in most NC State's degree programs. Semesters available: Offered based on need.

INFORMATION TECHNOLOGY

ITEC 1420 - Introduction to Information Security
3 Credit(s); 2 Lab Hour(s), 2 Lecture Hour(s)
This course provides an overview of security challenges and strategies of countermeasure in the information systems environment. Topics include definition of terms, concepts, elements, and goals incorporating industry standards and practices with a focus on confidentiality, availability and integrity aspects of information systems.

ITEC 1430 - Certified Ethical Hacker (CEH)
3 Credit(s); 3 Lab Hour(s), 2 Lecture Hour(s)
This ethical hacking and countermeasures course prepares students for EC-Council's Certified Ethical Hacker (CEH) exam. The course focuses on hacking techniques and technology from an offensive perspective. The student will learn to scan, test, hack and secure systems. Students will learn the five phases of ethical hacking: reconnaissance; gaining access; enumeration; maintaining access; and covering their tracks. Throughout the course students will be immersed in a hacker's mindset, evaluating not just logical, but physical security-exploring every possible point of entry to find the weakest link in an organization.
Required Prerequisite Course(s): *Take ITEC 1640 ITEC 1650 and ITEC 1840 with a Minimum Grade of C- OR take ITEC-1635 and ITEC 1690 with a Minimum Grade of C-*

ITEC 1610 - IT Essentials
3 Credit(s); 2 Lab Hour(s), 2 Lecture Hour(s)
This course covers the fundamentals of computer hardware and software as well as more advanced concepts such as security, networking, and the responsibilities of an information and communications technology (ICT)professional. The curriculum helps students prepare for entry-level ICT career opportunities and the CompTIA A+ certification. CTAG# CTIT014

ITEC 1620 - WIRESHARK 101

2 Credit(s); 2 Lab Hour(s), 1 Lecture Hour(s)

This course provides a starting point for analyzing network traffic, troubleshooting network performance, and detecting network security related incidents. Students will capture, filter, and analyze network traffic based on network protocols, applications, and data origin.

Required Prerequisite Course(s): *Take ITEC 1640 with a minimum grade of C-*

ITEC 1640 - INTRODUCTION TO NETWORKS CCNA1

2 Credit(s); 2 Lab Hour(s), 1 Lecture Hour(s)

This is the first course in a series of three. The curriculum provides a comprehensive introduction to the networking field and in-depth exposure to fundamental networking, LAN switching, wireless LANs, basic routing, Cybersecurity, WAN concepts, VPNs, QoS, virtualization, and network automation. Threaded throughout the course are security concepts and skills including threat mitigation through LAN security, ACLs, and IPsec. Through hands-on lab activities, students learn how to implement network technologies and troubleshoot common issues. This course, together with ITEC 1645 and ITEC 1665, prepares students for Cisco's CCNA certification exam. CTAG: CTIT007

ITEC 1645 - SWITCHING, ROUTING, AND WIRELESS ESSENTIALS CCNA2

2 Credit(s); 2 Lab Hour(s), 1 Lecture Hour(s)

This is the second course in a series of three. The curriculum provides a comprehensive introduction to the networking field and in-depth exposure to fundamental networking, LAN switching, wireless LANs, basic routing, Cybersecurity, WAN concepts, VPNs, QoS, virtualization, and network automation. Threaded throughout the course are security concepts and skills including threat mitigation through LAN security, ACLs, and IPsec. Through hands-on lab activities, students learn how to implement network technologies and troubleshoot common issues. This course, together with ITEC 1640 and ITEC 1665, prepares students for Cisco's CCNA certification exam. CTAG: CTIT008

Required as Prerequisite or Concurrent Course(s): *Take ITEC 1640 with a minimum grade of C-*

ITEC 1650 - LINUX FUNDAMENTALS (LINUX+)

3 Credit(s); 2 Lab Hour(s), 2 Lecture Hour(s)

This course presents an overview of Linux operating systems and an introduction to data communication concepts in Linux environments. Architecture, package management, and GNU/Unix commands are discussed. Basic Linux shell and scripting tools are demonstrated. Students learn how to install and administer essential Linux system and networking services. This course prepares students for CompTIA's Linux+ certification.

ITEC 1665 - ENTERPRISE NETWORKING, SECURITY, AND AUTOMATION CCNA3

2 Credit(s); 2 Lab Hour(s), 1 Lecture Hour(s)

This is the third course in a series of three. The curriculum provides a comprehensive introduction to the networking field and in-depth exposure to fundamental networking, LAN switching, wireless LANs, basic routing, Cybersecurity, WAN concepts, VPNs, QoS, virtualization, and network automation. Threaded throughout the course are security concepts and skills including threat mitigation through LAN security, ACLs, and IPsec. Through hands-on lab activities, students learn how to implement network technologies and troubleshoot common issues. This course, together with ITEC 1640 and ITEC 1645, prepares students for Cisco's CCNA certification exam.

Required Prerequisite Course(s): *ITEC1645 (minimum grade of C-)*

ITEC 1690 - NETWORK SECURITY (SECURITY+)

3 Credit(s); 2 Lab Hour(s), 2 Lecture Hour(s)

This course helps students acquire the knowledge and skills required to identify risk and to employ risk mitigation activities that ensure infrastructure and operational security with respect to network and data confidentiality, integrity, and availability. Students will use a variety of tools to capture, analyze, and generate network traffic. Students will also gain an awareness of applicable security policies, laws, and regulations. This course prepares students for the CompTIA Security+ certification exam.

Required Prerequisite Course(s): *Take ITEC 1420 or ITEC 1610 with a minimum grade of C-*

ITEC 1810 - MICROSOFT OFFICE FOR IT PROFESSIONAL

3 Credit(s); 2 Lab Hour(s), 2 Lecture Hour(s)

This course prepares students to use the advanced features of Microsoft Office in a business environment. The skills learned in this course will prepare students to support business users, use the integrated tools within Microsoft Office, and apply advanced skills for analysis, reporting and presentations. Students are expected to be familiar with the fundamentals of Microsoft Windows, Word, Excel, Access, and PowerPoint. Upon completion, students should be able to demonstrate competency by producing integrated presentations, documents, spreadsheets, and relational databases. Semesters Available: Day-F Eve-F

Required Prerequisite Course(s): *Take CISS 1020 or appropriate score on the Computer Literacy Assessment*

ITEC 1840 - ETHICS IN INFORMATION AGE

3 Credit(s); 2 Lab Hour(s), 2 Lecture Hour(s)

This course provides a strong understanding of the legal, ethical, and societal implications of information technology. Updated to cover the latest technological developments, this edition examines issues associated with the professional code of ethics, cyberattacks and cybersecurity, security risk assessment, privacy, electronic surveillance, freedom of expression, censorship, protection and infringement of intellectual property, development of high-quality software systems, the impact of IT on society, social networking, and the ethics of IT corporations.

ITEC 1860 - INTRODUCTION TO PROGRAMMING

3 Credit(s); 2 Lab Hour(s), 2 Lecture Hour(s)

Python is a user-friendly, object-oriented programming language. This course provides a clear, accessible, and skill-focused approach to programming with Python using Python 3. The course offers students a thorough overview of multiple applied areas, including image processing, cryptography, astronomy, the Internet, and bioinformatics. Problem sets are based on real-world examples and problem-solving rather than language features. This course offers students a solid platform of key problem-solving skills that translate easily across programming languages.

ITEC 2410 - INTRUSION DETECTION & PREVENTION SYSTEMS

3 Credit(s); 2 Lab Hour(s), 2 Lecture Hour(s)

This course presents an overview to Intrusion Detection Systems (IDS) and Intrusion Prevention Systems (IPS) and an introduction to the security tools used to implement these technologies. Deploying an IDS/IPS on a network and tuning the platform to work in conjunction with network traffic flow will be demonstrated. Students will learn the role of an IDS/IPS in the network and how to deploy these technologies to operate effectively.

Required Prerequisite Course(s): *Take ITEC 1430, ITEC 1650; Minimum Grade C-*

ITEC 2420 - ADVANCED NETWORK SECURITY

3 Credit(s); 2 Lab Hour(s), 2 Lecture Hour(s)

This course offers an introduction to virtual private networks (VPNs) and firewalls for securing a network. Various network security-related issues are introduced and examined. Different types of VPNs for securing data in an organizational setup are discussed as well as the benefits and architecture of a VPN and how to implement a VPN. Other topics include the utility of firewalls in tackling security problems and the limitations of a firewall. In addition, instruction is also given on how to construct, configure, and administer a firewall and the functionality of a firewall.

Required Prerequisite Course(s): *Take ITEC 1690 with a minimum grade of C-*

Required as Prerequisite or Concurrent Course(s): *Take ITEC 1430 with a minimum grade of C-*

ITEC 2430 - OPEN SOURCE SECURITY TOOLS (OSST)

3 Credit(s); 2 Lab Hour(s), 2 Lecture Hour(s)

One way to achieve sound defensive security is through an offensive mindset. This course introduces open source security tools with a focus on Kali Linux. Students will learn about open source security tools and how to exploit these technologies effectively-both offensively and defensively. A variety of open source tools will be demonstrated covering topics such as: Vulnerability Analysis, Wireless Attacks, Forensic Tools, Stress Testing, Sniffing & Spoofing, Hardware Hacking, and more. Through a series of progressively more difficult labs, students will utilize open source security tools to defend and attack both simulated and actual networks.

Required as Prerequisite or Concurrent Course(s): *Take ITEC 2410; Minimum Grade C-*

ITEC 2450 - Computer Hacking Forensic Investigator (CHFI)

3 Credit(s); 2 Lab Hour(s), 2 Lecture Hour(s)

This course is based on EC-Council's Computer Hacking Forensic Investigator course and presents a detailed methodological approach to computer forensics and evidence analysis. This is a comprehensive course covering major forensic investigation scenarios. The course enables students to acquire necessary hands-on experience on various forensic investigation techniques and standard forensic tools necessary to successfully carry out a computer forensic investigation leading to prosecution.

Required Prerequisite Course(s): *Take ITEC 1430; Minimum Grade C-*

ITEC 2460 - Cloud Computing

3 Credit(s); 2 Lab Hour(s), 2 Lecture Hour(s)

This course offers an introduction to cloud computing overview, concepts, and models. This course serves as a basis for understanding the standard cloud terminologies and methodologies needed to implement, maintain, and support cloud technologies and infrastructure. This course covers 100% of all exam CompTIA Cloud+ CV0-002, with a practical focus on real-world skills. Topics include cloud service and delivery models, various types of disk storage systems network infrastructure and management, virtualization components, performance tuning, systems management, troubleshooting and security. Mobile Device Management (MDM), business continuity and disaster recovery are also covered.

Required Prerequisite Course(s): *Take ITEC 1420 or ITEC 1610 with a minimum grade of C-*

ITEC 2500 - Capstone for Cyber Security Professional

3 Credit(s); 2 Lab Hour(s), 2 Lecture Hour(s)

This course requires students to work in teams to analyze, design, implement, and manage solutions for a comprehensive project. Teams document and present their work in formal settings throughout the course. Final presentations are reviewed by one or more information technology professionals.

Required Prerequisite Course(s): *Take COMM 1010, ENGL 1030, and also take ITEC 2410 and ITEC 2430 with a minimum grade C- in those courses*

ITEC 2610 - Implementing Window Server

3 Credit(s); 2 Lab Hour(s), 2 Lecture Hour(s)

This course focuses on the installation, storage, and compute features in Windows Server 2016. It covers general installation tasks and considerations, and the management of images for deployment. Upon successful completion of the course, students will be able to implement and configure Windows Server compute resources and Hyper-V virtualization services in an enterprise environment. This course prepares students for Microsoft's 70-740 certification exam: Installation, Storage, and Compute with Windows Server 2016.

Required Prerequisite Course(s): *Take ITEC 1420 or ITEC 1610 with a minimum grade of C-*

ITEC 2650 - Data Center Virtualization (VMware-VCA)

3 Credit(s); 2 Lab Hour(s), 2 Lecture Hour(s)

This course helps students to identify technical requirements for data center virtualization and then align those requirements with technical products and solutions that best meet those needs. Successful students will acquire a basic understanding of VMware's vSphere and related products and technologies, as well as how those technologies drive specific business virtualization solutions. This course prepares students for VMware's VMware Certified Associate - Data Center Virtualization certification exam. Semesters Available: Day-F Eve-F

ITEC 2665 - Wireless & Business Technologies

3 Credit(s); 2 Lab Hour(s), 2 Lecture Hour(s)

Upon completion of this course, students will be exposed to design, implement, and mange wireless and voice over IP (VOIP) networks, as well as remote monitoring and management (RMM) solutions and technologies. The primary focus of this course is the installation and management of wireless networks with further solutions involving day to day operations and troubleshooting. The course follows a logical organization of the Certified Wireless Network Administrator (CWNA) Wireless exam objectives (a vendor-neutral enterprise WI-FI certification). Material is presented in a concise manner focusing on increasing the student's retention and recall of exam topics. The core wireless component of this course prepares students for the Certified Wireless Network Professional's (CWNP) CWNA wireless certification exam. The VOIP component of this course introduces students to voice over IP (VOIP) technologies. Students will plan, implement, and manage VOIP networks. The VOIP component of this course prepares students for 3CX's Basic, Intermediate, and Advanced VOIP certification exams. Students are also introduced to remote monitoring and management (RMM) technologies and call tracking/ticketing systems.

Required Prerequisite Course(s): *ITEC1645 (minimum grade of C-)*

ITEC 2670 - Administering Windows Server

3 Credit(s); 2 Lab Hour(s), 2 Lecture Hour(s)

This course provides students with the knowledge and skills necessary to administer Windows servers in an enterprise environment. Successful completion of this course validates the student's ability to implement and administer a Windows Server infrastructure. This course prepares students for Microsoft's 70-742 certification exam: Identity with Windows Server 2016

Required Prerequisite Course(s): *Take ITEC 2610 with a minimum grade of C-*

ITEC 2700 - Capstone for Networking Professionals

3 Credit(s); 2 Lab Hour(s), 2 Lecture Hour(s)

Working as a team, this course requires students to analyze, design, implement, and manage solutions for a comprehensive project. Teams document and present their work in formal settings throughout the course. Final presentations are reviewed by one or more information technology professionals. Semesters Available: Day-Sp Eve-Sp

Required Prerequisite Course(s): *Take COMM 1010, ENGL 1030, BUSM 1260, STAT 1010 and also take ITEC 1665, ITEC 1690, and ITEC 2665 with a minimum grade C- in those courses*

Required as Prerequisite or Concurrent Course(s): *Take ITEC 2670*

ITEC 2701 - Certification Prep for A+

1 Credit(s); 1 Lecture Hour(s)

This course, together with ITEC 1610, prepares the student to take the CompTIA A+ certification exams. Exam codes 220-901 and 220-902.

ITEC 2702 - Certification Preparation for Security+

1 Credit(s); 1 Lecture Hour(s)

This course, together with ITEC 1690, prepares the student to take the CompTIA Security+ exam, SY0-401.

ITEC 2703 - Certification Prep for Linux+

1 Credit(s); 1 Lecture Hour(s)

This course, together with ITEC 1650, prepares the student to take the CompTIA Linux+ exam, LX0-101.

ITEC 2705 - Certification Preparation for CCNA Routing & Switching

1 Credit(s); 1 Lecture Hour(s)

This course, together with ITEC 1665, prepares the student to take the Cisco CCNA Routing & Switching Certification exam.

ITEC 2706 - Certification Preparation for VMware (VCA)

1 Credit(s); 1 Lecture Hour(s)

This course, together with ITEC 2650, prepares the student to take the VMware Certification Exam VCA-Data Center Virtualization.

ITEC 2707 - Certification Preparation for Windows Server Exam (I)

1 Credit(s); 1 Lecture Hour(s)

This course, together with ITEC 2610, prepares the student to take Microsoft Exam 70-410 Installing and Configuring Windows Server 2012.

ITEC 2708 - Certification Preparation for Windows Server Exam (II)

1 Credit(s); 1 Lecture Hour(s)

This course, together with ITEC 2670, prepares the student to take Microsoft Exam 70-411 Administering Windows Server 2012.

ITEC 2709 - Certification Preparation for CWNA Wireless

1 Credit(s); 1 Lecture Hour(s)

This course, together with ITEC 2665, prepares the student for Certified Wireless Network Profession's (CWNP) Certified Wireless Network Administrator (CWNA) wireless certification exam.

ITEC 2710 - Certification Preparation for CCNA Security

1 Credit(s); 1 Lecture Hour(s)

This course, together with ITEC 1410, prepares the student to take the Cisco CCNA Security Certification Exam IINS 210-260.

ITEC 2711 - Certification Preparation for Certified Ethical Hacker (CEH)

1 Credit(s); 1 Lecture Hour(s)

This course, together with ITEC 1430, prepares the student to take EC-Council's Certified Ethical Hacker exam (EC-CEH).

ITEC 2712 - Certification Preparation for Computer Hacking Forensic Investigator (CHFI)

1 Credit(s); 1 Lecture Hour(s)

This course, together with ITEC 2450, prepares the student to take EC Council's Computer Hacking Forensic Investigator exam (EC-CHFI).

ITEC 2713 - Certification Preparation for Cloud+

1 Credit(s); 1 Lecture Hour(s)

To provide students the opportunity to earn Cloud+ industry certification.

ITEC 2980 - Cooperative Work Experience

1 Credit(s); 10 Cooperative Work Hour(s)

A cooperative work experience provides an opportunity for students to obtain practical work experience in the Information Technology field while earning college credit. This on or off campus employment experience can be paid or unpaid. The work experience is coordinated by a faculty member who visits the job site for a conference with the student and the supervisor at least once per semester. Students must complete 150 hours of work experience for each hour of credit. This class is Pass/No Pass (P/NP).

Required Prerequisite Course(s): *Students must have completed 18 semester hours of ITEC classes with a C- or better grade in each course*

Required Concurrent Course(s): *Take ITEC 2990*

ITEC 2990 - Seminar

1 Credit(s); 1 Seminar Hour(s)

This course is taken concurrently with ITEC 2980 - Cooperative Work Experience. Students will discuss their work place experiences, identify the skills required, assess their performance, and present their learning experience and how it prepared them for a career in Information Technology. Students must obtain permission from the instructor to enroll in this class. This class is Pass/No Pass (P/NP).

Required Concurrent Course(s): *Take ITEC 2980*

ITEC 2999 - Special Topics in Information Technology

3 Credit(s); 3 Lecture Hour(s)

This course enables faculty members in the Information Technology department to present a specific topic or project in Information Technology, on a limited basis, which is not normally covered in the current Information Technology curriculum. The course may be offered twice before it must be discontinued or added to the curriculum via the required Curriculum Committee process. Semesters Available: Based on Need

LIBERAL ARTS

LART 2900 - Liberal Arts Capstone

1 Credit(s); 1 Lecture Hour(s)

This course will assist students transitioning from the community college experience to a four-year educational institution. Students will integrate the knowledge and skills acquired in their general education experiences with those developed in their program specific courses to engage in projects that require them to: think critically about their prior education, explore future academic and career-related paths, and develop skills to enhance their success. Such projects may include research papers, presentations, and/or portfolio development.

Required Prerequisite Course(s): *Must have completed 45 credit hours*

MATHEMATICS

MATH 0020 - Basic Mathematics and Pre-Algebra Lab

1 Credit(s); 2 Lab Hour(s)

This supplementary lab is designed to provide additional practice and consultation in basic operations involving whole numbers, integers, decimals and fractions; solving basic equations; ratio and proportion; percentage; simplifying polynomials; measurement including the metric system; perimeters, areas, and volumes of geometric figures; square root; and descriptive statistics. MATH0020 is graded pass (P) or no pass (NP).

Required Concurrent Course(s): *Qualifying Placement test score. Co-Requisite MATH 0073*

MATH 0030 - Foundations of Mathematical Reasoning Lab

1 Credit(s); 2 Lab Hour(s)

Students in MATH 0075 Foundations of Mathematical Reasoning will complete preview assignments prior to coming to class. These reviews will prepare them to successfully engage with the in-class activities. Students in the MATH0030 lab will complete worksheets during class that will enable them to go home and successfully complete the preview assignment for MATH 0075 on their own.

Required Concurrent Course(s): *Take MATH 0075*

MATH 0065 - Algebra for Applied Geometry & Trigonometry

1 Credit(s); 1 Lecture Hour(s)

This course is designed to enhance students' algebraic methods and procedures that will be used in Applied Geometry and Trigonometry. The topics will include demonstrations in using the calculator, scientific notation, order of operations, polynomials, inequalities, exponents, radicals, solving equations, graphing, factoring, and rational expressions.

Required Prerequisite Course(s): *Take MATH 0072 or MATH 0073 with a minimum grade of C-*

Required Concurrent Course(s): *Take MATH 1070*

MATH 0075 - Foundations of Mathematical Reasoning

3 Credit(s); 3 Lecture Hour(s)

Foundations of Mathematical Reasoning is a quantitative literacy course designed to provide students with the skills and conceptual understanding to succeed in a college-level statistics course. Foundations of Mathematical Reasoning is organized around big mathematical and statistical ideas. The course will help students develop conceptual understanding and acquire multiple strategies for solving problems. The course will prepare students for success in future courses and will help them develop skills for the workplace and as productive citizens.

Required Concurrent Course(s): *Take MATH 0030*

MATH 0084 - Introductory and Intermediate Algebra

5 Credit(s); 5 Lecture Hour(s)

The course consists of a brief review of arithmetic concepts, signed numbers, fractions and decimals. It also includes linear equations and inequalities, polynomials, factoring, rational expressions and equations, coordinate graphing, systems of linear equations, simplification of radicals, functions (including linear, quadratic, exponential and logarithmic), exponents and complex numbers.

Required Prerequisite Course(s): *Take MATH 0072 or MATH 0073 (Minimum grade of C- required) or qualifying placement test scores*

MATH 1070 - Applied Geometry & Trigonometry

3 Credit(s); 3 Lecture Hour(s)

This course is a study of basic algebra, basic geometry, and an introduction to trigonometry. The class will review signed numbers and their operations, exponents, scientific notations, logarithms and systems of measurements. This class will also cover algebraic expressions and solving equations with one variable using shop problems and shop formulas and also will use shop problems for statements of comparison and mixture proportions. The basic geometry will cover points, planes, lines, polygons, triangles, circles and the application of these concepts. We will use key definitions in trigonometry to solve sides and angles of a triangle.

Required as Prerequisite or Concurrent Course(s): *Take MATH 0084 (minimum grade of C-) OR qualifying placement test scores OR co-requisite of MATH 0065*

MATH 1110 - College Algebra

4 Credit(s); 4 Lecture Hour(s)

A study of: 1) polynomial operations, rational expressions, exponents, radicals; 2) linear and quadratic equations, inequalities, absolute value applications and their graphs; 3) graphs of elementary functions and non-functions including inverse functions, combining functions, and translating and transforming functions; 4) study of polynomial functions including the Fundamental Theorem of Algebra, zeroes of polynomials, rational functions, partial fractions; 5) exponential and logarithmic functions including graphs and applications; 6) Gauss-Jordan elimination and Cramer's Rule. This course meets the requirements for OTM College Algebra TMM001.

Required Prerequisite Course(s): *Take MATH 0084 (Minimum grade of C- required) or qualifying placement test score*

MATH 1130 - Trigonometry

4 Credit(s); 4 Lecture Hour(s)

This course includes the study of trigonometric functions and inverse trigonometric functions and their graphs; solutions of right and oblique triangles and their applications; solutions of trigonometric equations and inequalities; the use of identities, vectors, and complex numbers; and solutions of polar equations and parametric equations. Students must supply a graphing calculator. This course meets the requirements for OTM Trigonometry TMM003.

Required Prerequisite Course(s): *Take MATH 1110 (Minimum grade of C- required) or qualifying placement test scores*

MATH 1150 - Calculus I

5 Credit(s); 5 Lecture Hour(s)

A study of analytic geometry, limits, continuity, the derivative, basic differentiation rules, rates of change, the product and quotient rules, higher-order derivatives, the chain rule, implicit differentiation, related rates, extrema on an interval, Rolle's Theorem and the Mean Value Theorem. Function analysis includes increasing and decreasing functions and the first derivative test, concavity and the second derivative test, limits at infinity and curve sketching. Concluding topics include anti-derivatives, indefinite and definite integrals, the Fundamental Theorem of Calculus, and integration by substitution. Applications include optimization problems, Newton's method, differentials, and areas of planar regions. This course meets the requirements for OTM Calculus I TMM005. If combined with MATH 1151, it meets the requirements for OTM Calculus I & II sequence TMM017.

Required Prerequisite Course(s): *Take MATH 1130 (Minimum grade of C- required) or qualifying placement test score*

MATH 1151 - Calculus II

5 Credit(s); 5 Lecture Hour(s)

This course is a continuation of MATH 1150 - Calculus I. Topics include integration and applications, calculus of exponential and logarithmic functions, hyperbolic functions, methods of integration, integration by parts, indeterminate forms and L'Hôpitals's Rule, moments and centers of mass, fluid pressure and force, integration techniques, series including Taylor and Maclaurin, calculus of conics, calculus of parametric equations, and polar forms of conic sections including Kepler's Laws. This course meets the requirements for Transfer 36 Calculus II TMM006. If combined with MATH 1150, it meets the requirements for Transfer 36 Calculus I & II sequence TMM017.

Required Prerequisite Course(s): *Successful completion of MATH 1150 with a grade of C- or better required*

MATH 2000 - Discrete Mathematics

3 Credit(s); 3 Lecture Hour(s)

This course presents topics in sets, logic, proofs, functions/sequences/relations, algorithms, counting methods, recurrence relations, graph theory, and trees. Emphasis is placed on proper notation and terminology as well as problem solving and proofs. Prerequisite MATH 1110 (minimum grade of C- required) or COMPASS College Algebra score of 46 or higher or ACT math score of 26 or higher or ACCUPLACER College Level Math Score of 55 or higher.

Required Prerequisite Course(s): *Successful completion of MATH 1110 with a grade of C- or better or ACT Math score of 26 or higher or ACCUPLACER Next Generation Algebra 263 or above*

MATH 2010 - Calculus III

4 Credit(s); 4 Lecture Hour(s)

This is the third of three courses in the basic calculus sequence. Topics include vector functions, functions of two or more variables, gradients, tangent planes and normal lines, LaGrange multipliers, partial derivatives (including applications), arc length and curvature, multiple integration, implicit and parametric calculus, spherical and cylindrical coordinates, Jacobians to change variables, and vector calculus including Green's Theorem, and Stoke's Theorem. This course meets the requirements for OTM Calculus III TMM018 and also TAG# OMT018.

Required Prerequisite Course(s): *Successful completion of MATH 1151 with a grade of C- or better required*

MATH 2030 - Differential Equations

5 Credit(s); 5 Lecture Hour(s)

Includes study of differential equations of first and higher order, simultaneous, linear and homogenous differential equations, solution by power series, Laplace transformations, applications, and systems of differential equations. This course meets the requirements for OTM Elementary Differential Equations TMM020 and also TAG# OMT020.

Required Prerequisite Course(s): *Successful completion of MATH 2010 with a grade of C- or better required*

MATH 2900 - Mathematics Capstone

1 Credit(s); 1 Lecture Hour(s)

This course will assist students transitioning from the community college experience to a four-year educational institution. Students will integrate the knowledge and skills acquired in their general education experiences with those developed in their program specific courses to engage in projects that require them to: think critically about their prior education, explore future academic and career-related paths, and develop skills to enhance their success. Such projects may include research papers, presentations, and/or portfolio development.

Required Prerequisite Course(s): *Must have completed 45 credit hours*

MATH 2999 - Special Topics in Mathematics

3 Credit(s); 3 Lecture Hour(s)

This course allows for mathematics courses to be offered which are not normally offered. Topics and credit hours vary

MECHANICAL ENGINEERING TECHNOLOGY

MECT 1150 - Fundamentals of Engineering Design

2 Credit(s); 3 Lab Hour(s), 1 Lecture Hour(s)

An introductory course to acquaint the student with the tools used to convey design concepts and product information in the engineering arena. 3D visualization, using sketching, drawing, solid modeling and computer aided drafting will be used. The course will also introduce the main concepts in developing an engineering design project. Semesters Offered: Day - F, Sp Evening - F, Sp

MECT 1750 - Hydraulics and Pneumatics

3 Credit(s); 2 Lab Hour(s), 2 Lecture Hour(s)

This course will be based on learning today's Fluid Control Concepts that are important in die construction in the manufacturing area. In addition to system design and layout, the student will gain experience through labs using construction and operating systems. (TAG# OET009)

MECT 1910 - Introduction to Project Design

1 Credit(s); 3 Lab Hour(s)

Students will participate in a mechanical design project as assigned.

Required Prerequisite Course(s): *Take ENGR 1010*

MECT 2230 - Engineering Materials

3 Credit(s); 2 Lab Hour(s), 2 Lecture Hour(s)

Physical metallurgy emphasizing commercial alloys, heat treatment, and surface treatment of the iron, steel, aluminum, copper, and aerospace metals. The laboratory covers basic metallographic techniques of specimen polishing, etching, and examination. (TAG# OET013)

MECT 2230L - Engineering Materials Lab

0 Credit(s); 2 Lab Hour(s)

Required as Prerequisite or Concurrent Course(s): *Take MECT 2230*

MECT 2330 - Statics

3 Credit(s); 2 Lab Hour(s), 2 Lecture Hour(s)

A problem course dealing with bodies at rest; it lays the necessary groundwork for further study in the design and analysis of structures and machines. Emphasis is placed upon the importance of the ability to draw free body diagrams used in solving problems. (TAG# OET007)

Required as Prerequisite or Concurrent Course(s): *Take PHYS 1110*

MECT 2335 - Engineering Statics

3 Credit(s); 3 Lecture Hour(s)

A problem-based course utilizing calculus in dealing with bodies at rest; it lays the necessary groundwork for further study in the design and analysis of structures and machines. Emphasis is placed upon the importance of the ability to draw free body diagrams used in solving problems.

Required Prerequisite Course(s): *Take MATH 1150*

Required as Prerequisite or Concurrent Course(s): *Take PHYS 1110*

MECT 2440 - Strength of Materials

3 Credit(s); 2 Lab Hour(s), 2 Lecture Hour(s)

A study of the effects of load on structures, frames, beams, columns, and mechanisms; including stress and strain in tension, compression, shear, and torsion; column buckling; torsion, axial and lateral deflections; thermal stresses and strains, and properties of materials. (TAG# OET008)

Required Prerequisite Course(s): *Take MECT 2330*

MECT 2905 - Design Project I

1 Credit(s); 3 Lab Hour(s)

This course builds on prior design project courses. Students will participate in a mechanical design project as assigned.

Required Prerequisite Course(s): *Take MECT 1750*

MECT 2910 - Mechanical Design Project

1 Credit(s); 3 Lab Hour(s)

This is a capstone course in the Associate Degree program; it brings together the course work and learning experiences from the mechanical engineering technology program. Students will participate in a mechanical design project to be completed following the procedures presented.

Required Prerequisite Course(s): *Take MECT 2905*

Required as Prerequisite or Concurrent Course(s): *or MECT 2440*

MECT 3010 - Applied Dynamics

3 Credit(s); 3 Lecture Hour(s)

In this course, students will study static force and moment analysis using vector methods, applications of dry friction and analysis of structures and machines. Dynamic analysis using force and acceleration, energy and momentum methods will also be discussed.

Required Prerequisite Course(s): *Take MECT 2330, MATH 1151*

MECT 3031 - Technical Thermodynamics

3 Credit(s); 3 Lecture Hour(s)

This course covers the analysis of thermodynamic concepts as they apply to heating and power production, including conservation of energy, work and heat, engines and refrigeration.

Required Prerequisite Course(s): *Take MATH 1151, PHYS 1130*

MECT 3050 - Mechanical Design I

3 Credit(s); 3 Lecture Hour(s)

This course introduces the student to the engineering design process. Analysis of stress, strain, deflection and fatigue in mechanical design will be examined. Design of beams, columns, springs and machine elements will also be discussed.

Required Prerequisite Course(s): *Take MECT 3010, MECT 2440*

MECT 3171 - Applied Thermodynamics

3 Credit(s); 2 Lab Hour(s), 2 Lecture Hour(s)

This course explores the basic principles and laws of classical thermodynamics, equations of state, reversibility and entropy applied to processes and cycles for ideal and non-ideal substances. Special attention will be given to gas power cycles, vapor and combined power cycles, refrigeration cycle. Air conditioning processes and mechanics of heat transfer will also be studied.

Required Prerequisite Course(s): *Take MATH 1151, MECT 3031*

MECT 3910 - Design Project II

1 Credit(s); 3 Lab Hour(s)

This Intermediate course continues to build on prior project design courses. Students will participate in a mechanical design project as assigned.

Required Prerequisite Course(s): *Take MECT 2910*

MECT 3950 - Design Project III

1 Credit(s); 3 Lab Hour(s)

This course introduces the student to the engineering design process. Analysis of stress, strain, deflection and fatigue in mechanical design will be examined. Design of beams, columns, springs and machine elements will also be discussed.

Required Prerequisite Course(s): *Take MECT 3910 or ENGR 2980*

MECT 4010 - Applied Fluid Mechanics

4 Credit(s); 2 Lab Hour(s), 3 Lecture Hour(s)

This course explores the fundamentals of fluid statics and dynamics including differential analysis, dimensional analysis and similitude, laminar and turbulent flow, viscosity and boundary layer concepts, and compressible flow. Students will apply these principles to practical, applied problems such as; flow of fluids in pipes and conduits, pump selection and application, the design and analysis of HVAC ducts as well as Drag and Lift.

Required Prerequisite Course(s): *Take MECT 1750, MATH 1151*

MECT 4050 - Mechanical Design II

3 Credit(s); 3 Lecture Hour(s)

This course covers design and application of mechanical components and machine elements including shafts, gears, gear drives, belt drives, chain drives, fasteners, power screws, clutches, brakes and machine frames.

Required Prerequisite Course(s): *Take MECT 2230, MECT 3050*

MECT 4910 - Design Project IV

1 Credit(s); 3 Lab Hour(s)

This advanced design project course continues to build on prior design experience. Students will participate in a mechanical design project as assigned.

Required Prerequisite Course(s): *Take MECT 1750*

Required as Prerequisite or Concurrent Course(s): *Take MECT 2440*

MANUFACTURING TECHNOLOGY

MFGT 1010 - Industrial Blueprint Reading

2 Credit(s); 2 Lab Hour(s), 1 Lecture Hour(s)

Blueprint interpretation is a core skill for Engineers and Apprentices. Students will learn the fundamentals of orthographic projection, arrangement of views, application of dimensions and tolerances, machining and finishing processes, and more. Materials presented conform to the latest ANSI standards and ISO specifications. Sample prints in both standard and metric format.

MFGT 1110 - Manufacturing Processes

3 Credit(s); 2 Lab Hour(s), 2 Lecture Hour(s)

This course offers an introduction to manufacturing methods and basic machine tool operation. Students will be provided the background needed to read and interpret technical drawings and proper use of a variety of inspection and measuring tools. Students will also develop and use shop documents such as job plans and blueprints. Lab activities include Soldering, Electroplating, CNC Engraving, Mold making, Polymer Resin and Sheet Metal fabrication. Diligent attention is given to safety in the modern manufacturing environment. OET010 Manufacturing Processes Semesters Offered: Day - F, Sp Evening - F, Sp

MFGT 1120 - Advanced Machining

2 Credit(s); 2 Lab Hour(s), 1 Lecture Hour(s)

This course builds on the basic skills presented in MFGT1110. Students who complete this course will focus on the NIMS certification exams available for Vertical Milling, Drill Press, Grinding, and Turning Operations including chucking and between centers. Focus will be on safety throughout the course. Semesters Offered: Day - Sp Evening - Sp

Required Prerequisite Course(s): *Take MFGT 1110 AND either MECT 1150 or ENRD 2260*

MFGT 1300 - Welding and Welding Equipment

2 Credit(s); 2 Lab Hour(s), 1 Lecture Hour(s)

This course covers the equipment and techniques associated with the welding and cutting processes most widely used in industry today. Topics include Oxy-fuel, SMAW, GTAW, Robotics applications, Laser welding, and others. Print reading and weld testing methods are also included. Diligent attention is given to personal and fire safety during lab activities.

MFGT 1550 - CNC Setup and Operations

1 Credit(s); 3 Lab Hour(s)

An introduction to computer numerical control (CNC) practices, equipment, setup and operation. This course will concentrate on both mills and lathes. Students will build and qualify tooling, set up jobs, load programs, and fab parts. A series of lab projects are included.

MFGT 1640 - Computer Aided Manufacturing I

2 Credit(s); 2 Lab Hour(s), 1 Lecture Hour(s)

Students will use simulation software to verify programs written in G and M codes. HAAS mill and lathe trainers will be used in conjunction with a HAAS CNC Mill for select lab exercises. Students will complete supporting documents such as lettered prints, tool drawings, set up sheets and code. Semesters Offered: Day - F Evening - F

Required Prerequisite Course(s): *Take MFGT 1110*

MFGT 2010 - Jig and Fixture Design

3 Credit(s); 2 Lab Hour(s), 2 Lecture Hour(s)

Tool design is the process of designing and developing the tools, methods, and techniques necessary to improve manufacturing efficiency and productivity. Students use Solid Modeling software to design tools used in fabricating, welding, and inspection applications. Tool design is an ever-changing, growing process of creative problem solving which addresses quality and economy to produce a competitive product to solve manufacturing situations. Semesters Offered: Day - Sp Evening - Sp

Required Prerequisite Course(s): *Take MFGT 1110 and either MECT 1150 or ENRD 2260*

MFGT 2100 - Quality Control and SPC

2 Credit(s); 2 Lecture Hour(s)

This course covers basic manufacturing concepts of Quality Control, SPC (Statistical Process Control), Lean Manufacturing, and other principles, objectives and influencing factors of production control. Students learn about planning and scheduling applications as well as interpretation and application of GDT to prints and inspection settings. Students may take NIMS (National Institute for Metalworking Skills) certification exam in Materials, Measurement and Safety. Semesters Offered: Day - Sp Evening - Sp

MFGT 2200 - Polymers & Industrial Plastics

2 Credit(s); 2 Lab Hour(s), 1 Lecture Hour(s)

This course covers basic applications of plastics in products and industry. Learn how different plastics are processed, and common and unusual plastic components and products how they are manufactured. Green applications are also introduced. Design applications are created using solid modeling programs such as Autodesk Inventor, and the prototype design process. Semesters Offered: Day - F Evening - F

MFGT 2220 - Manufacturing and Prototypes

2 Credit(s); 2 Lab Hour(s), 1 Lecture Hour(s)

Students will design and produce prototypes at the Kehoe FABLAB. Students will use Subtractive, Powder, and 3D Printers, CO2 Laser, Optical Laser Scanner, large format Digital Printer, and a variety of small shop and hand tools. Students will develop shop documents such as job plans, production schedules, and blueprints. Diligent attention is given to safety and prototype design, following the Form, Fit and Function Industrial design standard.

MFGT 2250 - Stamping Operations and Die Design

3 Credit(s); 2 Lab Hour(s), 2 Lecture Hour(s)

This course is designed to give students knowledge of press operations. An overview of standard frame structures and press accessories including stock feeders and de-coilers, as well as new press technology and current developments in the stamping industry will be presented. The second part of the course covers material strips, sheet metal models, die design, and tonnage calculations. Students will use solid modeling software to develop and troubleshoot die designs. Semesters Offered: Day - F Evening - F

Required Prerequisite Course(s): *Take MFGT 1110 AND either MECT 1150 or ENRD 2260*

MFGT 2510 - Fundamentals of Light & Lasers

2 Credit(s); 2 Lab Hour(s), 1 Lecture Hour(s)

Light plays a central role in our daily lives. Laser applications including CD players, digital cameras, bar code scanners, solar power and fiber-optics are introduced in this course. A growing and developing area of technology, Photonics applications are expanding in modern manufacturing. Fundamental information is covered in this course. Semesters Offered: Day - F Evening - F

MFGT 2520 - Elements of Photonics with NANO

2 Credit(s); 2 Lab Hour(s), 1 Lecture Hour(s)

This course covers the operational characteristics of lasers. Lasers are very useful in areas such as material processing, measurement, laser sensing and imaging, medicine, military apps, entertainment and holography. Solid state technology and applications of NANO technology is also introduced in this course. Semesters Offered: Day - Sp Evening - Sp

Required Prerequisite Course(s): *Take MFGT 2510*

MFGT 2640 - Computer Aided Manufacturing II
2 Credit(s); 2 Lab Hour(s), 1 Lecture Hour(s)
Students will build on fundamental programming skills and knowledge of machine tools to write programs using MASTERCAM X5 for milling and turning machines. CAD/CAM/CNC combines CAD skills to create geometry with CAM software to generate G and M codes for fabrication of parts on CNC machine tools. Students will have the option to test for NIMS certifications in CNC disciplines. Semesters Offered: Day - Sp Evening - Sp

MFGT 2910 - Manufacturing Technology Project
2 Credit(s); 2 Lab Hour(s), 1 Lecture Hour(s)
This course brings together the course work and learning experiences from the Advanced Manufacturing Engineering Technology program. Each student will select and develop a manufacturing design project, with instructor approval, to be completed following the procedures presented. Students will apply accepted Principles of Project Management from inception to completion of the project. Semesters Offered: Day - Sp Evening - Sp
Required Prerequisite Course(s): *Completed 12 semester hours for MFGT courses*

MFGT 2999 - Special Topics in Manufacturing
3 Credit(s); 3 Lecture Hour(s)
This course presents a specific topic in Manufacturing Engineering Technology that is normally not covered in the current Tool & Die Technology. Credit hours (1-3) and topics will be pre-approved by the academic administration.

MORTUARY SCIENCE

MSCI 1070 - Thanatology
3 Credit(s); 3 Lecture Hour(s)
This course focuses key aspects of thanatology: dying, end-of-life decision making, loss, grief, and mourning, assessment and intervention, traumatic death and death education. The subjects are explored through the lenses of culture, socialization, religion, spirituality, and historical and contemporary perspectives. Life span issues and integration of family, larger systems, ethical and legal issues are also explored. Semesters available: Eve - F, Sp

MUSIC

MUSC 1010 - Music Appreciation
3 Credit(s); 3 Lecture Hour(s)
Develop listening skills used for understanding elements of musical style in a historical perspective and the significance of music as fine art.

OCCUPATIONAL THERAPHY ASSISTANT

OTAP 1015 - Introduction to OTA
1 Credit(s); 1 Lecture Hour(s)
This course will examine the profession of occupational therapy and its role in educational systems, health care and the community. Topics include the history of the profession, the development and utilization of occupational therapy assistants, philosophical principles of the profession, the Occupational Therapy Framework: Domain and Process, Standards of Practice, Code of Ethics, roles of the occupational therapist and occupational therapy assistant, and national and state credentialing requirements. Students will be exposed to the relevant theories prevalent within the occupational Therapy profession. There will also be discussion about professional relationships, along with exploration of cultural, ethical and legal issues in occupational therapy practice. Relationship to Curriculum Design: This course addresses the Occupational Performance, Client-Centered Practice, Health, Wellness and Quality of Life, Communication Skills, and Professional and Ethical Behavior threads of the curriculum design.
Required Concurrent Course(s): *Take OTAP 1020, OTAP 1021*

OTAP 1020 - Foundations I: Activity Analysis
2 Credit(s); 1 Lecture Hour(s)
The student will be introduced to the analysis and performance of occupations in work, self-care, play and leisure throughout the life span, including adaptation to achieve a therapeutic goal. This course will focus on the development of observation skills, assessment and teaching, adapting, and grading occupations. The proper care, storage, and maintenance of equipment and supplies will also be discussed. Relationship to Curriculum Design: This course addresses the Occupational Performance and Professional and Ethical Behavior threads of the curriculum design.
Required Concurrent Course(s): *Take OTAP 1015, OTAP 1021 and OTAP 1020L*

OTAP 1020L - Foundations I: Activity Analysis Lab
0 Credit(s); 3 Lab Hour(s)
Required Concurrent Course(s): *Take OTAP 1020*

OTAP 1021 - Foundations II: Therapeutic Relationships
2 Credit(s); 1 Lecture Hour(s)
This course provides an overview of the origins of psychiatric occupational therapy and the theoretical foundation of mental health practice. How the occupational therapy process is applied within the context of mental health practice is discussed. In addition, interpersonal relationships, therapeutic use of self and group roles and development are discussed. Students continue to build observation skills, interaction skills and practice leading and working within groups. Relationship to Curriculum Design: This course addresses the Occupational Performance, Client-Centered Practice, Health, Wellness and Quality of Life, Communication Skills, Clinical Reasoning, and Professional and Ethical Behavior threads of the curriculum design.
Required Concurrent Course(s): *Take OTAP 1015, OTAP 1020 and OTAP 1021L*
Required as Prerequisite or Concurrent Course(s): *Take PSYC 1010*

OTAP 1021L - Foundations II: Therapeutic Relationships Lab
0 Credit(s); 3 Lab Hour(s)
Required Concurrent Course(s): *Take OTAP 1021*

OTAP 1022 - OTA Kinesiology
3 Credit(s); 2 Lecture Hour(s)
Kinesiology incorporates the study of many areas including anatomy, physiology, physics and biomechanics. Students will learn about qualitative and quantitative methods to gather information about client's movements. Students are introduced to range of motion and manual muscle testing and learn to apply them within activity analysis. They will work on developing a greater understanding of how to use this information to develop effective interventions to effect change within their clients. Relationship to Curriculum Design: This course addresses the Occupational Performance, Clinical Reasoning, Professional, and Ethical Behavior threads of the curriculum design.
Required Prerequisite Course(s): *Take BIOL 2751, OTAP 1015, OTAP 1020, OTAP 1021*
Required Concurrent Course(s): *Take OTAP 1022L*

OTAP 1022L - OTA Kinesiology
0 Credit(s); 3 Lab Hour(s)
Required Concurrent Course(s): *Take OTAP 1022*

OTAP 1030 - Process I: Developmental
3 Credit(s); 8 Clinical Hour(s), 2 Lecture Hour(s)
A review of human development from birth to adolescence in relation to occupational performance will be provided. Issues that may impact occupational performance and thus require adaptation will be discussed. Topics will include theory, evidence-based practice, frames of reference, the occupational therapy process and the roles of OTA and OT in practice settings for this population will be discussed. Relationship to Curriculum Design: This course addresses the Occupational Performance, Client-Centered Practice, Health, Wellness and Quality of Life, Clinical Reasoning, and Professional and Ethical Behavior threads of the curriculum design.
Required Prerequisite Course(s): *Take BIOL 2751, OTAP 1020 OTAP 1021*
Required Concurrent Course(s): *Take OTAP 1031 and OTAP 1030L*
Required as Prerequisite or Concurrent Course(s): *Take PSYC 2010*

OTAP 1030L - Process I: Developmental Lab
0 Credit(s); 3 Lab Hour(s)
Required Concurrent Course(s): *Take OTAP 1030*

OTAP 1031 - Practice I: Developmental
2 Credit(s); 1 Lecture Hour(s), 5 Practicum Hour(s)
This course provides observation and experience opportunities for individuals to learn more about the client population (children to adolescents) and to begin to develop professional insights. The course provides lecture and discussion to complement topics and experiences in directed practice (fieldwork level I) sites. Directed practice (fieldwork level I) hours may be supervised by clinical educators or faculty at approved health care, educational or community setting. Students are responsible for transportation. Relationship to Curriculum Design: This course addresses the Occupational Performance, Communication Skills, Clinical Reasoning, Professional
Required Concurrent Course(s): *Take OTAP 1030*

OTAP 2040 - Process II Adult Physical Dysfunction
3 Credit(s); 2 Lecture Hour(s)
A review of human development from adolescence to adulthood in relation to occupational performance will be provided. The impact of traumatic injury and illnesses on occupational performance will be explored. Issues that may impact occupational performance and thus require adaptation will be discussed. Topics will include theory, evidence-based practice, frames of reference, the occupational therapy process and the roles of OTA and OT in practice settings for this population will be discussed. Relationship to Curriculum Design: This course addresses the Occupational Performance, Client-Centered Practice, Health, Wellness and Quality of Life, Clinical Reasoning, and Professional and Ethical Behavior threads of the curriculum design.
Required Prerequisite Course(s): *Take BIOL 2752, OTAP 1030*
Required Concurrent Course(s): *Take OTAP 2041 and OTAP 2040L*

OTAP 2040L - Process II Adult Physical Dysfunction Lab
0 Credit(s); 3 Lab Hour(s)
Required Concurrent Course(s): *Take OTAP 2040*

OTAP 2041 - Practice II Adult Physical Dysfunction
2 Credit(s); 1 Lecture Hour(s), 5 Practicum Hour(s)
This course provides observation and experience opportunities for individuals to learn more about the client population (adolescence to adulthood) and to begin to develop professional insights. The course provides lecture and discussion to complement topics and experiences in directed practice (Level I fieldwork) sites. Directed practice (Level I fieldwork) hours may be supervised by clinical educators or faculty at approved health care, educational or community setting. Students are responsible for transportation. Relationship to Curriculum Design: This course addresses the Occupational Performance, Communication Skills, Clinical Reasoning, Professional and Ethical Behavior threads of the curriculum design.
Required as Prerequisite or Concurrent Course(s): *Take OTAP 2040*

OTAP 2050 - Process III Community and Aging
4 Credit(s); 3 Lecture Hour(s)
A review of human development from adulthood to geriatrics in relation to occupational performance will be provided. The impact of aging on occupational performance with an emphasis on aging in society will be explored. Issues that may impact occupational performance and thus require adaptation will be discussed. Topics will include theory, evidence-based practice, frames of reference, the occupational therapy process and the roles of OTA and OT in practice settings for this population will be discussed. Relationship to Curriculum Design: This course addresses the Occupational Performance, Client-Centered Practice, Health, Wellness and Quality of Life, Clinical Reasoning, and Professional and Ethical Behavior threads of the curriculum design.
Required Prerequisite Course(s): *Take OTAP 2040*
Required Concurrent Course(s): *Take OTAP 2050L, OTAP 2051 and OTAP 2065*

OTAP 2050L - Process III Community and Aging Lab
0 Credit(s); 3 Lab Hour(s)
Required Concurrent Course(s): *Take OTAP 2050*

OTAP 2051 - Practice III Community and Aging
2 Credit(s); 1 Lecture Hour(s), 5 Practicum Hour(s)
This course provides observation and experiential opportunities for individuals to focus on the psychological and social factors that influence engagement in occupation within the adult and geriatric client population and to begin to develop professional insights. The course provides lecture and discussion to complement topics and experiences in directed practice (Level I fieldwork) sites. Directed practice (Level I fieldwork) hours may be supervised by clinical educators or faculty at approved health care, educational or community setting. Students are responsible for transportation. Relationship to Curriculum Design: This course addresses the Occupational Performance, Health, Wellness and Quality of Life, Communication Skills, Clinical Reasoning, and Professional and Ethical Behavior threads of the curriculum design.
Required Concurrent Course(s): *Take OTAP 2050*

OTAP 2065 - Current Practice Trends
2 Credit(s); 2 Lecture Hour(s)
Current practice trends in the local region and emerging theories and techniques in the field of occupational therapy will be explored. The role of occupational therapy assistants in management will be explored in addition to preparation for Professional practice. Relationship to Curriculum Design: This course addresses the Occupational Performance, Client-Centered Practice, Health, Wellness and Quality of Life, Communication Skills and Professional and Ethical Behavior threads of the curriculum design.
Required Prerequisite Course(s): *Take OTAP 2040, OTAP 2041*
Required Concurrent Course(s): *Take OTAP 2050, OTAP 2051*

OTAP 2080 - Directed Practice: FWIIA
3 Credit(s); 18 Practicum Hour(s)
Having completed three varied directed practice (Fieldwork I experiences), the student will be prepared to enter directed practice (Fieldwork Level II), a 35 hr/week experience. Students will function as staff members of cooperating facilities and use the occupational therapy process while practicing as an entry level OTA. Students are expected to comply with agency policies and to conduct themselves in a professional manner. Students may be assigned to work with individuals with developmental, physical or emotional challenges. Students are responsible for transportation, room and board. This course is graded Pass (P) or No Pass (NP).
Required Prerequisite Course(s): *Take OTAP 2050, OTAP 2051, OTAP 2065*
Required Concurrent Course(s): *Take OTAP 2081, OTAP 2085*

OTAP 2081 - Directed Practice: FWIIB
3 Credit(s); 18 Practicum Hour(s)
Having completed OTAP 2080 - Directed Practice: FWIIA, the student is prepared to complete the second directed practice (Fieldwork Level II), a 35 hr/week experience. Students will function as staff members of cooperating facilities and use the occupational therapy process while practicing as an entry level OTA. Students are expected to comply with agency policies and to conduct themselves in a professional manner. Students may be assigned to work with individuals with developmental, physical or emotional challenges. Students are responsible for transportation, room and board. This course is graded Pass (P) or No Pass (NP).
Required Prerequisite Course(s): *Take OTAP 2050, OTAP 2051, OTAP 2065*
Required Concurrent Course(s): *Take OTAP 2080, OTAP 2085*

OTAP 2085 - Seminar: FWII
1 Credit(s); 1 Seminar Hour(s)
This seminar course is designed to provide directed practice students with online support through their experiences. Students will also attend either evening or weekend "workshop seminars" arranged by the coordinating faculty to support professional development through this experience and to help prepare the student for the NBCOT examination and professional practice. This course is graded Pass (P) or No Pass (NP). Relationship to Curriculum Design: This course addresses Communication Skills, Clinical Reasoning, and Professional and Ethical Behavior threads of the curriculum design.
Required Prerequisite Course(s): *Take OTAP 2050, OTAP 2051, OTAP 2065*
Required Concurrent Course(s): *Take OTAP 2080, OTAP 2081*

PHILOSOPHY

PHIL 1010 - WESTERN PHILOSOPHY

3 Credit(s); 3 Lecture Hour(s)

This course involves an examination of the great philosophical ideas that have shaped the development of Western Civilization. These ideas include those promoted during the ancient Greek period of Western development, the early Christian era, the Protestant Reformation, the Enlightenment, the Nineteenth Century, the Modern Age, the Age of Existentialism, the Postmodern era, and the Age of Recovery. The philosophers covered include Socrates, Plato, Aristotle, St. Paul, Augustine, Occam, Aquinas, Erasmus, Luther, Descartes, Hobbes, Rousseau, Kant, Hegel, Feuerbach, Marx, Emerson, Nietzsche, Kierkegaard, Bergson, Dewey, Heidegger, Sartre, Camus, Teilhard, Habermas, Pera, Guardini, Zizek, and Ratzinger. This course meets the requirements for OTM Arts and Humanities TMAH and also TAG# OAH405.

PHIL 1110 - ETHICS

3 Credit(s); 3 Lecture Hour(s)

This course involves an examination of several ethical theories, including ethical relativism, utilitarianism, virtue ethics, social contract ethics, theological ethics, and rational ethics. Subjects covered may include the ethics of nuclear war, the ethics of suicide, ethical issues in abortion, the ethics of euthanasia, ethical issues in genetic engineering, sexual ethics, racism and sexism, capital punishment, ethics and the environment and so on. This course meets the requirements for OTM Arts and Humanities TMAH and also TAG# OAH046.

PHIL 2999 - SPECIAL TOPICS IN PHILOSOPHY

3 Credit(s); 3 Lecture Hour(s)

This course enables faculty members in philosophy to present various topics of current interest to students throughout the college on a limited basis. The course may involve participation in required field trips. Course may be repeated on different topic. The course may be offered twice before it must be discontinued or added to the curriculum via the required Curriculum Committee process. The course meets the humanities elective requirements in most NC State's degree programs. Semesters available: Offered based on need.

PHLEBOTOMY

PHLB 1110 - PHLEBOTOMY

2 Credit(s); 3 Lab Hour(s), 1 Lecture Hour(s)

This course introduces students to the theory and practice of phlebotomy using a variety of blood collection techniques. Laboratory procedures include venipuncture and skin puncture techniques. Students will correlate particular laboratory tests with specific color-coding for collection tubes. The course will specialize in the issues and trends in health care, including ethics and law, government regulations, professional development, employment opportunities, interviewing techniques, resume writing and job seeking skills. The course includes discussion of practicum experiences. This course is a flex course and may not follow the regular College calendar. The scheduled dates and times vary throughout the year. The course is taught off campus. Semesters available: Offered based on need.

Required Concurrent Course(s): *Take PHLB 1210 and ELKG 1110*

PHLB 1210 - PHLEBOTOMY DIRECTED PRACTICE

2 Credit(s); 12 Practicum Hour(s)

This course specializes in the practice of phlebotomy procedures as performed by students in the clinical laboratory or associated facilities, with practical application of phlebotomy techniques learned in PHLB 1110 - Phlebotomy. This course is a flex course and may not follow the regular College calendar. The scheduled dates and times vary throughout the year. The course is taught off campus. Semesters available: Offered based on need.

PHLB 1250 - PHLEBOTOMY SEMINAR

1 Credit(s); 1 Lecture Hour(s)

This seminar course specializes in the issues and trends in health care, including ethics and law, government regulations, professional development, employment opportunities, interviewing techniques, resume writing, and job seeking skills. This course is concurrent with PHLB 1210 - Phlebotomy Directed Practice The course includes discussion of practicum experiences. This course is a flex course and may not follow the regular College calendar. The scheduled dates and times vary throughout the year. The course is taught off campus. Semesters available: Offered based on need.

Required Concurrent Course(s): *Take PHLB 1110 and PHLB 1210*

PHARMACY TECHNICIAN TRAINING

PHRM 2100 - PHARMACY TECH TRAINING PART A

8 Credit(s); 8 Lecture Hour(s)

This is an on-line program of study. This program consists of two courses PHRM2100 and PHRM 2200. The student entering this program will be prepared to obtain the skills necessary to be a certified pharmacy technician. Upon completion of the program (PHM2100 and PHRM 2200), the student will be eligible to take the Pharmacy Technician Certification Examination, (PTCE) provided by the Pharmacy Technician Certification Board. (PTCB). PHRM2100 course content will focus on medical terminology, central and peripheral nervous system, blood and blood formation, and hormones, medication classifications to include cardiovascular drugs, renal drugs, anti-infective agents, cancer drugs, chemotherapy drugs, and vitamins. The student will learn of the regulations governing the pharmacy industry in Ohio and at the Federal level. The student will learn aseptic techniques of medication preparation. The course will cover areas pertaining to pharmaceutical to include: definitions, methods of drug preparations and dispensing, syringes, techniques of sterile compounding, solutions, parenteral anti-neoplastic agents, and stability considerations for parenteral products.

Required Prerequisite Course(s): *Take ENGL 0040, MATH 0084 & CHEM 1010; (minimum grade of C- required for all); OR qualifying placement test scores*

Required Concurrent Course(s): *Take PHRM 2200*

PHRM 2200 - PHARMACY TECH TRAINING PART B

7 Credit(s); 6 Lecture Hour(s), 7 Practicum Hour(s)

The PHRM2200 course is designed to complete the didactic portion of the Pharmacy Technician program course of study and includes a 20-hour non-paid practicum at a local pharmacy. The major focus of the course is drug calculations to include the metric system of measurements, abbreviations, apothecary systems of notation, drug calculations, IV flow rates, dosage regimens, powders volumes and pricing. A secondary focus is on pharmacy operations to focus on basic fact in pharmacy, assisting the pharmacist, general prescriptions duties, medication distribution/inventory control, and third-party reimbursement. The student will be given a mock pharmacy technician certification examination designed to mimic the Pharmacy Technician Certification Board's examination.

Required Concurrent Course(s): *Take PHRM 2100*

PHYSICAL THERAPIST ASSISTANT

PHTA 1010 - INTRO TO PHYSICAL THERAPY

1 Credit(s); 1 Lecture Hour(s)

In this course the field of physical therapy and the roles of physical therapists, physical therapists assistants, and other healthcare personnel and organizations are explored. Laws, rules, ethics, organization, and accreditation in physical therapy and healthcare are reviewed also. Management of patient rights and the legal, ethical, and moral issues involved in the patient treatment, medical and physical therapy documentation, functional outcome reporting, and SOAP note writing is introduced as well.

Required Concurrent Course(s): *Take PHTA 1040 PHTA 1070*

PHTA 1040 - Physical Agents Theory and Practice
4 Credit(s); 2 Lecture Hour(s)
The course will cover the clinical application of physical agents to be administered by the physical therapist assistant. Included are the presentation of basic physiology and theory of vital signs, patient positioning, body mechanics, transfers, sterile procedures, massage, wound care, heat, cold, hydrotherapy, pneumatic compression, ultrasound, light, and motorized traction electrical safety as well as physiology, theory, and application of ultrasound, various forms of therapeutic electrical stimulation, transcutaneous electrical nerve stimulation, and biofeedback. Bed traction and patient instruction will also be included. Semesters available: Day - Fa
Required Concurrent Course(s): *Take PHTA 1010, PHTA 1070 PHTA 1040L, PHTA 1040T*

PHTA 1040L - Physical Agents Theory and Practice Lab
0 Credit(s); 3 Lab Hour(s)
Required Concurrent Course(s): *Take PHTA 1040*

PHTA 1040T - Physical Agents Theory and Practice Test Lab
0 Credit(s)
Required Concurrent Course(s): *Take PHTA 1040*

PHTA 1070 - Functional Anatomy
3 Credit(s); 3 Lab Hour(s), 2 Lecture Hour(s)
A course involving a study of human movement, principles of mechanics, musculoskeletal anatomy and neuromuscular physiology as it relates to the development of physical therapy exercise and those forces creating human activity. The time, space and mass aspects of human motion are also presented. Laboratory activities including location and palpation of muscles. Semesters available: Day - F
Required Concurrent Course(s): *Take PHTA 1010 PHTA 1040 PHTA 1070L*

PHTA 1070L - Functional Anatomy Lab
0 Credit(s); 3 Lab Hour(s)
Required Concurrent Course(s): *Take PHTA 1070*

PHTA 1090 - Therapeutic Exercise
4 Credit(s); 5 Lab Hour(s), 2 Lecture Hour(s)
This course is beginning course work in therapeutic exercise including goniometry, range of motion, manual muscle testing, strengthening, stretching, joint mobilization, manual therapy, abnormal posture and gait training as well as wheelchair mobility, aquatic therapy and women's care Semesters available: Day - Sp
Required Prerequisite Course(s): *Take PHTA 1010 PHTA 1040 PHTA 1070*

PHTA 1090L - Therapeutic Exercise Lab
0 Credit(s); 3 Lab Hour(s)
Required Concurrent Course(s): *Take PHTA 1090*

PHTA 1090T - Therapeutic Exercise Test Lab
0 Credit(s)
Required Concurrent Course(s): *Take PHTA 1090*

PHTA 1110 - Neuromuscular Rehabilitation
4 Credit(s); 5 Lab Hour(s), 2 Lecture Hour(s)
This is a continuation of didactic and technical instruction for clinical practice. This course covers normal and abnormal motor development, pediatric conditions affecting motor development, and interventions to address infant and pediatric conditions leading to motor delays and adult neurological disorders affecting motor function and interventions to address the motor deficits of individuals with neurological motor dysfunction. Wheelchair prescription and use as well as various transfers for pediatric and neurologically impaired individuals will also be covered. Semesters available: Day - Sp
Required Prerequisite Course(s): *Take PHTA 1010, PHTA 1040, PHTA 1070*
Required Concurrent Course(s): *Take PHTA 1090 PHTA 1110T PHTA 1110L*

PHTA 1110L - Neuromuscular Rehabilitation Lab
0 Credit(s)
Required Concurrent Course(s): *Take PHTA 1110 PHTA 1110T*

PHTA 1110T - Neuromuscular Rehabilitation Test Lab
0 Credit(s)
Required Concurrent Course(s): *Take PHTA 1110, PHTA 1110L*

PHTA 2070 - Pathophysiology and Interventions
3 Credit(s); 3 Lab Hour(s), 2 Lecture Hour(s)
This course examines diagnoses encountered by the physical therapist assistant during practice and will be presented in terms of their relationship to physical therapy. Topics will include but not be limited to cardiovascular conditions, respiratory diseases, infectious diseases, and geriatric disorders. Semesters available: Day - F
Required Prerequisite Course(s): *Take PHTA 2110 and PHTA 2115*
Required as Prerequisite or Concurrent Course(s): *Take PHTA 2090 and PHTA 2170*

PHTA 2070L - Pathophysiology and Interventions Lab
0 Credit(s); 2 Lab Hour(s)
Required Concurrent Course(s): *Take PHTA 2070*

PHTA 2070T - Pathophysiology and Interventions Test Lab
0 Credit(s)
Required Concurrent Course(s): *Take PHTA 2070*

PHTA 2090 - Orthopedic Conditions and Interventions
3 Credit(s); 2 Lecture Hour(s)
This course is designed to provide more in-depth detail and knowledge involving clinical conditions and interventions related to orthopedic diagnoses. This more advanced subject matter will allow the physical therapist assistant student to integrate previous knowledge into more situations with greater understanding of the orthopedic client. Semesters available: Day - F
Required Prerequisite Course(s): *Take PHTA 2110 and PHTA 2115*
Required as Prerequisite or Concurrent Course(s): *Take PHTA 2070 and PHTA 2170*

PHTA 2090L - Orthopedic Conditions and Intervention Lab
0 Credit(s); 3 Lab Hour(s)
Required Concurrent Course(s): *Take PHTA 2090*

PHTA 2110 - Practicum I
1.5 Credit(s); 12 Practicum Hour(s)
The practicum experience is a "hands-on" reality experience providing on-the-job opportunities to acquire further knowledge, learning and opportunities for practicing skills. The practicum will take place in a facility that can provide learning experiences consistent with the student's interest and learning desires and meets approval of the instructor. Students will be supervised by a licensed physical therapist or physical therapist assistant. This practicum experience is a full-time rotation for 5 weeks with a minimum of 35 hours per week with an online seminar during the 5 weeks. Semesters available: Day - Su
Required Prerequisite Course(s): *Take PHTA 1090 and PHTA 1110*
Required as Prerequisite or Concurrent Course(s): *Take PHTA 2115*

PHTA 2115 - SEMINAR I

1 Credit(s); 1 Seminar Hour(s)

This course discusses issues relevant to the physical therapy profession and patient populations. The course also discusses time and stress management as well as styles of management and communication, utilization review, and utilization management. The course relates patient outcomes to documentation and reimbursement in the healthcare field. Introduction into research as it relates to physical therapy, along with data collection and the different methods of collecting data for research. Semesters available: Day – Su

Required Prerequisite Course(s): *Take PHTA 1090, PHTA 1110*

Required Concurrent Course(s): *Take PHTA 2110*

PHTA 2130 - PRACTICUM II

2 Credit(s); 15 Practicum Hour(s)

This is the second of three clinical rotations completed in a facility affiliated with the program. The practicum experience is a "hands-on" reality experience providing on-the-job opportunities to acquire further knowledge, learning and opportunities for practicing skills. The practicum will take place in a facility that can provide learning experiences consistent with the student's interest and learning desires and meets approval of the instructor. Students will be supervised by a licensed physical therapist or physical therapist assistant. This practicum experience is a full-time rotation for 6 weeks for a minimum of 38 hours per week. Semesters available: Day - F

Required Prerequisite Course(s): *Take PHTA 2070, PHTA 2090 and PHTA 2170*

Required as Prerequisite or Concurrent Course(s): *Take PHTA 2135, PHTA 2150, and PHTA 2155*

PHTA 2135 - SEMINAR II

1 Credit(s); 1 Seminar Hour(s)

This course is designed to review material discussed in previous physical therapy assistant courses. The review is designed to assist students in preparation for the Ohio licensing exam and the National Physical Therapist Assistant Examination. As well as to cover topics such as professional development and evidence-based practice. This course is graded Pass (P) or No-Pass (NP). Day – Sp

Required Prerequisite Course(s): *Take PHTA 2070, PHTA 2090, PHTA 2170*

Required Concurrent Course(s): *Take PHTA 2130, PHTA 2150, PHTA 2155*

PHTA 2150 - DIRECTED PRACTICE

3.5 Credit(s); 17.5 Practicum Hour(s)

This is the final clinical rotation completed in a facility affiliated with the Physical Therapy Assistant program. The Directed practicum experience is a "hands-on" reality experience providing on-the-job opportunities to acquire further knowledge, learning and opportunities for practicing skills. The Directed practicum will take place in a facility that can provide learning experiences consistent with the student's interest and learning desires and meets approval of the instructor. Students will be supervised by a licensed physical therapist or physical therapist assistant. This practicum experience is a full-time rotation for 7 weeks for a minimum of 40 hours per week. Semesters available: Day - Sp

Required Prerequisite Course(s): *Take PHTA 2070, PHTA 2090, PHTA 2170*

Required as Prerequisite or Concurrent Course(s): *Take PHTA 2130, PHTA 2135, and PHTA 2155*

PHTA 2155 - SEMINAR III

1 Credit(s); 1 Lecture Hour(s)

This course discusses issues relevant to the physical therapy profession and patient populations. The course reviews the Ohio laws and rules for jurisprudence exam and the Integrity and Practice Campaign designed by the APTA. The course will have discussions online about patient caseload and different diagnoses that the students are encountering.

Required Prerequisite Course(s): *Take PHTA 2070, PHTA 2090, PHTA 2170*

Required Concurrent Course(s): *Take PHTA 2130, PHTA 2135, PHTA 2150*

PHTA 2170 - PROFESSIONAL RESEARCH

2 Credit(s); 2 Lecture Hour(s)

This is a research course which will allow the PTA student to learn to perform evidence-based research to gain further understanding in a particular area as well as to complete a research project and present the material to classmates. This class is graded Pass (P) or No-Pass (NP). Semesters available: Day - Sp

Required Prerequisite Course(s): *Take PHTA 2110 and PHTA 2115*

Required as Prerequisite or Concurrent Course(s): *Take PHTA 2070 and PHTA 2090*

PHYSICS

PHYS 1010 - INTRODUCTORY PHYSICS

3 Credit(s); 3 Lab Hour(s), 2 Lecture Hour(s)

This course will provide students with a general understanding, knowledge, and awareness of the physical world around them. Topics will introduce the concepts of mechanical, electrical and atomic physics with discussions, lectures, and laboratory experiences related to the principles of mechanics, heat, light, sound, electricity, magnetism, and atomic structure. This course meets the requirements for OTM in Natural Sciences TMNS.

Required Prerequisite Course(s): *Take MATH 0084 or higher with a minimum grade of C-*

PHYS 1050 - PHYSICS FOR ARTISTS

3 Credit(s); 3 Lab Hour(s), 2 Lecture Hour(s)

This course will provide students with a general understanding, knowledge, and awareness of the physical world around them. Topics will introduce the concepts of mechanical, electrical, sound, and light physics with related lectures, discussions, demonstrations, and laboratory experiences. Semesters available: Day – Sp

Required Prerequisite Course(s): *Take MATH 0084 Minimum Grade C-*

PHYS 1110 - GENERAL PHYSICS I

4 Credit(s); 3 Lab Hour(s), 3 Lecture Hour(s)

A study of Classical Newtonian Mechanics including measurement systems, dimensional analysis, vectors, scalars, linear, circular and rotational motion, forces in equilibrium, acceleration, work, and energy. A study of material properties including density, and hydraulic principles (both static and kinetic). Also, a study of waves, and sound including simple harmonic motion, vibrations, reflection, transmission, interference, and resonance for waves, and intensity, sources, interference, and Doppler Effect for sound. This course meets the requirements for TAG# OSC014. If combined with PHYS1130, TAG# OSC021 is met.

Required as Prerequisite or Concurrent Course(s): *Take MATH 1130 (Can be concurrent - minimum grade of C-) or HIGHER OR qualifying placement test score*

PHYS 1130 - GENERAL PHYSICS II

4 Credit(s); 3 Lab Hour(s), 3 Lecture Hour(s)

A study of heat to include calorimetry, expansion, heat capacity, conductivity, phase change, kinetic theory and gas laws. A study of light including its nature, and geometric optics. Also, a study of electricity and magnetism including electric charges at rest, potentials, capacitance and dielectrics, current, resistance, and voltage, alternating circuits theory of frequency, reactance, impedance, power and resonance, magnetic field definition and effects on moving charges and conductors. This course meets the requirements for TAG# OSC015. If combined with PHYS 1110, TAG# OSC021 is met.

Required Prerequisite Course(s): *Take PHYS 1110*

PHYS 2010 - COLLEGE PHYSICS I

4 Credit(s); 3 Lab Hour(s), 3 Lecture Hour(s)

This is a calculus-based physics course that has a study of Classical Newtonian Mechanics including measurement systems, dimensional analysis, vectors, scalars, linear, circular and rotational motion, forces in equilibrium, acceleration, work, and energy. A study of material properties including density, and hydraulic principles (both static and kinetic). Also, a study of waves, and sound including simple harmonic motion, vibrations, reflection, transmission, interference and resonance for waves, intensity, sources, interference, and Doppler Effect for sound. Semesters available: Day - Sp

Required as Prerequisite or Concurrent Course(s): *Take MATH 1151*

PHYS 2030 - COLLEGE PHYSICS II

4 Credit(s); 3 Lab Hour(s), 3 Lecture Hour(s)

This is a calculus-based physics course that has a study of heat to include calorimetry, expansion, heat capacity, conductivity, phase change, kinetic theory and gas laws. A study of light including its nature, and geometric optics. Also, a study of electricity and magnetism including electric charges at rest, potentials, capacitance and dielectrics, current, resistance, and voltage, alternating circuits theory of frequency, reactance, impedance, power and resonance, magnetic field definition and effects on moving charges and conductors. Semesters available: Day - Sp

Required Prerequisite Course(s): *Take PHYS 2010; Minimum Grade C*

PARALEGAL

PLGL 1010 - Introduction to Paralegal Studies
3 Credit(s); 3 Lecture Hour(s)
This course presents the history, development, and use of paralegals in today's legal world. The course provides an overview of the legal system and its use of paralegals. Interviewing skills are also emphasized.

PLGL 1030 - Legal Ethics & Professional Responsibility
3 Credit(s); 3 Lecture Hour(s)
This course consists of an overview of the ethical and professional responsibilities which exist today for a paralegal practicing in the legal profession. Students will learn the significant areas were problems may occur, including specialized fields such as domestic relations and criminal law. Emphasis will be on the rules and ethical considerations of topics including confidentiality, conflict of interest and unauthorized practice of law.

PLGL 1040 - Contract Law
3 Credit(s); 3 Lecture Hour(s)
This course will introduce the statutory laws that govern oral and written agreements in regards to the transaction of goods and services, money and property.

PLGL 1050 - Legal Research
4 Credit(s); 4 Lecture Hour(s)
Emphasis is placed upon thorough and efficient research and upon preparing briefs based on research. Computerized legal research is utilized. The primary and secondary sources of law are presented as well as step-by-step approach to their use.
Required Prerequisite Course(s): *Take PLGL 1010*

PLGL 1051 - Legal Research and Writing I
3 Credit(s); 3 Lecture Hour(s)
This course will focus on effective writing skills with a review of grammar and punctuation used in the legal profession. The students will learn legal outlining structure and organization in the preparation of legal writing documents based upon an introduction to legal research.

PLGL 1052 - Legal Research and Writing II
3 Credit(s); 3 Lecture Hour(s)
A continuation of the precepts of PLGL 1051. An emphasis is placed on thorough and efficient legal research as well as the preparation of legal briefs and memoranda. Computerized legal research will be utilized in this course.
Required Prerequisite Course(s): *Take PLGL 1051;*

PLGL 2010 - Probate Administration
3 Credit(s); 3 Lecture Hour(s)
This course presents the law and terminology of wills, estates, estate administration and taxation. The laws of descent and distribution and guardianship. Proper estate planning is emphasized throughout the course.
Required Prerequisite Course(s): *Take PLGL 1052*

PLGL 2030 - Family Law
3 Credit(s); 3 Lecture Hour(s)
This course presents the body of law concerning domestic relations, divorce, legal separation, parental rights and responsibilities, and child support.
Required Prerequisite Course(s): *Take PLGL 1052*

PLGL 2040 - Tort Law
3 Credit(s); 3 Lecture Hour(s)
This course will provide an understanding of the sources and the use of tort law. There is an emphasis on defenses and remedies in which oral arguments, case studies, and legal briefs will be utilized.

PLGL 2050 - Debtor-Creditor Relations
3 Credit(s) 3 Lecture Hour(s)
This course examines debtor-creditor laws including liens and various forms of bankruptcy. The representation of typical clients is stressed along with the paralegals role in gathering evidence and client research. Students will prepare a Chapter 7 and Chapter 13 bankruptcy petition.
Required Prerequisite Course(s): *Take PLGL 1052*

PLGL 2090 - Litigation
3 Credit(s); 3 Lecture Hour(s)
This course centers around the paralegal's role in discovery procedure and trial practice as it relates to civil litigation. It examines the role of the attorney in the trial process including case preparation and organization of materials. Students will be involved in preparing materials for a hypothetical trial.
Required Prerequisite Course(s): *Take PLGL 1052*

PLGL 2110 - Real Estate Transactions
3 Credit(s); 3 Lecture Hour(s)
This course presents the basic laws and terminology governing real estate. Real estate documents and their proper filings are emphasized.
Required Prerequisite Course(s): *Take PLGL 1052*

PLGL 2130 - Workers' Compensation/Social Security Disability
4 Credit(s); 4 Lecture Hour(s)
This course examines workers' compensation and social security disability laws. Emphasis is placed upon drafting of forms required for filing claims. Semesters available Day - Sp
Required Prerequisite Course(s): *Take PLGL 1050*

PLGL 2150 - Paralegal Seminar/Practicum
4 Credit(s); 2 Lecture Hour(s), 14 Practicum Hour(s)
Students will be presented with the functions and procedures of a law office. Practicum experiences will be used as a basis for discussion.
Required Prerequisite Course(s): *Take PLGL 1010*

PLGL 2151 - Paralegal Seminar/Practicum
3 Credit(s); 14 Practicum Hour(s), 1 Seminar Hour(s)
This course will provide preparation for job seeking and placement into the paralegal field. Students will be presented with the functions and procedures of a law office. Practicum experiences will be used as a basis for discussion.
Required Prerequisite Course(s): *Take PLGL 1052;*

PLGL 2900 - Paralegal Studies Capstone
1 Credit(s); 1 Lecture Hour(s)
This course will assist students transitioning from the community college experience to a four-year educational institution. Students will integrate the knowledge and skills acquired in their general education experiences with those developed in their program specific courses to engage in projects that require them to: think critically about their prior education, explore future academic and career-related paths, and develop skills to enhance their success. Such projects may include research papers, presentations, and/or portfolio development
Required Prerequisite Course(s): *Must have completed 45 credit hours.*

PLGL 2999 - Special Topics in Paralegal
3 Credit(s); 3 Lecture Hour(s)
This course enables faculty members in the Paralegal department to present various topics of current interest to students throughout the college on a limited basis. The course may be offered twice before it must be discontinued or added to the curriculum via the required Curriculum Committee process. Semesters available: As Needed

PRACTICAL NURSING

PNUR 1012 - FUNDAMENTALS OF PRACTICAL NURSING
6 Credit(s); 3 Lecture Hour(s)

This introductory course begins the study of the nursing process as it relates to meeting basic human needs of individuals in all age groups. Emphasis is placed upon principles of nursing care, performance of safe nursing measures, development of observational skills, and recording. Communication methods and nurse-patient relationships, health and health care organizations, and the role of the practical nurse as a member of the health care team are explored. Emphasis is placed upon increasingly complex principles of nursing care and performance of safe nursing measures as the semester progresses.

Required Concurrent Course(s): *Take PNUR 1012C, PNUR 1012L*
Required as Prerequisite or Concurrent Course(s): *Take BIOL 1730, BIOL 1101, PNUR 1030*

PNUR 1012C - FUNDAMENTALS PRACTICAL NURSING CLINICAL
0 Credit(s); 6 Clinical Hour(s)

Required Concurrent Course(s): *Take PNUR 1012*

PNUR 1012L - FUNDAMENTALS OF PRACTICAL NURSING LAB
0 Credit(s); 3 Lab Hour(s)

Required Concurrent Course(s): *Take PNUR 1012*

PNUR 1030 - PHARMACOLOGY
2 Credit(s); 2 Lecture Hour(s)

Pharmacology PNUR 1030/RNUR 1030 provides an introduction to the study of drugs. Content also includes classifications of drugs, dosage calculations, legal aspects of drug administration, and preparation and administration of drugs. Uses, actions and side effects of selected drugs will be studied as well as associated nursing care and implications. Semesters available: Day - F

Required Prerequisite Course(s): *MATH 0084 (minimum grade of C-) or qualifying placement test scores AND High School Chemistry or CHEM 1010 (minimum grade of C-)*
Required as Prerequisite or Concurrent Course(s): *Take PNUR 1012 and BIOL 1730*

PNUR 2012 - ADVANCED CONCEPTS OF PRACTICAL NURSING I
6 Credit(s); 3 Lecture Hour(s)

This course builds on the basic nursing knowledge gained in PNUR 1012 and PNUR 1030. Emphasis is placed upon content relating to interferences with meeting basic human needs of safety and protection, nutrition and elimination, sensory perception, and oxygenation throughout the life cycle. Focus will be upon utilization of the nursing process. Content includes presentation and study of drug categories that are related to common health problems. The role of the practical nurse in drug administration is emphasized. Principles of therapeutic nutrition are integrated throughout the course. Practical application of this information is achieved through clinical experience at in-patient facilities and various community health venues.

Required Prerequisite Course(s): *Take PNUR 1012, PNUR 1030, BIOL 1730, BIOL 1101*
Required as Prerequisite or Concurrent Course(s): *Take BIOL 1550, PNUR 2012C*

PNUR 2012C - ADVANCED CONCEPTS OF PRACTICAL NURSING I CLINICAL
0 Credit(s); 6 Clinical Hour(s)

Required Concurrent Course(s): *Take PNUR 2012*

PNUR 2012L - ADVANCE CONCEPT OF PRACTICAL NURSING I LAB
0 Credit(s); 3 Lab Hour(s)

Required Concurrent Course(s): *Take PNUR 2012*

PNUR 2032 - ADVANCED CONCEPT OF PRACTICAL NURSING II
6 Credit(s); 3 Lecture Hour(s)

This course is a continuation of content begun in PNUR 1012, PNUR 1030, and PNUR 2012. Content is designed to prepare a student to care for individuals of all ages. Emphasis is placed upon content relating to interferences with meeting basic human needs of safety and protection, nutrition and elimination, sexuality, and oxygenation throughout the life cycle. Focus will be upon utilization of the nursing process. Content includes presentation and study of drug categories that are related to common health problems. The role of the practical nurse in drug administration is emphasized. Principles of therapeutic nutrition are integrated. Patient care experiences include local nursing homes and the obstetrics and gynecology unit in a local hospital. There is a capstone preceptorship experience at the end of the semester. Evening hours may occur during the clinical rotation.

Required Prerequisite Course(s): *Take PNUR 2012*
Required Concurrent Course(s): *Take PNUR 2032C*
Required as Prerequisite or Concurrent Course(s): *Take PNUR 2050, BIOL 1550*

PNUR 2032C - ADVANCED CONCEPTS OF PRACTICAL NURSING II CLINICAL
0 Credit(s); 9 Clinical Hour(s)

Required Concurrent Course(s): *Take PNUR 2032*

PNUR 2050 - PROFESSIONALISM & TRENDS IN PRACTICAL NURSING
1 Credit(s); 1 Lecture Hour(s)

This course is designed to prepare the student for the role transition from student to graduate/practicing nurse. Topics include a study of th history and future of nursing; legal, ethical, and political responsibilities and issues; the role of the Board of Nursing; nursing organizations; and job seeking skills. Strategies for coping with conflict and stress as a new graduate will be explored. Roles and responsibilities of the practical nurse are discussed. Students will prepare for the licensure exam by completing the required paperwork and taking a practice examination.

Required Prerequisite Course(s): *Take PNUR 2012*
Required as Prerequisite or Concurrent Course(s): *Take PNUR 2032, BIOL 1550*

POLITCAL SCIENCE

POLT 1010 - AMERICAN NATIONAL GOVERNMENT
3 Credit(s); 3 Lecture Hour(s)

This course involves an examination of the people, values, institutions, processes, and policies associated with American government. Special emphasis is given to the way in which all of the variables interact to form the dynamic that is American politics. This course meets the requirements for OTM in Social and Behavioral Science TMSBS

PHYSICAL SCIENCE

PSCI 1010 - WEATHER STUDIES: INTRODUCTION TO METEOROLOGY
3 Credit(s); 2 Lab Hour(s), 2 Lecture Hour(s)

An introductory science course designed to familiarize students with the basic facts, theories, and methods relating to the study of meteorology. This course will focus on the principles of the natural world and the causes of weather. Students will apply these principles by analyzing and interpreting the effects of the atmosphere on our natural and human ecosystems using real-time data from the National Weather Service. This course will also analyze the effects of various human activities upon weather and the global system. Semesters available: Fall - online

PSCI 1030 - OCEAN STUDIES: INTRODUCTION TO OCEANOGRAPHY
3 Credit(s); 2 Lab Hour(s), 2 Lecture Hour(s)

An introductory science course designed to examine the world's oceans from an earth science perspective. Students will use real-world ocean information to explore the physical, chemical, biological, and geographical properties of oceans and investigate the interactions between the oceans and the hydrosphere, atmosphere, lithosphere, and biosphere. Semesters available: Fall - online

PSCI 1050 - Climate Studies: Introduction to Climatology

3 Credit(s); 2 Lab Hour(s), 2 Lecture Hour(s)

An introductory science course designed to familiarize students with the basic facts, theories, and methods relating to the study of climatology. This course will focus on the principles of the natural world and the causes of weather. Students will apply these principles by analyzing and interpreting the effects of the atmosphere on our natural and human ecosystems using real-time data from the National Weather Service. This course will also analyze the effects of various human activities upon weather and the global system. Semesters available: F - Online

PSYCHOLOGY

PSYC 1010 - Introduction to Psychology

3 Credit(s); 3 Lecture Hour(s)

Introduction to Psychology is an introductory level course and is a study of the basic human behavior. Topics include the history of psychology, scientific methods, biological processes, cognitive processes, sensation and perception, consciousness, learning, intelligence, human development, personality theory, psychopathology and treatment, stress and health, and social psychology. Please note outcomes are written to OBR standards using OBR language. Ohio Articulation Number OSS015. This course meets the requirements for OTM in Social and Behavioral Science TMSBS

PSYC 1070 - Introduction to Women's Studies

3 Credit(s); 3 Lecture Hour(s)

This course is an introductory course to familiarize learners with some of the major questions, themes, and issues in the study of women. This course will focus on the scientific study of female behavior, including personality, biological, psychological and cultural determinants of women's role in society. It will also discuss historical perspectives that have shaped and continue to shape women's lives as well as how women have resisted and continue to resist these very institutions, practices and representations. Topics discussed will include sexuality, gender development, sexism, women's multiple roles and relationships and violence against women. This course meets the requirements for OTM in Social and Behavioral Science TMSBS

PSYC 1090 - Death and Dying

3 Credit(s); 3 Lecture Hour(s)

This course will focus on why and how people experience loss, death and grief. We will investigate the ideas of Kubler-Ross and others and expand our exploration to include the Eastern and Judeo-Christian perspectives. In addition, we will consider a variety of sources of grief (death, divorce, alcoholism, birth of a handicapped child, life-threatening illnesses, etc.) and how people react to such events. Semesters available: Day - F Evening - Sp

PSYC 2010 - Human Growth and Development

3 Credit(s); 3 Lecture Hour(s)

This course presents an overview of the total lifespan of human growth and development from conception through death. Major theories of human development will be studied through examination of the dynamics of human growth in relation to physical/neurological, socio/emotional, and cognitive development across the lifespan. Please note outcomes are written to ODHE standards using ODHE language. Ohio Articulation Number 0SS048. This course also meets the requirements for Ohio Transfer 36 - Social and Behavioral Sciences TMSBS.

Required Prerequisite Course(s): *Take PSYC 1010*

PSYC 2030 - Child Psychology

3 Credit(s); 3 Lecture Hour(s)

Child psychology is a study of the biological, social, affective, and cognitive aspects of the development of children from conception to adolescence. The implications of this development for present and future behaviors are presented. The research, principles, concepts, and theories of child psychology are emphasized. Semesters available: Day - Sp Evening - Offered based on need.

Required Prerequisite Course(s): *Take PSYC 1010*

PSYC 2050 - Abnormal Psychology

3 Credit(s); 3 Lecture Hour(s)

This course will examine the definition, classification, origin, and treatment of abnormal behavior. Categories of disorders discussed will include personality, anxiety, mood, somatoform, dissociative, sexual, psychotic, developmental-related and addictive disorders. Research methodology in abnormal psychology, historical perspective, the assessment process, ethical issues and use of the DSM will also be emphasized. Please note outcomes are written to ODHE (Ohio Department of Higher Education) standards using ODHE language. Ohio Articulation Number OSS017.

Required Prerequisite Course(s): *Take PSYC 1010*

PSYC 2090 - Social Psychology

3 Credit(s); 3 Lecture Hour(s)

Social psychology provides an exploration of the influences of other people, groups, and situations on the individual. This social psychology course will apply the scientific method as a tool in the discovery of individual functioning in the social world. Please note outcomes are written to ODHE standards using ODHE language. Ohio Articulation Number 0SS016.

Required Prerequisite Course(s): *Take PSYC 1010*

PSYC 2100 - Personality Theory

3 Credit(s); 3 Lecture Hour(s)

The personality theory course provides a survey of major perspectives of personality. This course will apply the scientific method as a tool in the discovery of personality description, development, and assessment. Please note outcomes are written to ODHE standards using ODHE language. Ohio Articulation Number 0SS018.

Required Prerequisite Course(s): *Take PSYC 1010*

PSYC 2170 - Forensic Psychology

3 Credit(s); 3 Lecture Hour(s)

This course will examine the relationship between psychology and different components of the criminal justice system. An introduction to the field of forensic psychology will be provided and examination of some different types of criminal behavior will occur. Applications of psychological principles to the resolution of problems within the criminal justice field will also be explored.

Required Prerequisite Course(s): *Take PSYC 1010*

PSYC 2999 - Special Topics in Psychology

3 Credit(s); 3 Lecture Hour(s)

Special Topics in Psychology - A particular topic or combination of topics will be covered when there is sufficient student interest. Students will be expected to contribute to discussions on the basis of readings in the selected areas. Course offered based on student interest. Course may be repeated on different topic. A specific course may be offered twice before it must be discontinued or added to the curriculum via the required Curriculum Committee process. Semesters available: Offered based on need.

RADIOLOGICAL SCIENCES

RADS 1120 - Clinical Practicum I

1 Credit(s); 7 Practicum Hour(s)

Clinical Practicum is designed to provide students with practical application of material learned in didactic courses. Following a clinical orientation, students will be assigned to an affiliated clinical facility. An orientation to patient transport and to the radiology desk for order entry will be assigned. The students will learn to manipulate the radiographic equipment and perform radiographic procedures under the appropriate level of supervision of qualified radiographers. Students complete clinical objectives and competencies.

Required Concurrent Course(s): *Take RADS 1160*

RADS 1140 - Radiologic Procedures/Seminar I
3 Credit(s); 1 Lecture Hour(s), 1 Seminar Hour(s)
This course will provide an introduction to the basic steps in completion of a radiographic examination from the beginning of the procedure to the end of the procedure. Radiographic procedures of the chest, abdomen, and appendicular skeleton will be presented. Mobile X-ray procedures and surgical X-ray procedures will be introduced. The students will develop an understanding of how to use age-appropriate communication in the clinical setting. Laboratory exercises in an energized lab provide the student with practical application of the classroom material. Radiation protection is emphasized. Medical terminology is correlated with the content of the course. Radiographic images will be evaluated. A one hour seminar will cover various clinical topics.
Required Concurrent Course(s): *Take RADS 1120, RADS 1140L*

RADS 1140L - Radiologic Procedures/Seminar I Lab
0 Credit(s); 3 Lab Hour(s)
Required Concurrent Course(s): *Take RADS 1140*

RADS 1160 - Imaging Science 1
3 Credit(s); 2 Lecture Hour(s)
This course is designed to provide an overview of the radiographer's role in the healthcare delivery system. The course introduces concepts related to the profession, patient care assessments, radiation protection, basic radiographic equipment and image analysis standards. The lab setting will permit application of these skills.
Required Concurrent Course(s): *Take RADS 1120 RADS 1140, RADS 1160L*
Required as Prerequisite or Concurrent Course(s): *Take STAT 1010*

RADS 1160L - Imaging Science 1 Lab
0 Credit(s); 3 Lab Hour(s)
Required Concurrent Course(s): *Take RADS 1160*

RADS 1220 - Clinical Practicum 2
1 Credit(s); 7 Practicum Hour(s)
Clinical Practicum is designed to provide students with practical application of material learned in didactic courses. In this course students will continue to perform radiographic procedures under the appropriate level of supervision of qualified radiographers. Student will rotate to mobile radiography and surgical radiography. Clinical rotations to facilities may vary this semester as students rotate to facilities with digital imaging systems and computed imaging systems to help learn the comparisons of both types of systems encountered in the field. Students complete clinical objectives and competencies.
Required Prerequisite Course(s): *Take RADS 1160*
Required Concurrent Course(s): *Take RADS 1260*

RADS 1240 - Radiologic Procedures/Seminar 2
3 Credit(s); 3 Lab Hour(s), 1 Lecture Hour(s), 1 Seminar Hour(s)
Radiographic procedures of the pelvic girdle, shoulder girdle, bony thorax and spine will be presented. Laboratory exercises in an energized lab provide the student with practical application of the classroom material. Radiation protection is emphasized. There will be a continuation of instruction on mobile radiographic procedures. Special imaging procedures of the joints (Arthrography) and of the spine (Myelography) will be introduced. The students will be given an overview of the basic concepts and terminology related to the study of radiographic pathology. Radiographic pathology of the skeletal system will be presented. Students will correlate knowledge of skeletal pathology and radiographic positioning with the evaluation of medical images. Medical terminology is correlated with the content of the course. A one hour seminar will cover various clinical topics.
Required Prerequisite Course(s): *Take HLTH 1150, RADS 1120*
Required Concurrent Course(s): *Take RADS 1220, RADS 1240L*

RADS 1240L - Radiologic Procedures/Seminar 2 Lab
0 Credit(s); 3 Lab Hour(s)
Required Concurrent Course(s): *Take RADS 1240*

RADS 1260 - Imaging Science 2
3 Credit(s); 2 Lecture Hour(s)
This course is designed to establish a foundation in the principles that govern the image production process. Content establishes a knowledge base of factors that control and influence the production and recording of radiographic images. Electronic and film imaging with associated accessories are included. Image analysis is included with the importance of optimal imaging standards. The lab setting will permit application of these skills. Courses are taught in a hybrid format. The lecture and seminar portion are offered virtually using Canvas and Zoom technologies. The lab portions are taught on campus with face-to-face instruction and hands on practice. Semesters Available: Day – F
Required Prerequisite Course(s): *Take RADS 1140*
Required Concurrent Course(s): *Take RADS 1240, RADS 1260L*

RADS 1260L - Imaging Science 2 Lab
0 Credit(s); 3 Lab Hour(s)
Required Concurrent Course(s): *Take RADS 1260*

RADS 2321 - Clinical Practicum 3
1 Credit(s); 7 Practicum Hour(s)
Clinical Practicum is designed to provide students with practical application of material learned in didactic courses. In this course students will continue to perform radiographic procedures under the appropriate level of supervision of qualified radiographers. Students will learn how to operate fluoroscopy equipment and perform contrasted exams of the GI tract. Student will continue rotations through mobile and surgical radiography. Students will begin orthopedic rotations to learn various modifications of radiographic positioning and procedures. Students complete clinical objectives and competencies.
Required Prerequisite Course(s): *Take RADS 1260*
Required Concurrent Course(s): *Take RADS 2360, RADS 2340*

RADS 2340 - Radiologic Procedures/Seminar 3
1.5 Credit(s); 0.5 Seminar Hour(s)
Radiographic procedures of the neck, digestive and biliary systems will be presented. Students will learn to work with barium sulfate, gastrografin, and carbon dioxide as contrast medium for the digestive system. Laboratory exercises in an energized lab provide the student with practical application of the classroom material. Radiation protection is emphasized. Radiographic pathology of the digestive and hepatobiliary systems will be presented. Students will learn to recognize pathology of the digestive and hepatobiliary system on medical images and be able to identify imaging procedures appropriate for each body system. A one hour seminar will cover various clinical topics.
Required Prerequisite Course(s): *Take RADS 1220*
Required Concurrent Course(s): *Take RADS 2321, RADS 2360, RADS 2340L*

RADS 2340L - Radiologic Procedures/Seminar 3 Lab
0 Credit(s); 2 Lab Hour(s)
Required Concurrent Course(s): *Take RADS 2340*

RADS 2360 - Imaging Science 3
1.5 Credit(s); 0.5 Lecture Hour(s)
This course provides basic concepts of pharmacology, EKG, venipuncture and administration of diagnostic contrast agents and intravenous medications. The appropriate delivery of patient care during these procedures is emphasized. Students also continue to evaluate radiographic images for diagnostic efficacy. Courses are taught in a hybrid format. The lecture and seminar portion are offered virtually using Canvas and Zoom technologies. The lab portions are taught on campus with face-to-face instruction and hands on practice. Semesters Available: Day - Su
Required Prerequisite Course(s): *Take BIOL 2752, RADS 1240*
Required Concurrent Course(s): *Take RADS 2340, RADS 2360L*

RADS 2360L - Imaging Science 3 Lab
0 Credit(s); 2 Lab Hour(s)
Required Concurrent Course(s): *Take RADS 2360*

RADS 2420 - Clinical Practicum 4
2 Credit(s); 14 Practicum Hour(s)
Clinical Practicum is designed to provide students with practical application of material learned in didactic courses. In this course students will continue to perform radiographic procedures under the appropriate level of supervision of qualified radiographers. Introductory clinical rotations will be schedule in the modalities of CT and MRI to help students gain an understanding of cross-sectional anatomy and the role these special imaging modalities play in the diagnosis of diseases. Student will rotate to a pediatric hospital to gain experience imaging pediatric patients. Students complete clinical objectives and competencies.
Required Prerequisite Course(s): *Take RADS 2360*
Required Concurrent Course(s): *Take RADS 2460*

RADS 2440 - Radiologic Procedures/Seminar 4
3 Credit(s); 1 Lecture Hour(s), 1 Seminar Hour(s)
Radiographic procedures of the skull, sinuses and facial bones will be introduced. Methods for imaging pediatric patients will be explored. Students will learn to modify positioning protocols for trauma patients and recognize trauma pathology on radiographs. Laboratory exercises in an energized lab provide the student with practical application of the classroom material. Radiation protection is emphasized. Medical terminology is correlated with the content of the course. Radiographic pathology of the respiratory, cardiovascular and central nervous system will be included. A one-hour seminar will cover various clinical topics.
Required Prerequisite Course(s): *Take RADS 2321*
Required Concurrent Course(s): *Take RADS 2420, RADS 2440L, RADS 2460.*

RADS 2440L - Radiologic Procedures/Seminar 4 Lab
0 Credit(s); 2 Lab Hour(s)
Required Concurrent Course(s): *Take RADS 2440*

RADS 2460 - Imaging Science 4
3 Credit(s); 2 Lecture Hour(s)
This course is designed to establish a knowledge base of radiographic and fluoroscopic equipment design. The nature and characteristics of radiation, x-ray production, and photon interaction with matter are also included. Image analysis is included with the importance of optimal imaging standards. Courses are taught in a hybrid format. The lecture and seminar portion are offered virtually using Canvas and Zoom technologies. The lab portions are taught on campus with face-to-face instruction and hands on practice. The lab setting will permit application of these skills. Semesters Available: Day - F
Required Prerequisite Course(s): *Take RADS 2340*
Required Concurrent Course(s): *RADS 2440, RADS 2460L*

RADS 2460L - Imaging Science 4 Lab
0 Credit(s); 3 Lab Hour(s)
Required Concurrent Course(s): *Take RADS 2460*

RADS 2520 - Clinical Practicum 5
3 Credit(s); 21 Practicum Hour(s)
Clinical Practicum is designed to provide students with practical application of material learned in didactic courses. In this course students will continue to perform radiographic procedures under the appropriate level of supervision of qualified radiographers. Students will be completing all required mandatory and elective competencies and objectives prior to completion of the program. In addition, students will be gathering medical images and reports (following HIPAA requirements) to complete their capstone case study. Introductory clinical rotations will be scheduled in the modalities of angiography, cardiac catheterization lab, echocardiography, EKG, ultrasound and radiation therapy to help students gain an understanding of the role these special imaging modalities play in the diagnosis of diseases.
Required Prerequisite Course(s): *Take RADS 2460*
Required Concurrent Course(s): *Take RADS 2560*

RADS 2540 - Radiologic Procedures/Seminar 5
3 Credit(s); 1 Lecture Hour(s), 1 Seminar Hour(s)
This course is a capstone to all previous radiographic procedure courses. Students will be creating a radiographic case study and presenting the case to their peers. In addition, students will be required to complete final lab simulations to assess entry-level positioning skills. Some new information will continue to be presented such as radiographic procedures of the urinary and reproductive system. Pathology of the urinary and reproductive system will also be included to help students correlate the use of specific radiographic projections and their influence on the diagnosis of diseases. Laboratory exercises in an energized lab provide the student with practical application of the classroom material. Radiation biology will be discussed and its influence on radiation protection protocols. Students will complete a Web-based research assignment investigating the impact of radiation accidents and their effect on human organisms. Medical terminology is correlated with the content of the course. American Registry of Radiologic Technologies (ARRT) certification exam review will be conducted. A one-hour seminar will include various clinical topics.
Required Prerequisite Course(s): *Take RADS 2420*
Required Concurrent Course(s): *Take RADS 2520, RADS 2540L. RADS 2560.*

RADS 2540L - Radiologic Procedures/Seminar 5 Lab
0 Credit(s); 3 Lab Hour(s)
Required Concurrent Course(s): *Take RADS 2540*

RADS 2560 - Imaging Science 5
3 Credit(s); 2 Lecture Hour(s)
This course is designed to incorporate learned radiologic concepts and clinical practices. Focus areas in radiology will be reviewed in preparation for graduation. This course includes evaluations for final competencies in clinical and didactic studies. The course will also present information in resume writing, interview techniques, professional development including certification and licensure requirements, ethical /legal responsibilities and transition from student to radiographer. Courses are taught in a hybrid format. The lecture and seminar portion are offered virtually using Canvas and Zoom technologies. The lab portions are taught on campus with face-to-face instruction and hands on practice. The lab setting will permit application of these skills.
Required Prerequisite Course(s): *Take RADS 2440*
Required Concurrent Course(s): *Take RADS 2540, RADS 2560L*

RADS 2560L - Imaging Science 5 Lab
0 Credit(s); 2 Lab Hour(s)
Required Concurrent Course(s): *Take RADS 2560*

RESPIRATORY CARE

RESP 1110 - Respiratory Care Equipment and Procedures I
5 Credit(s); 4 Lecture Hour(s)
In this course students will learn techniques and procedures for providing basic respiratory care: assessment, communication, body mechanics, medical gas supply systems, oxygen therapy, special gas therapy, humidity and aerosol therapy, oxygen analysis, pulse oximetry, blenders, lung expansion therapy, bronchopulmonary hygiene (including coughing techniques), sterilization/infection control procedures, manual resuscitators, use of chest tubes, and basic pulmonary function testing. Semesters available: Day - F
Required Concurrent Course(s): *Take RESP 1140, and RESP 1190*
Required as Prerequisite or Concurrent Course(s): *Take BIOL 1730*

RESP 1110L - Respiratory Care Equipment and Procedures I Lab
0 Credit(s); 3 Lab Hour(s)
Required Concurrent Course(s): *Take RESP 1110*

RESP 1140 - PHARMACOLOGY
2 Credit(s); 2 Lecture Hour(s)
This course is a study of those drugs directly and indirectly affecting therapeutic management of cardiopulmonary patients and includes pharmacologic principles, administration of drugs, drug mixing calculations, and major cardiopulmonary drug therapy used by the respiratory therapy technician and therapist. Additional systemically administered drugs are discussed in reference to their effect on the cardiopulmonary system. In order to successfully complete the course, the student will be required to pass a written examination (Drug Proficiency Exam) on Respiratory Care pharmacologic agents with a 77%.
Required as Prerequisite or Concurrent Course(s): *Take RESP 1110, CHEM 1030*

RESP 1190 - PRACTICUM I
0.5 Credit(s); 3.5 Practicum Hour(s)
This is a clinical course. The student will be assigned to a hospital 8 hours per week for eight weeks (64 total hours) to work under the direct supervision of a clinical instructor. This is an introductory clinical experience for the student to the practice respiratory care skills the student obtained in RESP 1110. The student will perform direct patient care by evaluating patients' medical records, assessing patients' oxygen therapy needs, practice administration/assessment of medical gas therapy, humidity/aerosol therapy, perform oxygen analysis, perform sterilization/infection control procedures, perform hyperinflation therapy, and bronchopulmonary hygiene techniques on patients. The student may be involved in emergency medical procedures include cardiopulmonary resuscitation and the use of manual resuscitators. Semesters available: Day - F
Required Concurrent Course(s): *Take RESP 1110*

RESP 1220 - RESPIRATORY CARE EQUIPMENT & PROCEDURE II
5 Credit(s); 4 Lecture Hour(s)
In this course students will learn techniques and procedures for providing advanced respiratory care: airway management (to include oral/nasal airways, intubation, tracheostomy tubes, cuff inflation, and suctioning), noninvasive positive pressure ventilation, capnography, arterial blood gas analysis, and adult mechanical ventilation (to include indications, hazards, initial set-up, modes, monitoring, troubleshooting, and weaning.) An introduction to patient death, dying, and quality of life issues is included.
Required Prerequisite Course(s): *Take RESP 1110, RESP 1190*
Required Concurrent Course(s): *Take RESP 1270, RESP 1290, RESP 1220L*

RESP 1220L - RESPIRATORY CARE EQUIPMENT & PROCEDURE II LAB
0 Credit(s); 3 Lab Hour(s)
Required Concurrent Course(s): *Take RESP 1220*

RESP 1250 - CARDIOPULMONARY ANATOMY & PHYSIOLOGY
4 Credit(s); 4 Lecture Hour(s)
This course is a study of the physic principles as they apply to cardio-pulmonary physiology, anatomy of the lungs and heart, the mechanics of ventilation and pulmonary circulation, airway resistance, hemodynamics, lung compliance, and the non-uniform distribution of ventilation and perfusion. Gas Laws and other mathematical equations will be studied and applied to the cardiopulmonary system. Oxygen transport and Carbon Dioxide transport are also covered in detail. Semesters available: Day - F
Required Prerequisite Course(s): *Take BIOL 1730, RESP 1110, RESP 1140, RESP 1190;*
Required Concurrent Course(s): *Take RESP 1220 and RESP 1270*

RESP 1270 - PHYSICIAN'S SEMINAR I
2 Credit(s); 2 Lecture Hour(s)
This course is a discussion course focused on problem-based learning of patient care. The course aides the student by relating previous and current laboratory, classroom, and clinical experiences into a more meaningful perspective of total patient care. Physician, faculty, and students present real patient cases to the class from their own clinical experience. Class discussion focuses on patient assessment, diagnostic laboratory testing, and analysis to rule out a diagnosis and develop a treatment plan with follow up assessment of therapy for effectiveness. Physician led discussion of medical topics such as: taking a patient history, past medical history, social history, assessing chief complaint, physical examination, evaluation of chest and upper airways, radiologic interpretation, special procedures, mechanical ventilation, differential diagnostic procedures, ethical-legal issues, pathology, pharmacologic intervention, and other related material are presented during the term. In this course, disease processes are explored in depth as to etiology, pathophysiology, clinical manifestations, diagnosis, therapeutics, prognosis, and respiratory involvement. Semesters available: Day - Sp
Required Prerequisite Course(s): *Take RESP 1110, RESP 1140, RESP 1190;*
Required Concurrent Course(s): *Take RESP 1290*
Required as Prerequisite or Concurrent Course(s): *Take RESP 1220 and RESP 1250*

RESP 1290 - PRACTICUM II
2.5 Credit(s); 1 Lecture Hour(s), 10.5 Practicum Hour(s)
This is a practicum course. The student will be assigned to a hospital 12 hours per week for 13 weeks (156 total hours) to work under the direct supervision of a practicum instructor. This is a continuation of RESP 1190. This course provides practicum experience for the student to the practice respiratory care skills the student obtained in RESP 1110. The student will perform direct patient care by evaluating patients' medical records, assessing patients' oxygen therapy needs, practice administration/assessment of medical gas therapy, humidity/aerosol therapy, perform oxygen analysis, perform sterilization/ infection control procedures, perform hyperinflation therapy, bronchopulmonary hygiene techniques on patients, airway management, bronchopulmonary hygiene, lung expansion therapy, intermittent aerosolize therapy via different modalities, dispensing respiratory pharmacologic agents, arterial blood gas punctures and analysis, and airway management techniques. The student may be involved in emergency medical procedures include cardiopulmonary resuscitation and the use of manual resuscitators. Seminar time is provided at campus. Semesters available: Day - Sp
Required Prerequisite Course(s): *Take RESP 1110, RESP 1190*
Required as Prerequisite or Concurrent Course(s): *Take RESP 1220, RESP 1250 and RESP 1270*

RESP 2310 - RESPIRATORY CARE EQUIPMENT & PROCEDURES III
2 Credit(s); 1 Lecture Hour(s)
This course is a continuation of RESP 1210 and has instruction and laboratory application in adult critical care procedures such as: advance assessment in respiration of oxygen and carbon dioxide, hemodynamic monitoring, high frequency ventilation, and nitric oxide administration. The course transitions the student from the adult critical care experience to the neonatal and pediatric clinical settings focusing on infant and pediatric mechanical ventilation, ventilation techniques, CPAP, Bi-Level ventilation, Nitric oxide therapy, therapeutic procedures, and equipment specific to the neonatal and pediatric setting. The course will cover neonatal and pediatric pathologies such as HMD, BPD, CHD, Asthma, Meconium Aspiration, SIDS, and CF. Semesters available: Day - Su
Required Prerequisite Course(s): *Take RESP 1220*
Required Concurrent Course(s): *Take RESP 2310L*
Required as Prerequisite or Concurrent Course(s): *Take RESP 2330 and RESP 2390*

RESP 2310L - RESPIRATORY CARE EQUIPMENT & PROCEDURES III LAB
0 Credit(s); 3 Lab Hour(s)
Required Concurrent Course(s): *Take RESP 2310*

RESP 2330 - Advanced Life Support Procedures

1 Credit(s); 3 Lab Hour(s)

This course consists of the American Heart Association's Advance Cardiac Life Support (ACLS), Pediatric Advance Life Support (PALS), and Neonatal Resuscitation Program (NRP). When the student successfully completes this course they will be issued certification cards for each discipline from the America Heart Association. The course is taught by certified AHA instructors. The laboratory hours are arranged. The course will be offered during the term as three separate modules, each two days (approximately 16 hours) dates and times to be announced. Semesters available: Day - Su

RESP 2390 - Practicum III

2.5 Credit(s); 1 Lecture Hour(s), 10 Practicum Hour(s)

This is a practicum course. The student will be assigned to a hospital 16 hours per week for 10 weeks (160 total hours) to work under the direct supervision of a practicum instructor. This is a continuation of RESP 1290. This course provides practicum experience for the student to the practice respiratory care skills the student obtained in RESP 1220. The student will perform direct patient care in an ICU setting evaluating patients' medical records, assessing patients' oxygen therapy needs, practice administration/assessment of medical gas therapy, humidity/aerosol therapy, perform oxygen analysis, perform sterilization/infection control procedures, perform hyperinflation therapy, bronchopulmonary hygiene techniques on patients, airway management, bronchopulmonary hygiene, lung expansion therapy, intermittent aerosolize therapy via different modalities, dispensing respiratory pharmacologic agents, arterial blood gas punctures and analysis, mechanical ventilation, and airway management techniques including extubation. The student may be involved in emergency medical procedures include cardiopulmonary resuscitation and the use of manual resuscitators. Seminar time is provided at campus. Semesters available: Day - Su

Required Prerequisite Course(s): *Take RESP 1220, RESP 1290*

Required as Prerequisite or Concurrent Course(s): *Take RESP 2310 and RESP 2330*

RESP 2410 - Respiratory Care Equipment & Procedures IV

3 Credit(s); 2 Lecture Hour(s)

In this course, students will learn about advanced pulmonary function testing techniques and equipment, electrocardiograms, breathing exercises, pulmonary and cardiac exercise testing, bronchoscopy, polysomnography, indirect calorimetry, pulmonary rehabilitation, and home care. Semesters available: Day - F

Required Concurrent Course(s): *Take RESP 2410L*

Required as Prerequisite or Concurrent Course(s): *Take RESP 2470 and RESP 2490*

RESP 2410L - Respiratory Care Equipment & Procedures IV Lab

0 Credit(s); 3 Lab Hour(s)

Required Concurrent Course(s): *Take RESP 2410*

RESP 2450 - Pathology

3 Credit(s); 3 Lecture Hour(s)

In this course, respiratory disorders are explored as to etiology, pathophysiology, clinical manifestations, diagnosis, therapeutics, prognosis, and respiratory therapy involvement. Semesters available: Day - F

Required as Prerequisite or Concurrent Course(s): *Take RESP 2410, RESP 2470 and RESP 2490*

RESP 2470 - Physician's Seminar II

2 Credit(s); 2 Lecture Hour(s)

This course is a discussion course focused on problem-based learning of patient care. The course aides the student by relating previous and current laboratory, classroom, and clinical experiences into a more meaningful perspective of total patient care. Physician, faculty, and students present real patient cases to the class from their own clinical experience. Class discussion focuses on patient assessment, diagnostic laboratory testing, and analysis to rule out a diagnosis and develop a treatment plan with follow up assessment of therapy for effectiveness. Physician led discussion of medical topics such as: taking a patient history, past medical history, social history, assessing chief complaint, physical examination, evaluation of chest and upper airways, radiologic interpretation, special procedures, mechanical ventilation, differential diagnostic procedures, ethical-legal issues, pathology, pharmacologic intervention, and other related material are presented during the term. In this course, disease processes are explored in depth as to etiology, pathophysiology, clinical manifestations, diagnosis, therapeutics, prognosis, and respiratory involvement. Semesters available: Day - F

Required Concurrent Course(s): *Take RESP 2490*

Required as Prerequisite or Concurrent Course(s): *Take RESP 2410*

RESP 2490 - Practicum IV

2.5 Credit(s); 1 Lecture Hour(s), 10.5 Practicum Hour(s)

This is a practicum course and is a continuation of RESP 2390. The student will be assigned to a hospital 12 hours per week for 13 weeks (156 total hours) to work under the supervision of a practicum instructor. six weeks will be spent in adult critical care and seven weeks will be spent in neonatal and pediatrics setting. This course provides a more intense look at adult mechanical ventilation focusing on the understanding of pathophysiology of the critical care patient as it applies to mechanical ventilation and critical care procedures. The student will learn to assess and troubleshoot mechanical ventilators, assess patient outcomes, analyze and apply mechanical ventilator techniques to adapt to the patient's pathophysiological needs. As a part of this practicum experience the student will perform an intubation rotation in a surgical environment under the supervision of an anesthesiologist. The course covers practical application in a pediatric hospital performing practicum procedures as they relate to the neonatal/pediatric patient including assessment, oxygen therapy, humidity/aerosol therapy, aerosolized medication delivery methods, airway management and suctioning, oximetry, apnea monitoring, conventional mechanical ventilation, CPAP, High Frequency Oscillation, and weaning procedures. The student may be involved in emergency medical procedures include cardiopulmonary resuscitation and the use of manual resuscitators. Seminar time is provided at campus. Semesters available: Day - F

Required as Prerequisite or Concurrent Course(s): *Take RESP 2410, RESP 2470*

RESP 2570 - Respiratory Care Administration

2 Credit(s); 2 Lecture Hour(s)

This course is a study of the responsibilities of the respiratory therapy supervisor/administrator to include staffing, scheduling, maintenance of equipment and supplies, policy and procedure, budget preparation, meetings, department reports, department planning and organization, quality assurance monitoring of patient care, JCAHO accreditation regulations, emergency preparedness, motivational theory, ethical and legal implications of practice, contemporary issues affecting health care, preparing a resume, and review of the Ohio Respiratory Care law: HB 4761. Semesters available: Day - Sp

Required as Prerequisite or Concurrent Course(s): *Take RESP 2599*

RESP 2590 - Practicum V

2.5 Credit(s); 0.5 Lecture Hour(s), 12 Practicum Hour(s)

This is a practicum experience course and is a continuation of RESP 2490 - Practicum IV. This rotation is 36 hours per week for 5 weeks (180 total hours). A faculty advisor is assigned to the student and they work together to set up the student's practicum experience. The student will be assigned to a health care facility to work under the supervision of a licensed respiratory care professional. The student may be assigned to various areas of respiratory care which may focus on therapeutics, critical care, emergency medicine, diagnostic, and rehabilitation. The faculty advisor will regularly visit and collaborate with the student's employer supervisor to provide feedback and evaluations to the student. Semesters available: Day - Sp

Required Prerequisite Course(s): *Take RESP 2410, RESP 2490*

Required as Prerequisite or Concurrent Course(s): *Take RESP 2599*

RESP 2599 - Respiratory Care Review

1.5 Credit(s); 1.5 Lecture Hour(s)

This course is a review of respiratory care in preparation for the National Board for Respiratory Care Entry Level Examination, Written Registry Examination, and the Clinical Simulation Examination. The student will become familiar with the NBRC Examination Matrix and testing format for each of the national examinations. In order to successfully complete the course requirements, the student will be required to successfully complete, (based upon the minimum passing limit, MPL), and Entry Level Staff Assessment Examination produced by the NBRC. Semesters available: Day - Sp

Required as Prerequisite or Concurrent Course(s): *Take RESP 2590*

REGISTERED NURSING

RNUR 1010 - Basic Concepts in Nursing

6 Credit(s); 3 Lecture Hour(s)

An introduction to fundamental nursing skills, interpersonal communication and relationships, safety in practice, ethical/legal issues of nursing practice including nursing roles and boundaries, awareness of developmental levels, medication administration guidelines/techniques/calculations, IV assessment and calculations, OR protocols and procedures pre-, intra- and post-operative care, pain assessment & management, teaching and learning, and cognitive development with a focus on critical thinking. Emphasis is placed on interviewing and physical assessment skills; safe, hygienic client care; skills performance; emotional, spiritual, and cultural concerns; infection control, surgical wound healing, medical and surgical asepsis and excretory stressors. Stress adaptation/wellness, documentation, computer research, and community nursing resources are all integral aspects of the course. Utilization of all aspects of the nursing process is emphasized in classroom, clinical and laboratory experiences. Extended care facilities and acute care units in the hospital setting are utilized for clinical rotation to integrate gerontological and beginning medical-surgical nursing theory with practice. Semesters available: Day – F

Required Concurrent Course(s): *Take RNUR 1010C and RNUR 1010L*

Required as Prerequisite or Concurrent Course(s): *Take PSYC 1010, RNUR 1030 and BIOL 2751*

RNUR 1010C - Basic Concepts in Nursing Clinical

0 Credit(s); 6 Clinical Hour(s)

Required Concurrent Course(s): *Take RNUR 1010*

RNUR 1010L - Basic Concepts in Nursing Lab

0 Credit(s); 3 Lab Hour(s)

Required as Prerequisite or Concurrent Course(s): *Take RNUR 1010*

RNUR 1030 - Pharmacology

2 Credit(s); 2 Lecture Hour(s)

Pharmacology PNUR 1030/RNUR 1030 provides an introduction to the study of drugs. Content also includes classifications of drugs, dosage calculations, legal aspects of drug administration, and preparation and administration of drugs. Uses, actions and side effects of selected drugs will be studied as well as associated nursing care and implications. Semesters available: Day - F

Required Prerequisite Course(s): *MATH 0084 (minimum grade of C-) or qualifying placement test scores and High School Chemistry or CHEM 1010 (minimum grade of C-)*

RNUR 1050 - Intermediate Concepts in Nursing I

7 Credit(s); 12 Lab Hour(s), 3 Lecture Hour(s)

This course focuses on the response of clients to respiratory, urinary, gastrointestinal, orthopedic, endocrine (diabetes, thyroid, and parathyroid), fluid balance, and vascular stressors. Extensive emphasis is placed on meeting basic human needs, restoration of wellness, health maintenance, and promotion. Critical thinking, therapeutic communication, client teaching, developmental level tasks, cultural influences, and ethical/legal issues of nursing practice are also integrated throughout the course. Acute care units in the hospital setting are utilized for clinical rotation to integrate intermediate medical-surgical theory with practice. Semesters available: Day - Sp

Required Prerequisite Course(s): *Take RNUR 1010, RNUR 1030, PSYC 1010, BIOL 2751*

Required Concurrent Course(s): *Take RNUR 1050L and RNUR 1050C*

Required as Prerequisite or Concurrent Course(s): *Take PSYC 2010, BIOL 1101 and BIOL 2752*

RNUR 1050C - Intermediate Concepts in Nursing I Clinical

0 Credit(s); 9 Clinical Hour(s)

Required Concurrent Course(s): *Take RNUR 1050*

RNUR 1050L - Intermediate Concepts in Nursing I Lab

0 Credit(s); 3 Lab Hour(s)

Required Concurrent Course(s): *Take RNUR 1050*

RNUR 1070 - Intermediate Concepts in Nursing II

5 Credit(s); 9 Lab Hour(s), 2 Lecture Hour(s)

This intermediate course utilizes and builds on basic skills and knowledge of RNUR 1010 and RNUR 1050. The focus of study is on the utilization of the nursing process emphasized in classroom and clinical experiences as it relates to meeting basic human needs. Acute care units in the hospital setting are utilized for clinical rotation to integrate intermediate medical-surgical theory with practice. Semesters available: Day - Su

Required Prerequisite Course(s): Take RNUR 1050

Required Concurrent Course(s): Take RNUR 1070C

Required as Prerequisite or Concurrent Course(s): Take ENGL 1010

RNUR 1070C - Intermediate Concepts in Nursing II Clinical

0 Credit(s); 9 Clinical Hour(s)

Required Concurrent Course(s): Take RNUR 1070

RNUR 1090 - Professionalism in Nursing

1 Credit(s); 1 Lecture Hour(s)

Explores the development of professional nursing. Students are introduced to selected core nursing values, concepts, themes and theories which will be used as a foundation. The concepts of health and illness as influenced by psychological, social, cultural, ethical, and legal issues are examined. Nursing theories, the ANA Nursing Scope and Standards of Practice, Code of Ethics for Nurses, and Ohio Board of Nursing are explored. Semesters available: SU - Online

Required Prerequisite Course(s): Take RNUR 1010, RNUR 1030, RNUR 1050;

RNUR 1125 - Transition Concepts in Nursing
7 Credit(s); 5 Lecture Hour(s)
This course recognizes and builds on the previous education and work experience of the L.P.N. Emphasis of study is upon utilization of the nursing process to maintain and/or restore optimal level health for individuals with common recurring health problems. Theoretical content and clinical experiences focus on the stress adaptation process as it relates to the basic human needs of oxygenation, nutrition and elimination, activity and rest, safety and security, mental health and behavioral adjustment, and sexual role satisfaction. Theory regarding stress adaptation, therapeutic communication, nutrition, developmental levels/tasks, pharmacology, culture, community resources, and ethical/legal boundaries is integrated into the course. Laboratory and clinical experiences are planned to review and enrich knowledge of technical skills and nursing care. Some evening experiences may be scheduled during the semester. It is designed to assist the student who is a Licensed Practical Nurse (L.P.N.) to make the transition into the advanced level RNUR courses.
Required Prerequisite Course(s): *Take RNUR 1030 PSYC 1010 PSYC 2010, BIOL 1101, BIOL 2752*
Required Concurrent Course(s): *Take RNUR 1125L and RNUR 1125C*
Required as Prerequisite or Concurrent Course(s): *Take ENGL 1010*

RNUR 1125C - Transition Concepts in Nursing Clinical
0 Credit(s); 3 Clinical Hour(s)
Required Concurrent Course(s): *Take RNUR 1125*

RNUR 1125L - Transition Concepts in Nursing Lab
0 Credit(s); 3 Lab Hour(s)
Required Concurrent Course(s): *Take RNUR 1125*

RNUR 2030 - Advanced Concepts in Nursing I
8 Credit(s); 3 Lecture Hour(s)
This course is designed to assist the student to integrate and build on concepts and skills learned in previous nursing courses. Emphasis of study is upon utilization of the nursing process to maintain and/or restore optimal level health for individuals who present immediate and complex nursing needs. Critical thinking will be utilized in the exploration of theoretical content and clinical experiences. The focus of study is on the stress-adaptation process as it relates to the basic human needs of nutrition and elimination, safety and security, oxygenation, activity and rest, and mental health and behavioral adjustments. Health promotion in growth and development is a strong component of the course. Skills of self-evaluation, organization, discharge planning and referral will be developed. Knowledge regarding therapeutic communication, diet therapy, pharmacology, developmental levels/tasks, community health and resources, culture, and ethical/legal boundaries are integrated into the course. Clinical experiences are planned to work with children, adolescents, young adults and child-bearing clients. Clinical experiences are planned in community agencies with preceptors. Some evening clinical experiences may be scheduled during the quarter. Group leaders are expected to make clinical assignments the day prior to clinical experience. Semesters available: Day - F, Sp
Required Prerequisite Course(s): *Take RNUR 1070 or RNUR 1125*
Required Concurrent Course(s): *Take RNUR 2030C and RNUR 2030L*
Required as Prerequisite or Concurrent Course(s): *Take CHEM 1030, and BIOL 1550*

RNUR 2030C - Advanced Concepts in Nursing I Clinical
0 Credit(s); 12 Clinical Hour(s)
Required Concurrent Course(s): *Take RNUR 2030*

RNUR 2030L - Advanced Concepts in Nursing I Lab
0 Credit(s); 3 Lab Hour(s)
Required Concurrent Course(s): *Take RNUR 2030 and RNUR 2030C*

RNUR 2050 - Advanced Concepts in Nursing II
8 Credit(s); 3 Lecture Hour(s)
This course is designed to assist the student in integrating and expanding concepts and skills learned in previous nursing courses. Critical thinking will be utilized in implementing the nursing process to maintain and/or restore optimal level health and behavioral adjustment for individuals with complex nursing needs. Theoretical content and clinical experiences will focus on the stress-adaptation process as it relates to the basic human needs of mental health and behavioral adjustment, oxygenation, nutrition and elimination, and safety and security. Skills of self-evaluation and work organization will be developed. Knowledge regarding basic and therapeutic communication concepts, diet therapy, pharmacology, developmental levels/tasks, community health and resources, culture, and ethical/legal boundaries are integrated in the course. Clinical experiences are planned which allow the student to meet the course objectives in different settings (acute care hospitals, psychiatric hospitals and community agencies) and may include different shift times. Semesters available: Day - F, Sp
Required Prerequisite Course(s): *Take RNUR 1070 or RNUR 1125*
Required Concurrent Course(s): *Take RNUR 2050C and RNUR 2050L*
Required as Prerequisite or Concurrent Course(s): *Take CHEM 1030, and BIOL 1550*

RNUR 2050C - Advanced Concepts in Nursing II Clinical
0 Credit(s); 12 Clinical Hour(s)
Required Concurrent Course(s): *Take PNUR 2050*

RNUR 2050L - Advanced Concepts in Nursing II Lab
0 Credit(s); 3 Lab Hour(s)
Required Concurrent Course(s): *Take RNUR 2050 and RNUR 2050C*

RNUR 2070 - Nursing Trends and Transitions
1 Credit(s); 1 Lecture Hour(s)
A study of the complex processes that occur and influence the student's transition into nursing practice. Reality shock, the changing healthcare delivery system, as well as legal and ethical responsibilities and issues are included. The role of health care organizations as they relate to the practice of nursing is covered. The nurse's role in the political arena is explored. Delegation as an integral part of nursing care delivery is examined. Requirements for initial and continued licensure and employee expectations are included. Semesters available: Day - Sp
Required Prerequisite Course(s): *Take RNUR 1070 or RNUR 1125*

RNUR 2070L - Nursing Trends and Transitions Lab
0 Credit(s); 3 Lab Hour(s)
Required Concurrent Course(s): *Take RNUR 2070*

SOCIOLOGY

SOCY 1010 - Introduction to Sociology
3 Credit(s); 3 Lecture Hour(s)
Introduction to the theoretical foundations and methods used to gather, interpret, and evaluate data in sociology. Insight into how society is organized by focusing on the structure and function of social institutions, the impact of culture and socialization on individuals and groups, and systems of stratification among various racial and ethnic, social class, gender and sexuality groups. Please note outcomes are written to OBR standards using OBR language. Ohio Articulation Number OSS021. This course meets the requirements for OTM in Social and Behavioral Science TMSBS.

SOCY 1090 - Death and Dying
3 Credit(s); 3 Lecture Hour(s)
This course will focus on why and how people experience loss, death and grief. We will investigate the ideas of Kubler-Ross and others and expand our exploration to include the Eastern and Judeo-Christian perspectives. In addition, we will consider a variety of sources of grief (death, divorce, alcoholism, birth of a handicapped child, life-threatening illnesses, etc.) and how people react to such events. Semesters available: Day - F Evening - Sp

SOCY 2010 - Cultural Diversity and Racism

3 Credit(s); 3 Lecture Hour(s)

Sociological exploration of American racial and ethnic groups. Emphasis placed on the social construction of race and ethnicity, patterns of intergroup contact. Historical comparative analysis of selected groups with emphasis on economic, political and structural inequalities. Please note outcomes are written to OBR standards using OBR language. Ohio Articulation Number OSS 050 Race and Ethnicity. This course also meets the requirements for OTM in Social and Behavioral Sciences TMSBS.

SOCY 2030 - Marriage and Family

3 Credit(s); 3 Lecture Hour(s)

Sociology of Marriage and Family examines numerous components that impact the family, including: marriage, love, work, race and ethnicity, parenthood, divorce, remarriage/stepfamilies, and family violence. Theoretical perspectives related to families will also be examined. Social and governmental influences that relate to and impact families will be addressed. TAG# OSS023

SOCY 2050 - Social Problems

3 Credit(s); 3 Lecture Hour(s)

This course will present an overview of generally recognized social problems by sociological measurement. Definitions of social problems and an understanding of their impact on the quality of life and the social work field will be implemented.

SOCY 2999 - Special Topics in Sociology

3 Credit(s); 3 Lecture Hour(s)

Special Topics in Sociology - A particular topic or combination of topics will be covered when there is sufficient student interest. Students will be expected to contribute to discussions on the basis of readings in the selected areas. Course may be repeated on different topic. A specific course may be offered twice before it must be discontinued or added to the curriculum via the required Curriculum Committee process. Course offered based on student interest. Semesters available: Offered based on need.

SPANISH

SPAN 1010 - Beginning Spanish I

3 Credit(s); 3 Lecture Hour(s)

This course develops basic speaking, listening, writing and reading skills. The goal is for students to achieve a Novice Mid-level of proficiency across all the aforementioned skills. At this level, students will be able to engage in simple interpersonal exchanges. They will also be able to present and understand information about themselves and their immediate surroundings using words, phrases and memorized expressions while speaking and listening, reproduce from memory a modest number of words and phrases in context while writing, and identify a number of highly contextualized words and phrases including cognates and borrowed words while reading. Also, students will have an introduction to Hispanic Cultures by examining a variety of topics. This course is not intended for native speakers of Spanish.

SPAN 1020 - Beginning Spanish II

3 Credit(s); 3 Lecture Hour(s)

SPAN1020 is a continuation of SPAN 1010 with more advanced practice in listening, reading, speaking (spoken presentations as well as interpersonal exchanges), and writing with an emphasis on practical Spanish. Course includes introduction to Hispanic culture on selected topics. Prerequisite: Two years of high school Spanish or SPAN 1010 (C or above). This course is not intended for native speakers of Spanish. Semesters Available: Day-Sp

Required Prerequisite Course(s): *Take SPAN 1010; Minimum Grade C*

STATISTICS

STAT 0086 - Algebra for Probability & Statistics

2 Credit(s); 2 Lecture Hour(s)

This course is designed to teach students the algebraic methods and procedures that will be needed in a probability and statistics course. The topics will include demonstrations in using the calculator, scientific notation, order of operations, converting decimals to percents, inequalities, and exponents, radicals, solving equations, graphing lines using slope and y-intercept, solving equations using the quadratic formula, sequences and variation.

Required Prerequisite Course(s): *Take MATH 0072 or MATH 0073 with a minimum grade of C- OR COMPASS Algebra score of 1-30 OR ACT Math score of 19 or higher OR ACCUPLACER Elementary Algebra score of 45 or higher*

STAT 1010 - Probability and Statistics

3 Credit(s); 3 Lecture Hour(s)

This course provides the student with an overview of probability and statistics. Probability terminology, concepts and rules are emphasized in solving probability problems. Descriptive statistics, including measures of central tendency and dispersion, charts, tables and diagrams are used to summarize data. The student is introduced to the binomial, Poisson, hyper-geometric, normal and t-distributions. Confidence intervals, hypothesis testing, correlation, and linear regression are used to make conclusions concerning population parameters from sample data. This course meets the requirements for OTM Introductory Statistics TMM010.

Required as Prerequisite or Concurrent Course(s): *MATH 0084 (Minimum grade of C- required) or qualifying placement test score OR Co-requisite of STAT 0086*

STAT 1030 - Statistical Analysis

3 Credit(s); 3 Lecture Hour(s)

Students in this course learn analysis techniques including hypothesis testing and confidence intervals for standard deviations for one and two populations, contingency tables (chi-squared), analysis of variance (ANOVA), least squares method, multiple regression models, and non-parametric hypothesis tests. Students will design, develop, and present a statistical analysis project. Successful completion of STAT 1010 with a grade of C- or better required.

Required Prerequisite Course(s): *Successful completion of STAT 1010 with a grade of C- or better required*

STAT 1040 - Statistics for Business Analytics

3 Credit(s); 3 Lecture Hour(s)

Statistical inferences including estimation, confidence intervals, and tests of hypotheses for means, standard deviations, and proportions: analysis of variance; regression analysis; chi-square; business applications. Students will develop a basic competency in using a computer spreadsheet and/or the graphing calculator to perform statistical calculations.

Required Prerequisite Course(s): *Successful completion of STAT 1010 with a grade of C- or better required*

STAT 1050 - Statistical Methods in Business

3 Credit(s); 3 Lecture Hour(s)

This course presents a study of basic concepts and practices of statistics as they relate to business. The course includes descriptive statistics, probability, statistical distributions, sampling, estimation, and hypothesis testing. Other topics include correlation, regression, process improvement using control charts, index numbers, and time series analysis. Successful completion of MATH 0084 with a grade of C- or better or a COMPASS Algebra score of 65 or higher or ACT Math score of 22 or higher required.

Required Prerequisite Course(s): *MATH 0084 or higher with a grade of C- or better or COMPASS Algebra score of 52 or higher or ACT Math score of 22 or higher oe ACCUPLACER College Level Math score of 30 or higher required*

STATE TESTED NURSE ASSISTANT

STNA 1110 - State Tested Nurse Assistant

3 Credit(s); 3 Lab Hour(s), 2 Lecture Hour(s)

The course is the classroom and laboratory portion of state-mandated testing for Nurse Aides in Ohio. The course is designed to prepare the students to successfully pass the state-mandated testing for Nurse Aides in Ohio. Students will satisfactorily complete the didactic and laboratory portion of the Ohio Department of Health's, Nurse Aide Training and Competency Evaluation Program, (NATCEP). This course will consist of 80 class lecture hours and skills development. This course is a flex course and may not follow the regular College calendar. The scheduled dates and times vary throughout the year. The course is taught off campus. Semesters available: Offered based on need.

Required Concurrent Course(s): *Take STNA 1250*

STNA 1150 - State Tested Nurse Asst CPR/First Aid

1 Credit(s); 1 Lecture Hour(s)

A practical course in the care and handling of victims of common emergencies; i.e., transportation and household accidents, climate related emergencies. Areas include basic life support, victim assessment, shock, bleeding, bandaging, splinting, burns, poisoning, medical emergencies, rescue and moving victims, triage. Students who meet the examination requirements will receive both a Community First Aid and Safety card from the American Red Cross and Basic Life Support for Heath Care Provider Professional's card from the American Heart Association. This course is a flex course and may not follow the regular College calendar. The scheduled dates and times vary throughout the year. The course is taught off campus. Semesters available: Offered based on need.

STNA 1250 - State Tested Nurse Assistant Directed Practice

2 Credit(s); 1 Lecture Hour(s), 12 Practicum Hour(s)

The course is the directed practice training associated with STNA 1110 and STNA 1150 of the state-mandated testing for Nurse Aides in Ohio. The course is designed to prepare the students clinically to demonstrate the skills learned in the STNA 1110 and STNA 1150 courses. Students will satisfactorily complete the laboratory portion of the Ohio Department of Health's, Nurse Aide Training and Competency Evaluation Program, (NATCEP). This course consists of 12 directed practice hours /week of skills development. This course is a flex course and may not follow the regular College calendar. The scheduled dates and times vary throughout the year. The course is taught off campus. Semesters available: Offered based on need.

Required Concurrent Course(s): *Take STNA 1110*

SURGICAL TECHNOLOGY

SURG 1030 - Fundamentals of Surgical Technology

12 Credit(s); 10 Lab Hour(s), 6 Lecture Hour(s), 8 Practicum Hour(s)

This course teaches the role and responsibility of the surgical technologist in effective communication, legal, ethical, and moral aspects of care, preparation of the patient for surgery, preparation of the OR for surgery, aseptic techniques, patient care procedures, environmental safety, and supply/equipment preparation and use. This course is for surgical technologist only and will not meet the needs for any other allied health or nursing program.

Required Prerequisite Course(s): *BIOL1550*

SURG 1070 - Surgical Technology Procedures

16 Credit(s); 3 Lab Hour(s), 11 Lecture Hour(s)

This course covers selected commonly performed surgical procedures, pathology leading to surgical intervention, purposes of surgery, problems that may arise, and techniques/instruments specific to general & minimal access as applied to GI, urology, male reproductive, OB & GYN surgeries, Vascular, Thoracic, Neurology, Ophthalmic, ENT, Plastics, Orthopedics, and Dental. The course practicum component allows demonstration of both psychomotor skill competency and practicum judgment. This course is for surgical technologist only and will not meet the needs for any other allied health or nursing program.

Required Prerequisite Course(s): *Take SURG 1030, BIOL 2751, BIOL 2752*

THEATRE

THEA 1010 - Introduction to Theatre

3 Credit(s); 3 Lecture Hour(s)

Course is an overview of theatre as an art form. Includes historical and production points of view. Students will effectively view and critique plays and musicals. This is NOT a performance-based course, but a theory and analysis-based class. Semesters Available: Offered based on need.

VISUAL COMMUNICATION MEDIA AND TECHNOLOGY

VCMT 1050 - Imaging I

3 Credit(s); 2 Lab Hour(s), 2 Lecture Hour(s)

Course work includes an introduction to the vocabulary and production processes necessary to create images for printing, web design, and video, including desktop scanning and resolution. Using the leading computer software applications, students will explore raster and create vector-based imagery, illustration, photo restoration, color correction and image composting.

VCMT 1085 - Visual Communications I

3 Credit(s); 2 Lab Hour(s), 2 Lecture Hour(s)

This beginning course provides an overview of the MAC computer platform, and the Visual Communication Media and Technology industry. Students will explore different careers in the VCMT field. This course provides an overview of visual communication, graphic design principles, layout design, and typography. The leading computer software applications will be used to explore the processes of design and layout of different types of documents and media.

Required as Prerequisite or Concurrent Course(s): *Take VCMT 1050*

VCMT 1190 - Video Production I

3 Credit(s); 2 Lab Hour(s), 2 Lecture Hour(s)

This course explores the basic concepts, principles, terminology, skills, design techniques, styles and production processes utilized in planning, writing, lighting, performing, shooting, editing, and graphic generation for producing video. Producing quality audio for video is also explored. Single camera style, creative team work and storytelling will also be employed. TAG# OCM008

Required Prerequisite Course(s): *Take ARTS 1070 and VCMT 1050 with a minimum grade of C-*

VCMT 1280 - Visual Communication II & Typography

3 Credit(s); 2 Lab Hour(s,) 2 Lecture Hour(s)

Expanding on student's knowledge of graphic design elements and principles covered in VCMT 1085, students will further explore page design. Emphasis will be on typography. History of typography, graphic design, and printing processes will be studied. Projects may include advertisements, letter shapes, logos, brochures, tables, form documents, grid layouts and mass media communication. Semesters available: Days - Sp

Required Prerequisite Course(s): *Take VCMT 1085 with a minimum grade of C-*

VCMT 1550 - Imaging II

3 Credit(s); 2 Lab Hour(s), 2 Lecture Hour(s)

This course will expand on the vocabulary and production processes learned in VCMT 1050 - Imaging I. Emphasis will be on raster-based images produced from the leading graphic software applications. Digital photography, developing images for the Internet, and more complex compositing techniques will be covered. Semesters available: Days - Sp Evenings - Sp

Required Prerequisite Course(s): *Take ARTS 1010, VCMT 1050 with a minimum grade of C-*

VCMT 2060 - Principles of Printing Technology

3 Credit(s); 2 Lab Hour(s), 2 Lecture Hour(s)

An overview of printing processes including individual hands-on experience with the major printing processes including offset lithography, large format inkjet, digital printing and silk screen printing. Printing materials and finishing techniques will be included. Hands-on experience printing in the lab will be required. Semesters available: Days - Sp

Required Prerequisite Course(s): *Take VCMT 1280, VCMT 1550*

VCMT 2070 - Web Design I

3 Credit(s); 3 Lab Hour(s), 2 Lecture Hour(s)

This class will cover current web design workflow, best practices for web design including designing for mobile phones, UX/UI user experience/interface design, HTML5, CSS and Javascript to build web sites, ftp access to web servers, SEO (search engine optimization) and web site analytics. Students will build at least one web site using an HTML text editor with Bootstrap or other CSS responsive framework and another web site with CMS (Content Management Software) like Wordpress. Web sites will contain images, text, navigation and carousel or slide show. Students should have experience with image editing software as well as websites and mobile apps. CTAG: CTIM005 Graphical Website Design.

Required Prerequisite Course(s): *Take VCMT 1050 with a minimum grade of C*

VCMT 2280 - Editing & Publishing for Visual

3 Credit(s); 4 Lab Hour(s), 1 Lecture Hour(s)

This course blends both copy and design to further develop skills in writing for publications, designing, and producing publications. Students will get experience in two related areas 1) writing and editing documents for publication, and 2) using design publication software to produce multiple page documents like books, newsletters, magazines, ebooks, and interactive publications. Students will produce copy for their publishing projects prior to placing it in their layout, will edit copy for technical correction, and will copy fit text to complete their projects. The use of grids, master pages, style sheets, tables, forms, and variable data, for print and electronic publication will be covered. This course will be team taught with the English department. Semesters available: Days - Sp

Required Prerequisite Course(s): *Take VCMT 1280, ENGL 1030 with a minimum grade of C- in both classes*

VCMT 2390 - Video Production II

3 Credit(s); 2 Lab Hour(s), 2 Lecture Hour(s)

This course builds on the skills learned in the Introduction to Video I course. Students will have an opportunity to explore more in depth concepts, principles, techniques and processes of producing, writing and directing as well as lighting, shooting, and editing audio and video. Students will have an opportunity to acquire skills in producing corporate/industrial style videos using both field and studio approaches.

Required Prerequisite Course(s): *Take VCMT 1190 with a minimum grade of C-*

VCMT 2400 - Motion Graphics

3 Credit(s); 4 Lab Hour(s), 1 Lecture Hour(s)

This course is intended to build upon the skills received in previous VCMT imaging and video courses. The focus is on temporal and dynamic graphic communication incorporating video, stills, illustration, music and animation within a motion graphics software application. By the end of this course the student will be able to create a dynamic logo, program opening as well as an animated lower third and an info graphic for a video program.

Required as Prerequisite or Concurrent Course(s): *Take VCMT 1190 and VCMT 1550*

VCMT 2550 - Imaging III

3 Credit(s); 4 Lab Hour(s), 1 Lecture Hour(s)

This course will cover advanced vector & raster imaging techniques. Vector imaging techniques will cover information graphics, cartography, package design, 3 D gradient mesh, and technical illustration. Students will produce samples for their portfolio that demonstrate their skills in image manipulation, including advanced color correction, advanced photo retouching techniques, and photo montage. Semesters available: Days - F

Required Prerequisite Course(s): *Take VCMT 1550 with a minimum grade of C-*

VCMT 2590 - Video Production III

3 Credit(s); 4 Lab Hour(s), 1 Lecture Hour(s)

This course will allow students to gain a more critical and in-depth perspective of organizational video production. Students will have opportunities to gain real world experience by producing organizational videos. Advanced techniques in directing, videography, audio and video editing, and lighting will be employed. This course will allow students to build confidence in their producing skills as well as add to their portfolios.

Required Prerequisite Course(s): *Take VCMT 2390 with a minimum grade of C-*

VCMT 2700 - Capstone Multimedia Portfolio

2 Credit(s); 2 Lab Hour(s), 1 Lecture Hour(s)

This course is designed to take a project idea from pre-production to finished product. Students will be expected to utilize all skills acquired in their VCMT program to assemble an electronic portfolio which can be used for employment interviews. All VCMT classes completed or concurrently enrolled. This class should be taken within 20 credit hours of graduation. Semesters available: Days - Sp

Required as Prerequisite or Concurrent Course(s): *15 credit hours of VCMT & ARTS classes must be completed or concurrent (with a C- or better) and a GPA of 2.00*

VCMT 2800 - Cooperative Work Experience

1 Credit(s); 1 Lecture Hour(s)

The cooperative work experience is an opportunity for students to obtain practical work experience in the Visual Communications Field, while earning college credit. This on or off campus employment experience can be paid or unpaid. The work experience is coordinated by a faculty member who visits the job site for a conference with the student and the supervisor at least once per semester. Students must complete 150 hrs of work experience. This class is pass/fail. Semesters available Days - F, Sp, Su

Required Prerequisite Course(s): *Must be concurrent with VCMT 2850 - Seminar. Student must have completed 24 semester credit hours of VCMT classes with a C- or better. Students should have a 2.0 GPA. All forms required for the Cooperative Work Experience must be submitted upon registering for this class. Students are required to attend an orientation class the first week of the semester. Students must get permission of the instructor in order to enroll in this class.*

Required Concurrent Course(s): *Take VCMT 2850*

VCMT 2850 - Seminar

1 Credit(s); 1 Lecture Hour(s)

This course is taken concurrently with VCMT 2800 - Cooperative Work Experience. Students will discuss their work place experiences that occur during their Cooperative Work Experience. Students must get permission of the instructor in order to enroll in this class. Semesters available Days - F, Sp, Su

Required Concurrent Course(s): *Take VCMT 2800*

VCMT 2999 - Special Topics in Visual Communication Media & Technology

3 Credit(s); 3 Lecture Hour(s)

This course enables faculty members in the Visual Communications Media & Technology department to present a specific topic or project in Visual Communications, on a limited basis, that is not normally covered in the current VCMT curriculum. The course may be offered twice before it must be discontinued or added to the curriculum via the required Curriculum Committee process.

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HEIDEN SECRIST-EICHORN, Education
AMANDA SEITER, Occupational Therapy Assistant
THOMAS SELVAGE, English
ALLISON SHAPERO, Business
AMANDA SHEETS, English
HEATHER SHEPARD, English
MICHAEL SHERFY, History
THOMAS SHIELDS, English
JAMES SIMMERING, Industrial Technology
SHEILA SIPES-JONES, Mathematics
DAVID SMITH, Chemistry
SCOTT SMITH, English, Theatre
ALICE SOCKWELL, Nursing
JAMIE SOURS, Radiological Sciences
MICHAEL STINE, Philosophy
SHELBY STOUT, Nursing
GREGORY STRINGER, History
BREAH STUMP, Business
PAUL SUKYS, Humanities, Philosophy
KRISTOPHER SULLENBERGER, Engineering Technology
MACKENZIE TAYLOR, Geology
DIANNA TEMPLE, Art
NICK TERRY, Visual Communications Media & Technology
MADISON THOMPSON, Humanities
NYSSA TUCKER, Mathematics
MAKAYLA TYREE, Mathematics
DULCEY WAGNER, Health Services, Nursing
LINDA WAGNER, English
PAULA WALDRUFF, Business
BRANDI WALKER, First Year Experience, Mathematics
SETH WALKER, Criminal Justice
PAULA WANDER, Biology
RICHARD WASOWSKI, Communications
CORISA WELCH, Criminal Justice
MISTY WELCH, Nursing
DANTAN WERNECKE, Political Science
ERIC WILLIAMS, Humanities
P MARIE WILLIAMS, Health Services
ERIC WINBIGLER, Criminal Justice
VIVIAN WINTERS, Human Services
LINDA WORLEY, Biology
WEI XIONG, English
ELIZABETH YOUNG, Nursing
LUMENG ZHONG, Visual Communications Media & Technology
AARON ZHU, Accounting

COLLEGE CREDIT PLUS FACULTY

The following individuals partner with the college to deliver credit courses are area high schools and career centers.

TAMI ABSI, Ohio Virtual Academy
KAREN ALLEN, Centerburg High School
NATHAN ALTIZER, Centerburg High School
MICHELLE ASHLEY, Colonel Crawford High School
LEANNE BAUERDICK, Pioneer Career and Technology Center
KIMBERLY BOEHM, Madison High School
JENNA BOLLINGER, Galion High School
KATHLEEN CAUGHENBAUGH, Plymouth High School
JAIME CHENEVEY, West Holmes High School
AMANDA CLAWSON, Mansfield Senior High School
ANDREW COCHRAN, Colonel Crawford High School
JEFF COOK, South Central High School
JACQUELINE COSTAS, Ashland County - West Holmes Career Center
CHARMAE COTTOM, Pioneer Career and Technology Center
WES COURSER, Mansfield Christian High School
ADAM DANIELS, Colonel Crawford High School
ANGELA DEGRAY, Galion High School
TY DENDINGER, South Central High School
ALEX DEWITT, Wayne City Schools Career Center
ELLEN DICKERSON, Centerburg High School
JAMES DILLON, Madison High School
BEN DROWN, Loudonville High School
JACKIE DUNCAN, Shelby High School
RANDY ECHELBERGER, Clear Fork High School
TENA EYSTER, Galion High School
DANE FARINA, Lucas High School
MELISSA FITTANTE, Ontario High School
ROBERT FLANNERY, Pioneer Career and Technology Center
BRYAN FRITZ, Plymouth High School
CHRIS GARVERICK, EHOVE Career Center
DANIEL GEORGE, Pioneer Career and Technology Center
BECKY GRAHAM, Ft. Hayes Career Center
PAMELA GRUBBS, Ashland County - West Holmes Career Center
JANELLE GRUBE, Plymouth High School
ANDREW GUERTLER, Shelby High School
SCOTT GURNEY, Shelby High School
ROBIN HAGER, Pioneer Career and Technology Center
JESSICA HAMMOND, Galion High School
MATTHEW HANNING, Pioneer Career and Technology Center
PAT HARGIS, Bucyrus High School
BETHANY HART, Norwayne High School
BRAD HELENTHAL, Norwayne High School
TIMOTHY HENIGE, Ontario High School
CHRIS HICKS, Pioneer Career and Technology Center
CHRIS HIGGINS, Norwalk High School
ABBY HOFFMAN, Ashland High School
MARK HOFFMAN, Hillsdale High School
MEAGHAN HOSTETLER, Ashland High School
RICHARD JACOX, Ontario High School
CHRISTOPHER KARL, Pioneer Career and Technology Center
AUBREY KLINK, Madison High School
BRIAN KRIEGER, Ashland High School
NICOLE LAMBRIGHT, Galion High School
TOM LEWIS, Mt. Gilead High School
SARAH LUCHA, South Central High School
MICHAEL MACK, Hillsdale High School
JASON MARTIN, Plymouth High School
TONI MCKEE, Ashland High School
KRISTA MCKIBBEN, Colonel Crawford High School
SHANNON MCKIERNAN, Plymouth High School

CHAD METZGER, Madison High School
TERRY OSWALD, Buckeye Central High School
RENEE PARRILL, Ohio Virtual Academy
TYLER POPE, Buckeye Central High School
LUKE POWER, Hillsdale High School
TRISHA REESE, Norwayne High School
LAURA RINGLER, Plymouth High School
KIMBERLY ROGERS, Ashland High School
AIMEE ROSS, Loudonville High School
CARTER ROSS, Mansfield Christian High School
BRIELLE SAUTTER, Centerburg High School
KIMBERLEE SCHROETER, Mansfield Senior High School
TOM SELVAGE, Hillsdale High School
BRIAN SHEA, EHOVE Career Center
JIM SIMMERING, Ashland County - West Holmes Career Center
ADAM STALEY, Clear Fork High School
KATIE STASEN, Crestline High School
KIP STEVENS, Pioneer Career and Technology Center
ERIC STONER, Loudonville High School
TERA STUMP, Norwayne High School
TAYLOR TACKETT, Colonel Crawford High School
TIARA TAYLOR, Ohio Virtual Academy
HEATHER TEGTMEIER, Northwestern High School
REGINA THEISEN, Ontario High School
JENISE VAUGHN, Ashland High School
TAMI VAUGHN, Clear Fork High School
BETH VIPPERMAN, Willard High School
RICH WASOWSKI, Ashland High School
MEGAN WEADE, Centerburg High School
AARON WELTLIN, Plymouth High School
ERIC WINBIGLER, Pioneer Career and Technology Center
DAVID WOODS, Crestline High School

ADVISORY COMMITTEES

ACCOUNTING

Mark Damberger, RS Hanline
Denny Davis, CPA, Retired
Pat Dropsey, Richland County Auditor
Bill Harvey, Whitcomb and Hess
Nanci Keinath, Kilgore and Herring CPAs
Dennis Lammers, RS Hanline
Cindi Mathys, Buffalo Wild Wings
Bill Miller, CPA, Retired
Roger Miller, Mizick, Miller and Co., Inc.
Angie Morehead, Gorman Rupp Company
Linda Schumacher, Pioneer Career and Technology Center
David Taylor, CPA
Rita Wiening, Pioneer Career and Technology Center
Alex Willacker, RS Hanline

BIOSCIENCE TECHNOLOGY

Dale Arnold, Ohio Farm Bureau
Melissa Carr, Charles River Laboratories
Rod Cheyney, Ashland County-West Holmes Career Center
Maribeth Eckert, Charles River Laboratories
Amy Elderbrock, Ashland County-College Now Coordinator
Sherry Fair, Mansfield Wastewater Treatment Facility
Abby Levitt, University of Findlay
Troy Menssen, Oxyrase
Mason Posner, Ashland University
Leanne Silvis, Charles River Laboratories
William Wallace, Mansfield Water Treatment Plant

BUSINESS ADMINISTRATION

Val Ashcraft, RFME
Austin Baker, Directions Credit Union
Rick Casey, Marco Photo Services
Jarred Cass, Avita WorkWell
Bill Condo, MTD Products
Neil Hamilton, SCORE
Elie Harriett, Classic Insurance & Financial Services, Co.
Jeremy Harrison, Spire Advertising
Clayton Herold, Richland Bank
Jessica Hiser, Spherion
Greg Kibler, Strategic Wealth Management Group
Michalina Lacy, Small Business Development Center
Caitlin McKelvey, Shelby YMCA
Rebecca Owens, Catholic Charities Diocese of Toledo
Tobey Roberts, Temp2Hire
Jodi Scott, Madison Marquette
Dara Shade, Key Bank
Christina Simpkins, Stoneridge Hi-Stat
Dave Warren, Spherion Staffing
Holly Williams, Kingwood Center Gardens
John-Mark Young, Whitaker-Meyers
Jackie Zugg, Western & Southern Life

CHILD DEVELOPMENT CENTER

GOVERNING BOARD

Sheila Campbell, North Central State College
Sheryl Cress, North Central State College
Daniel Dickman, Richland County Job and Family Services
Melanie Fahey, Catalyst Life Services
Carol Freytag, The Ohio State University Mansfield
Donna Hight, The Ohio State University Mansfield
Diane Karther, Retired Mental Health & Recovery Board Ashland
Michelle Kowalski, The Ohio State University Mansfield
Cindy Pitcher, Richland County Job & Family Services
Jason Tucker, North Central State College

POLICY COUNCIL

Lydia Dennin, Parent, Richland County Children Services
Coryanna Fraley, Student Parent, North Central State College
Suzanna Hammond, Little Buckeye Children's Museum
Rhonda Marsh, Richland County Children's Services
Danielle Reith, YMCA Child Care Resources & Referral
Shawn Scott, Parent, Child Development Center
Carrie Witwer, Student Parent, North Central State College

CRIMINAL JUSTICE

Scott Berry, Richland County Court Services
Lance Combs, Shelby Police Department
John Hinton, Morrow County Sheriff
Amy Ivy, Ohio State Highway Patrol
Paul Johnson, CCP, CHPA, OhioHealth Systems
David Mack, Shelby Police Department
Joe Masi, Richland County Sheriff Department
Mark Maxwell, EMA, Knox County
Carl Richert II, Ashland County Sheriff
Steve Sheldon, Richland County Sheriff Department
Eric Winbigler, Pioneer Career and Technology Center

ENGINEERING TECHNOLOGY AND INDUSTRIAL TECHNOLOGY

Andrew Agard, Gorman Rupp
Ed Alt, MTD Products
Paul Boggs, Jay Industries
Dale Butler, Gorman Rupp
Mark Cacchio, NextGen Films
Thomas Close, Ashland County West Holmes Career Center
Bill Condo, MTD Products
Steve Cummings, Mansfield Engineered Components
Brad Cyrus, Gorman Rupp
DJ Daniels, Gorman Rupp
BJ Ellis, NextGen Films
Clay Frye, Pioneer Career and Technology Center
Jeff Gray, Guild International
Lee Heilman, Superb Industries, Inc.
Neil Hergatt, Hergatt Machine, Inc.
Mark Hess, Hess Industries
Sam Hillman, Hillman Precision, Inc.
Jason Hoffman, Buckeye Educational Systems
Hank Keller, Richland Manufacturing Coalition
David McGough, Knox County Career Center
Corey Miller, Timkin
Carl Neutzling, IBEW
Dave Roseberry, Warren Rupp
Kimberly Spencer, Anheuser-Busch, Inc.
Brandy Straub, Hi-Stat Manufacturing
Eric Swain, Covert Manufacturing
Jonie Tucker, Timkin
Ben Williams, CSI Controls

HEALTH SERVICES TECHNOLOGY

Janet Ballard, EHOVE Adult Education
Deborah Ferguson, OhioHealth Mansfield
Angie Hoptry, Central Ohio EMS
Velma Messenger, Madison Adult Education
Sonja Pluck, Madison Adult Education

HUMAN SERVICES

Diana Adams, Student Representative
Teresa Cook, Area Agency on Aging
Mary Jo Hawk, The Ohio State University, Mansfield
Jennifer Henderson, H&R Choices
Kelley Kantor, Salvation Army KROC Center
Jenny Keesee, Student Representative
Lillie Kirsch, Marion Technical College
Brychelle Lawrence, Family Life Counseling and Psychiatric Services
Jean Ollis, Mt. Vernon Nazarene University, Mansfield
Amanda South, Richland Newhope Industries, Inc.
Cindy Wallis, Community Counseling Service
Vivian Winters, North Central State College
Angela Woodward, Ashland County Career Association

INFORMATION TECHNOLOGY

Luke Abrams, Newman Technology, Inc.
Steve Allen, CenturyLink
Glenn Baker, RR Donnelly and Sons
Curt Bannworth, RR Donnelly and Sons
Dan Cannon, MT Business Technologies, Inc.
Mark Coe, Ohio Mutual Insurance Group
Keith Dawson, Century Link
Scott Drozda, Partec Systems
Aaron Francis, Optum
Chris Gaverick, EHOVE Career Center
Rob Heyde, Abercrombie & Fitch Company
Gary Lauderbaugh, Ohio Mutual Insurance Group
Steve Lawhorn, Mobile Tek Services
Mick Leach, Alliance Data
Scott Moats, MT Business Technologies, Inc.
Kyle Newmyer, OhioHealth
Michael Pfeifer, ES Consulting
Jason Poth, Sentec Systems, LLC
Major Price, North Central State College
Alex Reed, Avita Health Systems
Chris Risner, Gorman Rupp
Denao Ruttino, Advanced Computer Connections
Brian Schmidt, Schmidt Security
Terry Sheets, Avita Health Systems
Charles Smith, Eagle Mark 4 Equipment
James Weiner, City of Manfield
Tyler Westmoreland, LSC Communications
D. Patrick Wischmeier, Gorman Rupp
Shawn Zerby, Guidewire

NURSING, PRACTICAL

Becky Allen, Kingston of Ashland
Lisa Browning, Brethren Care Village
Jennifer Burton, Fairway Schools
Joia Crago, RN, Avita Health Systems Galion
Judy Fisher, Visiting Nurses Association
Carrie Harpster, Brethren Care Ashland
Sarah Kerr, Good Shepherd Nursing Home
Hellen Sauder, Good Shepherd Nursing Home
James Secrest, LPN Graduate
Tracy Tabor, Kingston of Ashland
Laura Weyant, Kingston of Ashland
Ellisa Workman, Heartland of Bucyrus

NURSING, REGISTERED

Shirley Bixby, Ashland County Health Department
Lisa Browning, Brethern Care Village, Ashland
Barbara Bull, Country Pointe
Lisa Bushong, University Hospital Ashland
Joia Crago, Avita Health Systems Galion
Stacy Daniel, Clinical RD
Libby Daniels, OhioHealth Mansfield
Trisha DelGreco, OhioHealth Shelby
Kelly Dials, RN, OhioHealth Mansfield
Kathy Durflinger, Avita Health System Ontario
Erin Fitzpatrick, Knox Community Hospital
Jason Gahring, Fisher Titus Medical Center
Carrie Harpster, Brethren Care Village
Tyler Harris, Willows at Willard
Marsha Hoover, OhioHealth Mansfield
Beth Howard, Winchester Terrace Nursing Home
Shirley Irvine, University Hospital Ashland
Sarah Kerr, LLS The Good Shepherd
Ashley Kube, Avita Health Systems
Tonya Purdy, UH Samaritan Hospital
Cathy Sapp, Home Care Matters
Helen Sauder, LLS The Good Shepherd Ashland
Amy Schmidt, Richland Public Health
Joe Snyder, Wooster Hyperbolic and Wound Center
Julia Swain, Samaritan Regional Health System
Tracy Tabor, Kingston of Ashland
Laura Weyant, Kingston of Ashland

PHYSICAL THERAPIST ASSISTANT

Laurie Brackett, PT, Richland Newhope
Billie Daley, PTA
Andrea DeNero, PTA, Avita Summit Therapy
Justin Drew, PTA, University Hospital Ashland
Brianne Drinkard, PTA, Absolute/Altercare Brethren Care Villiage
Melissa Duff, PT, County Board of Development Disabilities
Cheryl Gray, PTA, University Hospital Ashland
Lori Hunt, PTA, Executive Care Home Health and Rehabilitation
Kelly Kisling, PTA, Nationwide Children's
Esther Moore, PTA, Mohican Sports Medicine
Truly Moore, PT, Kingston of Ashland
Jeff Music, PTA, Apex Therapy, Crystal Care Center
Christie Schaffer, PTA, OhioHealth

RADIOLOGICAL SCIENCES

Heidi Chambers, OhioHealth Mansfield
Haring Darbee, OhioHealth Mansfield
Tonya Drum, RT (R), Samaritan Regional Health System
Kelly Gouge, RT (R) (CT) (MR) (M), Avita Health System Galion
Dave Harrison, RT (R), Wooster Community Hospital
Lori Holzworth, RT (R) (CT), OhioHealth Mansfield
Andrea Johnston, OhioHealth Mansfield
Karla Meisner, RT (R) (MR), Avita Health System Galion
Jaime Sours, Wooster Community Hospital
Shanthan Tumu, DO, OhioHealth Mansfield

RESPIRATORY CARE

Devon Adams, Avita Health System
Lisa Awad, Ohio Health Mansfield
Chris Baker, RRT/RCP, Wooster Community Hospital
Pam Couch, RRT/RCP, Samaritan Hospital
Laura Evans, RRT/RCP, Nationwide Children's Hospital
Alisha Greene, Student Representative
Larry Hamon, Knox Community Hospital
Nicole Hance, Fisher Titus Medical Center
Henry Heinzmann, M.D., Program Medical Director
Lynn Long, RRT/RCP, Marion General Hospital
Rachel Samuels, Student Representative
Kathy Smetzer
Nick Thornton
Reagan Wells

VISUAL COMMUNICATIONS MEDIA AND TECHNOLOGY

Aaron Billheimer, Fan CaveStan Cain, Cain Graphics
Whitney Caldwalder, Brendon Publishing
Arnie Clawson, Hobby Store
Noah Gangi, Samaritan Hospital
Tim Joyce, DRM
Natalie Lantz, Pivot Creative
John Maurer, Maurer Photography
Teri Myers, North Central State College
Don Sanders, Crown Jewlz
Brian Skowronski, WMFD
Stephanie Smith, Church Directories
Barbara Speelman, Murr Printing
Robert Wappner, Heritage Graphics

Maps

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