## orthwest State <br> Community College



## Northwest State Community College

## Mission:

To Serve by Creating Opportunities which maximize the potential of individuals, communities and organizations through transformational learning.

## Vision:

Serving as a beacon of leadership, Northwest State Community
College will be a gateway, its people the keystone, to a sustainable future.

## Call to Service:

To be an innovative leader providing access to those who seek to learn.
To be committed to the development of human potential.
To be a leader and partner in economic and community development.
To be a skillful steward of resources accountable to our varied stakeholders.

Northwest State Community College is accredited by:
The Higher Learning Commission
30 North La Salle Street, Suite 2400
Chicago, IL 60602-2504
312-263-0456
www.ncahigherlearningcommission.org


All of us at Northwest State Community College welcome you to our college community. Northwest State is an innovative college that is creating ways to reach out to you. At NSCC it is about you - your future, your career, and your success.

In order to accomplish our goal, the college has an excellent staff, faculty and facilities with a full array of support services. At Northwest State, opportunities come in many forms - the Applied Associate Degrees, Associate of Arts and Science Degree, as well as pathways to careers or bachelor degree programs which NSCC makes available through college and university partnerships. There are opportunities for certificate programs, licensure preparation and industry certification in various fields, and continuing education for professional development and personal interest. Custom Training Solutions (CTS), a division of Northwest State, offers specialized and customized training for the business and industry workforce.

The Northwest State Community College community looks forward to assisting you throughout your college experience by providing a quality education that is accessible and flexible to meet your needs. Whether you are entering college directly from high school or returning to college later in life, we thank you for making Northwest State your first choice for providing you with a relevant curriculum that will transform youlife.

On behalf of the Board of Trustees and the College, we welcome you to Northwest State Community College.

Whether you are continuing your education, looking for challenging and engaging courses, orimprovingyourcurrent jobskills, we invite youto consider Northwest State CommunityCollege.

Try to imagine all the individuals who have succeeded after graduating from NSCC. Youare following in the footsteps of these individuals. Youtoohave the opportunity to succeed by attending one of the fastest growing two-year schools in the state of Ohio. When you tour our campus you quickly discoverthat our faculty, staff, andadministration care about your success. Our people and our facilities provide the environment, the curriculum, the technical support, and state of the artequipment to meet thehighest academic standards for student success. As the Chancellor of the Ohio Board of Regents stated during his recent visit to Northwest State, "Community colleges are the backbone of our effort to increase educational attainment. They are the most accessible, affordable parts of our educational system."

We welcome the opportunity to serve you. Thank you for letting ushelpfulfill your educational needs. Northwest State Community College...itreally Makes YouThink!
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Northwest State Community College is an affirmative action, equal opportunity employer and educator that does not discriminate on the basis of race, color, national origin, religion, disability, gender, or age.

In accordance with the Americans with Disabilities Act, it is the policy of Northwest State Community College to provide reasonable accommodations to persons with disabilities.

Any information contained in this catalog is subject to change whenever the College deems it necessary so that the most current trends in technology, education, and the economy can be addressed. Students are advised to consult with their advisor or the appropriate College official for current policies, procedures, or requirements.

For further information contact:
Northwest State Community College
22600 State Route 34
Archbold, OH43502-9542

## Progressive History

Northwest State Community College is located in the last region of the Buckeye State to be claimed by settlers. In the quarter century since the Ohio Board of Regents approved the formation of the Four County Technical Institute, this community-serving institution has progressed steadily into the future, discovering and meeting the diverse and ever-changing needs of Defiance, Fulton, Henry, Paulding, and Williams Counties.

Studies in 1966 and again in 1967 established that a need for technical education existed and would grow in Northwest Ohio. Consequently, in 1968, the Ohio Board of Regents approved the formation of Four County Technical Institute, and classes began in September, 1969, in the west wing of the Four County Joint Vocational School. In 1972, Northwest Technical College moved into its own building. The change made it possible to accommodate 600 daytime students with laboratories, general classrooms, a large meeting room, commons, student services area, and library.

In addition, Phase II of the College Master Plan in 1987 nearly doubled the size and capacity of the College. An open atrium became the link between the renovated original structure and the new wings. The Business Technology occupies the "B" wing, with those rooms available to other courses as needed. Student services, food services, an attractive conference room, and an exercise area are housed in the " $C$ " wing. Another building, the Child Development Center, opened in the fall of 1991. As the State Community College status brings about growth, additional building has taken place on the present 80-acre site.

In January 2002, a new 12,000 square foot Technology Training Center was opened, which includes 5 technical labs that support the Plastics, Industrial Electrical, and CAD Technologies.

# Academic Support Services 

## Accreditations and Approvals

Northwest State Community College takes pride in its accreditation by The Higher Learning Commission and a member of the North Central Association of Colleges and Schools.

Professional approval and/or accreditations are given for quality programs. Many of the majors at Northwest State Community College have received this distinction.

The Human Services students who successfully have completed this major can apply for State of Ohio Counselor and Social Worker Board for Social Work Assistant.

The Early Childhood Education major is approved by the Ohio Department of Education for Pre-Kindergarten Associate certification.

The Associate Degree Nursing program is approved by the Ohio Board of Nursing and accredited by the National League for Nursing Accrediting Commission, 61 Broadway 33rd Floor, New York, NY 10006, (800) 669-1656, ext. 153.

The Practical Nursing program is approved by the Ohio Board of Nursing.

The Electrical Engineering Technology Program is accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering Technology. Accreditation Board for Engineering and Technology, 111 Market Place, Suite 1050, Baltimore, MD 21202 Telephone (410) 347-7700.

The Metalworking Program is designed to meet the quality requirements set by the National Institute for Metalworking (NIMS).

The Business Technologies are accredited by the Association of Collegiate Business Schools and Programs. ACBSP, 7007 College Blvd., Suite 420, Overland Park, KS 66211, (913) 339-9356.

## Affiliations and Memberships

Northwest State Community College maintains memberships in national, regional, and local professional organizations including League for Innovation in Community Colleges, North Central Association, Ohio Association of Community Colleges, Better Business Bureau, National Association of Student Financial Aid Officers, Ohio Association of Student Financial Aid Officers, College Placement Council, Henry/Fulton JSEC, Ohio Association of College Admissions Counselors, Ohio Two-Year Placement Association, Educators in College Helping Hispanics Onward, Ohio Council on Student Development, National Council of Instructional Administrators, Association of Collegiate Business Schools and Programs, Midwest Institute for International/Intercultural Education, Ohio Association of Collegiate Registrars and Admissions Officers,

Ohio Association of Two-Year Colleges, Council of Chief Instructional Officers, American Association of Community Colleges, National League for Nursing, Midwest Alliance in Nursing, Council of North Central Two-Year Colleges, and the following local Chambers of Commerce: Napoleon/Henry County, Archbold, Paulding, Wauseon, Bryan, Delta, and Defiance, American Association of Collegiate Registrars and Admissions Officers.

## Institutional Learning Outcomes

Students earning associate degrees from Northwest State Community College should demonstrate:

1. Critical thinking skills, through comprehending the implications of problems, drawing on appropriate evidence, and constructing well-reasoned conclusions.
2. Communication skills, through reading comprehensions and effective writing.
3. Computation skills, through performance of basic algebraic manipulations and problem solving.
4. Teamwork skills, through interacting constructively with others to accomplish goals.

## Success Center

Student success is a priority at Northwest State Community College (NSCC). The Success Center (SC) is designed to enhance NSCC students' success by providing the staff, facilities, and resources necessary to support and empower students’ ability to achieve their potential. Students are encouraged to use the SC services and resources, as all are free of charge and easily accessible. The SC desk is located on the first floor in Building A just outside the east entrance doors of the library and is open during most daytime and evening hours Monday through Thursday and during the day on Friday. The SC tutoring service offers free assistance to students experiencing difficulty with a course despite regular attendance and hard work. Students interested in receiving tutoring services are encouraged to come to the SC and request assistance. Qualified students are encouraged to become tutors, who are paid by the College. Applications are available at the SC desk.
The SC houses a Math Lab, a Writing Lab, Tutoring Services, Accessibility Services, and ABLE (Adult Basic Literacy Education/ GED classes. The SC labs consist of user-friendly computers with Internet access and laser printing. The computers contain easy-tolearn word processing programs and desktop publishing applications, as well as other applications that enable students to produce papers efficiently.
The SC labs also offer a wide range of software, audio cassette/ workbook programs, videos, and supplementary textbooks to reinforce material covered in NSCC courses. These self-paced and easy-to-use tutorials are available for many topics in mathematics, English, reading and study skills, accounting, keyboarding, physical and life sciences, computer literacy, economics, and other areas.
for assistance regarding a disability, a student will need to provide recent documentation of the disability. For more specific information regarding the procedure for obtaining assistance, please see Accessibility Services section on this page.

# Student Support Services 

## Accessibility Services

A student with a disability may obtain assistance to help achieve his or her educational goals. Any student who wishes to investigate available college resources should first meet with the Success Center Supervisor or the Accessibility Services Coordinator. To be qualified for assistance regarding a disability, a student will need to provide recent documentation of the disability. Documentation should be sent at least three months prior to his or her semester start date or as soon as possible.

Upon delivery of documentation, each student is expected to:

1. Schedule an assessment and orientation appointment and meet with the Accessibility Services Coordinator to discuss and establish a plan for reasonable accommodations.
2. Apply for auditory books and other aids as necessary.
3. Schedule an advising session with the Dean of General Studies.
4. Notify instructors of the disability and discuss what accommodations will be beneficial prior to the first week of class.
5. Make arrangements with instructors and Success Center Supervisor for testing accommodations.

Individuals with hearing disabilities who need interpretive services must contact the Success Center Supervisor three months prior to their starting date in order to guarantee allocation of funds and qualified interpreters. No student will have his or her requests met until an academic plan is established with the Success Center Supervisor.

## Library Resource Center

The Library has many services available for students: a book and print journal collection, DVD and video collection, access to other Ohio college collections through OhioLINK, individual and group study space, , and interlibrary loan service. A student I.D. card is needed for checking out materials. For more information call 419-267-1272.

Additionally, the following services are available to enhance student research:

- Statewide access to over 90 libraries in the state of Ohio
- Electronic delivery of full-text journal articles
- $90+$ research databases on a variety of subjects
- Personalized research assistance on request


## Career Services

The Career Services Office assists students in the job search process while they are attending Northwest State Community College and when they are ready to graduate and gain professional employment. In addition to sharing employment listings with the students, the Career Services Office offers workshops and individual assistance with resume development, interviewing skills and job search concerns.

These services are also available to Northwest State Alumni. Listings of part-time and full-time positions are also available for currently enrolled students who are looking for employment, throughout the campus on bulletin boards and/or at www.northweststate.edu.
The following services are offered:

- Electronic resume referral service thru Web Walk-Up
- Job Search Workshops
- Full-time, part-time, Co-op and Summer Job Listings.
- Career Futures \& Choices CT, a computerized career guidance system, is offered free of charge in a workshop setting, two or three times a month.
- A wide range of career material is also available in our Career Services Offices as well as the college library.


## Cooperative Education

Cooperative Education at Northwest State Community College combines practical work experience with the academic program. This combination of academic learning and related on-the-job training can create an excellent learning environment for the student. The student can earn both wages and college credit for work experience. If the student is already employed in their field of study, the Co-op program may allow him/her to receive college credit for the work the student is currently doing.

Co-op is available to students enrolled in the Business Technologies Department and the Engineering Technologies
Department. For more information about the Cooperative Education program contact Career Services at 419-267-1330 or an advisor in the appropriate academic division.

## Child Development Center

Quality care for children ages 18 months to kindergarten is available at Northwest State Community College through Northwest Ohio Community Action Committee. This facility strives to meet the social, emotional, physical, mental and creative needs of each child trusted to its care. The center also serves as a clinical site for the college's Early Childhood Development and Paraprofessional Educational programs.

You can schedule care for your children at the center by calling 419-267-5188. The center is open year round from 6:00 am to 6:00 pm, Monday -Friday.

## Student Organizations

All students are encouraged to participate in extracurricular activities. Student Body Organization officers and members plan and supervise an ongoing calendar of activities.

In addition to social functions such as entertainment and parties, recreational activities are also sponsored. Intramurals consist of basketball, soccer, volleyball, bowling, ping-pong, flag football, and pool. Other planned recreational activities include a variety of on-and off-campus events, such as bowling, chili cook-off, spring fling, karaoke, ice cream social and spring break trips to Florida.

# Student Support Services 

Other special interest clubs, such as Phi Theta Kappa, and Progressive Student Organization (PSO), offer other opportunities for student involvement.

## Progressive Student

The Progressive Student Organization is a social action group that is devoted to bringing attention and raising awareness about some of the pressing social issues in our society and community. We do this through educational activities or engaging in projects that help the local community.

## Phi Theta Kappa

An honors and service organization for students attaining a 3.5 GPA after completing 18 or more credit hours.
Students are invited to become members and provide letters of recommendation from faculty.

## Education for Sustainability (E4S) Student Group

An organization of faculty, staff and students interested in environmental issues. Help is always needed to set up recycling boxes, empty recycling boxes, and to suggest and study ways NSCC can contribute to a cleaner environment.

## International Club

During the fall 2001 semester, an international club was organized. During the academic year the members traveled to various social and cultural events as well as participated in many of the NSCC campus activities.

## Student Body Organization (S.B.O.)

S.B.O is the representative student government at Northwest State Community College. This group is responsible for promoting academic, cultural, recreational, and social activities for students. Elected officers and student members coordinate, plan, and execute activities, policies, regulations affecting the general student body. Membership is open to all students. Regular meetings are held at which all students have a voice and a vote in the conduct of business. Students are also represented on various standing committees of the College.

## Kappa Beta Delta

KBD is a national honor society which was established in 1997 at the annual conference of the ACBSP to recognize students only in accredited associate degree-granting institutions for their high academic achievement in business programs. A Kappa Beta Delta chapter is one of the benefits of ACBSP accreditation and provides a means by which an institution may give lifetime national recognition to its outstanding graduates.

## Purpose:

This Honor Society was established to encourage and recognize scholarship and accomplishment among students of business, management, administration, and other business programs who are pursuing associate degrees in ACBSP-accredited two-year colleges, to encourage and promote personal and professional improvement, and a life distinguished by honorable service to humankind.

## Alumni Association

Membership in the Northwest State Alumni Association is automatically granted to any graduate of the college and to any former students who meet the credit hour criteria.

Northwest State Alumni Association Mission:
The Association shall engage alumni interest while promoting loyalty and strengthening relationships with students, community and alumni.

## Purposes:

1. Assist in the development of educational opportunities that will advance the College.
2. To actively foster community support for the College.
3. Encourage leadership in the community to enhance mutual economic prosperity.
4. Research opportunities for alumni to provide time, talent and resources to their alma mater.

Responsibilities:
Alumni Gatherings
Distinguished Alumni Awards
Nominations for Entrepreneurial Award \& American Association of Community Colleges Award
Graduation presentation/gift
For more details regarding alumni activities, write or call the Office of Development
Northwest State Community College
22600 State Route 34
Archbold, OH 43502
419-267-1460 or 419-267-1470

## Food Service

The Snack Bar is located on the first floor of the A Building. Opens for breakfast by 8:00 a.m. There are noon specials along with ala carte times in the "Grab and Go." It is also opened for dinner for those who have late afternoon or night classes.

## Bookstore

For the convenience of the students, a well-stocked bookstore is available on campus. In addition to textbooks, other supplies and materials, clothing items, snacks, and a limited food service are available. The cost of books and supplies is separate from, and in addition to, instructional fees.

## Student Facilities \& Services

The fitness room is for use of students \& employees of
Northwest State Community College - Fitness Room - C105
M-TH 7:30 am-10:00 pm
Friday 7:30am-3:30 pm
Saturday 8:00 am - Noon

Game Area - Atrium; Food Court - A Wing;
Shower and Locker Rooms - Women's - C108, Men's - C109
Non-Traditional Student Lounge - A248

## Student Insurance

A health insurance plan is available for full-time students on a voluntary basis. For a reasonable rate, students are covered 24 hours a day for 12 months. Information is available in the Student Services Office.

## Student Lockers

Atrium and fitness room lockers can be rented through the Student Activities Office. Rental by the semester or the entire academic year is available on a first-come-first-serve basis. In case of a campus emergency, authorized College and/or emergency personnel may open these lockers.

## Student Photo I.D. Cards

All students are required to have picture I.D. cards. These cards are used to identify NSCC students for student activities such as the ice cream social and bowling night. Additionally, these cards have the ability to be scanned for use in the library, bookstore, and the snack bar. There is no charge for these cards. If you lose your card, additional replacements will cost \$5.00. A Photo I.D. is available through the Campus Police Department.

## Adverse Weather - Closings or Delays

Northwest State Community College will operate under the premise that it will be in session according to the College Calendar. However, the president or designee will have the prerogative to close school (including off-campus sites) under extenuating circumstances, and under such conditions, the students will not be expected to report. Such closing will be announced over local radio and television stations and on the Northwest State Web Site at www.northweststate.edu. A recorded message will be placed on the college phone system. To check this message, dial 419-267-5521.

## Admission

Admission to Northwest State Community College is open to any high school graduate or holder of a high school equivalency statement (GED).

A non-high school graduate may be admitted upon presenting to the office of admissions evidence of the ability to satisfactorily complete college level work. Some programs may have additional admission requirements.

The College requires testing for course placement purposes and, in certain instances, developmental coursework prior to enrolling in college-level courses.

You are not required to meet with an Admissions Coordinator before you enroll at NSCC, but you may find it helpful. A Coordinator can suggest opportunities at the College you may not know about, can explain entrance requirements of the various programs, and can answer questions about how NSCC will help you reach your career goals.

## Mandatory Course Placement (COMPASS)

Prior to registration, all degree or certificate seeking students are required to be evaluated or show evidence of successful completion of college-level coursework in math and English. An appointment is required for COMPASS Placement Assessment. Contact the Admissions Office at 419-267-1320 to schedule an assessment.

Students who receive a score of 95-100 on the COMPASS placement test may choose to complete a writing sample, administered by the testing coordinator, to qualify for placement into ENG112Composition II. The writing sample will be reviewed by full-time faculty members in the English department. If approved, the testing coordinator will notify the student of the following placement options available to them:

1. Take ENG111 and ENG112, or
2. Take ENG112 and either ENG210, ENG220, ENG223, ENG234, ENG250, ENG251, ENG260, ENG261, or ENG271. The second writing course will be substituted for ENG111, and cannot also be used to meet a Humanities requirement.

## COMPASS Placement Retesting

1. Students may have one retest using either an alternate form of the COMPASS Placement Test or a Departmental Proficiency Test (but not both).
2. A retest must be requested prior to enrolling in related developmental courses.
3. Retesting must be approved by the General Studies Dean or designee.
4. There must be at least a one-month waiting period between testing dates involving a Departmental Proficiency test only.
5. Placement test results are valid for three years. After three years retesting is recommended and the fee is waived.
6. Students may choose to retake the entire COMPASS Placement Test or choose specific sub-tests for retesting.
7. $\mathrm{A} \$ 20$ retesting fee will be charged for the COMPASS Placement Test and a $\$ 45.00$ fee for the Proficiency Test.

## College Math Proficiency Policy

All associate degree and certificate programs offered at Northwest State Community College require all graduates to demonstrate a minimum math proficiency at the level of
MTH080 - Beginning Algebra. Proficiency can be demonstrated on the placement test at the time of entry, by passing a proficiency test, by successfully passing the course MTH080 - Beginning Algebra, or by being a recent high school graduate (within the last six years) and have taken two (2) or more high school algebra courses (not including any pre-algebra or geometry courses) with grades of "C" or better in each semester.

## New Student Orientation

All students enrolling at NSCC for the first time are encouraged to attend an orientation program. Orientations are held prior to the start of each semester. Call the Admissions Office at 419-267-1320 for times and dates.

## Advanced Placement

Many area high schools have developed plans with NSCC (AP code 1235) allowing their students to receive college credit for certain high school technical courses. Additional information is available through high school guidance counselors or through our Admissions Office.

## Classification of Students

Applicants for admission to the College may elect one of the following student classifications:

## Degree Seeking Student

A student who has indicated, at the time of application, the intent to study toward an associate degree and who has fulfilled all admission requirements.

## Certificate Seeking Student

A student who has indicated, at the time of application, the intent to study toward a one-year certificate program and who has fulfilled all admission requirements.

## Non-Degree Student

A student who has indicated, at the time of application, the intent to pursue selected courses (i.e. personal enrichment).

## Early Admit Student

Generally a high school student who has been recommended by his/her guidance counselor or principal to take college courses for credit.

Post-Secondary Enrollment Option Student Senate Bill 140 allows high school students who have met special admissions criteria to take college courses and receive either college credit or high school credit for work successfully completed.

## Transfer Student

Either a "degree" or "non-degree" student who has indicated, at the time of application, the interest to transfer selected general studies courses or a full degree program to a four-year bachelor's degree program. All students enrolling as transfer students should speak with the transfer coordinator prior to registering for classes.

## Guest/Transient Student

A student who is attending another institution of higher education and enters NSCC for specific courses which have been approved in writing by the other institution's vice president or registrar.

## Selective Service Registration

Federal law requires that males having reached the eligible age of eighteen, must register with the Selective Service System. Failure to provide proof of Selective Service registration will result in an additional out-of-state surcharge for the current semester. This surcharge will be waived only if proof of a Selective Service registration is received prior to the end of the semester. In addition, grades and transcripts will not be released without proof of registration, and Financial Aid eligibility may also be affected. Registration for a Selective Service number can be completed in one of two ways:

1. Applications are available at any Post Office. Complete the necessary forms and follow the procedures as outlined on the application.
2. Register on-line at www.sss.gov. In many cases, the selective service number will be received instantly, instead of the 90 days it takes to complete the mail-in application procedure.
After applying for a number, eligible students should fill out a verification form in the Registrar's Office, and as soon as they receive their selective service number, submit it to the Registrar's Office for final documentation.

## Transfer Credit to NSCC

Transfer credit will be allowed for any previous courses in which a "C" or better grade was earned from a U.S. or Canadian regionally accredited institution of higher learning. International students may receive credit for coursework taken at foreign institutions of higher learning by:

1. Providing a Credential Evaluation Report from a credential evaluation service of the student's choice (i.e. Educational Credential Evaluation, Inc. - 414-2893400, World Education Services - 312-222-0882, Josef Silney \& Associates - 305-273-1616. etc), or
2. A student may choose in lieu of providing a Credential Evaluation Report (officially translated transcript), to take proficiency examinations for any applicable coursework according to the College's Proficiency Examinations (Credit by Examination) policy.

Credits transferred to NSCC will apply toward graduation only if they satisfy requirements for a particular major. Transfer credit not required by a particular major may be counted as additional hours completed.

Transfer credit may be awarded for courses in which a student received credit through a proficiency exam taken at another regionally accredited institution. Such credit will be given only if

# Transfer Information 

the transcript clearly indicates that credit was granted for the course at another institution. If the transcript simply indicates that a proficiency exam was taken but credit was not given for the course, Northwest State will not accept the proficiency as transfer credit.

Students may receive credit for courses taken at non-accredited institutions by successfully passing a proficiency examination, if one is available.

In order to be eligible for the associate degree at the College, at least thirty percent of the credits must have been earned at Northwest State Community College.

## State of Ohio Policy for Institutional Transfer

The Ohio Board of Regents, following the directive of the Ohio General Assembly, developed a statewide policy to facilitate students' ability to transfer credits from one Ohio public college or university to another in order to avoid duplication of course requirements. Since independent colleges or universities in Ohio may or may not be participating in the transfer policy, students interested in transferring to independent institutions are encouraged to check with the college or university of their choice regarding transfer agreements. For additional information, please visit www.transfer.org.

## Transfer Module and Transfer Assurance Guides

The Ohio Board of Regents’ Transfer and Articulation Policy established the Transfer Module, which is a subset or entire set of a college or university's general education program. The Transfer Module consists of 54 to 60 quarter hours or 36 to 40 semester hours of courses in the following areas: English, Mathematics, Arts and Humanities, Social and Behavioral Sciences, Natural and Physical Sciences, and Interdisciplinary Study.

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

Since many receiving institutions require general education courses within or beyond the Transfer Module, students are encouraged early in their academic careers to meet with an academic advisor at the institution to which they plan to transfer.
The Ohio Board of Regents has also approved Transfer

Assurance Guides (TAGs) for several academic majors. Each TAG identifies courses that are required for particular areas of study (for
example, Biology, Education, and History four-year degrees). Students completing TAG-approved coursework will receive transfer credit at Ohio institutions that fulfills partial degree requirements for these majors. For more information on TAGs for specific fields of study, see the Ohio Board of Regents web site at www.regents.state.oh.us

## Responsibilities of Students

In order 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. Furthermore, students should determine if there are language requirements or any special course requirements that can be met during the freshman or sophomore year. This will enable students to plan and pursue a course of study that will articulate with the receiving institution's major. Students are encouraged to seek further information regarding transfer from both their advisor and the college or university to which they plan to transfer.

## Appeals Process

A student disagreeing with the application of transfer credit by the receiving institution shall be informed of the right to appeal the decision and of the process for filing the appeal on the Transfer of Credit Evaluation form. Each institution shall make available to students the appeal process for that specific college or university.

If a transfer student's appeal is denied by the institution after all appeal levels within the institution have been exhausted, the institution shall advise the student in writing of the availability and process of appeal to the state-level Articulation and Transfer

## Appeals Review Committee

The Appeals Review Committee shall review and recommend to institutions the resolutions of individual cases of appeal from transfer students who have exhausted all local appeal mechanisms concerning applicability of transfer credits at receiving institutions.

## Conditions for Transfer Admission

The policy encourages receiving institutions to give preferential consideration for admission to students who complete the Associate of Arts or Associate of Science degree with a cumulative grade point of 2.0 or better for all previous college-level courses.

The policy also encourages receiving institutions to give preferential treatment to students who have not earned an Associate of Arts or Associate of Science degree but who have earned 60 semester hours or 90 quarter hours with a cumulative grade point of 2.0 or better for all previous college-level courses.

The policy further encourages that students who have not earned an Associate of Arts or Associate of Science degree or who have not earned 60 semester hours or 90 quarter hours with a cumulative grade point of 2.0 or better for all previous college level courses be eligible for admission as transfer students on a competitive basis.

## Acceptance of Transfer Credit

Students who have completed the Associate of Arts or Associate of Science degree with a cumulative grade point of 2.0 or better will receive transfer credit for all college-level courses in which a grade of D or better has been earned.

Students who have not earned an Associate of Arts or Associate of Science degree will receive transfer credit only for those college le

Admission to a given institution, however, does not guarantee that a transfer student automatically will be admitted to all majors, minors, or fields of concentration at the institution. 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 students on the basis of the number of credits earned. All residency requirements must be successfully completed at the receiving institution prior to the granting of a degree.

## Transfer Degrees

Through articulation agreements with four-year colleges and universities in the area, Northwest State Community College has developed transfer degrees /programs to provide students the opportunity to complete the first two years at Northwest State and then transfer to a college or university to complete the last two years of a baccalaureate degree. Bluffton College; Bowling Green State University; Defiance College; Franklin University; Lourdes College; Medical College of Ohio; and The University of Toledo are a few of the many options available to Northwest State Community College students. NSCC offers the Associate of Arts and the Associate of Science degrees for undecided transfer students.

Many students have found that tuition and fees at Northwest State are less than those of four-year institutions. This, coupled with small classes and a low student-to-instructor ratio, makes NSCC an attractive alternative for students wishing to obtain the first two years of a bachelor's degree.

## Financial Aid Application Process

- A pin may be obtained by students and parents at www.pin.ed.gov
-File your FAFSA electronically at www.fafsa.ed.gov include Northwest State Community College Title IV School Code 008677
-Financial Aid Data Sheet available on NSCC Financial Aid webpage
-Loan Request Form \& Master Promissory Note - if interested in borrowing through the Federal
Stafford
Loan Program
-Part-time Student Employment - If interested in parttime employment at the college, log onto www.collegecentral.com/nscc.


## Federal Eligibility Requirements

To be eligible for financial aid students must:

- Have a high school diploma, GED, or complete a high school education in a home school setting approved under state law.
- Be enrolled in an eligible program as a degree-seeking student.
- Be a U.S. citizen or eligible non-citizen.
- Have a valid social security number
- Register with selective service as required of male students.
- Maintain satisfactory academic progress.


## Calculation of Financial Aid

- Your financial aid package is determined from the results of your FAFSA. The U.S. Department of Education calculates your Expected Family Contribution (EFC) based on the financial information from your FAFSA.
- Financial need is defined as the difference between the Cost of Attendance and your EFC.
- Cost of Attendance includes tuition, fees, books, supplies, transportation, and living expense estimates as determined by the Financial Aid office in accordance with federal regulations.


## Awarding Year

The financial aid-awarding year consists of the following terms: summer 2008, fall 2008, and spring 2009.

If a student enrolls for the summer, fall and spring, the total loan amounts listed below will be divided into 3 semesters. If the student enrolls for two terms, the total loan amounts per year will be divided by 2 terms. If a student enrolls for one term and it is the students last term before graduation, the loan will be pro-rated at a lower amount according to enrollment status.

## Federal Stafford Loans

The Federal Stafford Loan amounts listed below is the total amount that students may borrow for the entire financial aid awarding year.
First year students (1-29 credit hours earned) \$3,500 per year Second year students (30+ credit hours earned) \$4,500 per year Additional Unsubsidized for *Independent students \$4,000 per year *Independent students are classified as those who complete the FAFSA without parent information.

## Disbursement of Financial Aid

For students enrolled for fall and spring semester, one half of your financial aid for attending hours (grants and loans) will be credited toward the payment of tuition and fees each semester. Then:

1. If your financial aid is less than your total fees, you must pay the remaining amount according to the stated deadline on your invoice.
2. If the total amount of your financial aid exceeds your tuition and fees, you may elect to use your financial aid in the bookstore for the purchase of books and supplies.
3. Any remaining balance from your financial aid will generally be mailed to you during the fifth week of the semester.

## Federal Verification

Approximately 30\% of all financial aid applicants are selected for verification. If selected, students must complete a verification worksheet and bring in a signed copy of their federal income tax return to the Financial Aid Office. (Parent tax forms are also required for dependent students)

## Special Circumstances

If a student can document (with check stubs, etc.) a projected loss of income for this year, you may submit a Special Condition Request form to the Financial Aid Office. If your request is approved, we will resubmit your FAFSA using projected income for this year rather than last year's income to determine your aid eligibility. Please complete the Special Condition form available in the Financial Aid Office or NSCC web-site.

## Class Attendance

Class attendance is required for all financial aid recipients. Federal financial aid recipients are required to attend classes. Failure to attend classes will result in loss of financial aid (grants and/or loans). If you are considering withdrawing from all classes, you must first contact the Financial Aid Office to discuss the financial implications of withdrawing from all classes.

## Complete Withdrawals and the Federal Financial Aid Refund Policy

Recipients of federal financial aid (grants and loans) will be required to repay a portion of aid received if they withdraw from (or stop attending) all classes prior to the $60 \%$ point of the semester. The calculation for the return of these funds will result in the student owing money to the college.

Students who withdraw from or stop attending all courses will also be placed on financial aid probation (or suspension) for the following semester

Financial Aid Freeze Date and Dropping Courses
Dropping a course during the first 10 weeks prior to Financial Aid Freeze Date will result in a reduction of financial aid. The actual amount of aid a student receives will be based on the enrollment as of the financial aid census date. For the 20082009 year, this date falls at the beginning of the 10th week of classes. (See Academic Calendar) On that date, the financial aid office will 'freeze' your enrollment and adjust your award to the correct amount based on actual hours enrolled on that date. If your award of aid includes a late-starting class, and you drop that class after receiving aid, you may be required to return a portion of the aid you received. If students are enrolled in the 8 -week courses only, the census date will be prorated to the 3 rd week of the 8 -week time frame.

## Satisfactory Academic Progress

Students receiving any form of federal financial aid (grants and/or loans) must maintain satisfactory academic progress toward a degree objective. Failure to do so will result in federal financial aid being withheld until satisfactory academic progress regardless of whether they have previously received federal financial aid.

Satisfactory academic progress is checked at the end of each semester. In order to receive federal financial aid, students must be making satisfactory academic progress regardless of whether they have previously received federal financial aid.

Students are maintaining satisfactory academic progress if they meet all three of the following criteria:

1. Successfully complete (with grades of A, B, C, D, S, or X ) at least $67 \%$ of all credit hours attempted in the last semester attended
2. Successfully complete (with grades of A, B, C, D, S, or X ) at least $\mathbf{6 7 \%}$ of all credit hours attempted cumulatively
3. Maintain a minimum cumulative grade point average (GPA) as follows:

| Cumulative Credit | Cumulative |
| :---: | :---: |
| Hours Attempted | $\underline{G P A}$ |
| $1-15$ | 1.4 |
| $16-30$ | 1.6 |
| $31-45$ | 1.8 |
| $46+$ | 2.0 |

Students who do not meet all three of the above standards are placed on financial aid probation for one semester. Students who do not maintain SAP while on financial aid probation will be placed on financial aid suspension, thereby losing their financial aid eligibility.

Financial aid occurs in many forms. In general, the amount of assistance that students may receive depends upon their established financial need. This need is determined by a financial statement provided by students and their families. Students should reapply for aid every year.

|  | Programs | Type/Criteria | Applications | Maximum Ammount | Minimum Enrollment Status |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Grants | Academic <br> Competitive Grant | Federal Grant/need | FAFSA | \$750 | Full-Time |
|  | Federal Pell Grant | Federal Grant/need | FAFSA | \$4,731 year | Part-Time |
|  | Federal SEOG Grant | Federal Grant/need | FAFSA | Varies | Part-Time |
|  | Ohio College <br> Opportunity Grant | State Grant/need | FAFSA | Varies | Part-Time/ Full-Time |
|  | Ohio Instructional Grant | State Grant/need | FAFSA | Varies | Full-Time |
|  | Part-time Student Instruc tional Grant | State Grant/need | FAFSA | Varies | Part-Time |
| Scholarships | Presidential Scholarship | Academic/ 3.25 GPA \& ACT score of 23 | NSCC <br> Scholarship Application | Full Tuition | Full-Time 15 Credits |
|  | Dean's Scholarship | Academic/ 3.25 GPA | NSCC Scholarship Application | Half Tuition | Full-Time 15 Credit |
|  | NSCCEA Horizon <br> Scholarship | Academic | NSCC <br> Scholarship Application | Varies | Part-Time <br> 2nd Year |
|  | Max Covert Scholarship | Academic | NSCC Scholarship Application | Varies | Part-time 2nd. Year |
|  | Toledo Edison Scholarshir | Academic/Need | NSCC <br> Scholarship Application | Varies | Part-Time <br> 2nd. Year |
|  | Marie Richey Scholarship | Secretarial Major | NSCC <br> Scholarship Application | Varies | Part-Time <br> Full-Time |
|  | George Isaac Business Scholarship | Business Major | NSCC <br> Scholarship Application | Varies | Part-Time |
|  | Arrow Tru-Line Presiden tial Scholarship | Engineering Major | NSCC <br> Scholarship Application | Full Tuition | Full-tTme |
|  | NW Ohio Chapter of APICS Scholarship | Academic Need/ Business Major | NSCC <br> Scholarship Application | Varies | Parata-Time |
| Loans | Federal Stafford Loan | Student Loan/need | FAFSA and Stafford Loan Application | Freshman: \$3,500/ year Sophomore: \$4,500/year | Half-Time |
|  | Federal PLUS Loan | Parent Loan | PLUS Loan Application | Cost of attendance minus financial aid | Half-Time |
|  | Charles E. Schell Foundation Loan | Short-term Loan | None (See Financial Aid Office) | Tuition \& Books | Part-Time |
| Employment | Federal Work-Study (FWS) | Campus employment/ Need | FAFSA and FWS Application | Varies | Part-Time |

Dollar amounts subject to change due to federal \& state funding
Scholarships - See website for Applications

Please remember that a " $W$ " grade is considered an unsatisfactory grade for financial aid purposes. Courses in which grades of $\mathrm{W}, \mathrm{F}, \mathrm{U}, \mathrm{I}, \mathrm{P}, \mathrm{NP}$, or NG are received will be used for computation of hours attempted, but are not considered to have been successfully completed.

## Financial Aid Probation

Students, who have not maintained satisfactory academic progress, as defined above, will be placed on financial aid probation. Students will remain eligible for federal financial aid while on financial aid probation, but will not be allowed to purchase books in the bookstore with future financial aid until the first week of classes. Probation students must demonstrate passing grades before aid or future semesters can be used.

## Maximum Time Frame

Eligibility for federal financial aid (Federal Pell Grant, Federal SEOG, Federal Stafford Loan, or Federal Work Study) may not exceed $150 \%$ of the published length of an academic program as outlined in the college catalog. This is called a student's maximum time frame.
Since the average number of semester credit hours per associates degree program is 70 , the maximum time frame for receiving federal financial aid is $\underline{105}$ semester credit hours. The average number of semester credit hours per one-year certificate program is 38 ; the maximum time frame for receiving federal financial aid is $\underline{57}$ semester credit hours. This includes all credit hours attempted, including developmental courses, repeated courses, applicable transfer courses, and courses from which a student withdraws. Audited courses will not be included in the computation of hours attempted, nor will they be considered in determining enrollment status for financial aid purposes. Once a student reaches the maximum time frame, he/she is not eligible to receive additional federal financial aid. A student may request an extension of his/ her maximum time frame. Contact the Financial Aid Office for appeal procedures and forms. Students who complete the requirements for one associates degree or certificate program may have their maximum time frame extended for a second degree or certificate.

## Financial Aid Suspension

Students who do not maintain satisfactory academic progress, while on financial aid probation, will be placed on financial aid suspension.

Federal financial aid will then be suspended until satisfactory academic progress has been reestablished. Students may continue to take courses at their own expense until reaching the minimum GPA and/or the number of successfully completed credit hours required to re-establish satisfactory academic progress. However, it is possible to appeal your financial aid suspension status. Contact the Financial Aid Office for appeal procedures and forms, or go to www.northweststate.edu.

## Appeal Process

Students may appeal their Financial Aid Suspension status or request an extension of their Maximum Time Frame by submitting an appeal form to the Financial Aid Office. The Director of Financial Aid may or may not approve the request, depending upon the existence of extenuating circumstances.

Students for whom financial aid is reinstated as a result of appeal of their financial aid suspension status will be placed on probation for one semester. Continuation of federal financial aid for subsequent semesters is dependent upon satisfactory academic progress being attained.

## The Tuition and Fee Installment Plan (TIP)

TIP is an alternative to the single payment of fees due at the beginning of each semester.

A nonrefundable service fee will be charged to students for the Tuition and Fee Installment Plan.

Participants pay their fees in three installments. The first installment is due according to the published fee payment schedule, with the second and third payments due in approximately 30 -day increments. The second and third installments are due on the same dates for all students regardless of when the first payment was made. It is the students' responsibility to know the payment due dates and to make payments on time, even though a statement may not have been received in the mail.

A late fee of $\$ 15.00$ will be added to an installment payment when payment is not received or made in office or via the web by the due date.

Tuition, out-of-state, lab, student and late fees for fall and spring semester are covered by this program. The program is not offered for the summer term. Courses added after the first payments are not covered. Courses (including flexibly scheduled courses) paid for after late registration are not covered. Books, supplies, and noncredit tuition are not covered. Financial aid is deducted from total fees due before calculation of the payments. Financial aid finalized after the first payment is applied to the TIP balance due. The refund amount of a withdrawal from class is applied to the TIP balance due. Financial aid or withdrawal which results in an overpayment (after the TIP balance is covered in full) will be refunded to the student.

# Tuition, Fees and Refund Policy 

## Senior Citizen Discount

Any person who is sixty years of age or older, and who has resided in the state for at least one year, shall be permitted to enroll in classes without instructional charge, provided such attendance is on a credit basis, classroom space is available, and is approved by the instructors of the courses involved. The student is responsible for student and lab fees. Complete "Senior Citizen Fee Waiver" form in the Business Office, in Room C107. Just bring your driver’s license or Golden Buckeye Card. (You'll need to do this each semester you register for a class.)

## Payment of Fees

The amount of fees students pay each semester will depend upon the number of credit hours for which they are enrolled.
Students choosing to audit courses will pay the same fees as if the courses were being taken for credit.

Students who have outstanding financial obligations to the College will not be permitted to register for the next semester until those obligations are met.

All fees are subject to change at the beginning of any semester. If paying in person by credit card with a credit card not in your name, NSCC must have both a written authorization and the credit card signed by the card holder specifying if the card may be used for fees and/or books. This must be done each time the card is used. Payment of fees is required prior to the first day of the semester or first day of class for those flexibly scheduled. Failure to pay on time will result in a late fee being added.

## Application Fee

A $\$ 20.00$ non-refundable application fee is charged to all new students when applying for admission to the College. Payment is required immediately and is accepted by cash, check, or charge. Financial Aid is excluded as a means of payment.

When an applicant does not enroll, his or her application materials will be retained by the College for three years before being destroyed. After that time, the applicant must submit an updated application and other supporting documentation as necessary.

## Student Fee

A student fee will be assessed to students at the rate of $\$ 30.00$ each semester. Upon total withdrawal from all classes during the $100 \%$ refund period, the student fee will be fully refunded.

## Late Registration Fee

Late registration will be permitted during the first week of classes, or later with the approval of the instructor and division dean. A student who wishes to register late must first confer with a faculty advisor and departmental dean and present an approved program of courses to the Registrar's Office. A late registration fee of \$15.00 will be charged.

## Lab Fees

Laboratory fees are assessed in certain courses to cover the cost of expendable materials used by the student and/or technology costs.

## Proficiency Examination Fees

A non-refundable fee of $\$ 45.00$ must accompany any application for a proficiency examination. Contact the Testing Coordinator to secure the proper proficiency application form.

## Graduation and Diploma Fee

A one-time $\$ 50.00$ graduation and diploma fee per degree/major must be paid by all students at the time they file an application for graduation, whether applying for a two- year associate degree or a one-year certificate. These applications are due by October 15 to ensure evaluation prior to the beginning of Spring semester to better assist you in scheduling any remaining courses you may need. The graduation and diploma fee will also be charged for all additional degrees/majors.

## Refund of Student Fees

All withdrawals from class(es) must be in writing and are effective on the date received by the Registrar. The tuition and lab/material fee refund policy is shown below. Application, graduation, proficiency, and late fees are non-refundable. The student fee is refunded if a complete drop is done during the $100 \%$ refund period.

In extreme circumstances, tuition and lab/material fees may be refunded after the refund period. Documentation proving extreme circumstances must be submitted to the Registrar for consideration and final approval from the Student Services Committee.

\section*{Courses that are 16 week or more have the following refund policy <br> | Week 1 | 100\% Refund |
| :--- | :--- |
| Week 2 | $75 \%$ Refund |
| Week 3 | 50\% Refund |
| After Week 3 | No Refund | <br> Courses that are 8-15 week have the following refund policy Week $1 \quad 100 \%$ Refund <br> Week 2 50\% Refund <br> After Week 2 No Refund <br> Courses that are 2-7 week have the following refund policy <br> Week $1 \quad 100 \%$ Refund <br> Week 2 No Refund}

Course that are 1 week or less have the following refund policy Must be dropped the day before the course begins for a 100\% refund

Financial aid recipients should contact the Financial Aid Office if they plan to withdraw from (or stop attending) all classes during the semester.

# Tuition, Fees, and Refund Policy 

## Ohio Residency

The following persons shall be classified as residents of the state of Ohio for subsidy and tuition surcharge purposes:

1. A dependent student, at least one of whose parents or legal guardian has been a resident of the state of Ohio for all other legal purposes for twelve consecutive months or more immediately preceding the enrollment of such student in an institution of higher education.
2. A person who has been a resident of Ohio for the purpose of this rule for at least twelve consecutive months immediately preceding his or her enrollment in an institution of higher education and who is not receiving, and has not directly or indirectly received in the preceding twelve consecutive months, financial support from persons or entities who are not residents of Ohio for all other legal purposes.
3. A dependent child of a parent or legal guardian, or the spouse of a person who, as of the first day of a term of enrollment, has accepted full-time, self-sustaining employment and established domicile in the state of Ohio for reasons other than gaining the benefit of favorable tuition rates.

## Specific Exceptions and Circumstances

1. A person who is living and is gainfully employed on a fulltime or part-time and self-sustaining basis in Ohio and who is pursuing a part-time program of instruction at an institution of higher education shall be considered a resident of Ohio for these purposes.
2. A person who enters and currently remains upon active duty status in the United States military service while a resident of Ohio for all other legal purposes and his or her dependents shall be considered residents of Ohio for these purposes as long as Ohio remains the state of such person's domicile
3. A person on active duty status in the United States military service who is stationed and resides in Ohio and his or her dependents shall be considered residents of Ohio for these purposes.
4. A person who is transferred by his employer beyond the territorial limits of the fifty states of the United States and the District of Columbia while a resident of Ohio for all other legal purposes and his or her dependents shall be considered a resident of Ohio for these purposes as long as Ohio remains the state of such person's domicile and as long as such person has fulfilled his or her tax liability to the state of Ohio for at least the tax year preceding enrollment.
5. A person who has been employed as a migrant worker in the state of Ohio and his or her dependents shall be considered a resident for these purposes provided such person has worked in Ohio at least four months during each of the three years preceding the proposed enrollment.
6. A person who was considered a resident under this rule at the time the person started a community service position as defined under this rule, and his or her spouse and dependents, shall be considered as residents of Ohio while in service and upon completion of service in the community service position.
7. A person who returns to the state of Ohio due to marital hardship, takes or has taken legal steps to end a marriage, and reestablishes financial dependence upon a parent or legal guardian (receives greater than 50 percent of his or her support from the parent or legal guardian), and his or her dependents shall be considered residents of Ohio.
8. A person who is a member of the Ohio National Guard and who is domiciled in Ohio, and his or her spouse and dependents, shall be considered residents oh Ohio while the person is in Ohio National Guard service.

## Procedures

1. A dependent person classified as a resident of Ohio for these purposes and who is enrolled in an institution of higher education when his or her parents or legal guardian removes their residency from the state of Ohio shall continue to be considered a resident during continuous full-time enrollment and until his or her completion of any one academic degree program.
2. In considering residency, removal of the student or the student's parents or legal guardian from Ohio shall not, during a period of twelve months following such removal, constitute relinquishment of Ohio residency status otherwise established under paragraph 1 or 2 of this rule.
3. For students who qualify for residency status under paragraph 3 (of Ohio Residency), residency status is lost immediately if the employed person upon whom resident student status was based accepts employment and establishes domicile outside Ohio less than twelve months after accepting employment and establishing domicile in Ohio.
4. Any person once classified as a nonresident, upon the completion of twelve consecutive months of residency, must apply to NSCC for reclassification as a resident of Ohio for these purposes if such person in fact wants to be reclassified as a resident. Should such person present clear and convincing proof that no part of his or her financial support is or in the preceding twelve consecutive months has been provided directly or indirectly by persons or entities who are not residents of Ohio for all other legal purposes, such person shall be reclassified as a resident.
5. Any reclassification of a person who was once classified as a nonresident for these purposes shall have prospective application only from the date of such reclassification.
6. Any institution of higher education charged with reporting student enrollment to the Ohio Board of Regents for state subsidy purposes and assessing the tuition surcharge shall provide individual students with a fair and adequate opportunity to present proof of his or her Ohio residency

# Tuition, Fees, and Refund Policy 

for the purposes of this rule. Such an institution may require the submission of affidavits and other documentary evidence which it may deem necessary to a full and complete determination under this rule.

## Documentation of full-time employment and domicile shall include the following documents:

(a) A sworn statement from the employer or the employer's representative on the letterhead of the employer or the employer's representative certifying that the parent or spouse of the student is employed full-time in Ohio.
(b) A copy of the lease which the parent or spouse is the lessee and occupant of rented residential property in the state; a copy of the closing statement on residential and real property located in Ohio of which the parent or spouse is the owner and occupant; or if the parent or spouse is not the lessee or owner of the residence in which he or she has established domicile, a letter from the owner of the residence certifying that the parent or spouse resides at that residence.

Additional criteria which may be considered in determining residency for these purposes may include, but are not limited to the following:
(a) If a person is subject to tax liability under section 5747.02 of the Ohio Revised Code;
(b) If a person qualifies to vote in Ohio;
(c) If a person is eligible to receive state welfare benefits;
(d) If a person has an Ohio driver's license and/or motor vehicle registration.

Criteria evidencing lack of residency:
(a) If a person is a resident of or intends to be a resident of another state or nation for the purpose of tax liability, voting, receipt of welfare benefits, or student loan benefits (if the student qualified for that loan program by being a resident of that state or nation);
(b) If a person is a resident or intends to be a resident of another state or nation for any purpose other than tax liability, voting, or receipt of welfare benefits.

Application packets for in-state tuition are available in the Registrar's Office. Packets should be obtained no later than the first week of classes for the semester in question. The distribution and collection of all packets will be logged by the Registrar's Office.

The completed application requesting a change of out-of-state status, including all required documentation, must be received by the Registrar by the end of the third week of classes for the semester in question. The registrar will review the application within five working days from the date of receipt to determine the candidate's residency status.

The Registrar will notify in writing, the student applicant within ten working days, of the final determination of the request. A copy of the final determination along with the application and documentation will be filed in the student's file.
The applicant should plan to pay all fees, even if they believe their application will be approved. Provided that residency requirements were met prior to the first day of the semester, fees will be refunded back to the beginning of the semester in question once a final determination has been made.

## Academic Advisors

In an effort to foster individualized attention, each student is assigned an academic advisor. An advisor can provide guidance regarding class scheduling and program requirements or discuss academic problems. Advisors are available to answer any questions you may have regarding class schedules or other College policies and procedures. Each advisor has regular office hours set aside for student appointments.

## Academic Amnesty

A student may repeat coursework for which he or she earned a D, U, or an F grade. When a course, or its current equivalent, is repeated, the most recent grade will be included in the calculation of the grade point average. For up to and including 12 credit hours, the grade received in the previous course will remain on the transcript.

Repeating a course may affect financial aid. Students receiving Veteran educational benefits or other students who receive financial assistance from an outside agency should check for any agency rules that do not permit payment for courses that are taken more than once. Veteran educational benefits, for example, will not cover a third attempt for a failed course.

## Dean's List

For the purposes of the Dean's List calculations, a full-time student is defined as a student carrying at least 12 graded credit hours for the semester. A half-time student is defined as a student carrying between 6-11.99 graded credit hours for the semester.

Each full-time student earning a grade point average of 3.50 or above on a 4.00 scale will be named to the Full-time Dean's List for that semester. Each half-time student earning a grade point average of 3.50 or above on a 4.00 scale will be named to the half-time Dean's List for that semester.

# Academic Policies and Procedures 

## Academic Probation

Students will be placed on academic probation at the end of any semester, including summer session, in which their cumulative grade point average falls below the following minimum levels:

| Credit hours attempted | Cumulative GPA below |
| :---: | :---: |
| 15 | 1.40 |
| $16-30$ | 1.60 |
| $31-45$ | 1.80 |
| $46+$ | 2.00 |

Students will remain on academic probation until such time as their cumulative GPA meets or exceeds the minimum levels referenced in the paragraph above.
NOTE: Veterans receiving VA educational assistance may have benefits terminated following their second semester of academic probation if progress is not being made toward the required GPA.

## Academic Suspension

A student on probation will be suspended at the end of any semester, including summer, if the minimum cumulative grade point average is not reached while on probation. There will be no suspension if the semester grade point average is 2.00 or the student shows significant progress, as determined by the Chief Learning Officer.

The period of suspension will be for one academic semester, excluding summer session. The student petitions the Chief Learning Officer for re-enrollment.

## Academic or Financial Aid probation or suspension using financial aid funds in the Bookstore

No student on academic or financial aid probation or suspension can make purchases in the bookstore with financial aid funds until after the current semester grades have been posted. From the time grades are posted until the day before the start of the next semester, the student may use financial aid funds to purchase educational supplies, and only books for courses in which s/he is registered. As the first day of the semester, all financial aid funds available to the student will be totally accessible for all bookstore purchases.

## Adding or Dropping Classes

Students register for classes through myNSCC at www.northweststate.edu.

A student takes full responsibility for adding or dropping courses. Failure to attend classes or give proper written intention to withdraw will result in failure of a course. Students will be academically and/ or financially responsible for any "W" or "F" grades received. The adding or dropping of courses requires the student to contact the Financial Aid Department and/or the Business Office to adjust the aid or make payment.

## Adding Classes

Regular classes can be added online through the end of the first week of the semester during fall or spring and do not require the instructor's or division Dean's signatures. Courses may be added without written approval in summer semester prior to the first day of the semester only.

Registering for more than 20 credit hours in the fall/spring terms or more than 10 hours in the summer term require a student to obtain permission from the Dean or Chief Learning Officer.

## Dropping Classes

Student's drop courses using myNSCC through the $100 \%$ tuition refund period for a specific course.

## Withdrawing from class(es)

Dropping a course after the $100 \%$ tuition refund period is a "withdrawal", which may be completed by using myNSCC, inperson, by faxing the request to the Registrar's Office at 419-2675604, or by mailing the request which must be post marked on or before the last date for a "W" deadline. Failure to attend classes or give proper written intention to withdraw will result in failure of a course. Students will be academically and financially responsible for any "W" or "F" grade received.

The withdrawal period for 16 week courses is at the end of the sixth week and at the end of the third week for eight week courses. Courses that are 2-8 weeks in duration there are no withdrawals, and therefore, students must drop the course during the first week, which is a full drop and not a withdrawal. Courses that are less than 1 week do not have withdrawals.

## Military Withdrawal

Withdrawals due to military activation during a semester will require the student to withdraw from classes at the time of activation, at which time a "W" will be assigned. Upon receipt of a copy of the student's actual military activation orders, the College will refund $100 \%$ of the student's tuition and fee for the semester, and any "W" grade will be changed to a "WM" to signify a military withdrawal on the transcript. Upon returning to college the student is required to submit copy of the DD214.

## Developmental Courses

Refresher courses are offered in reading, writing, and mathematics for students who need or desire preparation for college-level studies. These courses may be required on the basis of COMPASS Assessment scores or elected by students. Students with questions regarding their need for these courses should consult with the Testing Office or the Success Center for clarification. Please see the Course Description section of this catalog for more details. Students whose placement scores indicate a need for developmental courses may be limited to twelve credit hours until satisfactory ("S") academic status is achieved. Developmental courses do not count towards graduation requirements and are graded as Satisfactory or Unsatisfactory (S/U).

## Academic Dishonesty

Academic dishonesty is defined as any attempt by a student to misrepresent academic work, including computer assignments/ activities or any effort to use unauthorized aids during a testing situation. There are many forms of academic dishonesty. Examples include but are not limited to:

1. Cheating - the use of unauthorized or prohibited materials. Students, who intentionally use or attempt to use unauthorized information in any academic exercise, including computers or exams, are cheating.
2. Cooperating with another person in academic dishonesty, such as, taking an exam for another student, having another student take an exam for you, arranging with other students to give or receive answers by use of signals, arranging to sit next to someone who will let you copy his or her exam, or allowing another student to copy from you during an exam.
3. Copying from or looking at another person's exam without his/her knowledge.
4. Obtaining unauthorized copies of an exam prior to exam time.
5. Intentionally falsifying information in an academic exercise or clinical/laboratory record.
6. Plagiarism - representing the words or ideas of another person as your own without identifying the source.
This includes submitting the work of another student as your own or allowing someone to submit your work as his or her own.

## Disciplinary Penalties for Academic Dishonesty

The faculty member who detects academic dishonesty and Division Dean will handle the discipline. In the event the faculty member is the Dean, the Chief Learning Officer will handle the discipline. Each action will be documented in writing and the faculty member will be notified.

1. For a first-time offense, a grade of "F" may be issued for the project, paper, test, or whatever assignment in which academic dishonesty has occurred. A faculty member may have other penalties specified in the course syllabus. The faculty member will impose the grade.
2. For a second offense, not necessarily in the same course, a grade of " $F$ " will be issued for the course in which academic dishonesty has occurred. The Chief Learning Officer will inform the faculty member of the second offense, and the faculty member will impose the grade. The Chief Learning Officer will inform the student.
3. For a third offense, not necessarily in the same course, a grade of " $F$ " will be issued for the course in which academic dishonesty has occurred. Additionally, any student who has been involved in three offenses, not necessarily in the same course or semester, will be dismissed from the College immediately for one semester (excluding summer). Upon readmission to the College, any future offense will cause the student to be dismissed immediately with no right to
readmission. The Chief Learning Officer will be responsible for
imposing dismissal.

## Reporting Cases of Academic Dishonesty

1. Within seven (7) days in which classes are held after the incident is discovered, the faculty member will file a written report of the incident with the Division Dean and the student charged. The report will include: a) the particular violation alleged; b) when the incident occurred; c) when it was discovered; d) the names of all students involved in the incident; and e) the action taken.
2. The Division Dean will forward the report to the Chief Learning Officer to be placed in an academic dishonesty history file.
3. Any such filed report will be removed and destroyed upon the student's meeting graduation requirements.

## Auditing Courses

The term "audit" refers to a course which is taken without credit. Courses taken on this basis are not included in the computation of the cumulative grade point average and are not applicable to graduation requirements. A student must elect audit status at the time of registration or take action to change to audit during the refund period for that class length. (Class length: 1 week or less = enroll as audit; 2 wks to $7 \mathrm{wks}=1$ week to change to audit; $8 \mathrm{wk}-16$ wks $=3$ weeks to change to audit) During the first week of classes, students have the privilege of changing from audit to credit. The student initiates such action through the Registrar's Office

## CatalogRequirements

Students will follow the curriculum requirements for their major as listed in the catalog in effect at the time of their admission to the College. Following a break of enrollment at NSCC of two years or more, students will automatically be updated to the catalog requirements in effect at the time of their re-enrollment.

## Change of Student Information

A change of major, address, or name are made by completing the Change of Student Information form in the Registrar's Office. A name change is completed by submitting the legal or court issued documents such as a marriage certificate, divorce decree, or other documentation of legal action and submitted to the Registrar's Office.

## Class Attendance Policy

Excessive absences are defined as three consecutive absences or sporadic absences that impair satisfactory student progress in a course. For those students, instructors will report excessive absences and last date of attendance to the Registrar's Office.

The College is obligated to report lack of attendance or last date of attendance to federal and state agencies that provide financial assistance to students.

Instructors have the right to issue a failing grade to students who incur excessive absences and who have not filed an official withdrawal from a course.

## Course Cancellation for Cause

The College reserves the right to cancel courses for cause, such as insufficient enrollment or unavailability of faculty.

## Course and Credit Hour Load Limitations

The maximum credit load for a student enrolled in a fall or spring terms is 20 credit hours and 10 credit hours during a summer term, except upon recommendation of his/her advisor and approval of the Department Dean and/or Chief Learning Officer. A student is considered to be enrolled full-time for a fall or spring terms when enrolled in at least 12 credit hours and at least 6 credit hours for a summer term.

## Cumulative Point Average

The cumulative point average is obtained at the conclusion of each semester by dividing the total number of credit points earned by the number of semester credit hours the student has attempted. Please refer to the Grading System for point system.

## Example:

| Course | Credits | Grade | Points |
| :--- | :--- | :--- | :--- |
| ENG111 | 3 | B | 9 |
| CIS119 | 1 | A | 4 |
| CHM101 | 4 | B | 12 |
| MTH109 | $\underline{4}$ credits | C | $\underline{8}$ |
|  | 12 points |  |  |

$33 \div 12=2.75$ cumulative g.p.a.

## Cumulative Technical Point Average

The cumulative technical point average (CUM TECH GPA) is obtained at the conclusion of each semester by dividing the number of credit points earned by the number of credit hours the student has attempted in technical courses only. Technical courses are designated by a "+" in front of the course number under each technology in this catalog.

## Academic Fresh Start Policy

Once in a lifetime, a student may apply for a change of grade from D, F, U, to a W in a maximum of two courses, which are not program requirements. The fresh start requirements for application are:

1. A student must be currently enrolled in credit courses and have a declared major at Northwest State Community College.
2. The student must have demonstrated satisfactory academic progress for at least one academic term (12 cumulative credit hours beyond fresh start course(s) request) with a GPA of 2.0 for these courses at Northwest State Community College including developmental courses.
3. Courses requested for fresh start must have been taken during the first 30 credit hours attempted including developmental courses.
4. The application for Academic Fresh Start must be in writing and is subject to review and approval by committee(s).
5. An application fee of $\$ 10$ per requested course change must be paid at the time of the application.
6. A transcript placement fee of $\$ 20$ per approved course must be paid within ten (10) days of notice of final approval.
7. Academic Fresh Start application forms are available in the Registrar's Office.

## Medical Fresh Start Policy

Once in a lifetime, due to catastrophic personal health/medical circumstances, students may be eligible to retake at no additional cost, classes that they failed (earned and "F" or "U" grade) as a result of their medical condition. The requirements for a medical fresh start are:

1. Petition for a Medical Fresh Start within two weeks of the end of the semester in which the "F" occurred.
2. Student had to be passing course(s) prior to event.
3. The student's incapacitation must have exceeded two weeks in duration.
4. A Medical Fresh Start applies only to illness/injury experienced by the student personally (does not include family members).
5. The student must register to re-take the affected courses within one year of filing the Petition for Medical Fresh Start.
6. The student and his/her attending physician must complete and sign the Petition for Medical Fresh Start.
7. Medical Fresh Start form and instructions are available in Registrar's office.
8. A non-refundable petition fee of $\$ 20$ must be paid at the time of application.

## Grade Reports

Grades are accessed through myNSCC link at www.northweststate.edu.

## Graduation Requirements

The associate degree is awarded upon the successful completion of any one of the two-year programs. A certificate is awarded upon the successful completion of any of the one-year certificate programs.

Students must have:

- Successfully completed all required courses in their program
Attained a 2.0 grade point average in their technical courses
- A cumulative grade point average of 2.0 in all courses
- Completion of thirty percent of the credits from Northwest State Community College
-. Students starting in the fall 2007 term are required to complete one online course (1-3 credit hours, and be fulfill the requirement in any subject area).

Students are eligible to receive only one degree within a technology but may have more than one concentration. A student's major or majors are listed on the student's transcript. Students wishing to receive dual degree/dual technologies must meet with their academic advisor to fulfill their programs of study.

Students must complete a petition for graduation by the published deadlines. A graduation application is available on the Registrar's Office web page and office.

A $\$ 50$ non-refundable graduation fee must accompany the application. Each graduate is expected to attend the graduation exercises after the application for graduation has been approved. Students who are unable to attend should notify the College by contacting the Registrar’s Office at least two weeks prior to Commencement.

The qualifications for graduation require that each required course in which an " $F$ " grade is received must be repeated. This requirement may be waived by the Chief Learning Officer, in special circumstances where a course is no longer available for the student to repeat and/or reasonable substitution can be made. In addition, certain majors require a grade of "C" or better in certain courses to meet graduation requirements. Students may, with written permission of their Division Dean or Chief Learning Officer, repeat a course in which they earned a passing grade. The grade received for the repeated course will thereafter be substituted for the former grade in calculating the student's cumulative grade point average.

If a student received a grade of "D", "F", "I", or "U", in a course and then receives credit for that course by successful completion of a similar course at another institution, the credit hours and quality points for the first registration will continue to be used in computing the student's grade point average.

## Graduation with Honors

Any student graduating with a cumulative point average of 3.50 or higher will be graduated with honors as follows:

$$
\begin{array}{ll}
3.50-3.74 & \text { Cum Laude } \\
3.75-3.89 & \text { Magna Cum Laude } \\
3.90-4.00 & \text { Summa Cum Laude }
\end{array}
$$

A notation of this honor will be placed on the student's diploma and transcript.

## Completing a Second Major

If a student completes a second major at any time within the same technology area, he/she will need to submit a graduation application (fee is waived) and upon completion of requirements we will add the second major to the transcript.

Students must complete a petition for graduation by the published deadlines. A graduation application is available on the Registrar's Office web page.

## Incomplete Grade

Students may request an incomplete through discussion with the instructor and by negotiating and completing an "Incomplete Grade Contract" with that instructor and the academic dean, provided that each of the following criteria is met:

1. The student is unable to complete the work due to reasons beyond their control.
2. The student is passing the course.
3. At least seventy-five percent of the coursework is completed.
4. The course may be completed without the aid of classroom instruction.

The contract must indicate the specific procedures and deadlines for fulfilling course requirements. A grade of an "I" will be assigned until a final grade can be established. Work must be completed by the deadline established by the instructor or by the end of the next regular semester, whichever is earlier. All incomplete grade contracts must be approved and signed by the division Dean.

Failure to complete the requirements of the contract will result in failure of the course, and the "I" will be converted to a grade of "F" on the student's permanent record by the Registrar's Office. Extensions to the time limit may be made only upon recommendation of the instructor involved and approval of the Department Dean.

## Independent Study

Independent study courses are initiated by the dean of the division in which the independent study course is to be offered.

The independent study of a course must be the last resort method of instruction considered only when program requirements, electives and appropriate substitutes are not available.

The independent study must satisfy the following three criteria:

1. The student is capable of successfully completing the course independently.
2. The course is appropriate for the independent study methodology.
3. The College is willing to offer the course independently.

The College may at its discretion offer courses in an independent study mode including but not limited to internships, practicum and co-ops.

## Grading System

The quality of coursework at Northwest State Community College is indicated by means of letter grades. Each grade, in turn, carries credit points which are used in computing the student's cumulative point average.

A Superior Quality .... 4.0 Credit Points
B High Quality ......... 3.0 Credit Points
C Average................. 2.0 Credit Points
D Below Average ...... 1.0 Credit Points
F Failing ...................0.0 Credit Points
I Incomplete.............Not computed in grade point average
NG No Grade $\qquad$ Reported by Instructor
NP In Progress $\qquad$ . Not computed in grade point average. Used to denote a flexible scheduled course where work is not completed by the end of semester when grades are due.
W Withdrawal. $\qquad$ Prior to the end of the twelfth week;
not computed in the grade point average.
WM Military Withdrawal
S Satisfactory
U Unsatisfactory
AU Audit; no credit
CR Credit Given
Grades of W, S, U, AU, P, CR, and I, are not computed in the cumulative point average.

## Pass/Fail Option

Students are permitted to select Satisfactory or Unsatisfactory grade (S/U) status for a limit of two elective courses per Associate Degree, and one per certificate program. Courses must be designated as such no later than the end of the first week of classes. Pass/Fail status for flexibly scheduled courses must be designated as such no later than the end of the first week of the original registration. The Request for Pass/Fail Status Form must be completed in the Registrar's Office, and students will not be allowed to change this status after formally selecting such. NOTE: Pass/Fail courses may not transfer to other institutions.

## Student Directory Information

## Right to Inspect and Review Records

The Family Education Rights and Privacy Act 1974 was designated to protect the privacy of education records. It established the right of students to have access to inspect and review their academic records, as well as limits the release of any such information about a student without the student's consent. A request to inspect and review record shall be made in writing to the Registrar.

## Directory Information

The items listed below are designated as "Directory Information" and may be released by this institution at its discretion:

| Name | Major | Full-time or Part-time status |
| :--- | :---: | :---: |
| *Address | Birth Date | Dates of Attendance |
| *Email | Honors | Degree(s) Conferred |
| *For legitimate educational purposes only |  |  |

Under the provisions of the Family Educational Rights and Privacy Act of 1974, you have the right to withhold the disclosure of any or all of the above information. Should you decide to withhold any information, you will need to fill out a Request to Prevent Disclosure of Directory Information form and submit it to the Registrar no later than the end of the second week of classes each semester. This form is available in the Registrar's Office. Such requests will be honored for one academic year or a shorter period of time as designated by the student. A complete set of FERPA guidelines is available for you to review in the Registrar's Office.

## Access to Student Records

College policy on a student's right to inspect and review personally identifiable records and the right for a hearing to challenge the content of those records:

## Inspect and Review Records

1. Individuals who have attended Northwest State Community College have the right to inspect and review official records, files, and data directly related to themselves, including material incorporated into each student's cumulative record folder in accordance with the College policy on access to student records.
2. A student may request, in writing, the opportunity to inspect and review his/her records.
a. The request should be made to the chief administrator or his/her designee(s) of the department in which the records are on file.
b. A request must specify records to be inspected and reviewed.
3. Release of Information for Deceased Students.
a. Requests for information on individuals other than the executor during the first 10 years after death will be limited to the release of directory information only. Thereafter, all information be comes available to the public.
4. A request by a student to inspect and review his/ her records will be granted within a reasonable period of time, but such time is not to exceed seven days in which classes are held after the request has been made.
5. Records will be inspected and reviewed by the student in the presence of the department head of his/her designee(s).
a. Records may not be changed or deleted during the process of inspection and review.
b. The student shall be advised of his/her right to challenge and the procedure to challenge any portion(s) of his/her College record.
c. Upon written request, the student shall be provided with a copy of requested documents within his/her record.
6. Northwest State Community College will release non-directory information, including grades, to parents of dependent students only with the written consent of the student, regardless of the student's
age or dependency status. Written consent for such requests must be submitted to the Registrar's Office.
Hearing to challenge content of records:
7. Students shall have an opportunity for a hearing to challenge the content of their College generated records, to insure that the records are not inaccurate, misleading, or otherwise in violation of the privacy or other rights of students, and to provide an opportunity for the correction or deletion of any such inaccurate, misleading, or otherwise inappropriate data contained therein. Third party records are not open to challenge.
8. A student may request, in writing, an opportunity for a hearing to challenge the content of his/her College record.
a. Request should be made to the President or his designee(s).
b. A request must:
9. Identify in specific terms the portion(s) of the record to be challenged
10. State the reason(s) for challenging the portion(s) of the record so identified.
11. State the remedy sought; i.e., the correction or the information under challenge.
Hearing procedures:
12. The hearing will be conducted by the President or his designee(s) who will act as the hearing officer.
13. The hearing will be granted within ten days after the request has been made.
14. The department head or his/her designee(s) responsible for the student record under challenge shall represent that record in the hearing.
15. Prior to the hearing, the hearing officer shall notify the student and the department head of the time, place and date of the hearing and of the specific portion(s) of the student's record to be challenged in the hearing.
16. The hearing shall be limited to consideration of the specific portion(s) of the student's record being challenged.
17. The student will have the right to be assisted by an advisor of his/her choice.
18. The burden of sustaining the challenge rests with the student.
19. The student and the department head have the right to present evidence and witnesses directly related to that portion(s) of the student's record being challenged.
20. The hearing officer shall keep a taped record of the hearing.
21. The hearing officer must provide the student with a written notification of the disposition of the challenge including the reason(s) for the disposition.

## Institutional personnel access to student records:

1. Students have the right to consent to disclosures of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent.
a. One exception, which permits disclosure without consent, is disclosure to "school officials" with legitimate educational interests. A school official is a person employed by the College in an administrative, supervisory, academic, research, or support staff position, including law enforcement unit personnel; a person or company with whom the College has contracted such as an attorney, auditor, or collection agent; a person serving on the Board of Trustees; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks.
b. A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibility.
2. Financial aid information supplied by students or parents will be maintained on a confidential basis, with only necessary information released to institutional personnel from the standpoint of processing financial aid awards.

## Student Directory Information:

The following directory information may be released without the student's or graduate's permission:

1. Name
2. Address*
3. Email*
4. Major field of study, dates of attendance, degrees and awards received
5. Students and graduates may restrict the publication and release of directory information by filing a written request in the Registrar's office
*for legitimate educational purposes only
Third parties:
Whenever a student's information is passed on to a third party, the College will inform the third party that such information may not be passed on to a fourth party.

Records:
The institution will maintain a record of persons who are not institutional employees who request access to a student's file or who obtain access to a student's file. These requests will be directed to the Registrar and/or the Chief Learning Officer.

## Proficiency Examination (Credit by Examination)

The College recognizes that students, through self-study or other methods, may have proficiencies that equate to the requirements of certain courses offered. Students who feel that they may be proficient in a course have the opportunity to request an examination to determine such capability; however, the student should be aware that proficiency tests are not available for every course.

Prior to applying for proficiency testing, the student must have submitted an application for admission to the College and paid the $\$ 20.00$ application fee.

A student may make application for a proficiency examination in a subject area by following these procedures:

1. Present tangible proof or evidence of proficiency to the Testing Coordinator or Department Dean.
2. Complete application for proficiency examination, make testing arrangements with the testing coordinator or Division Dean, and make payment of the $\$ 45.00$ preparation fee prior to the examination.
3. Complete the total process, if enrolled in the course in which examination is requested, before the end of the fourth week of a regular semester, and before the end of the second week of a summer semester.
4. A student cannot Proficiency in a course previously taken (successfully or unsuccessfully).
5. A student may make application for a Proficiency Examination ONE TIME PER COURSE.
6. Students certified as proficient will be refunded the appropriate credit hour tuition charge for the course.
7. Credit for the course for a satisfactory proficiency examination will become a part of the student's permanent record, and a grade of "CR" will be assigned.
8. Proficiency credit cannot be posted to the transcript until the end of the semester in which the student has completed at least one course at NSCC.

If not enrolled in the particular course for which examination is requested, a student can make application for the proficiency exam at any time during the regularly scheduled semester by following all procedures outlined above. All other policies will apply with the exception of refund of instructional charges.

## College Level Examination Program (CLEP), Advanced Placement (AP), and DANTES credit

Full college credit may be granted or prerequisite courses waived based upon College Level Examination Program (CLEP), Advanced Placement (AP), and DANTES credit.

Credit awarded through CLEP, AP, or DANTES scores may not exceed $70 \%$ of any degree or certificate requirement.

Upon presentation of CLEP, AP, and DANTES scores in the same area, credit will be awarded for either CLEP, AP, or DANTES based upon the higher number of credit hours. In no case will CLEP, AP,
and DANTES credits be combined. In the event that the credit hours to be awarded through CLEP, AP, or DANTES are equal, the individual department will award the appropriate credit at their discretion.

## Military School Credit

Transfer credit will be given to those students who have successfully completed educational experience through the military services as evaluated in the American Council on
Education Guide (ACE).
Total military credit transferred may not exceed $70 \%$ of any degree requirement.

## Second-Year Student Status

A "second-year student" is anyone who has completed thirty or more credit hours.

## Affirmative Action

Policy Statement

1. The Northwest State Community College affirmative action policy has as its objective the equal employment and treatment of all individuals without regard to race, color, religion, sex, national origin or ancestry, handicap, age, marital or parental status, veteran status, or other non-job related factors.
2. The College is fully committed to providing:
a. equal opportunities in all employment-related activities, including but not limited to, recruiting, hiring, advancement, transfer, compensation, benefits, and terms of employment;
b. Equal opportunities in all educational, social and recreational programs;
c. Physical access to all facilities.
3. It is the intent that this policy be in full compliance with all applicable federal and state laws and regulations concerning affirmative action.

## Assessment of Student learning

Northwest State Community College is committed to providing opportunities to develop students' academic and career potential through transformational learning. Students at NSCC will engage in a learning environment that challenges critical thinking, communication, computation, and teamwork skills. NSCC will gather information to assess student learning of these skills. Prior to graduation, all Associate Degree graduates are required to:

1. Complete a nationally normed test.
2. Submit the required elements of a portfolio.

# College Policies 

## Current electronic portfolio requirements include:

- The argument paper from English 111 (submission required to pass course).
- The research paper from English 112 (submission required to pass course).
- A writing assignment from a Humanities core course most likely to demonstrate critical thinking skills.
- A writing assignment from a Social Sciences core course most likely to demonstrate critical thinking skills.
- A writing assignment that represents, in the student's opinion, his or her best writing and critical thinking performance from late in the program (preferably from the final semester, and not duplicating other portfolio submissions).
- A writing assignment from the student's technical program (or, for an Associate of Arts or Associate of Science student, from the intended area of study upon transfer), that demonstrates application of writing and critical thinking skills (not to duplicate other portfolio submissions).
- Any other assignments designated by the student's specific degree program. Some programs require additional submissions beyond the minimum listed above.


## Assessment of Student learning

Policy Statement
All employees and students of Northwest State Community College have the inalienable right to work in an environment free from intimidation and harassment. This College prohibits an act physical, verbal or visual- that has the effect of unreasonably interfering with the employee/student's job performance or creates an intimidating, hostile or offensive atmosphere, either real or perceived.

## Dissemination of Policy

Information about the College's sexual harassment policy will be communicated at least annually to all employees and students through College publications and other available media.

## Definitions

1. Sexual harassment is defined as unwelcome sexual advances, requests for sexual favors, and other verbal or conduct of a physical nature when:
a. Submission to such conduct is made either explicitly or implicitly, a term or condition of an individual's employment or the student's status in a course, program, or activity.
b. Submission to or rejection of such conduct by an individual is used as the basis for employment decisions affecting such individuals.
c. Such conduct has the purpose or effect of substantially interfering with a person's work
or academic performance, or creating an intimidating, hostile, or offensive work/study environment.
2. Solicitation is a form of sexual harassment that includes offering sexual favors in exchange for personal advancement, monetary gain, improved academic or employment standing, or other special consideration.
3. Other forms of harassment is prohibited conduct including that which has the purpose or effect of creating an intimidating, hostile, discriminatory, or offensive educational environment on the basis of gender, religion, race, color, ethnicity, age, and/or disability.
All employees/students must act responsibly and professionally. Faculty, administration and staff employees must avoid placing themselves in situations where even the minute appearance of sexual harassment or improper conduct is a possibility. Northwest State Community College has substantial legal liability for the action of its employees. Accordingly, faculty, administration and staff employees will generally be subject to severe disciplinary action, including termination of employment with the College for improper conduct, actions and communications, either verbal or written.

All individuals affiliated with Northwest State Community College must take care to avoid improper conduct, language or dress which might be incorrectly interpreted by another individual. Any employee or student may speak to any union official, administrator, faculty or member of the College staff about any form of sexual harassment, without fear of reprisal or adverse action against that employee or student by the College. The employee or student need not complain to his/her union representative, administrator, direct supervisor prior to speaking to another supervisor or College official.

An employee or student who believes that (s)he is the victim of sexual harassment or other forms of harassment is asked to report the incident immediately to the Director of Human Resources. If the employee or student feels uncomfortable reporting to the person(s) designated, or if the harassment continues, (s)he is asked to contact the President of Northwest State Community College in person or by telephone at 419-267-5511, or in writing at 22600 State Route 34, Archbold, Ohio 43502. An impartial investigation will be conducted to determine whether the conduct can appropriately be defined as sexual harassment and if so, what corrective action can be taken.

Northwest State Community College will actively investigate any allegation of harassment and take appropriate disciplinary action which may include immediate termination of employment of any employee who has committed sexual harassment or other forms of harassment.
Regulations

It is a violation of College policy:

1. For any member of the faculty, administration, staff, or student body to engage in sexual or other forms of harassment or solicitation, as defined above.
2. For anyone knowingly to bring false accusations of sexual or other forms of harassment against any member of the College community, or to use the threat of such accusations to seek gain, advancement, or other special consideration.
3. To retaliate in any way against any member of the College community who files a complaint of sexual or other forms of harassment.

Administration Responsibilities
The President of the College shall designate the Executive
Assistant to the President/Human Resources as the Affirmative
Action Officer responsible for overall administration of the harassment policy.

1. The Affirmative Action Officer is responsible for:
a. Coordinating, disseminating and implementing this policy.
b. Serving as a resource for all matters dealing with sexual and other forms of harassment.
c. Investigating sexual and other forms of harassment complaints.
d. Assisting in the resolution of sexual and other forms of harassment complaints.
2. Each administrative officer is responsible within his or her area of jurisdiction for
a. Referring reported incidents of sexual and other forms of harassment to the Affirmative Action Officer.
b. Implementing sanctions as deemed appropriate.
3. All members of the College community are responsible for:
a. Ensuring adherence to this policy.
b. Discouraging sexual and other forms of harassment.
c. Reporting such incidents to the Affirmative Action Officer
d. Cooperating in any investigation which might result.

## Investigation Procedures

An individual who believes that this policy has been violated should contact the Affirmative Action Officer. First efforts in response to a complaint will be made on an informal basis through this office. Such efforts will be an attempt to resolve the complaint informally and will not involve formal investigative procedures.

If an informal resolution of the complaint is not achieved, the complainant may file a formal, written complaint with the Affirmative Action Officer. This will initiate a formal and complete investigation.

1. Procedures For Investigation Include:
a. All complaints of sexual and other forms of harassment will be handled without undue delay.
b. All information regarding a complaint will be considered confidential and made
known only to persons directly involved.
c. Investigation of a formal complaint will
include:
2. Notification to the person against whom the complaint is filed.
3. Consultation with the complainant and respondent, both of whom will be provided with a copy of the harassment policy.
4. Discussion with persons whom the investigator believes may be of assistance in establishing the facts of the complaint.
5. Preparation of a written report to the appropriate administrative officer, including recommendations for resolution. A copy of the report will be sent to both the complainant and the respondent.
6. Sanctions
a. At the conclusion of an investigation, the Affirmative Action Officer may recommend in his or her report either that the case be officially closed or that some action be taken. Recommended action may include, but is not limited to, counseling, reprimand (either verbal or written), reassignment of job responsibilities, probation, or suspension without pay, termination, or filing a criminal action. Any action relating to the disciplining of students will be administered through the Chief Learning Officer.
b. The administrative officer will then take whatever action (s)he deems appropriate.
c. If either the complainant or the respondent is not satisfied with the action taken by the Affirmative Action Officer, (s)he may appeal, in writing, to the President of Northwest State Community College, within seven calendar days of notification of the Affirmative Action Officer's decision. The President or President's designee will review the appeal and respond, in writing, to all parties-complainant, respondent, Affirmative Action Officer-concerning his or her disposition of the appeal.

# College Policies 

## Student Regarding Controlled Substances

NSCC specifically prohibits the illegal manufacture, sale, possession or use of alcoholic beverages, narcotics, marijuana, hypnotics, sedatives, tranquilizers, stimulants, hallucinogens or similar controlled substances at Northwest State Community College.

This policy applies to students, staff, faculty, and visitors. Violation of the policy may result in disciplinary action, including, but not limited to disciplinary probation, suspension, dismissal, expulsion, withholding of transcripts or other appropriate action.

## Student Conduct

To ensure each student at Northwest State Community College the right to obtain a quality education, certain rules of conduct must be imposed. Offenses which may result in disciplinary action include:

1. Possession or use of alcoholic beverages or controlled substances on the premises or entering the property under the influence of such substance
2. Possession of weapons
3. Gambling
4. Altering or forging an official College document
5. Furnishing false information to the College with the intent to deceive.
6. Unlawful and/or vandalistic appropriation of College property with the result that others are deprived of its use and benefits
7. Misuse of computer hardware, software, and privileges, including unauthorized use of an account number, password, program, file or file definition
8. Any action that is disruptive to the learning process of another

In order to maintain an orderly process for learning, the instructor/ supervisor/administrator has the authority to exclude any student who is considered to be detrimental to an ongoing learning experience. Disciplinary action may include but is not limited to disciplinary probation, suspension, dismissal, expulsion, withholding of transcripts or other appropriate action.

## Student Due Process and Grievance Policy

Resolution of a problem, whether academic or administrative, including challenging of a grade, can be achieved through proper channels or authority and may be resolved at any level of the due process and grievance procedure. Any student filing a grievance must follow the step-by-step procedure in the listed sequence.

## Academic Matter

Informal discussion between the student and the faculty member/ administrator should take place within twelve (12) instructional days* from the date of occurrence or discovery. In the case of a grade challenge, the date of occurrence is the date the grade was posted to the transcript. If the matter is not resolved, the student may invoke the formal written appeal process outlined below.
*NOTE: An instructional day is defined as any day, Monday through Saturday, that NSCC holds classes.

Step I - Formal Appeal Process

1. The student will submit a written grievance form to the individual involved within six (6) instructional days following unresolved informal discussion. If the written request is not received within the 6-day deadline, the case will be considered closed and the student will have forfeited the right for an appeal hearing.
2. Within six (6) instructional days of receiving the formal grievance, the individual involved and the student will meet and attempt to resolve the problem to the mutual satisfaction of both parties.
3. The faculty member/administrator will issue a written response to the student within six (6) instructional days after the meeting.
4. If the problem is not resolved in step one or the above time frames are not adhered to by the faculty member/ administrator, the student may proceed with Step 2.
Step 2 - Formal Appeal Process
5. Within six (6) instructional days of receiving the written response from Step 1, the student will submit the original grievance form to the supervisor of the individual involved, with a copy to the Chief Learning Officer.
6. Within six (6) instructional days of receiving all written documentation, the immediate supervisor will meet with the student and the individual involved attempting to resolve the problem to the mutual satisfaction of both parties. The Chief Learning Officer may attend this meeting at his/her discretion.
7. Within six (6) instructional days after the meeting, the immediate supervisor will issue a written response to all parties involved, with the original copy to the Chief Learning Officer.
a. If the problem is resolved, the written resolution issued by the supervisor will become part of the original document and bring closure to the grievance.
b. If the problem is not resolved, the student may proceed to Step 3.
8. If the above time frames are not adhered to by the student, the case will be considered closed and the student will have forfeited the right for an appeal hearing.
Step 3 - Formal Appeal Process
9. Within six (6) instructional days of receiving the written response from Step 2, the student may request a formal hearing by notifying the Chief Learning Officer. If the request is not received within the 6-day deadline, the case will be considered closed, and the student will have forfeited the right for an appeal hearing.
10. The Chief Learning Officer will notify and forward the original written grievance to the chairperson of the Academic Affairs committee.
11. Within (6) instructional days of receiving the request, the Academic Affairs Committee will meet to appoint an ad hoc due-process committee to hear the grievance.
a. The ad hoc committee will consist of five (5) members: one grade level I, II, or III employee; two faculty members; an officer of the student body organization; and a person of the student grievant's choice (person may be a present student, faculty member, or other employee of the College). Alternate committee members may be appointed as well by the Academic Affairs Committee. Grade level I, II, III includes vice presidents, division deans, and student service professionals.
b. The Academic Affairs chair will appoint one member of the ad hoc committee to act as chair for the proceedings.
12. The hearing will take place within six (6) instructional days after the committee appointments. To prepare for the hearing, the chair of the ad hoc committee may make the following arrangements, which are intended to facilitate due process.
a. Provide all ad hoc committee members with copies of the written grievance prior to the meeting.
b. Identify a date, time and meeting place convenient for the ad hoc committee members, the student grievant, and the person who is the object of the grievance.
c. Inform the student grievant and the staff member involved that they may present witnesses and additional written documentation at the hearing.
d. The following chronology for the hearing and follow-up is recommended. (The proceedings may also be tape-recorded, provided that all parties are informed in advance.)
13. Select a recorder.
14. Review the grievance and hearing procedures. This segment will be closed to the grievant and faculty member.
15. Invite the student to be heard. The grievant may present witnesses and additional written documentation at this time. This segment will be closed to the faculty member/administrator.
16. Invite the individual involved to be heard, at which time he or she may provide witnesses and additional written documentation. This segment will be closed to the student.
17. In closed session, the committee will discuss its findings and reach a clear and explicit decision. The student and individual involved may be invited to reappear and provide more information as requested.
e. Within six (6) instructional days after the formal hearing is concluded, the ruling of the ad hoc committee will be presented in writing to the student, the faculty member/administrator involved, the department dean, the chair of Academic Affairs Committee and the Chief Learning Officer, who will implement the ruling.
f. The decisions rendered by the ad hoc due process committee will be final.
g. All original documentation will be kept on file in the Chief Learning Officer.

## Non-Academic Matter

Informal discussion between the student and a staff member involved should take place within twelve (12) instructional days from the date of occurrence or discovery. If the matter is not resolved, the student may invoke the formal written appeal process outlined below.
Step-1 - Formal Appeal Process

1. The student will submit a written grievance form to the College employee involved within six (6) instructional days following unresolved informal discussion. If the written request is not received within the 6-day deadline, the case will be considered closed and the student will have forfeited the right for an appeal hearing.
2. Within six (6) instructional days of receiving the formal grievance, the College employee involved and the student will meet and attempt to resolve the problem to the mutual satisfaction of both parties.
3. The College employee will issue a written response to the student within six (6) instructional days after the meeting.
4. If the problem is not resolved in step one or the above time frames are not adhered to by the staff member, the student may proceed with Step 2.
Step 2 - Formal Appeal Process
5. Within six (6) instructional days of receiving the written response from Step 1, the student will submit the original grievance form to the supervisor of the individual involved, with a copy to the next
6. Within six (6) instructional days of receiving all written documentation, the immediate supervisor will meet with the student and the individual involved attempting to resolve the problem to the mutual satisfaction of both parties. The second level supervisor may attend this meeting at his/her discretion.
7. Within six (6) instructional days after the meeting, the immediate supervisor will issue a written response to all parties involved, with the original copy to the Chief Learning Officer.
a. If the problem is resolved, the written resolution issued by the supervisor will become part of the original document and bring closure to the grievance.
b. If the problem is not resolved, the student may proceed to Step 3.
8. If the above time frames are not adhered to by the student, the case will be considered closed and the student will have forfeited the right for an appeal hearing.
Step 3 - Formal Appeal Process
9. Within six (6) instructional days of receiving the written response from Step 2, the student may request a formal hearing by notifying the Chief Learning Officer. If the request is not received within the 6-day deadline, the case will be considered closed, and the student will have forfeited the right for an appeal hearing.
10. The Chief Learning Officer will notify and forward the original written grievance form to the chair of the Student Affairs committee.
11. Within six (6) instructional days of receiving the request, the Student Affairs Committee will meet to appoint an ad hoc due-process committee to hear the grievance.
a. The ad hoc due process committee will consist of one grade level I, II, or III employee; one grade level IV or support staff member; one faculty member; an officer of the student body organization; and a person of the student grievant's choice. (The person may be a present student, faculty member, or other employee of the College.)
b. The Student Affairs chair will appoint one member of the ad hoc committee to act as chair for the proceedings.
12. The hearing will take place within six (6) instructional days after the committee appointments. To prepare for the hearing, the chair of the ad hoc committee may make the following arrangements, which are intended to facilitate due process.
a. Provide all ad hoc committee members with copies of the written grievance prior to the meeting.
b. Identify a date, time and meeting place convenient for the ad hoc committee members, the student grievant, and the person who is the object of the grievance.
c. Inform the student grievant and the staff member involved that they may present witnesses and additional written documentation at the hearing.
d. The following chronology for the hearing and follow-up is recommended. (The proceedings may also be tape-recorded, provided that all parties are informed in advance.)
13. Select a recorder.
14. Review the grievance and hearing procedures. This segment will be closed to the student and staff member.
15. Invite the student grievant to be heard. The grievant may present witnesses and additional written documentation at this
time. This segment will be closed to the staff member.
16. Invite the staff member to be heard, at which time he or she may provide witnesses and additional written documentation. This segment will be closed to the student.
17. In closed session, the committee will discuss its findings and reach a clear and explicit decision. The student and staff member may be invited to reappear and provide more information as requested.
e. Within one week after the formal hearing is concluded, the ruling of the ad hoc committee will be presented in writing to the student grievant, the staff person involved, the staff member's immediate supervisor, the chairperson of the Student Affairs committee, and the second level supervisor who will implement the findings. All original documentation will be sent to the Chief Learning Officer.
f. The decisions rendered by the ad hoc committee will be final.
g. All original documentation will be kept on file in the Chief Learning Officer's Office.

## Study at Other Institutions

A student who wants to attend another institution during the summer or any other part of the academic year, for the purpose of transferring credit to a degree program of NSCC, must first obtain permission from the Chief Learning Officer and file a transient student form signed by the Chief Learning Officer or the Registrar.

Only credit hours transfer-quality points and grades are not figured into the student's permanent record.

## Campus Crime and Security Policy

Northwest State Community College does comply with the Crime Awareness and Campus Security Act of 1990.

## Drug Free Workplace Policy

Northwest State Community College shall comply with the Drug Free Workplace Act of 1988 and the Drug Free Schools Community Act of 1989.
Protection of Human Subjects Research Policy
Northwest State Community College shall comply with the federal provisions of the protection of human subjects in research policy in accordance with 45 CFR 46, and 21 CFR 56.

## Tobacco-Free Policy

The use of tobacco products within College owned or leased buildings and fleet vehicles is prohibited after June 7, 1993. Smoking is permitted in the courtyard south of the " $E$ " building.

# College Policies 

## Non-Discrimination Policy

Northwest State Community College is an equal opportunity institution, and does not discriminate on the basis of race, color, creed, national origin, sex, age, or handicap.

The College reserves the right to make changes in offerings, requirements, policies, regulations, and fees, subsequent to the publication of this catalog.

Certain degree and/or certificate programs have additional requirements, regulations, policies, and fees. For specific information, the student must contact the appropriate academic division.

Arts \& Sciences courses provide instruction that is essential to a wellrounded education, including written and oral communications, humanities, natural sciences, mathematics, and social and behavioral sciences. Every degree program requires a core of these general education courses to insure that our graduates are not only academically prepared but also better citizens. Arts \& Sciences courses help the students develop ways of approaching information and experience that strengthen their reasoning capacity, their awareness of relationships and responsibilities in a social and civic context, and their attention to values and moral issues.

Students in the Associate of Arts or Science degree program should plan their courses with the assistance of a faculty advisor after checking the requirements of the college to which they intend to transfer. By completing the AA or AS degree, the requirements for the Transfer Module will also be met. Additional courses or courses with higher credit value may be taken in order to meet the requirements of the major at the receiving institution. Electives should be chosen carefully in consultation with the receiving institution according to the desired major at the receiving institution.

Students whose goal is a four-year degree may find they can take selected courses at NSCC for a lower cost while staying near home. Academic work toward virtually any major at any college in the nation can be started at NSCC. To transfer efficiently, students must take courses that can be applied to the specific degree requirements at the institution to which they intend to transfer.

NSCC continues to develop and maintain articulation agreements and transfer guides with the institutions who receive the majority of NSCC's transfer students. Currently, covenant and inter-institutional articulation agreements are signed between Northwest State Community College and the following institutions of higher education: Bluffton College, Bowling Green State University, Cuyahoga Community College, Defiance College, Franklin University, Jackson Community College, Lakeland Community College, Lorain County Community College, Lourdes College, Ohio Northern University, Owens Community College, Terra Community College, University of Toledo, and Tri-State University. These agreements and guides help simplify the process for students transferring to these colleges and universities. Because new agreements and guides are continually being developed, students interested in transferring must stay in contact with their academic advisors for the most current information.

As part of the graduation requirements for the Associate of Arts, Associate of Science, Associate of Applied Business, Associate of Applied Science, Associate of Individualized Study, and Associate of Technical Study degrees, a student must complete at least five courses in general studies. These courses are distributed within five core categories. Students must take at least one course from each of the five categories as listed below. Students should consult their degree program for specific requirements within this core.

Associate of Arts and Associate of Science degrees are recommended primarily for students who plan to transfer to a four- year college or university. The planned program of instruction is generally equivalent to the first two years of a baccalaureate degree program.

## Core Requirements

I ENG111 Composition I
II ENG112 Composition II
III Any 100- or 200- level course with one of the following prefixes: BIO, CHM, ECO, ENG, GEO, HIS, HUM, MTH, PHI, PHY, PSY, SPN, SSC, or STA
(or)

HST212
HST240
HST242
IV ENG223
ENG230
ENG234 Narrative Literature of the Old Northwest Territory
ENG240 Introduction to Poetry
ENG241 Introduction to Fiction
ENG250 American Literature Through the Mid-19th Century
ENG251 American Literature Since the Mid-19th Century
ENG260 British Literature Through the 18th Century
ENG261 British Literature 19th Century to Present
ENG271 Non-Western Literature
HIS101 US History Pre-1876
HIS102 US History Post-1876
HIS203 US Since 1945
HIS210 The Modern World
HUM209 Humanities and Cultures:
Ancient \& Medieval Worlds
HUM210 Humanities and Cultures:
Renaissance to Present
HUM221 Music Appreciation
HUM230 Art Appreciation
PHI110 Critical Thinking \& Logic
PHI201 Introduction to Philosophy
PHI210 Ethics
PHI220 Ethics in Health Care
PHI222 Ethics in the Helping Profession
PHI230 World Religions
V PSY110 General Psychology
PSY220 Social Psychology
SSC101 Sociology
SSC110 General Anthropology
SSC120 American Government
SSC130 Comparative Government
SSC210 Cultural Diversity

NOTE: No course being used within I, II, IV, or V can be used within III.

In addition to these requirements, MTH080 proficiency is required for all NSCC Associate Degree graduates; however, individual programs may require a higher mathematics competence. This requirement may be fulfilled by placement test or by taking the course.

Students enrolled in either the Associate of Arts or Associate of Science degree program must demonstrate the following abilities through placement testing or successful course completion:
College Reading Series
MTH050Basic Math
CIS090 Introduction to Computers
MTH080Beginning Algebra
ENG090 Basic Composition
MTH090Intermediate Algebra
OAS090 Keyboarding Basics
Additional courses should be selected in line with the student's chosen field of study and the four-year college to which the student plans to transfer. Note that many four-year institutions require a foreign language sequence.

# Arts and Science 

The Arts and Sciences Division at NSCC offers the Associate of Arts and Associate of Science degrees as two-year degrees that represent the first two years of the four-year baccalaureate degree. The Associate of Arts and Associate of Science degrees are structured to give students a broadbased background in liberal arts. The degrees are flexible enough to allow students to meet the general education requirements at the four-year institution of their choice, with elective coursework that may be completed in their anticipated major.

The Associate of Arts and Associate of Science degrees are designed to provide the following program learning outcomes:

## PROGRAM LEARNING OUTCOMES

1. Produce unified, coherent, and well-developed essays following the rules of written academic English and MLA.
2. Interpret the larger thematic, historical or cultural significance of primary works in the humanities.
3. Define and apply key concepts when examining human functioning and problems in society.
4. Summarize and interpret data and relationships using standard statistical processes.
5. Demonstrate symbolic and graphic manipulations using analytic mathematic skills appropriate to the program.
6. Incorporate the steps of the scientific method, beginning with a question, and concluding by analyzing data and drawing conclusions about a stated hypothesis.
7. Demonstrate competency in utilizing current software applications.

## General Education

For Northwest State Core Requirements for all graduates, see page 34.

## Prerequisites

All students are required to demonstrate proficiencies in reading, writing, and mathematics based on scores on the placement test or take the recommended classes. If you have not taken the tests, see the testing coordinator in room C203A for information or referral to testing.

Some courses listed in this program have specific prerequisites. See prerequisites required for each course in the Course Description section of this publication.

|  |  |  |  |
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Social/Behavioral Sciences 12 credit hours required

- PSY110 and SSC101 are required

| ECO211 | Macroeconomics | 3 Cr. Hrs. |
| :--- | :--- | :--- |
| ECO212 | Microeconomics | 3 Cr. Hrs. |
| GEO110 | World Geography | 3 Cr. Hrs. |
| GEO210 | Geography - US \& Canada | 3 Cr. Hrs. |
| HST212 | Substance Abuse | 3 Cr. Hrs. |
| HST240 | Social Problems | 3 Cr. Hrs. |
| HST242 | Marriage and the Family | 3 Cr. Hrs. |
| PSY110 | General Psychology (Required) | 3 Cr. Hrs. |
| PSY210 | Abnormal Psychology | 3 Cr. Hrs. |
| PSY220 | Social Psychology | 3 Cr. Hrs. |
| PSY230 | Human Growth \& Development | 3 Cr. Hrs. |
| PSY240 | Psychology of Organizational Behavior | 3 Cr. Hrs. |
| PSY260 | Forensic Psychology | 3 Cr. Hrs. |
| SSC101 | Sociology (Required) | 3 Cr. Hrs. |


| $3 \mathrm{Cr} . \mathrm{Hrs}$. |  |  |  |
| :---: | :---: | :---: | :---: |
| 3 Cr. Hrs. | BIO101 | Principles of Biology* | 4 Cr. Hrs. |
| 3 Cr . Hrs. | BIO115 | Ecology* | 4 Cr. Hrs. |
| 3 Cr. Hrs. | BIO150 | The Human Body | 4 Cr. Hrs. |
| 3 Cr. Hrs. | BIO180 | Genetics* | 4 Cr . Hrs. |
|  | BIO210 | Botany* | 4 Cr . Hrs. |
| 3 Cr. Hrs. | BIO220 | Zoology* | 4 Cr. Hrs. |
| 3 Cr. Hrs. | BIO231 | Anatomy \& Physiology I* | 4 Cr. Hrs. |
| 3 Cr. Hrs. | BIO232 | Anatomy \& Physiology II* | 4 Cr. Hrs. |
|  | BIO257 | Microbiology* | 4 Cr. Hrs. |
| 3 Cr. Hrs. | CHM101 | Principles of Chemistry* | 4 Cr . Hrs. |
|  | CHM256 | Principles of Biochemistry* | 3 Cr. Hrs. |
| 3 Cr. Hrs. | PHY101 | Principles of Physical Science* | 4 Cr. Hrs. |
| 3 Cr. Hrs. | PHY140 | Astronomy* | 4 Cr. Hrs. |
| 3 Cr. Hrs. | PHY150 | Geology* | 4 Cr. Hrs. |
| 3 Cr . Hrs. | PHY251 | Physics: Mechanics \& Heat* | 4 Cr. Hrs. |
| 3 Cr. Hrs. | PHY252 | Physics: Electricity \& Magnetism* | 4 Cr. Hrs. |
| 3 Cr. Hrs. | MTH109 | College Algebra | 3 Cr. Hrs. |
| 3 Cr. Hrs. | MTH112 | Trigonometry | 3 Cr. Hrs. |
| 3 Cr. Hrs. | MTH213 | Calculus I | 5 Cr. Hrs. |
| $1 \mathrm{Cr} . \mathrm{Hr}$. | MTH214 | Calculus II | 5 Cr . Hrs. |
|  | STA140 | Introduction to Statistics (required) | 3 Cr. Hrs. |
| 3 Cr . Hrs. |  |  |  |
|  | Computer Literacy 3 credit hours required |  |  |
| 3 Cr. Hrs. | CIS114 | Microsoft Applications | 3 Cr. Hrs. |
| 3 Cr. Hrs. | CIS119 | PowerPoint | $1 \mathrm{Cr} . \mathrm{Hr}$. |
| 3 Cr. Hrs. | CIS116 | Outlook | $1 \mathrm{Cr} . \mathrm{Hr}$. |
| $\begin{aligned} & 3 \text { Cr. Hrs. } \\ & 3 \text { Cr. Hrs. } \end{aligned}$ | CIS118 | Access | $1 \mathrm{Cr} . \mathrm{Hr}$. |
| 3 Cr. Hrs. 3 Cr. Hrs. 3 Cr. Hrs. | - Electives may include any 100 or 200 l should be selected in line with the stud |  | Electives field of nt plans to ire a |
| 3 Cr. Hrs. Tit Hours |  |  |  |
| 3 Cr. Hrs. | Curriculum guide sheets for typical programs are available in the |  |  |
| 3 Cr . Hrs. | Student Services Office, C-106. Students planning to transfer to another college should use a guide sheet to help with academic planning. |  |  |
| 3 Cr. Hrs. For additional guidance, students should contact the college to which |  |  |  |
| 3 Cr. Hrs. For additional guidance, students should contact the college to which |  | 3 Cr. Hrs. they intend to transfer. |  |
| 3 Cr . Hrs. |  |  |  |
| 3 Cr . Hrs. |  |  |  |
| 3 Cr. Hrs. |  |  |  |
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The value and importance of historic preservation has finally come of age in the United States, where market forces are demanding professionals and paying them competitive wages for knowledge and skills in this area. Northwest State is fortunate to be within driving distance of the University of Eastern Michigan, which has the premier, award winning program in the U.S. for historic preservation. Students entering into Northwest State's associate degree program will fulfill the first two years of course requirements for the bachelor's degree at Eastern. The program provides students an entry level preparation that will make them cultural stewards who increase awareness and effectiveness of the preservation movement in the United States.

## Career Outlook

Based upon Eastern Michigan University's latest placement statistics (2003), the outlook for jobs is good. The most common placements are by the following categories: State Historic Preservation Offices, museums and historical societies, planning consultants and architectural firms, as well as local, state, and federal government entities. Other groups such as historic district commissions, downtown development authorities, statewide preservation organizations, as well as archives and libraries have hired graduates with preservation backgrounds. A few graduates have even been hired by the National Trust for Historic Preservation.

## PROGRAM LEARNING OUTCOMES

1. Produce unified, coherent, and well-developed essays following the rules of written academic English and MLA.
2. Interpret the larger thematic, historical or cultural significance of primary works in the humanities.
3. Define and apply key concepts when examining human functioning and problems in society.
4. Demonstrate knowledge of historically significant events and their impact on society.
5. Demonstrate symbolic and graphic manipulation using analytic mathematic skills appropriate to the program.
6. Incorporate the steps of the scientific method, beginning with a question, and concluding by analyzing data and drawing conclusions about a stated hypothesis.
7. Demonstrate competency in utilizing current software applications.
8. Demonstrate practices which lead to the preservation and use of historically significant documents.

| Humanities Electives: |  |
| :--- | :--- |
| ART103 |  | Beginning Drawing


| First Semester |  | Credits |
| :---: | :---: | :---: |
| CIS114 | Microsoft Applications ..................... | 3 |
| ENG111 | Composition I .................................. | 3 |
| HIS101 | U.S. History Pre-1876 ....................... | 3 |
| VCT108 | Photo Editing .................................... | 2 |
|  | Social/Behavioral Science Elective ........ | $\underline{3}$ |
|  |  | 14 |
| Second Semester |  | Credits |
| ENG112 | Composition II ................................ | ... 3 |
| HIS102 | U.S. History Post 1876 ................... | .... 3 |
| VCT111 | Layout \& Design .............. | ...... 3 |
|  | Math/Science Elective ..................... | ...... 3 |
|  | Social/Behavioral Science Elective ...... | ...... 3 |
|  |  | 15 |
| Third Semester |  | Credits |
| ENG250 | American Lit. Thru Mid. 19th Century | ... 3 |
| HIS234 | History of the Old Northwest ........... | ...... 3 |
| VCT268 | Video Production ............................ | ...... 3 |
|  | Math/Science Elective ..................... | ...... 4 |
|  | Social/Behavioral Science Elective ....... | ...... $\underline{3}$ |
|  |  | 16 |
| Fourth Semester |  | Credits |
| GEO210 | Geography U.S. \& Canada ................ | ...... 3 |
| STA220 | Statistics ...................................... | ...... 3 |
| VCT204 | Concepts of Visual Communications .. | ...... 3 |
|  | Humanities Elective ........................ | .... 3 |
|  | Social/Behavioral Science Elective ......... | ...... $\underline{3}$ |
|  |  | 15 |
| Math/Science Electives: (Must take 2 prefixes, one lab course): |  |  |
| BIO101 | Principles of Biology |  |
| BIO115 | Ecology |  |
| BIO150 | The Human Body |  |
| BIO180 | Genetics |  |
| BIO210 | Botany |  |
| BIO220 | Zoology |  |
| BIO231 | Anatomy \& Physiology I |  |
| BIO257 | Microbiology |  |
| CHM101 | Principles of Chemistry |  |
| MTH109 | College Algebra |  |
| MTH112 | Trigonometry |  |
| MTH213 | Calculus I |  |
| PHY101 | Principles of Physical Science |  |
| PHY140 | Astronomy |  |
| PHY150 | Principles of Geology |  |
| Social/Behavioral Science Electives: |  |  |
| GEO110 | World Geography |  |
| PSY110 | General Psychology |  |
| PSY220 | Social Psychology |  |
| PSY240 | Organizational Psychology |  |
| SSC101 | Sociology |  |
| SSC110 | General Anthropology |  |
| SSC120 | American Government |  |
| SSC210 | Cultural Diversity |  |

The NSCC Transfer Module consists of 40 semester credit hours which will transfer to any Ohio public two- or four-year college. Students should follow the instructions below in selecting courses for the Transfer Module:

1. Choose courses to fulfill the minimum requirements in each section below, according to the guidelines provided.
2. Complete the remaining hours of the Transfer Module by selecting additional courses listed in any of the sections to total the 40 semester hours required for the Transfer Module. NOTE: Be sure to check with an advisor to assure that the courses chosen are appropriate for the major and the transfer institution selected and that they are consistent with the minimum graduation requirements of this institution. Also, check the college catalog for any prerequisites required.
3. NSCC students completing the Associate of Arts or Associate of Science degree requirements will have satisfied this Transfer Module.

| English Composition 2 cours |  |
| :--- | :--- |
| ENG111 | Composition I |
| ENG112 | Composition |
|  |  |
| Mathematics | Electives |
| MTH109 | College Algebra |
| MTH112 | Trigonometry |
| MTH213 | Calculus I |
| MTH214 | Calculus II |

Arts \& Humanities Select a minimum of 3 courses from the following list:
ENG223 Interpretation of Literature 3 Cr. Hrs.
$\begin{array}{ll}\text { ENG230 } & \text { Children's Literature } \\ \text { ENG250 } & \text { American Literature Through the Mid-19th }\end{array}$
Century
ENG251 American Literature Since the Mid-19th Century
ENG260 British Literature Through the 18th Century
ENG261 British Literature 19th Century to Present
ENG271 Non-Western Literature 3 Cr. Hrs.
HIS101 US History Pre-1876 3 Cr. Hrs.
HIS102 US History Post-1876 3 Cr. Hrs.
HIS203 US Since 1945 Cr. Hrs.
HIS210 The Modern World 3 Cr. Hrs.
HUM209 Humanities and Cultures:
Ancient and Medieval Worlds 3 Cr. Hrs.
HUM210 Humanities and Cultures:
Renaissance to Present
HUM221 Music Appreciation
3 Cr. Hrs.
3 Cr. Hrs.
3 Cr. Hrs.
3 Cr. Hrs.
3 Cr. Hrs.
3 Cr. Hrs.
3 Cr. Hrs.

3 Cr. Hrs.
3 Cr. Hrs. Natural and Physical Sciences Select a minimum of 6 credits from the following list:
BIO101 Principles of Biology* 4 Cr. Hrs.
3 Cr. Hrs. BIO115 Ecology 4 Cr. Hrs.

3 Cr. Hrs. BIO150 The Human Body 4 Cr. Hrs.
5 Cr. Hrs. BIO180 Principles of Genetics 4 Cr. Hrs.
5 Cr. Hrs.
Social/Behavioral Sciences Select a minimum of 3 courses from at least 2 areas on the following list:

| ECO211 | Macroeconomics | 3 Cr. Hrs. |
| :---: | :---: | :---: |
| ECO212 | Microeconomics | 3 Cr . Hrs. |
| GEO110 | World Geography | 3 Cr. Hrs. |
| GEO210 | Geography - US and Canada | 3 Cr. Hrs. |
| HST240 | Social Problems | 3 Cr . Hrs. |
| HST242 | Marriage and the Family | 3 Cr. Hrs. |
| PSY110 | General Psychology | 3 Cr. Hrs. |
| PSY210 | Abnormal Psychology | 3 Cr. Hrs. |
| PSY220 | Social Psychology | 3 Cr. Hrs. |
| PSY230 | Human Growth \& Development | 3 Cr . Hrs. |
| PSY240 | Psychology of Organizational Behavior | 3 Cr. Hrs. |
| SSC101 | Sociology | 3 Cr. Hrs. |
| SSC110 | General Anthropology | 3 Cr. Hrs. |
| SSC120 | American Government | 3 Cr. Hrs. |
| SSC130 | Comparative Government | 3 Cr. Hrs. |
| SSC210 | Cultural Diversity | 3 Cr . Hrs. |

3 Cr. Hrs.
3 Cr. Hrs.
3 Cr. Hrs.
3 Cr. Hrs.
3 Cr. Hrs.
3 Cr. Hrs.
3 Cr. Hrs.
BIO210 Botany*
BIO220 Zoology*
BIO231 Anatomy \& Physiology I*
4 Cr. Hrs.
4 Cr. Hrs.

BIO257
Microbiology*
CHM101 Principles of Chemistry* 4 Cr. Hrs.
CHM256 Principles of Biochemistry* 3 Cr. Hrs.
PHY101 Principles of Physical Science* 4 Cr. Hrs.
PHY140 Astronomy* 4 Cr. Hrs.
PHY150 Principles of Geology 4 Cr. Hrs.
PHY251 Physics: Mechanics \& Heat* 4 Cr. Hrs.
PHY252 Physics: Electricity \& Magnetism* 4 Cr. Hrs.

The field of business is growing rapidly. Northwest State has many programs to help you see yourself in a whole new way!

Pre-Business Administration
Accounting
Accounting Assistant Certificate
Accounting Weekend College
Business Management
Banking \& Finance
Business Management Weekend College Entrepreneurship International/Global Business Logistics and Supply Chain Management Logistics and Supply Chain Management Certificate

Marketing \& Retailing
Straight Truck Transportation
Tractor Trailer Transportation
Real Estate Certificate
Information Technology
Computer Programming
Internet Security
Network Administration
Web Site Administration
Computer Technician Certificate
Office Administrative Services
Office Administration
Office Administration - Medical Support
Office Assistant Certificate
Paralegal Studies
Visual Communications
The following elective lists should be used unless specified on the program pages.

## General Studies:

Any 100 or 200 level course with one of the following prefixes: BIO, CHM, ENG, GEO, HIS, HUM, MTH, PHI, PHY, PSY, SPN, or SSC

PHI201 Introduction to Philosophy
PHI210 Ethics
PHI230 World Religions

## Course Sequence

This is a suggested sequence of courses for full-time students. If you are a part-time student, or have transferred courses from another school, you should generally complete courses listed under the first semester before moving on to semester 2, 3, and then 4 . Elective courses may be taken at any time. Please meet with your advisor to develop a personalized schedule which will meet your needs. Your advisor can help you make any necessary changes to this recommended sequence.

```
```

Social/Behavioral Science:

```
```

Social/Behavioral Science:
PSY110 General Psychology
PSY110 General Psychology
PSY220 Social Psychology
PSY220 Social Psychology
SSC101 Sociology
SSC101 Sociology
SSC110 General Anthropology
SSC110 General Anthropology
SSC120 American Government
SSC120 American Government
SSC130 Comparative Government
SSC130 Comparative Government
SSC210 Cultural Diversity

```
```

    SSC210 Cultural Diversity
    ```
```


## Prerequisites

All students are required to demonstrate proficiency in reading, writing, mathematics, keyboarding, and computers based on scores on the assessment test or by taking the recommended classes. If you have not taken these tests, see the testing coordinator in room C230A for information or referral to testing.

Some courses listed in this program have specific prerequisites. It is strongly recommended that students without prior accounting instruction strongly recommended that students without prior accounting instruction
take ACC090, Introduction to Accounting, BEFORE registering for Financial Accounting. See prerequisites required for each course in the Course Description section of the College catalog.

## General Education

For Northwest State Core Requirements, page 34. For the NSCC Transfer Module, see page 39.
o testing.

# Associate of Applied Business in <br> Pre-Business Administration 

Students who wish to transfer into the College of Business Administration at the University of Toledo can complete the first two years at Northwest State and earn an Associate of Science in Pre-Business Administration. Courses will transfer to the Bachelor of Business Administration degree. Many other four-year colleges and universities will also accept the courses for transfer credits.

## Career Outlook

Employment opportunities are varied and will depend on each individual goal. Entry-level management positions are found in the manufacturing, retail, food service, banking, and governmental services. Individuals interested in sales positions will find many opportunities. Both nationally and in the state of Ohio business services sales positions, particularly technical sales are expected to grow much faster than the average. Management positions are expected to grow about as fast as the average through the year 2009. Companies which are new and existing will be hiring managers. Service industries, such as food service, will experience a faster than average growth.

## PROGRAM LEARNING OUTCOMES

Students who complete the Pre-Business Administration program will be able to transfer to four-year colleges in degree programs in which:

1. Students will demonstrate understanding of the major styles of management.
2. Students will demonstrate mastery of a foundation of business understanding.

| Humanities Electives: (At least one from each prefix) |  |
| :--- | :--- |
| HIS101 | U.S. History Pre-1876 |
| HIS102 | U.S. History Post-1876 |
| HUM209 | Humanities \& Cultures: Renaissance to Present |
| HUM210 | Humanities \& Cultures: Ancient \& Medieval |
|  | Worlds |
| HUM221 | Music Appreciation |
| HUM230 | Art Appreciation |
| PHI110 | Critical Thinking \& Logic |
| PHI201 | Introduction to Philosophy |
| PHI210 | Ethics |
| PHI230 | World Religions |


| First Semester |  | Credits |
| :---: | :---: | :---: |
| ACC111 | Financial Accounting ........................... | 4 |
| ECO212 | Microeconomics ................................ | $\underline{3}$ |
| ENG111 | Composition I.. | 3 |
| MGT110 | Management ..................................... | 3 |
|  | Humanities Elective | 3 |
|  |  | 16 |
| Second Semester |  | Credits |
| ACC112 | Managerial Accounting ........................ | 4 |
| CIS114 | Microsoft Applications ...................... | 3 |
| ENG112 | Composition II .................................. | 3 |
| MKT110 | Marketing ......................................... | 3 |
|  | Humanities Elective ............................ | $\underline{3}$ |
|  |  | 16 |
| Third Semester |  | Credits |
| MTH213 | Calculus I .......................................... | 5 |
| SSC210 | Cultural Diversity .............................. | 3 |
|  | Humanities Elective ............................. | 3 |
|  | Natural Science Elective ...................... | 4 |
|  | Social/Behavioral Science Elective .......... | $\underline{3}$ |
|  |  | 18 |
| Fourth Semester |  | Credits |
| ECO211 | Mȧi̇croeconomics ................................ | 3 |
| STA220 | Statistics .......................................... | 3 |
|  | Humanities Elective ............................ | 3 |
|  | Literature Elective .............................. | 3 |
|  | Natural Science Elective ...................... | 4 |
|  |  | 16 |
| Literature Electives: |  |  |
| ENG223 | Interpretation of Literature |  |
| ENG250 | American Literature Through the Mid Century |  |
| ENG251 | American Literature Since the Mid-19 | th Century |
| ENG260 | British Literature Through the 18th C | entury |
| ENG261 | British Literature 19th Century to P |  |
| ENG271 | Non-Western Literature |  |
| Natural Science Electives: (One course per prefix) |  |  |
| BIO101 | Principles of Biology |  |
| BIO115 | Ecology |  |
| BIO180 | Principles of Genetics |  |
| PHY140 | Astronomy |  |
| PHY251 | Physics: Mechanics and Heat |  |
| PHY252 | Physics: Electricity and Magnetism |  |
| Social/Behavioral Science Electives: |  |  |
| PSY110 | General Psychology |  |
| SSC101 | Sociology |  |
| SSC120 | American Government |  |

# Associate of Applied Business in Accounting 

Students in accounting develop a high degree of technical skills in accounting systems and business organization. The accounting programs provide business-related experience on modern equipment. Courses utilize personal computers and electronic printing calculators. The Accounting degree program is designed to help students attain technical accounting skills and a broad knowledge of business fundamentals. Accounting systems are studied as they are applied every day in business and industrial organizations.

Graduates are qualified as Senior Clerks or Junior Accountants, positions as a Cost Accountant, Accounting Supervisor, Payroll Supervisor, or Office Manager. The Associate of Applied Business degree in Accounting is offered on a weekend college basis along with the typical schedule of daytime or evening classes.

## Career Outlook

Employment both nationally and in the state of Ohio is expected to grow about as fast as the average through the year 2009. As the economy grows, the number of businesses will increase as well as the need for accountants. The accounting profession generally has a low rate of turnover; therefore, openings will be primarily created through retirements and promotions.

## PROGRAMLEARNING OUTCOMES

Students who complete the Accounting program will be employable in a variety of accounting positions in which:

1. Students will create financial statements, reports, and schedules.
2. Students will interpret financial statements and make managerial decisions.
3. Students will integrate accounting knowledge into software programs.
4. Students will demonstrate accurate skills in recording and reporting of accounts.
5. Students will demonstrate mastery of a foundation of business understanding.

Accounting Electives:
ACC240 Business Income Tax Accounting
ACC291 Accounting Internship
Computer Accounting Electives:
ACC261 Quick Books
ACC262 Peachtree
ACC271 Intermediate Quick Books
ACC272 Advanced Quick Books
Mathematics Electives:
BUS110 Business Math/Calculators
MTH109 College Algebra

| First Semester |  | Credits |
| :---: | :---: | :---: |
| + ACC111 | Financial Accounting ......................... | 4 |
| + ACC120 | Payroll Accounting ............................. | 3 |
| ENG111 | Composition I. | 3 |
|  | Mathematics Elective ...... | 3 |
|  | Social/Behavioral Science Elective .......... | $\underline{3}$ |
|  |  | 16 |
| Second Semester |  | Credits |
| + ACC112 | Managerial Accounting ........................ | 4 |
| + ACC140 | Personal Income Tax Accounting .......... | 3 |
| CIS114 | Microsoft Applications ...................... | 3 |
| ENG112 | Composition II .................................. | 3 |
|  | Humanities Elective .......... | 3 |
|  |  | 16 |
| Third Semester |  | Credits |
| + ACC211 | Intermediate Accounting I .................... | 3 |
| + ACC221 | Cost Accounting I ........... | 3 |
|  | Computer Accounting Electives (3) ....... | 3 |
| + | Accounting Elective ............................ | 3 |
|  | Business Elective ............................... | $\underline{3}$ |
|  |  | 15 |
| Fourth Semester |  | Credits |
| + ACC212 | Intermediate Accounting II ................... | 3 |
| + ACC222 | Cost Accounting II .... | 3 |
| $+\quad$ ACC230BUS221 | Auditing ........................................... | 3 |
|  | Business Law .... | 3 |
|  | General Studies Elective ...................... | 3 |
|  |  | 15 |
| Business Electives: |  |  |
| BUS160 | International \& Global Business |  |
| BUS250 | Labor Relations |  |
| BUS260 | International Trade |  |
| CIS113 | Microsoft Excel |  |
| CIS118 | Access |  |
| CIS119 | Power Point |  |
| CIS122 | Intermediate Excel |  |
| ECO211 | Macroeconomics |  |
| ECO212 | Microeconomics |  |
| MGT110 | Management |  |
| MGT210 | Human Resource Management |  |
| MGT280 | Business Climate Analysis |  |
| MKT230 | Salesmanship |  |

Business Electives:

+ Students must attain a 2.00 grade point average in these technical courses to graduate.


# Associate of Applied Business in Accounting <br> Weekend College 

Students in accounting develop a high degree of technical skills in accounting systems and business organization. The accounting programs provide business-related experience on modern equipment. Courses utilize personal computers and electronic printing calculators. The Accounting degree program is designed to help students attain technical accounting skills and a broad knowledge of business fundamentals. Accounting systems are studied as they are applied every day in business and industrial organizations.

Graduates are qualified as Senior Clerks or Junior Accountants, positions as a Cost Accountant, Accounting Supervisor, Payroll Supervisor, or Office Manager. The Associate of Applied Business degree in Accounting is offered on a weekend college basis along with the typical schedule of daytime or evening classes.

## Career Outlook

Employment both nationally and in the state of Ohio is expected to grow about as fast as the average through the year 2009. As the economy grows, the number of businesses will increase as well as the need for accountants. The accounting profession generally has a low rate of turnover; therefore, openings will be primarily created through retirements and promotions.

## PROGRAMLEARNING OUTCOMES

Students who complete the Accounting program will be employable in a variety of accounting positions in which:

1. Students will create financial statements, reports, and schedules.
2. Students will interpret financial statements and make managerial decisions.
3. Students will integrate accounting knowledge into software programs.
4. Students will demonstrate accurate skills in recording and report ing of accounts.
5. Students will demonstrate mastery of a foundation of business understanding.

Accounting Electives:
$\begin{array}{ll}\text { ACC240 } & \text { Business Income Tax Accounting } \\ \text { ACC291 }\end{array}$
ACC291 Accounting Internship

| Computer Accounting Electives: |  |
| :---: | :--- |
| ACC261 | Quick Books |
| ACC262 | Peachtree |
| ACC271 | Intermediate Quick Books |
| ACC272 | Advanced Quick Books |




| Fall Semester |  | Credits |
| :---: | :---: | :---: |
| + ACC240 | Business Income Tax Accounting ... | 3 |
| ENG111 | Composition I.................................... | 3 |
|  | Social/Behavioral Science Elective .......... | 3 |
|  |  | 9 |
| Spring Semester |  | Credits |
| + ACC120 | Payroll Accounting ............................. | 3 |
| + ACC140 | Personal Income Tax Accounting .......... | 3 |
|  | General Studies Elective ...................... | 3 |
|  |  | 9 |



| Fall Semester |  |  |
| :--- | :--- | :--- |
| + | ACC211 | Credits |
| + | ACC221 | Cost Accounting I ................................... |
|  | 3 |  |
|  |  |  |
|  |  |  |
|  |  |  |


| Spring Semester |  | Credits |
| :--- | :--- | :--- |
| + | ACC212 | Intermediate Accounting II ...................... |
| + | ACC222 | Cost Accounting II ......................... |

Mathematics Electives:<br>BUS110 Business Math/Calculators<br>MTH109 College Algebra

Weekend College is offered on Friday and Saturday

+ Students must attain a 2.00 grade point average in these technical courses to graduate.

Accounting is an excellent foundation for any type of business or office position. Most managerial positions require at least some understanding of accounting functions. The one-year certificate program provides students with accounting skills in balance sheets, income statements, payroll accounting, and personal tax accounting.

Those who complete the program are employable within one academic year as a Payroll Clerk, Accounts Payable Clerk, Accounts Receivable Clerk, or General Accounting Bookkeeper in business or industrial organizations. The student can earn the associate degree by completing one year of fulltime study beyond the Accounting Assistant Certificate.

Although occupations such as accounting clerks and bookkeepers will probably not grow in size through the year 2009, the large size of the occupation ensures that there should be a large number of openings and plentiful job opportunities for job seekers. Openings will result primarily from replacing workers who leave the profession or retire. New positions will largely be created in small, rapidly growing organizations.

## Career Outlook

Employment both nationally and in the state of Ohio is expected to grow about as fast as the average through the year 2008. As the economy grows, the number of businesses will increase as well as the need for accountants. The accounting profession generally has a low rate of turnover; therefore, openings will be primarily created through retirements and promotions.

## PROGRAMLEARNING OUTCOMES

Students who complete the Accounting program will be employable in a variety of accounting positions in which:

1. Students will create financial statements, reports, and schedules.
2. Students will interpret financial statements and make managerial decisions.
3. Students will integrate accounting knowledge into software programs.
4. Students will demonstrate accurate skills in recording and reporting of accounts.
5. Students will demonstrate mastery of a foundation of business understanding.

| First Semester |  | Credits |
| :---: | :---: | :---: |
| + ACC111 | Financial Accounting .......................... | 4 |
| + ACC120 | Payroll Accounting ............................. | 3 |
| + | Accounting Elective ..... | 3 |
|  | Business Elective .. | $\underline{3}$ |
|  | Mathematics Elective ......................... | $\underline{3}$ |
|  |  | 16 |
| Second Semester |  | Credits |
| + ACC112 | Managerial Accounting ........................ | 4 |
| + ACC140 | Personal Income Tax Accounting .......... | 3 |
| BUS221 | Business Law ..................................... | 3 |
| CIS114 | Microsoft Applications ...................... | 3 |
| + | Computer Accounting Electives (3) ....... | $\underline{3}$ |
|  |  | 16 |

## Accounting Electives:

ACC240 Business Income Tax Accounting
ACC291 Accounting Internship
Business Electives:
BUS160 International \& Global Business
BUS250 Labor Relations
BUS260 International Trade
CIS113 Microsoft Excel
ECO211 Macroeconomics
ECO212 Microeconomics
MGT110 Management
MGT210 Human Resource Management
MGT280 Business Climate Analysis
MKT230 Salesmanship
Computer Accounting Electives:
ACC261 Quick Books
ACC262 Peachtree
ACC271 Intermediate Quick Books
ACC272 Advanced Quick Books
Mathematics Electives:
BUS110 Business Math/Calculators
MTH109 College Algebra

+ Students must attain a 2.00 grade point average in these technical courses to graduate.


# Associate of Applied Business in Business Management <br> Business Management Concentration 

Today's successful managers need a variety of skills, including communication skills and analytical and decision-making skills. The demand for business management personnel has risen with the growing number of small businesses in Northwest Ohio. At the same time, large businesses continuously require mid-management and supervisory personnel. The graduate of the Business Management program is skilled in supervision, labor relations, accounting, marketing, salesmanship, and decision-making. The graduate is qualified for a position as a General Manager or Assistant Manager of a small business or a Personnel Specialist, Foreman, or Supervisor of a manufacturer, commercial business, or other organization. The Business Management program offers a weekend college option along with the typical schedule of daytime or evening classes.

## Career Outlook

Employment opportunities are varied and will depend on each individual goal. Entry-level management positions are found in the manufacturing, retail, food service, banking, and governmental services. Individuals interested in sales positions will find many opportunities. Both nationally and in the state of Ohio, business services sales positions, particularly technical sales, are expected to grow much faster than the average. Management positions are expected to grow about as fast as the average through the year 2009. Companies which are new and existing will be hiring managers. Service industries, such as food service, will experience a faster than average growth.

## PROGRAMLEARNING OUTCOMES

Students who complete the Business Management program will be employable in a variety of management positions in which:

1. Students will demonstrate understanding of the major styles of management.
2. Students will exhibit personal skills of telephone etiquette, proper business attire, and social skills.
3. Students will exhibit work skills of attendance, work ethic, and self-motivation.
4. Students will demonstrate mastery of a foundation of business understanding.
5. Students will demonstrate understanding of business ethics.

| Business Electives: |  |
| :--- | :--- |
| ACC140 | Personal Income Tax Accounting |
| ACC221 | Cost Accounting I |
| ACC240 | Business Income Tax Accounting |
| BUS160 | International \& Global Business |
| BUS260 | International Trade |
| ECO211 | Macroeconomics |
| MGT221 | Entrepreneurship |
| MGT230 | Retail Management |
| MGT290 | Business Mgt. Co-Op/Internship |
| MKT210 | Advertising |
| REA210 | Real -Estate Principles |
| VCT182 | Photography |


| First Semester |  |  | Credits |
| :---: | :---: | :---: | :---: |
| + | ACC111 | Financial Accounting ........................... | 4 |
|  | ECO212 | Microeconomics ................................ | 3 |
|  | ENG111 | Composition I................................... | 3 |
| + | MGT110 | Management ..................................... | 3 |
|  |  | Mathematics Elective .......................... | $\underline{3}$ |
|  |  |  | 16 |


| Second Semester |  |  | Credits |
| :---: | :---: | :---: | :---: |
| + | ACC112 | Managerial Accounting ........................ | 4 |
|  | CIS114 | Microsoft Applications ...................... | 3 |
|  | ENG112 | Composition II .................................. | 3 |
| + | MKT110 | Marketing ......................................... | 3 |
|  |  | General Studies Elective ...................... | $\underline{3}$ |
|  |  |  | 16 |



| Fourth Semester |  |  | Credits |
| :---: | :---: | :---: | :---: |
| + | BUS250 | Labor Relations. | 3 |
| + | MGT280 | Business Climate Analysis ................... | 3 |
| + | MKT230 | Salesmanship .................................... | 3 |
|  |  | Business Analysis Elective .................. | 3 |
|  |  | Business Elective .............................. | 3 |
|  |  | Computer Elective .............................. | 1 |
|  |  |  | 16 |


| Business Analysis Electives: |  |
| :---: | :---: |
| ACC221 | Cost Accounting I |
| STA220 | Statistics |
| Computer Electives: |  |
| ACC261 | Quick Books |
| ACC262 | Peachtree |
| ACC271 | Intermediate Quick Books |
| CIS113 | Microsoft Excel |
| CIS118 | Access |
| CIS119 | PowerPoint |
| CIS121 | Intermediate Word |
| CIS122 | Intermediate Excel |
| CIS129 | Web Page Development |
| Mathematics Electives: |  |
| BUS110 | Business Math/Calculators |
| MTH109 | College Algebra |

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# Associate of Applied Business in Business Management Weekend College 

Today's successful managers need a variety of skills, including communication skills and analytical and decision-making skills. The demand for business management personnel has risen with the growing number of small businesses in Northwest Ohio. At the same time, large businesses continuously require mid-management and supervisory personnel. The graduate of the Business Management program is skilled in supervision, labor relations, accounting, marketing, salesmanship, and decision-making.

The graduate is qualified for a position as a General Manager or Assistant Manager of a small business or a Personnel Specialist, Foreman, or Supervisor of a manufacturer, commercial business, or other organization. The Business Management program offers a weekend college option along with the typical schedule of daytime or evening classes.

## Career Outlook

Employment opportunities are varied and will depend on each individual goal. Entry-level management positions are found in the manufacturing, retail, food service, banking, and governmental services. Individuals interested in sales positions will find many opportunities. Both nationally and in the state of Ohio, business services sales positions, particularly technical sales, are expected to grow much faster than the average. Management positions are expected to grow about as fast as the average through the year 2009. Companies which are new and existing will be hiring managers. Service industries, such as food service, will experience a faster than average growth.

## PROGRAMLEARNING OUTCOMES

Students who complete the Business Management program will be employable in a variety of management positions in which:

1. Students will demonstrate understanding of the major styles of management.
2. Students will exhibit personal skills of telephone etiquette, proper business attire, and social skills.
3. Students will exhibit work skills of attendance, work ethic, and self-motivation.
4. Students will demonstrate mastery of a foundation of business understanding.
5. Students will demonstrate understanding of business ethics.

| Business Electives: |  |
| :--- | :--- |
| ACC221 | Cost Accounting I |
| ACC240 | Business Income Tax Accounting |
| BUS160 | International \& Global Business |
| BUS260 | International Trade |
| MGT221 | Entrepreneurship |
| MGT230 | Retail Management |
| MGT290 | Business Mgt. Co-Op/Internship |
| MKT210 | Advertising |
| REA210 | Real Estate Principles |
| VCT182 | Photography |


| Fall Semester |  | Credits |
| :---: | :---: | :---: |
| + ACC111 | Financial Accounting ........................... | 4 |
| + MGT110 | Management ..................................... | 3 |
|  | Mathematics Elective ..... | $\underline{3}$ |
|  |  | 10 |
| Spring Semester |  | Credits |
| $\begin{array}{ll} + & \text { ACC112 } \\ & \text { BUS221 } \\ & \text { CIS114 } \end{array}$ | Managerial Accounting ........................ | 4 |
|  | Business Law .. | 3 |
|  | Microsoft Applications ...................... | $\underline{3}$ |
|  |  | 10 |
| Fall Semester |  | Credits |
| ENG111 | Composition I................................... | 3 |
| MKT110 | Marketing ......................................... | 3 |
|  | Social/Behavioral Science Elective ......... | $\underline{3}$ |
|  |  | $\underline{9}$ |
| Spring Semester |  | Credits |
| + ACC140 P | Personal Income Tax Accounting .......... | 3 |
|  | General Studies Elective ...................... | 3 |
|  |  | 6 |
| Fall Semester |  | Credits |
| ECO211 | Macroeconomics ................................ | 3 |
|  | Computer Electives ............................ | 2 |
|  | Humanities Elective ............................ | 3 |
|  |  | 8 |
| Spring Semester |  | Credits |
| ENG112 | Composition II .................................. | 3 |
| MGT280 | Business Climate Analysis ................... | $\frac{3}{\underline{6}}$ |
| Fall Semester |  | Credits |
| + BUS250 | Labor Relations .. | 3 |
| STA220 | Statistics ........................................... | $\underline{3}$ |
|  |  | $\underline{6}$ |
| Spring Semester |  | Credits |
| + MGT210 H | Human Resource Management .............. | 3 |
| + MKT230 | Salesmanship .................................... | 3 |
|  | Business Elective ............................... | $\underline{3}$ |
|  |  | 9 |
| Computer Electives: |  |  |
| ACC261 | Quick Books |  |
| ACC262 | Peachtree |  |
| ACC271 | Intermediate Quick Books |  |
| CIS118 | Access |  |
| CIS119 | PowerPoint |  |
| CIS121 | Intermediate Word |  |
| CIS122 | Intermediate Excel |  |
| CIS129 | Web Page Development |  |
| Mathematics Electives: |  |  |
| BUS110 Business Math/Calculators |  |  |
| MTH109 College Algebra |  |  |
| Weekend College is offered on Fridays and Saturdays. |  |  |
| $+\quad$ Students mu courses to gradu | must attain a 2.00 grade point average in uate. | hese techn |

# Associate of Applied Business in Business Management <br> Banking \& Finance Concentration 

The Banking and Finance major provides students with a broad and practical background in bank-related management skills and the application of those skills to the banking field. Topics with which a bank manager should be familiar (commercial and real estate lending, investments, regulatory structure, and financial statements) receive major emphasis. Several course projects require extensive research into these bank-related fields. The graduate is also familiar with the computer field and with some accounting and spreadsheet applications.

The graduate is qualified for a position as a Manager or Assistant Manager of a small bank, savings and loan, or credit union. In a larger institution, the graduate could specialize in either the loan origination or consumer/ commercial credit department.

Real Estate classes are offered in a seminar format as full-day sessions on weekends.

## Career Outlook

Most opportunities will be found in financial institutions which include banks, credit unions, loan companies, insurance firms, stock brokerage firms, investment banking firms, and commercial and residential real estate businesses. Job opportunities appear to be solid. For instance, growth for loan officer positions is expected to grow faster than the average through the year 2009. As the economy grows, loan officers/counselors will process more applications for commercial, consumer, and mortgage loans. Financial Manager Positions are expected to grow about as fast as the average, especially in the securities industry because more people are investing.

## PROGRAM LEARNING OUTCOMES

Students who complete the Banking \& Finance program will be employable in a variety of management positions in which:

1. Students will demonstrate understanding of the major styles of management.
2. Students will exhibit personal skills of telephone etiquette, proper business attire, and social skills.
3. Students will exhibit work skills of attendance, work ethic, and self-motivation.
4. Students will demonstrate mastery of a foundation of business understanding.
5. Students will demonstrate understanding of business ethics.
6. Students will demonstrate understanding of banking practice.

| First Semester |  | Credits |
| :---: | :---: | :---: |
| $+\begin{aligned} & \text { ACC111 } \\ & \text { ECO212 } \text { Fi } \\ & \text { ENG111 }\end{aligned}$ | Financial Accounting .......................... | 4 |
|  | Microeconomics | 3 |
|  | Composition I .................................... | 3 |
| + MGT110 | Management ..................................... | 3 |
|  | Mathematics Elective .......................... | $\underline{3}$ |
|  |  | 16 |
| Second Semester |  | Credits |
| + ACC112 M | Managerial Accounting ........................ | 4 |
| + BAN110 B | Bank Management .............................. | 3 |
| CIS114 M | Microsoft Applications ....................... | 3 |
| ENG112 | Composition II .................................. | 3 |
| MGT120 S | Supervision ....................................... | $\underline{3}$ |
|  |  | 16 |
| Third Semester |  | Credits |
| + BAN210 C | Credit Management ............................ | 3 |
| + BUS221 B | Business Law ..................................... | 3 |
| ECO211 M | Macroeconomics ................................ | 3 |
| MKT110 M | Marketing ......................................... | 3 |
| + REA210 | Real Estate Principles .......................... | 3 |
|  | Computer Elective .............................. | 1 |
|  |  | 16 |
| Fourth Semester |  | Credits |
| + BAN220 I | Investment Management ..................... | 3 |
| + MGT280 B | Business Climate Analysis ................... | 3 |
| + MKT230 | Salesmanship ..................................... | 3 |
|  | Computer Elective .............................. | 3 |
|  | General Studies Elective ....................... | 1 |
|  | Humanities Elective ............................. | $\underline{3}$ |
|  |  | 16 |
| Computer Electives: |  |  |
| ACC261 | Quick Books |  |
| ACC62 | Peachtree |  |
| ACC271 | Intermediate Quick Books |  |
| CIS113 | Microsoft Excel |  |
| CIS118 | Access |  |
| CIS119 | PowerPoint |  |
| CIS121 | Intermediate Word |  |
| CIS122 | Intermediate Excel |  |
| CIS129 | Web Page Development |  |
| Mathematics Electives: |  |  |
| BUS110 | Business Math/Calculators |  |
| MTH109 | College Algebra |  |

+ ACC111 Financial Accounting ............................. 4
ECO212 Microeconomics .................................... 3
ENG111 Composition I........................................ 3
+ MGT110 Management ......................................... 3
Mathematics Elective ............................ $\underline{3}$
16


## Fourth Semester <br> redits

+ MGT280 Business Climate Analysis 3
+ MKT230 Salesmanship ........................................ 3
Computer Elective ................................. 3
General Studies Elective ......................... 1
Humanities Elective ............................... $\underline{3}$ 16


# Associate of Applied Business in Business Management Marketing \& Retailing Concentration 


[^1]
# Associate of Applied Business in Business Management Entrepreneurship Concentration 

The graduate acquires skills to create innovative ventures, recognize opportunities, evaluate alternative courses of action, and formulate a plan to successfully achieve organizational objectives. Entrepreneurial skills can be utilized within existing organizations and government agencies to effect changes necessary to the success and survival of the organization.

Students are prepared with assessment skills in financial and legal analysis. The creation of the Business Plan forms the foundation for the entrepreneur and is a major focus of the Entrepreneurship course.

## Career Outlook

Employment both nationally and in the state of Ohio, is expected to grow as fast as the average. From 2002 to 2012 the top areas of job creation will be management and consulting ( $42.9 \%$ growth rate), computer systems and related services ( $41.3 \%$ growth rate), and home health care services (39.6\% growth rate), indicating areas of opportunities for individuals with a drive, vision and skills to provide new and creative services.

## Prerequisites

All students are required to demonstrate proficiency in reading, writing, mathematics, keyboarding, and computers based on scores on the assessment test or by taking the recommended classes. If you have not taken these tests, see the testing coordinator in room C104 for information or referral to testing.

Some courses listed in this program have specific prerequisites. It is strongly recommended that students without prior accounting instruction take ACC090 Introduction to Accounting BEFORE registering for Financial Accounting. See prerequisites required for each course in the Course Description section of the College catalog.

## General Education

For Northwest State Core Requirements, page 34. For the NSCC
Transfer Module, see page 39.

## PROGRAM LEARNING OUTCOMES

1. Students will identify entrepreneurial opportunities.
2. Students will develop strategies to exploit entrepreneurial opportunities.
3. Students will evaluate and analyze alternative strategies and assess risk.
4. Students will develop and present a feasible business plan.
5. Students will demonstrate understanding of the major styles of management.
6. Students will exhibit personal skills of telephone etiquette, proper business attire, and social skills.
7. Students will exhibit work skills of attendance, work ethic, and self-motivation.
8. Students will demonstrate mastery of a foundation of business understanding.
9. Student will demonstrate understanding of business ethics.
10. Students will demonstrate understanding of supervision of employees.

## Business Electives:

BUS110 Business Math/Calculators
MTH109 College Algebra

| First Semester |  |  |  | Credits |
| :---: | :---: | :---: | :---: | :---: |
| + | ECO212 | Microeconomics ................. | ................ | 3 |
|  | ENG111 | Composition I ... | .. | 3 |
|  | MGT110 | Management | .. | 3 |
|  |  | Mathematics Elective ...... | ......... | 3 |
|  |  | Technical Elective . | ............... | $\underline{3}$ |
|  |  |  |  | 15 |
| Second Semester |  |  |  | Credits |
|  | CIS114 | Microsoft Applications ....... | ............... | 3 |
|  | ENG112 | Composition II ............... | ............... | 3 |
|  | MGT120 | Supervision ........ |  | 3 |
|  | MKT110 | Marketing .... |  | 3 |
|  |  | General Studies Elective ... | ............... | $\underline{3}$ |
|  |  |  |  | 15 |
| Third Semester |  |  |  | Credits |
|  | ACC111 | Financial Accounting ........... | ................ | 4 |
|  | BUS221 | Business Law ... |  | 3 |
|  | ECO211 | Macroeconomics .. | ............... | 3 |
|  | MGT210 | Human Resource Manageme | ent .............. | 3 |
|  |  | Computer Elective ............ |  | 1 |
|  |  | Social Behavioral Science El | ective .......... | $\underline{3}$ |
|  |  |  |  | 17 |
| Fourth Semester |  |  |  | Credits |
|  | ACC112 | Managerial Accounting ........ | ................ | 4 |
|  | MGT221 | Entrepreneurship ............. | ................ | 3 |
|  | MGT280 | Business Climate Analysis . | .................. | 3 |
| + |  | Business Elective ............. | ............... | 3 |
|  |  | Computer Elective ....... | .............. | 1 |
|  |  | Humanities Elective ... | .. | $\underline{3}$ |
|  |  |  |  | 17 |
| Business Electives: |  |  |  |  |
| MGT290 Business Management Internship |  |  |  |  |
| MKT210 Advertising |  |  |  |  |
| MKT230 Salesmanship |  |  |  |  |
| Technical Electives: |  |  |  |  |
| CAD111 CAD I |  |  |  |  |
| IET105 Industrial Computing I |  |  |  |  |
| MET110 Print Reading \& Sketching |  |  |  |  |
| MGT130 Retail Management |  |  |  |  |
| PET110 Principles of Plastics |  |  |  |  |
| QCT100 Quality Concepts |  |  |  |  |
| Computer Electives: |  |  |  |  |
|  | ACC261 | Quick Books | ACC262 | Peachtree |
|  | ACC271 | Intermediate Quick Books | CIS118 | Access |
|  | CIS113 | Microsoft Excel | CIS119 | PowerPoint |
|  | CIS121 | Intermediate Word |  |  |
|  | CIS122 | Intermediate Excel |  |  |
|  | CIS129 | Web Page Development |  |  |
|  | Students must attain a 2.00 grade point average in these technica courses to graduate. |  |  |  |

# Associate of Applied Business in Business Management International/Global Business Concentration 



# Associate of Applied Business in Business Management Logistics and Supply Chain Management Concentration <br> 2008-2009 

A career in Supply Chain Management deals with a dynamic environment of efficiently facilitating the delivery of goods to customers through a variety of intermediaries. The process is known as channel management and is only a small part of Supply Chain Management. Supply Chain Management deals with the entire array of sourcing, procurement, conversion, and logistics management activities. Organizations must rely on effective supply chains to coordinate the vast array of inputs and outputs of globally networked companies. The combination of Information Technology and outsourcing have created organizations like Dell and WalMart adept at forming alliances and/or performing specific strategic tasks to take advantage of market conditions.

## Career Outlook

Employment outlook appears strong through 2014 for front line Supervisors/Managers of Production/Operating Workers with 860 new jobs per year and hourly rates of pay at $\$ 24.15$. Upper management positions including General and Operations Managers will experience an average annual growth of 1,894 workers per year and wage rates of $\$ 45.63$ and would require additional education and experience.

## PROGRAM LEARNING OUTCOMES

Students who complete the Logistics Supply Chain Management program will be employable in a variety of management positions in which they can:

1. Demonstrate an understanding of Supply Chain managements.
2. Differentiate between an internal and external Supply chain.
3. Differentiate between make to stock and make to order strategies.
4. Differentiate between a push and pull manufacturing system.

| First Semester |  | Credits |
| :---: | :---: | :---: |
| + ACC111 | Financial Accounting ........................... | 4 |
| ECO212 | Microeconomics | 3 |
| ENG111 | Composition I .................................... | 3 |
| + MGT110 | Management | 3 |
| MTH109 | College Algebra | $\underline{3}$ |
|  |  | 16 |
| Second Semester |  | Credits |
| + ACC112 | Managerial Accounting ........................ | 4 |
| ENG112 | Composition II .................................. | 3 |
| + MGT120 | Supervision ....................................... | 3 |
| + MKT110 | Marketing | 3 |
|  | Computer Elective .............................. | $\underline{3}$ |
|  |  | 16 |

## Third Semester

Credits

+ BUS221 Business Law ..... 3
+ SCM200 Supply Chain Management. ..... 3
+ STA220 Statistics ..... 3
General Studies Elective ..... 3
Humanities Elective ..... 315
Fourth Semester Credits
+ SCM210 Purchasing and Materials Mgt. ..... 3
+ SCM220 Operations Management ..... 3
+ SCM230 Physical Distribution Logistics ..... 3
Business Elective ..... 3
Social Behavioral Science Elective ..... $\underline{3}$
Computer Electives:
Microsoft WordCIS113 Microsoft ExcelCIS114 Microsoft Applications

| Business Electives: |  |
| :--- | :--- |
| ACC140 |  |
| ACC221 | Cosst Accounting I |
| ACC240 | Business Income Tax Accounting |
| BUS160 | International \& Global Business |
| BUS260 | International Trade |
| ECO211 | Macroeconomics |
| MGT221 | Entrepreneurship |
| MGT230 | Retail Management |
| MGT290 | Business Mgt. Co-Op/Internship |
| MKT210 | Advertising |
| REA210 | Real Estate Principles |
| VCT182 | Photography |

+ Students must attain a 2.00 grade point average in these technical courses to graduate.


# Associate of Applied Business in Business Management Logistics and Supply Chain Management Certificate 

A career in Supply Chain Management deals with a dynamic environment of efficiently facilitating the delivery of goods to customers through a variety of intermediaries. The process is known as channel management and is only a small part of Supply Chain Management. Supply Chain Management deals with the entire array of sourcing, procurement, conversion, and logistics management activities. Organizations must rely on effective supply chains to coordinate the vast array of inputs and outputs of globally networked companies. The combination of Information Technology and outsourcing have created organizations like Dell and WalMart adept at forming alliances and/or performing specific strategic tasks to take advantage of market conditions.

## Career Outlook

Employment outlook appears strong through 2014 for front line Supervisors/Managers of Production/Operating Workers with 860 new jobs per year and hourly rates of pay at $\$ 24.15$. Upper management positions including General and Operations Managers will experience an average annual growth of 1,894 workers per year and wage rates of $\$ 45.63$ and would require additional education and experience.

## PROGRAM LEARNING OUTCOMES

Students who complete the Logistics Supply Chain Management program will be employable in a variety of management positions in which they can:

1. Demonstrate an understanding of Supply Chain managements.
2. Differentiate between an internal and external Supply chain.
3. Differentiate between make to stock and make to order strategies.
4. Differentiate between a push and pull manufacturing system.


+ Students must attain a 2.00 grade point average in these technical courses to graduate.


## Real Estate Certificate

Real Estate agents assist people in buying, selling, and renting properties and businesses. Real Estate agents work for brokers on a contractual basis. Some real estate agents work for construction companies, promoting homes that the company is building. Students who complete the Real Estate Certificate are qualified to pursue licensure as a Real Estate Salesperson. The Ohio Real Estate Commission has approved the following courses in preparation for licensure: REA210 Real Estate Principles, REA220 Real Estate Law, REA230 Real Estate Finance, and REA240 Real Estate Appraisal. Credits earned in the Real Estate Certificate also apply toward the Banking \& Finance Major.

Real Estate classes are offered in a seminar format as full-day sessions on weekends.

## Career Outlook

Employment will be stable in the state of Ohio for real estate agents. The demand for home purchases and management of rental units is expected to grow in the future. People will continue to move to other parts of the country, creating a demand for home sales, while others will be seeking larger homes as their income increases. Real estate agents will be able to work more efficiently with the increased use of technology in the field, such as computers, cellular phones, and pagers. Access to the internet will also allow agents to show clients homes without leaving the office, therefore helping the agent to serve more clients than in the past.

| First Semester | Credits |
| :---: | :---: |
| + ACC111 Financial Accounting ........................... | 4 |
| BUS110 Business Math/Calculators .................. or | 3 |
| MTH109 College Algebra .................................. | 3 |
| ECO212 Microeconomics ................................ | 3 |
| + REA210 Real Estate Principles .......................... | 3 |
| + REA220 Real Estate Law ................................. | $\underline{3}$ |
|  | 16 |
| Second Semester | Credits |
| + ACC112 Managerial Accounting .......................... | 4 |
| CIS114 Microsoft Applications .......................... | 3 |
| MKT110 Marketing ......................................... | 3 |
| + REA230 Real Estate Finance ............................ | 3 |
| + REA240 Real Estate Appraisal ......................... | $\underline{3}$ |
|  | 16 |

+ Students must attain a 2.00 grade point average in these technical courses to graduate.


# Associate of Applied Business in Business Management Straight Truck Transportation Concentration 

| The Straight Truck Transportation major provides students with the skills required to qualify as an entry truck driver in interstate and/or intrastate commerce. Graduates are familiar with vehicles, engines, and brakes. They also have acquired skills in maneuvering, cornering, backing, and parking through a variety of urban and rural environments. |  | First Semester |  | Credits |
| :---: | :---: | :---: | :---: | :---: |
|  |  | ECO212 | Microeconomics | 3 |
|  |  | BUS110 | Business Math/Calculators | 3 |
|  |  | or |  |  |
|  |  | MTH109 | College Algebra .................................. | 3 |
|  |  | + MGT110 | Management ..................................... | 3 |
| The graduate of the Business Management program is skilled in supervision, labor relations, accounting, and decision-making. The graduate is qualified for a position as a General Manager or Assistant Manager of a small business or a Personnel Specialist, Foreman, or Supervisor of a manufacturer, commercial business, or other organization. |  | TRN150 | Straight Truck Driver .......................... | 7 |
|  |  |  |  | 16 |
|  |  | Second Seme |  |  |
|  |  | CIS114 | Microsoft Applications. | $\frac{\text { Credits }}{3}$ |
|  |  | ENG111 | Composition I .................................... | 3 |
| Truck driving classes are held at the HR Career Development Truck Driver Training School in Montpelier, Ohio and require additional fees. |  | MKT110 | Marketing ......................................... | 3 |
|  |  |  | Business Elective ................................ | 3 |
|  |  |  | General Studies Elective ...................... | $\underline{3}$ |
|  |  |  |  | 15 |
| Employment of truck drivers is strong and is expected to remain at a high level in Ohio and throughout the country. The world depends upon the transfer of raw materials and finished goods, with the primary method via truck transportation. |  |  |  |  |
|  |  | Third Semester |  | Credits |
|  |  | + ACC111 | Financial Accounting ........................... | 4 |
|  |  | + BUS221 | Business Law ..................................... | 3 |
|  |  | ENG112 | Composition II .................................. | 3 |
| PROGRAM LEARNING OUTCOMES <br> Students who complete the Straight Truck Driving program will be employable in a variety of positions in which: |  | + MGT210 | Human Resource Management .............. | 3 |
|  |  |  | Computer Elective .............................. | 1 |
|  |  |  | Social/Behavioral Science Elective .......... | $\underline{3}$ |
|  |  |  |  | 17 |
| 1. Students will demonstrate understanding of the major styles of management. |  | Fourth Semester |  | Credits |
| 2. Students will exhibit personal skills of telephone etiquette, proper business attire, and social skills. |  | + ACC112 | Managerial Accounting ........................ | 4 |
|  |  | + BUS250 | Labor Relations .................................. | 3 |
| 3. Students will exhibit work skills of attendance, work ethic, and self-motivation. |  | + MGT280 | Business Climate Analysis ................... | 3 |
|  |  | STA220 | Statistics .......................................... | 3 |
| 4. Students will demonstrate mastery of a foundation of business understanding. |  |  | Humanities Elective ............................ | $\underline{3}$ |
|  |  |  |  | 16 |
| 5. Students will demonstrate understanding of business ethics. |  |  |  |  |
| 6. Students will demonstrate understanding of truck driving practices. |  | Computer Electives: |  |  |
|  |  | ACC261 | Quick Books |  |
|  |  | ACC262 | Peachtree |  |
|  |  | ACC271 | Intermediate Quick Books |  |
|  |  | CIS118 | Access |  |
| Business Electives: |  | CIS119 | PowerPoint |  |
| ACC140 | Personal Income Tax Accounting | CIS121 | Intermediate Word |  |
| ACC221 | Cost Accounting I | CIS122 | Intermediate Excel |  |
| ACC240 | Business Income Tax Accounting | CIS129 | Web Page Development |  |
| BUS160 | International \& Global Business |  |  |  |
| BUS260 | International Trade |  |  |  |
| ECO211 | Macroeconomics |  |  |  |
| MGT220 | Entrepreneurship |  |  |  |
| MGT230 | Retail Management |  |  |  |
| MGT290 | Business Mgt. Co-Op/Internship |  |  |  |
| MKT210 | Advertising |  |  |  |

[^2]
# Associate of Applied Business in Business Management Tractor-Trailor Transportation Concentration 



+ Students must attain a 2.00 grade point average in these technical courses to graduate.


# Associate of Applied Business in Information Technology Computer Programming Concentration 

Computers play a part in nearly all phases of our life today. Businesses and governmental agencies, large and small, require trained computer specialists. The Computer Programming Major prepares computer programmers and computer operators to work with a wide variety of computers and languages used by area employers. Emphasis is placed upon business-oriented computer languages. Programming and practical applications of business data are stressed. In the laboratory, hands-on experience is provided using the Internet and PC compatible computers.

Graduates may find employment in entry-level positions with typical titles such as Computer Operator, Application Programmer, Maintenance Programmer, Software Developer, or in Technical Support. A career path may include Lead or Senior Programmer and Data Processing Manager.

## Career Outlook

Employment of computer programmers is expected to be quite good. Through the year 2010, the growth is expected to be faster than the average nationally and as fast as average in the state of Ohio. Opportunities should be especially good for those programmers who know several programming languages.

## PROGRAM LEARNING OUTCOMES

Students who complete the Computer Programming program will be employable in a variety of positions in which:

1. Students will write and depub programs.
2. Students will gain an understanding of structured programming concepts.
3. Students will assemble and troubleshoot hardware.
4. Students will install and troubleshoot current Personal Computer hardware and current Operating System software.
5. Students will install and troubleshoot Network Operating Systems and current Network Protocols.
6. Students will demonstrate software skills.

| Business Electives: |  |  |
| :--- | :--- | :---: |
| BUS160 | International \& Global Business |  |
| BUS221 | Business Law |  |
| BUS260 | International Trade |  |
| ECO211 | Macroeconomics |  |
| ECO212 | Microeconomics |  |
| MGT110 | Management |  |
| MGT210 | Human Resource Management |  |
| MGT280 | Business Climate Analysis |  |


| First Semester |  | Credits |
| :---: | :---: | :---: |
| + CIS111 | Visual Basic Programming .................... | 4 |
| + CIS190 | Computer Operations GOS ................. | 4 |
| ENG111 | Composition I.................................... | 3 |
|  | Math Elective | $\underline{3}$ |
|  |  | 14 |
| Second Semester |  | Credits |
| + CIS109 | Database Management ........................ | 4 |
| CIS114 | Microsoft Applications ......................... | 3 |
| + CIS165 | Java Programming .............................. | 4 |
| ENG112 | Composition II .................................. | 3 |
|  | Business Elective ................................... | $\underline{3}$ |
|  |  | 17 |


| Third Semester |  |  | Credits |
| :---: | :---: | :---: | :---: |
| + | ACC111 | Financial Accounting .......................... | 4 |
| + | CIS108 | Internet Scripting ................................ | 4 |
| + | CIS150 | Programming C++ ............................... | 4 |
|  |  | General Studies Elective ...................... | $\underline{3}$ |
|  |  |  | 15 |


| Fourth Semester |  | Credits |  |
| :--- | :--- | :---: | :---: |
| $+\quad$ ACC112 | Managerial Accounting .......................... | 4 |  |
|  | Business Analysis Elective ........................ | 3 |  |
|  | Humanities Elective ........................ | 3 |  |
|  | Social Behavioral Science Elective ........... | 3 |  |
| + | Technical Elective .............................. | 4 |  |
|  |  |  | 17 |


| Business Analysis Electives: |  |
| :---: | :--- |
| ACC221 | Cost Accounting I |
| BUS280 | Finance |
| STA220 | Statistics |

Mathematics Electives:
BUS110 Business Math/Calculators
MTH109 College Algebra

Technical Electives:
CAD111 CAD I
CIS155 Linux Networking I
CIS161 C \#
CIS180 Computer Operations \& CL
CIS230 Programming RPG
CIS255 Linux Networking II
CIS256 Internet Security
CIS272 Microsoft Networking I
CIS282 Microsoft Networking II
CIS283 Microsoft Networking III
CIS290 Information Technology Internship
EET272 Cisco Networking I

+ Students must attain a 2.00 grade point average in these technical courses to graduate.


# Associate of Applied Business in Information Technology <br> Internet Security Concentration 

An Internet Security professional assists in securing networks and computers from unauthorized activity. This program will teach students how to monitor networks using packet sniffing, secure networks using firewalls, secure network file systems, manage passwords, encrypt files, encypt network traffic, and deal with threats such as spyware, malware and viruses.

## Career Outlook

Career opportunities are numerous for individuals in this field. All organizations, large and small, use the computer as an integral part of their business. Workers need both software and hardware support to do their jobs. Graduates may find employment in entry-level positions with typical titles such as Internet Security Specialist, Network Security Analyst, Security Administrator or Computer Security Specialist.

## PROGRAM LEARNING OUTCOMES

Students who complete the Internet Security program will be employable in a variety of positions in which:

1. Students will gain an understanding of structured programming concepts.
2. Students will assemble and troubleshoot hardware.
3. Students will install and troubleshoot current Personal Computer hardware and current Network Protocols.
4. Students will demonstrate software skills.
5. Students will implement procedures designed to counteract current Computer and Network security risks.

| First Semester |  |  | Credits |
| :---: | :---: | :---: | :---: |
| + | CIS150 | Programming C++ ............................... | 4 |
| + | CIS190 | Computer Operations GOS ................. | 4 |
|  | ENG111 | Composition I................................... | 3 |
|  |  | Mathematics Elective ......................... | $\underline{3}$ |
|  |  |  | 14 |



| Third Semester |  |  | Credits |
| :---: | :---: | :---: | :---: |
|  | ACC111 | Financial Accounting ........................... | 4 |
| + | CIS155 | Linux Networking I ............................ | 4 |
|  | CJT130 | Criminal Justice Principles ................... | 3 |
| + |  | Technical Elective ............................... | $\underline{4}$ |
|  |  |  | 15 |


| Fourth Semester |  |  | Credits |
| :---: | :---: | :---: | :---: |
|  | ACC112 | Managerial Accounting ....................... | 4 |
| + | CIS256 | Internet Security ............................ | 4 |
|  |  | Business Analysis Elective .................. | 3 |
|  |  | Social/Behavioral Science Elective ......... | 3 |
| + |  | Technical Elective .............................. | 4 |
|  |  |  | 18 |

## Business Electives:

| BUS160 | International \& Global Business |
| :--- | :--- |
| BUS221 | Business Law |
| BUS260 | International Trade |
| ECO211 | Macroeconomics |
| ECO212 | Microeconomics |
| MGT110 | Management |
| MGT210 | Human Resource Management |
| MGT280 | Business Climate Analysis |


| Business Analysis Electives: |  |
| :---: | :--- |
| ACC221 | Cost Accounting I |
| BUS280 | Finance |
| STA220 | Statistics |


| Mathematics Electives: |  |
| :--- | :--- |
| BUS110 |  |
| MTH109 | Business Math/Calculators |
|  | College Algebra |
| Technical Electives: |  |
| CAD111 |  |
| CIS108 | CAD I |
| CIS109 | Database Management |
| CIS111 | Visual Basic Programming |
| CIS161 | C \# |
| CIS165 | Java Programming |
| CIS180 | Computer Operations \& CL |
| CIS230 | Programming RPG |
| CIS255 | Linux Networking II |
| CIS282 | Microsoft Networking II |
| CIS283 | Microsoft Networking III |
| CIS290 | Information Technology Internship |
| EET272 | Cisco Networking I |

[^3]
# Associate of Applied Business in Information Technology Network Administration Concentration 

The Network Administration major provides the skills and training necessary toinstall and maintain networks using Microsoft and Linux Operating Systems. The program provides the student with training in current programming languages such as C++, Java, C\#, and Visual Basic. Graduates are eligible to sit for certification tests leading to certification as a Microsoft Certified Professional, a Microsoft Certified System Engineer, TIA Linux+ Certification, and A+ Certification.

## Career Outlook

Career opportunities are numerous for individuals in this field. All organizations, large and small, use computers as an integral part of how they do business. Workers need both software and hardware support to do their jobs. Graduates may find employment in entry-level positions with typical titles such as Network Administrator, Network Engineer, Network Installation Engineer, Computer Programmer, or Technical Support or Help Desk. A career path may include Enterprise Network Administration, Lead or Senior Programmer, Systems Programmer, and Data Processing Manager.

PROGRAM LEARNING OUTCOMES

1. Students will assemble and troubleshoot hardware.
2. Students will install and troubleshoot current Personal Computer hardware and current Operating System software.
3. Students will install and troubleshoot Network Operating Systems and current Network Protocols.
4. Stdents will gain an understanding of structured programming concepts.
5. Students will demonstrate software skills.

| First Semester |  |  | Credits |
| :---: | :---: | :---: | :---: |
| + | CIS150 | Programming C++ ............. | 4 |
| + | CIS190 | Computer Operations GOS | 4 |
|  | ENG111 | Composition I............. | 3 |
|  |  | Mathematics Elective ....... | $\underline{3}$ |
|  |  |  | 14 |


| Second Semester |  |  | Credits |
| :---: | :---: | :---: | :---: |
| + | CIS114 | Microsoft Applications ....................... | 3 |
| + | CIS272 | Microsoft Networking ........................ | 4 |
|  | ENG112 | Composition II ................................. | 3 |
|  |  | Business Elective ... | 3 |
| + |  | Technical Elective .............................. | 4 |
|  |  |  | 17 |



| Fourth Semester |  | Credits |
| :---: | :---: | :---: |
| ACC112 | Managerial Accounting ........................ | 4 |
|  | Business Analysis Elective ................... | 3 |
|  | Humanities Elective ............................ | 3 |
|  | Social/Behavioral Science Elective .......... | 3 |
| + | Technical Elective ............................. | 4 |
|  |  | 17 |


| Mathematics | Electives: |
| :--- | :--- |
| BUS110 | Business Math/Calculators |
| MTH109 | College Algebra |

Technical Electives:
CAD111 CAD I
CIS108 Internet Scripting
CIS109 Database Management
CIS111 Visual Basic Programming
CIS161 C\#
CIS165 Java Programming
CIS180 Computer Operations \& CL Programming
CIS230 Programming RPG
CIS255 Linux Networking II
CIS256 Internet Security
CIS282 Microsoft Networking II
CIS283 Microsoft Networking III
CIS290 Information Technology Internship
EET272 Cisco Networking I

[^4]
# Associate of Applied Business in Information Technology Web Site Administration Concentration 

| The increase in power of microcomputers and the maturation of data communications technology is driving the replacement of centralized data processing systems with distributed processing, client-server networks. This down-sizing may be to pure microcomputer installations or to hybrid systems involving complex interfaces and dissimilar micro-mini-mainframe computer hardware. | First Semester |  | Credits |
| :---: | :---: | :---: | :---: |
|  | + CIS108 | Internet Scripting . | 4 |
|  | + CIS114 | Microsoft Applications ... | 3 |
|  | + CIS190 | Computer Operations GOS ................. | 4 |
|  | ENG111 | Composition I ............... | 3 |
|  |  | Mathematics Elective | 3 |
|  |  |  | 17 |
| Career Outlook |  |  |  |
| Career opportunities are numerous for individuals in this field. All organizations, large and small, use computers as an integral part of how they do business. Workers need both software and hardware support to do their jobs. Graduates may find employment in entry-level positions with typical titles such as Network Administrator, Network Engineer, Network Installation Engineer, Web Master, Technical Support or Help Desk. | Second Semester |  | Credits |
|  | + CIS109 | Database Management ........................ | 4 |
|  | + CIS129 | Web Site Development ......................... | 3 |
|  | + CIS272 | Microsoft Networking I ...................... | 4 |
|  | ENG112 | Composition II ................................ | 3 |
|  |  | Humanities Elective .. | 3 |
|  |  |  | 17 |
| PROGRAM LEARNING OUTCOMES | Third Semester |  | Credits |
| 1. Students will assemble and troubleshoot hardware. | ACC111 | Financial Accounting .......................... | 4 |
| 2. Students will install and troubleshoot current Personal | + CIS155 | Linux Networking I ............................ | 4 |
| Computer hardware and current Operating System soft- | + CIS282 | Microsoft Networking II ...................... | 4 |
| ware. | + VCT268 | Video Production ................................ | $\underline{3}$ |
| 3. Students will install and troubleshoot Network Operating Systems and current Network Protocols. |  |  | 15 |
| 4. Stdents will gain an understanding of structured programming concepts. <br> 5. Students will demonstrate software skills. <br> 6. Students will develop and edit web pages. <br> 7. Students will demonstrate the ability to develop graphic enhancements. | Fourth Semester |  | Credits |
|  | + VCT266 | Multimedia Production | 3 |
|  |  | Business Elective ................................ | 3 |
|  |  | Business Analysis Elective ................... | 3 |
|  |  | General Studies Elective ....................... | 3 |
|  |  | Social/Behavioral Science Elective .......... | $\underline{3}$ |
|  |  |  | 15 |
|  | Business Electives: |  |  |
|  | BUS160 | International \& Global Business |  |
|  | BUS221 | Business Law |  |
|  | BUS260 | International Trade |  |
|  | ECO211 | Macroeconomics |  |
|  | ECO212 | Microeconomics |  |
|  | MGT110 | Management |  |
|  | MGT210 | Human Resource Management |  |
|  | MGT280 | Business Climate Analysis |  |
|  | Business Analy | ysis: |  |
|  | ACC221 | Cost Accounting I |  |
|  | BUS280 | Finance |  |
|  | STA220 | Statistics |  |
|  | Mathematics E | Electives: |  |
|  | BUS110 | Business Math/Calculators |  |
|  | MTH109 | College Algebra |  |

[^5]
## Computer Technician Certificate

The Computer Technician must have experience working on personal computers, experience working on networks and some programming experience. Technicians are acquainted with software packages such as word processors and spreadsheets. The computer technician must be knowledgeable in computer operations and computer systems.

## Career Outlook

The student can earn the associate degree by completing one year of fulltime study beyond the Computer Technician Certificate. Graduates may find employment in entry-level positions such as Computer Technician, Peripheral Equipment Operator, Help Desk Technician or Technical Support.

## PROGRAM LEARNING OUTCOMES

Students who complete the Computer Technician program will be employable in a variety of positions in which:

1. Studens will write and debug programs.
2. Stdents will gain an understanding of structured programming concepts.
3. Students will assemble and troubleshoot hardware.
4. Students will install and troubleshoot current Personal Computer hardware and current Operating System software.
5. Students will install and troubleshoot Network Operating Systems and current Network Protocols.
6. Students will demonstrate software skills.

| First Semester |  |  | Credits |
| :---: | :---: | :---: | :---: |
|  | CIS108 | Internet Scripting ................................ | 4 |
| + | CIS150 | Programming C++ ............................... | 4 |
| + | CIS190 | Computer Operations GOS ................. | 4 |
|  | ENG111 | Composition I .................................... | $\underline{3}$ |
|  |  |  | 15 |


| Second Semester |  |  | Credits |
| :---: | :---: | :---: | :---: |
| + | CIS114 | Microsoft Applications ....................... | 3 |
| + | CIS165 | Java Programming .............................. | 4 |
| + | CIS272 | Microsoft Networking I ...................... | 4 |
|  | ENG112 | Composition II .................................. | 3 |
|  |  | Business Elective ......................... | $\underline{3}$ |
|  |  |  | 17 |

## Networking Electives:

| CIS155 | Linux Networking I |
| :--- | :--- |
| CIS272 | Microsoft Networking I |
| EET272 | Cisco Networking I |

Business Electives:

| BUS221 | Business Law |
| :--- | :--- |
| BUS160 | International \& Global Business |
| BUS260 | International Trade |
| ECO211 | Macroeconomics |
| ECO212 | Microeconomics |
| MGT110 | Management |
| MGT210 | Human Resource Management |
| MGT280 | Business Climate Analysis |

[^6]
# Associate of Applied Business in Office Administrative Services Office Administration Concentration 

A management team is complete only with a qualified administrative staff. The Office Administrative Services Technology develops well-trained graduates for positions in business and in governmental agencies as principal assistants to the managers and administrators of industrial corporations, financial institutions, colleges and schools, hospitals, clinics, law firms, governmental agencies, and small business.

Graduates’ skills include in-depth training using spreadsheets, database management, presentation software, word processing skills and the integration between applications in developing documents. They also have knowledge of Office Accounting with the use of computerized accounting software while developing skill at the keyboard and document composition and proofreading.

## Career Outlook

This occupation is one of the largest in the United States. Employment opportunities should be very good, especially for those who have obtained excellent communication skills. Although many of the tasks that secretaries and administrators perform have become automated, it will be those tasks which require personal contact and communication which will continue to play a key role in the office activities of most organizations. Those duties include planning conferences, receiving clients, and giving staff instructions. It is expected that several hundred thousand secretarial positions will be open annually throughout the U.S.

## PROGRAM LEARNING OUTCOMES

Students who complete the Office Administration program will be employable in a variety of positions in which:

1. Studens will exhibit proficient keyboarding skills.
2. Students will demonstratrate language arts skills such as proofreading, grammar, and punctuation.
3. Students will demonstrate proficiency in computer software skills.
4. Students will demonstrate time management and organizational skills.

| First Semester |  |  | Credits |
| :---: | :---: | :---: | :---: |
|  | CIS104 | Desktop Management ......................... | 2 |
| + | CIS112 | Microsoft Word | 3 |
|  | ENG111 | Composition I .................................... | 3 |
| + | OAS101 | College Keyboarding* | 3 |
| + | OAS110 | Records Management .......................... | 3 |
|  |  | General Studies Elective ... | $\underline{3}$ |
|  |  |  | 17 |
| Second Semester |  |  | Credits |
| + | CIS113 | Microsoft Excel .................................. | 3 |
|  | CIS118 | Access | 1 |
|  | CIS138 | Intermediate Access ..... | 1 |
|  | ENG112 | Composition II .................................. | 3 |
| + | OAS102 | Keyboarding Applications ................... | 3 |
| + | OAS105 | Document Editing \& Proofreading ........ | 2 |
| + | OAS160 | Office Procedures ............................... | $\underline{3}$ |
|  |  |  | 16 |
| Third Semester |  |  | Credits |
|  | ACC102 | Office Accounting ............................... | 4 |
|  | BUS110 | Business Math/Calculators .................. | 3 |
|  | CIS119 | PowerPoint | 1 |
|  | OAS200 | Speedbuilding .................................... | 1 |
| + | OAS230 | Transcription ..................................... | 3 |
|  | OAS249 | Advanced Microsoft Suite. | $\underline{3}$ |
|  |  |  | 15 |
| Fourth Semester |  |  | Credits |
|  | ACC261 | Quick Books ..... | 1 |
| + | OAS250 | Integrated Business Projects ................ | 3 |
| + | OAS291 | Internship ......................................... | 1 |
|  | OAS292 | Internship ......................................... | 1 |
|  | MGT110 | Management ..................................... | 3 |
|  |  | Humanities Elective ............................ | 3 |
|  |  | Social/Behavioral Science Elective ......... | $\underline{3}$ |
|  |  |  | 15 |

*OAS090 Keyboarding Basics is required before taking OAS101 or proficiency test.

+ Students must attain a 2.00 grade point average in these technical courses to graduate.


# Associate of Applied Business in Office Administrative Services Medical Support Concentration 

| Medical employees work in physicians' offices, hospitals, nursing homes, and other medical settings. They may transcribe dictation, prepare medical records or charts, schedule appointments, handle correspondence, prepare bills, and process insurance forms. In addition to a good background in keyboarding, accounting, and computers, there is a need for expertise with medical terminology and familiarization with medical references. Strong communication skills are also important in dealing with patients in stressful situations. | First Semester |  | Credits |
| :---: | :---: | :---: | :---: |
|  | CIS104 | Desktop Management | 2 |
|  | + CIS112 | Microsoft Word | 3 |
|  | ENG111 | Composition I | 3 |
|  | OAS101 | College Keyboarding* | 3 |
|  | OAS110 | Records Management | 3 |
|  |  | General Studies Elective | $\underline{3}$ |
| Career Outlook | Second Seme |  | Credits |
| The increase in medical services and the aging population place tremendous demands on physicians and hospitals. Medical employees are essential workers who must accurately process medical and insurance documents. Nationally, employment for medical secretaries is expected to grow as fast as average and in Ohio it is expected to grow faster than average through the year 2008. | CIS113 | Microsoft Excel | 3 |
|  | ENG112 | Composition II .................................. | 3 |
|  | OAS102 | Keyboarding Applications ................... | 3 |
|  | OAS105 | Document Editing \& Proofreading ........ | 2 |
|  | OAS160 | Office Procedures ... | 3 |
|  | OAS180 | Medical Terminology | 3 |
|  |  |  | 17 |
| PROGRAM LEARNING OUTCOMES |  |  |  |
| Students who complete the Medical Support program will be employable in a variety of positions in which: | Third Semester |  | Credits |
|  | ACC102 | Office Accounting ....... | 4 |
|  | BUS110 | Business Math/Calculators .................. | 3 |
| 1. Studens will exhibit proficient keyboarding skills. | + OAS200 | Speedbuilding ..................................... | 1 |
| 2. Students will demonstratrate language arts skills such as proof- | + OAS221 | Medical Information Coding ................ | 3 |
| reading, grammar, and punctuation. <br> 3. Students will demonstrate proficiency in computer software skills. | + OAS282 | Medical Transcription... | 3 14 |
| 4. Students will demonstrate time management and organizational skills. | Fourth Semester |  | Credits |
|  | ACC261 | Quick Books ..................................... | 1 |
| 5. Students will exhibit proficiency in medical terminology and | ACC271 | Intermediate Quick Books .................... | 1 |
| transcription. | OAS281 | Medical Insurance .............................. | 3 |
| 6. Students will demonstrate the ability to properly code | + OAS291 | Internship ......................................... | 1 |
| medical procedures. | OAS292 | Internship ......................................... | 1 |
|  |  | Humanities Elective ............................ | 3 |
|  |  | Social/Behavioral Science Elective ......... | 3 |
|  | + | Technical Elective ............................... | $\underline{3}$ |
|  |  |  | 16 |

## Technical Electives:

| OAS222 | Intermediate Medical Information Coding |
| :--- | :--- |
| OAS249 | Advanced Microsoft Suite |

*OAS090 Keyboarding Basics is required before taking OAS101 or proficiency test.

[^7]A one-year certificate is available for students who need a quicker entry into the job market. The skills needed for entry-level positions in today's fast-paced and automated business office are provided in this program. The Office Assistant is prepared to assemble facts and figures from office records and express them in statements, letters, and forms; file office records, operate calculators, photocopy machines, and the latest word processing equipment; and assist with general business duties such as responding to mail, making arrangements for business trips, and scheduling appointments.

The student can earn the associate degree by completing one year of fulltime study beyond the Office Assistant Certificate.

## Career Outlook

Employment opportunities should be very good, especially for those who have obtained excellent communication skills. Although many of the tasks that secretaries perform have become automated, it will be those tasks which require personal contact and communication which will continue to play a key role in the office activities of most organizations.

## PROGRAM LEARNING OUTCOMES

Students who complete the Office Assistant program will be employable in a variety of positions in which:

1. Studens will exhibit proficient keyboarding skills.
2. Students will demonstratrate language arts skills such as proofreading, grammar, and punctuation.
3. Students will demonstrate proficiency in computer software skills.
4. Students will demonstrate time management and organizational skills.

| First Semester |  | Credits |
| :---: | :---: | :---: |
| CIS104 | Desktop Management ......................... | 2 |
| + CIS112 | Microsoft Word .................................. | 3 |
| ENG111 | Composition I .................................... | 3 |
| + OAS101 | College Keyboarding* ......................... | 3 |
| + OAS110 | Records Management .......................... | 3 |
|  | General Studies Elective ...................... | $\underline{3}$ |
|  |  | 17 |
| Second Semester |  | Credits |
| + CIS113 | Microsoft Excel ................................. | 3 |
| CIS118 | Access .............................................. | 1 |
| CIS138 | Intermediate Access ............................ | 1 |
| ENG112 | Composition II .................................. | 3 |
| + OAS102 | Keyboarding Applications ................... | 3 |
| + OAS105 | Document Editing \& Proofreading ........ | 2 |
| + OAS160 | Office Procedures ............................... | 3 |
|  |  | 16 |

*OAS090 Keyboarding Basics is required before taking OAS101 or proficiency test.

+ Students must attain a 2.00 grade point average in these technical courses to graduate.


# Associate of Applied Business in Paralegal Studies 

The Paralegal works under the direct supervision of an attorney, performing a variety of duties including research and investigation of facts for attorneys. The Associate Degree in Paralegal Studies prepares students for an entry-level position in a law firm or law department of a business or financial institution. Typical job titles include Legal Assistant, Title Researcher, and Legal Researcher. The paralegal may be called on to prepare a variety of law-related documents including standard forms, pleadings, deeds mortgages, and other documents. The Paralegal may search official records and record and file documents with County Clerk of Courts, Secretary of State, or other officials. The Paralegal will perform legal research for the preparation of briefs and other legal documents, and communicate clearly and effectively in writing and orally with attorneys, clients, and other government officials.

This program prepares the student for transfer to the University of Toledo's Bachelor of Science in Paralegal Studies.

## Career Outlook

Nationally, and in the state of Ohio, employment for paralegals is expected to grow faster than the average through the year 2008. Most Paralegals will be hired by private firms, although opportunities will also exist in the public sector. In larger cities there are also opportunities with consumer organizations, public agencies, and the courts.

## PROGRAM LEARNING OUTCOMES

Students who complete the Paralegal program will be employable in a variety of positions in which:

1. Studens will exhibit understanding of law office practices.
2. Students will demonstratrate ability to conduct legal research and comprehend legal documents.
3. Students will demonstrate understanding of civil and criminal procedures
4. Students will demonstrate exhibit understanding of tort law situations and procedures.
5. Students will demonstrate understanding of real estate transactions and probate procedures in Ohio.
6. Students will demonstrate understanding of domestic relations law in Ohio.

| General Studies | Electives: |
| :--- | :--- |
| ART103 | Beginning Drawing |
| HUM209 | Humanities and Cult.: Ancient \& Medieval Worlds |
| HUM210 | Humanities and Cult.: Renaissance to Present |
| HUM221 | Music Appreciation |
| HUM230 | Art Appreciation |


| First Semester |  | Credits |
| :---: | :---: | :---: |
| CIS114 | Microsoft Applications ....................... | 3 |
| ENG111 | Composition I. | 3 |
| + PAR100 | Introduction to Paralegal ...................... | 3 |
| + PAR101 | Law Office Management ..................... | 3 |
|  | Mathematics Electives ........................ | 3 |
|  |  | 15 |
| Second Semester |  | Credits |
| ACC111 | Financial Accounting .......................... | 4 |
| ENG112 | Composition II .................................. | 3 |
| + PAR110 | Civil Procedures ................................... | 3 |
| + PAR115 | Family Law ....................................... | 3 |
|  | Social/Behavioral Science Elective .......... | $\underline{3}$ |
|  |  | 16 |
| Third Semester |  | Credits |
| + PAR205 | Real Estate Transactions ..................... | 3 |
| + PAR210 | Legal Research \& Writing ..................... | 3 |
| + PAR215 | Tort Law ........... | 3 |
|  | Business Elective ... | 3 |
|  | General Studies Elective ...................... | $\underline{3}$ |
|  |  | 15 |
| Fourth Semester |  | Credits |
| + PAR220 | Criminal Law ............... | 3 |
| + PAR222 | Estates, Trusts \& Wills ....................... | 3 |
| PHI110 | Critical Thinking \& Logic .................... | 3 |
| SSC210 | Cultural Diversity ............................. | 3 |
|  | Program Elective ................................ | $\underline{3}$ |
|  |  | 15 |
| Social/Behavioral Science Electives: |  |  |
| PSY110 | General Psychology |  |
| SSC110 | General Anthropology |  |
| SSC120 | American Government |  |
| Business Electives: |  |  |
| BUS221 | Business Law (Not for Transfer) |  |
| ECO211 | Macroeconomics (Transfer) |  |
| Mathematics Electives: |  |  |
| BUS110 | Business Math/Calculators (Not for | ransfer) |
| MTH109 | College Algebra (Transfer) |  |
| Program Electives: |  |  |
| BIO101 | Principles of Biology |  |
| BIO115 | Ecology |  |
| BIO231 | Anatomy \& Physiology I |  |
| PAR221 | Bankruptcy (Not for Transfer) |  |
| PHY140 | Astronomy |  |

+ Students must attain a 2.00 grade point average in these technical courses to graduate.


## Associate of Applied Business in Visual Communications

The Visual Communication program prepares students for a variety of positions utilizing computer graphics and imaging skills. Graduates are prepared to produce public relations materials, including print, video, and electronic media.

Graduates may transfer as juniors to complete a bachelor's degree in Visual Communications.

## Career Outlook

Opportunities within this field are expected to grow through the year 2006 due to the emphasis on visual appeal in product design, advertising, marketing, web design, and television. Willingness to relocate, however, may be an important factor since many of the opportunities will be in larger metropolitan areas.

## PROGRAM LEARNING OUTCOMES

Students who complete the Visual Communications program will be employable in a variety of positions in which:

1. Students will demonstrate the ability to take photos under various conditions.
2. Students will accurately edit photos.
3. Students will demonstrate knowledge of graphics and drawing abilities.
4. Students will demonstrate the ability to manipulate programs to create and enhance graphics.
5. Students will demonstrate the ability to capture, edit, and animate video.

| First Semester |  | Credits |
| :---: | :---: | :---: |
| + CIS114 | Microsoft Applications ....................... | 3 |
| + CIS118 | Access .............................................. | 1 |
| + CIS119 | PowerPoint. | 1 |
| ENG111 | Composition I .................................... | 3 |
| + VCT108 | Photo Editing .................................... | 2 |
| + VCT182 | Photography ..................................... | 3 |
|  | Mathematics Elective .......................... | $\underline{3}$ |
|  |  | 16 |
| Second Semester |  | Credits |
| ART103 | Beginning Drawing ............................. | 3 |
| + CIS129 | Web Page Development ....................... | 3 |
| ENG112 | Composition II .................................. | 3 |
| + VCT111 | Layout \& Design ................................ | 3 |
| + VCT205 | Visual Communication Technology ....... | 2 |
|  | Program Elective* ............................... | $\underline{3}$ |
|  |  | 17 |


| Third Semester |  |  | Credits |
| :---: | :---: | :---: | :---: |
|  | ACC111 | Financial Accounting .......................... | 4 |
|  | HUM230 | Art Appreciation .............................. | 3 |
| + | VCT260 | 3D Computer Animation ..................... | 3 |
| + | VCT268 | Video Production | 3 |
|  |  | General Studies Elective ...................... | $\underline{3}$ |
|  |  |  | 16 |

Fourth Semester Credits
BUS221 Business Law ..... 3
ENG210 Technical Communications ..... 3

+ VCT204 Concepts of Visual Communications . ..... 3
+ VCT266 Multimedia Production ..... 3
+ VCT289 VCT Co-Op Experience ..... 3
Social/Behavioral Science Elective ..... $\underline{3}$


## Mathematics Electives:

| BUS110 | Business Math/w Calculators |
| :--- | :--- |
| MTH109 | College Algebra (Transfer) |


| Program Electives: |  |
| :--- | :--- |
| ART210 | Oil/Acrylic Painting |
| CAD111 | CAD I |
| MKT110 | Marketing |
| MTH112 | Trigonometry (Transfer) |

* Students planning to transfer to a four-year college should take MTH112 Trigonometry.
+ Students must attain a 2.00 grade point average in these technical courses to graduate.


## Engineering Technology Division

The field of Engineering Technology and Skilled Trades is growing rapidly. Northwest State has many programs to help you see yourself in awhole new way!

The following elective lists should be used unless specified on the program page.

| Business: |  |
| :---: | :---: |
| BUS280 | Finance |
| MKT110 | Marketing |
| MKT230 | Salesmanship |
| General Studies: |  |
| ENG113 | Speech |
| ENG210 | Technical Communications |
| ENG214 | Discussion \& Conference Methods |
| ENG220 | Business Writing |
| Humanities: |  |
| ENG223 | Interpretation of Literature |
| ENG224 | American Literature |
| ENG225 | British Literature |
| ENG230 | Children's Literature |
| HIS101 | U.S. History Pre-1876 |
| HIS102 | U.S. History Post-1876 |
| HIS203 | U.S. Since 1945 |
| HIS210 | The Modern World |
| HUM209 | Humanities and Cultures: Ancient \& Medieval Times |
| HUM210 | Humanities and Cultures: Renaissance to Present |
| HUM221 | Music Appreciation |
| HUM230 | Art Appreciation |
| PHI110 | Critical Thinking \& Logic |
| PHI201 | Introduction to Philosophy |
| PHI210 | Ethics |
| PHI230 | WorldReligions |
| (Any NSCC Humanities Elective) |  |

General Studies:
ENG113 Speech
ENG214 Discussion \& Conference Methods
ENG220 Business Writing

## Science:

CHM101 Principles of Chemistry
PHY252 Physics: Electricity \& Magnetism

## Social/Behavioral Science:

| GEO210 | Geography - US and Canada |
| :--- | :--- |
| PSY110 | General Psychology |
| PSY220 | Social Psychology |
| SSC101 | Sociology |
| SSC110 | General Anthropology |
| SSC120 | American Government |
| SSC130 | Comparative Government |
| SSC140 | Current International Problems |
| SSC210 | Cultural Diversity |
| SSC230 | Economy \& Society |
| (Any NSCC Social/Behavioral Science Elective) |  |

# Associate of Applied Science Mechanical Engineering Technology 

The machinery of modern industry consists of mechanical devices - levers that move, wheels that spin, and cogs that must mesh. The Mechanical Engineering Technology is designed to train students in technology based, entry-level occupations related to the mechanical and manufacturing engineering fields. The graduate will be able to assist engineers and other professional staff engaged in plant and facilities maintenance and other plant engineering and management functions.

All aspects of industry are dependent on the production and reading of drawings to convey information.

The Mechanical Engineering Technology provides a student the opportunity to study engineering topics associated with the design and installation of mechanical equipment and systems with the option of transferring to another institution to pursue a four-year bachelor degree in Mechanical Engineering Technology.

The student who follows this course of study will be trained to function as a Mechanical Technician in a number of industrial situations which require knowledge of mechanical systems, engineering materials, and equipment. The student may find himself/herself working closely with engineers engaged in designing, testing, servicing, or assembly and installation of machinery and industrial equipment.

## Career Outlook

Many diverse occupations find their origins in the mechanical field. These occupations include a variety of titles in the areas of drafting, production, testing, design and analysis, to name a few. Employment in the mechanical field should be quite good with job opportunities growing as fast as average nationally and in the state of Ohio. The largest need for mechanical engineering technicians will be in manufacturing, with companies continually wanting new or improved machinery.

## PROGRAM LEARNING OUTCOMES

Students earning an Associate degree from this program should demonstrate:

1. Proficiency in manipulating Computer-Aided-Design (CAD) software, in a hands-on environment.
2. Basic knowledge of operating systems, networking, and computer hardware
3. Proficiency in design concepts, orthographic projection, dimensioning practices, and blueprint reading.
4. Basic knowledge of common manufacturing processes.
5. Knowledge of reading and operating precision measuring devices and instruments.
6. Knowledge of the physics of fluids, components, troubleshooting and design applications for hydraulic and pneumatic systems.
7. Knowledge of the basic physical and chemical properties of common engineering materials and their design considerations.
8. Knowledge of the resolution of forces on rigid bodies and how to calculate stress, strain, and deflection.

| First Semester |  |  | Credits |
| :---: | :---: | :---: | :---: |
| + | CAD111 | CAD I .............................................. |  |
|  | ENG111 | Composition I. | 3 |
|  | IET105 | Industrial Computing I** ..................... | 3 |
|  | MET103 | Applied Geometry \& Trigonometry ...... | 3 |
|  | MET110 | Print Reading \& Sketching ................... | 3 |
|  | MTH109 | College Algebra .................................. | 3 |
|  |  |  | 19 |
| Second Semester |  |  | Credits |
| + | CAD112 | CAD II .. | 4 |
|  | ENG112 | Composition II. | 3 |
|  | MTH112 | Trigonometry .................................... | 3 |
|  | PET110 | Principles of Plastics .......................... | 4 |
|  |  | General Studies Elective ....................... | 3 |
|  |  |  | 17 |
| Third Semester |  |  | Credits |
|  | QCT141 | Precision Measurement ........................ | 3 |
|  | MET232 | Industrial Fluid Power I | 3 |
|  | PHY251 | Physics: Mechanics \& Heat .................. | 4 |
|  | MET235 | Statics | 3 |
|  | MET234 | Strength of Materials . | 3 |
|  |  | Humanities Elective ............................ | 3 |
|  |  |  | 19 |
| Fourth Semester |  |  | Credits |
|  | MET134 | Engineering Materials .......................... | 3 |
|  | MET265 | Machine Design | 3 |
| + |  | Technical Elective .............................. | 3 |
|  |  | Science Elective . | 4 |
|  |  | Social/Behavioral Science Elective ... | $\underline{3}$ |
|  |  |  | 16 |
| Technical Electives: |  |  |  |
|  | CAD213 | CAD III |  |
|  | EET240 | Engineering Programming |  |
|  | QCT243 | Advanced Quality Improvement |  |
|  | MET252 | Industrial Fluid Power II |  |
|  | MET290 | Eng. Tech. Co-Op/Internship |  |
|  | EET171 | Industrial Electricity I |  |

** Prior to taking IET105, students should have basic computer literacy in Windows and at least one Windows application.

+ Students must attain a minimum grade of "C" in all courses with a '+' to progress in the program and to graduate.


# Associate of Applied Science in Instrumentation Technology <br> Automation \& Controls Concentration 

\begin{tabular}{|c|c|c|c|}
\hline \multirow[t]{3}{*}{The Industrial Automation Engineering Technology program is a new two year degree program.} \& \multicolumn{2}{|l|}{First Semester} \& Credits <br>
\hline \& + CAD111 \& CAD I \& 4 <br>
\hline \& ENG111 \& Composition I \& 3 <br>
\hline \multirow[t]{4}{*}{The market today divides employees in the electrical field in two distinct areas: Industrial Electrical (installation \& troubleshooting), and Industrial Automation (design and application).} \& \multirow[t]{2}{*}{$+\quad$ IET105

MTH109} \& Industrial Computing I** \& 3 <br>
\hline \& \& College Algebra . \& 3 <br>
\hline \& + EET171 \& Industrial Electricity I \& 3 <br>
\hline \& \& Social/Behavioral Science Elective ........... \& $\underline{3}$ <br>
\hline \multicolumn{3}{|l|}{The Industrial Automation program will allow students to apply technology such as Industrial Networking, Programmable Controllers, Instrumen-} \& 19 <br>
\hline tation, Robotics and Automated Controls to solve problems in the manu- \& \multicolumn{2}{|l|}{Second Semester} \& Credits <br>
\hline \& + EET240 \& Engineering Programming ..................... \& 3 <br>
\hline program in the OEM (original equipment manufacturers) and System \& + EET272 \& CISCO Networking I ........................... \& 4 <br>
\hline Integrator market. This is an excellent program for upgrading the skill level \& ENG112 \& Composition II ................. \& 3 <br>
\hline of the Engineering and Maintenance personnel in the Industrial Automation \& MTH112 \& Trigonometry ... \& 3 <br>
\hline field that are currently working in the industry. \& + EET194 \& Industrial Electricity II ........................ \& 3 <br>
\hline \& \& Humanities Elective ............................ \& $\underline{3}$ <br>
\hline Career Outlook \& \& \& 19 <br>
\hline \multirow[t]{3}{*}{The career outlook for workers in the Automation and Robotics field is tremendous. The skilled workers in manufacturing are in high demand.} \& \multicolumn{2}{|l|}{Third Semester} \& Credits <br>
\hline \& + IET107 \& Industrial Computing II ....................... \& 3 <br>
\hline \& PHY251 \& Physics: Mechanics \& Heat .................. \& 4 <br>
\hline PROGRAMLEARNING OUTCOMES \& + PLC200 \& Programmable Controller I ................... \& 3 <br>
\hline \multirow[t]{2}{*}{Students earning an Associate degree from this program should demonstrate:} \& \multirow[t]{2}{*}{+ EET265} \& Instrumentation \& Controls I ................ \& 3 <br>

\hline \& \& General Studies Elective ... \& $$
\frac{3}{16}
$$ <br>

\hline 1. Electrical symbols and abbreviations \& \& \& <br>
\hline 2. Print reading and documentation \& \multicolumn{2}{|l|}{Fourth Semester} \& Credits <br>
\hline 3. Wiring techniques \& + PLC210 \& Programmable Controller II ................... \& 3 <br>
\hline 4. Troubleshooting and analysis \& PLC220 \& Programmable Controller III ................ \& 3 <br>
\hline 5. Electrical measurements and calculations \& + PLC230 \& Servo/Robotic Systems \& 3 <br>
\hline 6. Electrical control symbols \& +

+ \& Instrumentation \& Controls II $\qquad$ Technical Elective \& 3 <br>
\hline 7. Electrical power systems \& \& Science Elective ................................................. \& 3 <br>
\hline 8. Industrial computing \& \& \& 18 <br>
\hline 9. Systems component storage \& \& \& <br>
\hline
\end{tabular}


## Technical Electives:

Any EET, CAD, QCT or MET course
** Prior to taking IET105, students should have basic computer literacy in Windows and at least one Windows application

+ Students must attain a minimum grade of "C" in all courses with a ' + ' to progress in the program and to graduate.


# Associate of Applied Science in Mechanical Engineering Technology CAD/CAM Concentration 

| The CAD/CAM graduate will earn an Associate of Applied Science degree in the Mechanical Engineering Technology. Students completing the associate degree are qualified to play a support role to the engineering professionals in industry preparing blueprints, layouts, bills of materials, manufacturing and product support documentations. The CAD/CAM major will also prepare the student to interpret designs and to design components and tooling used in manufacturing and to operate production machines and program CNC machines, using G Codes and state-of-the-art CAM software. | First Semester |  | Credits |
| :---: | :---: | :---: | :---: |
|  | CAD111 | CAD I | 4 |
|  | ENG111 | Composition I | 3 |
|  | + IET105 | Industrial Computing I** | 3 |
|  | MET103 | Applied Geometry \& Trigonometry ...... | 3 |
|  | + MET110 | Print Reading \& Sketching ... | 3 |
|  | + MET122 | Principles of Machining . | 3 |
|  |  |  | 19 |
|  | Second Semester |  | Credits |
| Career Outlook | CAD112 | CAD II | 4 |
| Job seekers who have a two-year degree should have the best prospects for employment. With the shortage of skilled Metalworkers in the US today, the job opportunities are really good for the CAD/CAM Technician. | ENG112 | Composition II | 3 |
|  | + MET150 | Tooling \& Fixtures | 3 |
|  | + MET222 | Programming Computer Numerical Cont | 3 |
|  | MTH109 | College Algebra .................................. | 3 |
| PROGRAMLEARNING OUTCOMES | + QCT141 | Precision Measurement | $\underline{3}$ |
| Students earning an Associate degree from this program should demonstrate: |  |  | 19 |
| 1. Proficiency in manipulating Computer-Aided-Design (CAD) | Third Semester |  | Credits |
| software, in a hands-on environment. | + CAD213 | CAD III ............................................ | 4 |
| 2. Basic knowledge of operating systems, networking, and computer hardware. | + MET223 | CAM I ................................................................................. | 4 |
| 3. Proficiency in design concepts, orthographic projection, dimen- | MTH112 | Trigonometry .................................... | 3 |
| sioning practices, and blueprint reading. | PHY251 | Physics: Mechanics \& Heat $\qquad$ General Studies Elective | 3 |
| 4. Basic knowledge of common manufacturing processes. |  | Humanities Elective ................................. | 3 |
| 5. Knowledge of reading and operating precision measuring devices and instruments. |  |  | 21 |
| 6. Knowledge of the physics of fluids, components, troubleshooting and design applications for hydraulic and pneumatic systems. | Fourth Semester |  | Credits |
|  | + MET260 | CAM II. | 3 |
| 7. Knowledge of the basic physical and chemical properties of common engineering materials and their design considerations. | + MET262 | CAD/CAM Project ............................................................... | 4 |
|  |  | Science Elective |  |
| 8. Knowledge of the resolution of forces on rigid bodies and how to |  | Social/Behavioral Science Elective .......... | 3 |
| calculate stress, strain, and deflection. | + | Technical Elective ............................... | 3 |


| Technical Electives: |  |
| :--- | :--- |
| MET232 | Industrial Fluid Power I |
| MET290 | Eng. Tech. Co-Op/Internship |
| PET110 | Principles of Plastics |
| EET171 | Industrial Electricity I |

** Prior to taking IET105, students should have basic computer literacy in Windows and at least one Windows application.

+ Students must attain a minimum grade of " C " in all courses with a '+' to progress in the program and to graduate.


## Computer Aided Design Certificate

The CAD one-year certificate program will prepare the student to create engineering drawings on the computer using CAD software.

The student can earn an associate degree in CAD/CAM by completing the equivalent of one year of full-time coursework beyond this certificate.

## Career Outlook

Graduates of this program may find employment as an entry-level CAD Technician or as a Detailer working under the direction of a design engineer.

Job opportunities for CAD technicians will remain stable with most of the positions occurring from replacing workers who leave the profession or retire.

## PROGRAMLEARNING OUTCOMES

Students earning a certificate from this program should demonstrate:

1. Knowledge of file handling and management.
2. Familiarity with computer software, CAD, computer hardware, and component terminologies.
3. Basic knowledge working with Cartesian coordinate system.
4. Knowledge of setup, display, drawing, inquiry, and modify commands.
5. Demonstrate ability of developing, modifying, and manipulating symbols, crosshatching, and various types of dimensioning.
6. Demonstrate a knowledge of inquiry commands and developing industrial-type detail and assembly drawings as well as plotting finished projects.

** Prior to taking IET105, students should have basic computer literacy in Windows and at least one Windows application.

+ Students must attain a minimum grade of "C" in all courses with a '+' to progress in the program and to graduate.


# Associate of Applied Science in Plastics Engineering Technology 

Plastics is one of the fastest growing manufacturing industries today. The Plastics program at Northwest State Community College was created in response to the industry demand in Northwest Ohio for employee training and student education in plastics manufacturing. Students will receive specialized training in thermoplastic materials, injection molding, and plastics testing. Graduates will also be skilled in various processes such as blow molding, extrusion, and thermoforming.

## Career Outlook

While consumer demand for convenient, plastic products increases, so will the need for highly-skilled plastics technicians. Job titles in this field can include Molding Technician, Production Supervisor, Design and Development, and Quality Control Technician to name a few. Employment of plastic processing workers is expected to grow as fast as the average both nationally and in the state of Ohio. An increase in workers trained in the field will stem from manufacturers substituting plastic parts for those that had been manufactured from metal in the past.

## PROGRAMLEARNING OUTCOMES

Students earning an Associate degree from this program should demonstrate:

1. Basic knowledge of polymers including history, current industry, recycling, types of polymers and properties.
2. Basic knowledge of common manufacturing processes used in the plastics industry.
3. Proficiency in design concepts, orthographic projection, dimensioning practices, and blueprint reading.
4. Knowledge of reading and operating precision measuring devices and the ability to apply SPC practices to various processes within the plastics industry.
5. Knowledge of the physics of fluids, components, troubleshooting and design applications for hydraulic and pneumatic systems.
6. Basic knowledge of the injection molding process and the ability to establish a production intent process and troubleshoot various defects.
7. Basic knowledge of the various properties associated with plastics and ability to perform functional tests used to determine properties.
8. Basic knowledge of common secondary operations used in the plastics industry primarily for assembly and decorating.


| Third Semester |  | Credits |
| :---: | :---: | :---: |
| + MET232 | Industrial Fluid Power I ...................... | 3 |
| + PET231 | Plastics Materials Testing ................... | 4 |
| PHY251 | Physics: Mechanics \& Heat .................. | 4 |
| + QCT100 | Quality Concepts ............................... | 3 |
| + | Plastics Elective ................................. | $\underline{4}$ |
|  |  | 18 |
| Fourth Semester |  | Credits |
| + PET250 | Plastics Secondary Operations .............. | 4 |
|  | Humanities Elective ............................ | 3 |
| + | Plastics Elective. | 4 |
|  | Social/Behavioral Science Elective .......... | 3 |
| + | TechnicalElective .......................... | $\underline{3}$ |
|  |  | 17 |
| Technical Electives: |  |  |
| CAD111 | CAD I |  |
| CAD112 | CAD II |  |
| MET265 | Machine Design |  |
| MET290 | Engineering Tech. Co-op/Internship |  |


| Plastics Electives: |  |
| :--- | :--- |
| PET220 | Advanced Injection Molding |
| PET225 | Extrusion, Blowmolding \& Thermoforming |
| PET240 | Injection Mold Tooling |

+ Students must attain a minimum grade of " $C$ " in all courses with a ' + ' to progress in the program and to graduate.


## Plastics Manufacturing Certificate

Plastics is one of the fastest growing manufacturing industries today. The Plastics program at Northwest State Community College was created in response to the industry demand in Northwest Ohio for employee training and student education in plastics manufacturing. Students will receive specialized training in thermoplastic materials, injection molding, and plastics testing. Graduates will also be skilled in various processes such as blow molding, extrusion, and thermoforming.

## Career Outlook

While consumer demand for convenient, plastic products increases, so will the need for highly-skilled plastics technicians. Job titles in this field can include Molding Technician, Production Supervisor, Design and Development, and Quality Control Technician to name a few. Employment of plastic processing workers is expected to grow as fast as the average both nationally and in the state of Ohio. An increase in workers trained in the field will stem from manufacturers substituting plastic parts for those that had been manufactured from metal in the past.

## PROGRAMLEARNING OUTCOMES

Students earning a certificate from this program should demonstrate:

1. Basic knowledge of polymers including history, current industry, recycling, types of polymers and properties.
2. Basic knowledge of common manufacturing processes used in the plastics industry.
3. Proficiency in design concepts, orthographic projection, dimensioning practices, and blueprint reading.
4. Knowledge of reading and operating precision measuring devices and the ability to apply SPC practices to various processes within the plastics industry.
5. Knowledge of the physics of fluids, components, troubleshooting and design applications for hydraulic and pneumatic systems.
6. Basic knowledge of the injection molding process and the ability to establish a production intent process and troubleshoot various defects.
7. Basic knowledge of the various properties associated with plastics and ability to perform functional tests used to determine properties.
8. Basic knowledge of common secondary operations used in the plastics industry primarily for assembly and decorating.

| First Semester |  | $\frac{\text { Credits }}{3}$ |
| :---: | :---: | :---: |
| + MET110 P | Print Reading \& Sketching .................... |  |
| + PET110 P | Principles of Plastics ........................... | 4 |
|  | General Studies Elective .................. | 3 |
|  |  | 10 |
| Second Semester |  | Credits |
| MTH109 C | College Algebra .................................. | 3 |
| + PET210 I | Injection Molding .............................. | $\frac{4}{7}$ |
| Third Semester |  | Credits |
| MET103 App | Applied Geometry \& Trigonometry ...... | 3 |
| + PET240 I | Injection Mold Tooling ........................ | $\frac{4}{7}$ |
| Fourth Semester |  | Credits |
| + PET231 P | Plastics Materials Testing ..................... | 4 |
| + QCT100 Q | Quality Concepts ............................... | 3 |
| + P | Plastics Elective ................................. | $\frac{4}{11}$ |
| Plastics Electives: |  |  |
| PET220 | Advanced Injection Molding |  |
| PET225 | Extrusion, Blowmolding \& Thermoforming |  |
| PET231 | Plastic Materials Testing |  |
| PET250 | Plastics Secondary Operations |  |

+ Students must attain a minimum grade of "C" in all courses with a '+' to progress in the program and to graduate.


## Plastics Machine Maintenance Concentration

2008-2009

Polymers (Plastics) and Rubber is the number one industry in Ohio. This industry requires sophisticated production machinery. Maintenance Technicians are required to keep this type of machinery running. This program combines basic plastics courses as well as courses from the Industrial Maintenance programs.

The Associate of Technical Studies (ATS) degree is a recognized degree through the Ohio Board of Regents. The ATS is a customizable degree that is made up of two technical content areas, primarily for students that have educational goals that do not match traditional programs offered at NSCC. This degree is designed for a student who wishes to enter the field of Plastics Maintenance.

The degree consists of three different types of courses: General Courses (15 hrs.), Basic Courses ( 15 hrs. ) and Technical Courses ( $30-43 \mathrm{hrs}$.). The General Studies core of classes is required of all graduates of NSCC. The Basic Courses are courses that basically prepare students for the technical courses. The Technical Courses are made up of two types of classes: Plastics and Industrial Electrical.

If students wish to transfer on to a University for a Bachelor degree, they must have each course evaluated individually by the University.

This is an excellent program for employees who are currently working in the maintenance department of a plastic company, or an employee of a plastic company wishing to get into the maintenance department.

To sign up for this program or to customize your own ATS degree, the student should meet with the Dean of the Engineering Technology Division.

## PROGRAMLEARNING OUTCOMES

Students earning an Associate degree from this program should demonstrate:

1. Basic knowledge of polymers including history, current industry, recycling, types of polymers and properties.
2. Basic knowledge of common manufacturing processes used in the plastics industry.
3. Proficiency in design concepts, orthographic projection, dimensioning practices, and blueprint reading.
4. Knowledge of reading and operating precision measuring devices and the ability to apply SPC practices to various processes within the plastics industry.
5. Knowledge of the physics of fluids, components, troubleshooting and design applications for hydraulic and pneumatic systems.
6. Basic knowledge of the injection molding process and the ability to establish a production intent process and troubleshoot various defects.
7. Basic knowledge of the various properties associated with plastics and ability to perform functional tests used to determine properties.
8. Basic knowledge of common secondary operations used in the plastics industry primarily for assembly and decorating.


## Technical Electives:

See Division Dean for Technical Electives
** Prior to taking IET105, students should have basic computer literacy in Windows and at least one Windows application.

+ Students must attain a minimum grade of "C" in all courses with a '+' to progress in the program and to graduate.


# Associate of Applied Science Industrial Management Technology 

This program is designed to prepare graduates for careers as technicians, management trainees, or supervisors in manufacturing. Courses include a mixture of Business Management topics with an emphasis on Engineering Technologies.

## Career Outlook

Employment in Industrial Management Technicians and Electrical Engineering Technicians is expected togrow nationally and in the state of Ohio. The world is dependent on many types of electronic products and consumers continue to want newer and faster products. This need will ensure that manufacturers will continue to hire the technicians to improve the products.

## PROGRAMLEARNING OUTCOMES

Students earning an Associate degree from this program should demonstrate:

1. Basic knowledge of operating systems, networking, and computer hardware.
2. Proficiency in manipulating Computer-Aided-Design (CAD) software, in a hands-on environment.
3. Proficiency in design concepts, orthographic projection, dimensioning practices, and blueprint reading.
4. Basic knowledge of common manufacturing processes.
5. Knowledge of the physics of fluids, components, troubleshooting and design applications for hydraulic and pneumatic systems.
6. Basic knowledge of polymers including history, current industry, recycling, types of polymers, properties, and common manufacturing processes used in the plastics industry.
7. Knowledge of reading measuring devices and the ability to apply SPC practices to various processes within the plastics industry.


## Technical Electives:

CAD112 CAD II
MET134 Engineering Materials
MET232 Industrial Fluid Power
MET290 Engineering Tech. Co-Op/Internship
QCT141 Precision Measurement
QCT142 Advanced Concepts of GD\&T
PET110 Principles of Plastics

## Business Electives:

Refer to the Engineering Technologies cover sheet in this section.
** Prior to taking IET105, students should have basic computer literacy in Windows and at least one Windows application.

+ Students must attain a minimum grade of "C" in all courses with a ' + ' to progress in the program and to graduate.


## Quality Control Certificate

A Manufacturing Quality major prepares the student for a career as a Quality specialist (Supplier Quality Engineer, Green Belt, Mechanical Inspector, Quality Technician, Auditor, and similar roles).

Twenty-first century manufacturing operations link productivity to quality. Lean manufacturing quality concepts are essential to modern competiveness. Accordingly, persons seeking greater responsibility should consider the Quality curriculum.

This program of study prepares the student to sit for American Society for Quality Technician exam. ASQ certifications are widely recognized and favorably impact hiring and compensation decisions.

## Career Outlook

The greatest need for engineering technicians will be in manufacturing. Companies need improved machinery, up to date processes, and lean manufacturing methods to compete on a global basis. Quality skills apply during all phases of the product cycle - from concept to production to distribution and service.

ISO/TS/OHSAS certifications are becoming a common prerequisite for doing business, worldwide. This course of study imparts the skills needed to comply with many certification system requirements.
Skills learned in this course form a solid foundation on which to build if your goal is to become a Quality Assurance Manager, Quality Engineer, or Quality Auditor.

## PROGRAMLEARNING OUTCOMES

Students earning a certificate from this program should demonstrate:

1. Basic knowledge leading to quality from management, practitioner and customer perspectives.
2. Concentration on quality problem solving and process control tools.
3. Basic understanding of probability and philosophies espoused by Deming, Crosby, and Juran.
4. Basic knowledge of quality, measurement system analysis and control charting principles.
5. Proper selection and use of measuring tools for the feature based upon the print specification.
6. Proficiency for dealing with tolerance stacks, another layer of G D \& T.
7. Basic understanding of more complex quality improvement methods by studying at least three of the following topics:

Advanced SPC
Six Sigma Start-up
DOE: Screening Experiments
Measurement Systems Analysis
Problem solving.

| irst Semester |  |  | Credits |
| :---: | :---: | :---: | :---: |
| + | MET110 | Print Reading \& Sketching ................... | 3 |
|  | MTH109 | College Algebra ............................... | 3 |
| + | QCT100 | Quality Concepts ............................ | 3 |


| Second Semester |  |  | Credits |
| :--- | :--- | :--- | :---: |
| + | CAD100 | CAD for Machining .............................. | 3 |
| + | QCT131 | Quality for Lean Manufacturing ........... | 3 |
| + | IET105 | Industrial Computing I ${ }^{* *} \ldots . . . . . . . . . . . . .$. | $\underline{3}$ |
|  |  |  |  |


| Third Semester |  |  |
| :--- | :--- | :--- |
| $+\quad$ QCT141 | Precision Measurement ......................... | 3 |
| + | QCT243 | Advanced Quality Improvement ........... |
|  |  | 3 |
|  | General Studies Elective ..................... | $\underline{3}$ |
|  |  |  |
|  |  |  |


| Fourth Semester |  |  |  |
| :--- | :--- | :--- | :---: |
| + | PET110 | Principles of Plastics ............................. | 4 |
| + | QCT250 | Certified Quality Technician/ ................. | 3 |
|  |  | Certified Mechanical Inspector Review |  |
| + | QCT142 | Advanced Concepts of GD\&T ............. | $\underline{3}$ |
|  |  |  | 10 |

** Prior to taking IET105, students should have basic computer literacy in Windows and at least one Windows application.

+ Students must attain a minimum grade of "C" in all courses with a '+' to progress in the program and to graduate.

HVACR: Heating, Ventilating, Air Conditioning, and Refrigeration, as a technical discipline, has made its transition to the "high-tech" field. Modern environmental control equipment presently use advanced controls involving pneumatic, electro-mechanical and direct digital control technologies. Today, common HVAC-R applications include the use of computers and computer network interfaces to facilitate building/space climate control and monitoring. Presently, manpower shortages exist for qualified personnel (see http://www.mepatwork.com for additional information). Men and women wanting to enter this field must understand these advanced technologies, their controls and communications networks if they are to be successful in this changing field.

## Career Outlook

A wide variety of employment possibilities exist for those individuals who have training in the Climate Control field. HVAC-R Installers and Service Technicians are always needed to support companies involved in product sales and service. These skilled tradespersons work in residential, commercial and industrial settings keeping related equipment operational throughout the climate seasons. Refrigeration Journeymen work in commercial and industrial settings providing support for the food industry. Air Balance Specialists work with Environmental Engineers to test and adjust newly installed and existing HVAC-R systems. Systems Integrators unify various sub-systems involving the HVAC-R and Fire Control-Life Safety technologies under one common control.

## Upgrade to an Associate Degree

Get an Associate Degree in Quality Control, by creating a customized ATS (Associate of Technical Studies). See the Dean of Engineering Technologies for more details.

## PROGRAMLEARNING OUTCOMES

Students earning a certificate from this program should demonstrate:

1. Knowledge of electrical symbols and abbreviations.
2. Basic knowledge of operating systems, networking, and computer hardware.
3. Proficiency in design concepts, orthographic projection, dimensioning practices, and blueprint reading.
4. Knowledge of the physics of fluids, components, troubleshooting and design applications for hydraulic and pneumatic systems.


## Technical Electives:

Any EET, CAD, QCT or MET course
** Prior to taking IET105, students should have basic computer literacy in Windows and at least one Windows application.

+ Students must attain a minimum grade of "C" in all courses with a '+' to progress in the program and to graduate.


## Programmable Controller (PLC) Certificate

Programmable Controllers have been a portion of a number of two year degree programs in the past. The technology in this area is expanding at such a fast pace that companies across the country are now using hundreds of these units in their plants to control machinery. These units have replaced conventional relay controlled systems within the com mercial and industrial manufacturing plants.

With the rapid rate of technological change in the industrial automation field, and with an aging workforce, companies are looking for a set curriculum or certification that they can utilize as a tool for advancing current employees, and as a filtering process for hiring new employees. This curriculum can serve both needs.

This certificate prepares the student to install, maintain and troubleshoot industrial grade PLC systems.

## Career Outlook

Many diverse occupations find their origins in the mechanical field. These occupations include a variety of titles in the areas of drafting, pro- duction, testing, design and analysis, to name a few. Employment in the mechanical field should be quite good with job opportunities growing as fast as average nationally and in the state of Ohio. The largest need for mechanical engineering technicians will be in manufacturing, with companies continually wanting new or improved machinery.

## PROGRAMLEARNING OUTCOMES

Students earning a certificte from this program should demonstrate:

1. Knowledge of electrical symbols and abbreviations.
2. Basic knowledge of operating systems, networking, and computer hardware.
3. Proficiency in design concepts, orthographic projection, dimensioning practices, and blueprint reading.
4. Basic ladder logic programming, addressing, editing, and troubleshooting.

| First Semester | Credits |
| :---: | :---: |
| + EET171 Industrial Electricity I . | 3 |
| MTH080 Beginning Algebra ............................... | 3 |
|  | 6 |
| Second Semester | Credits |
| + EET194 Industrial Electricity II ......................... | 3 |
| + IET105 Industrial Computing I**. | 3 |
|  | 6 |
| Third Semester | Credits |
| + CAD111 CAD I .............................................. | 4 |
| + EET276 Motors \& Motor Controls ................... | $\underline{3}$ |
|  | 7 |
| Fourth Semester | Credits |
| + PLC200 Programmable Controller I ..................... | 3 |
| General Studies Elective ..................... | 3 |
|  | 6 |
| Fifth Semester | Credits |
| + EET265 Instrumentation \& Controls .................. | 3 |
| + PLC210 Programmable Controller II ................... | 3 |
|  | 6 |
| Sixth Semester | Credits |
| + EET240 Engineering Programming .................... | 3 |
| + PLC220 Programmable Controller III ................. | $\underline{3}$ |
|  | 6 |

** Prior to taking IET105, students should have basic computer literacy in Windows and at least one Windows application.

+ Students must attain a minimum grade of " $C$ " in all courses with a ' + ' to progress in the program and to graduate.


# Associate of Applied Science in Industrial Technology Industrial Electrician Concentration 


** Prior to taking IET105, students should have basic computer literacy in Windows and at least one Windows application.

+ Students must attain a minimum grade of "C" in all courses with a '+' to progress in the program and to graduate.


# Industrial Electrical Related Trades Certificate 

This program will focus on learning experiences for the student that will prepare he or she with the technical skills to work in the Industrial Electrical field in positions such as Industrial Electrician, Electrical Technician, Industrial Controls Technician, or Maintenance Technician. All of these courses apply toward the comparable associate degree.

Students in the program will be trained not only in traditional Electrician skills, but also how to operate and troubleshoot state-of-the-art programmable controller systems, solid state motor drives, instrument systems and industrial computer systems used by maintenance personnel in manufacturing and process plans.

Students will receive hands-on training on AC/DC motors, transformers, test equipment, basic hydraulic systems, and industrial wiring practices according to the National Electrical Code. Most of the technical classes will have $50 \%$ of the learning experience in the classroom, and the other $50 \%$ in the laboratory with hands-ontraining. This programfocuses on basic fundamentals so that graduates can also adapt to the continuous changes in technology.

## Career Outlook

As manufacturers invest in new highly technological equipment, the demand for the Industrial Electrician is great.

## PROGRAMLEARNING OUTCOMES

Students earning a certificate from this program should demonstrate:

1. Knowledge of electrical symbols and abbreviations.
2. Proficiency in basic electrical theory, motor starters, solenoid valves, various control devices, motor circuits, and variable frequency drivers.
3. Proficiency in the systematic elimination of the various parts of a system to locate a malfunctioning part safely but properly.
4. Basic knowledge of PLC control systems.
5. Knowledge of the physics of fluids, components, troubleshooting and design applications for hydraulic and pneumatic systems.

| First Semester | Credits |
| :---: | :---: |
| + EET171 Industrial Electricity I .......................... | 3 |
| MTH080 Beginning Algebra .............................. | $\underline{3}$ |
|  | 6 |
| Second Semester | Credits |
| + EET194 Industrial Electricity II ......................... | 3 |
| + IET105 Industrial Computing I ** ..................... | $\underline{3}$ |
|  | 6 |
| Third Semester | Credits |
| + EET174 Electrical Prints \& Troubleshooting ........ | 3 |
| + MET232 Industrial Fluid Power I ....................... | $\underline{3}$ |
|  | 6 |
| Fourth Semester | Credits |
| + EET276 Motors \& Motor Controls ................... | 3 |
| + PLC200 Programmable Controller I ................... | $\underline{3}$ |
|  | 6 |
| Fifth Semester | Credits |
| + EET277 Industrial Electronics ........................... | 3 |
| + PLC230 Servo/Robotics Systems ...................... | $\underline{3}$ |
|  | 6 |
| Sixth Semester | Credits |
| + EET265 Instrumentation \& Controls I ................ | 3 |
| General Studies Elective ...................... | $\underline{3}$ |
|  | 6 |
| Seventh Semester | Credits |
| + EET281 Industrial Wiring (NEC) ....................... | 3 |

** Prior to taking IET105, students should have basic computer literacy in Windows and at least one Windows application.

+ Students must attain a minimum grade of " $C$ " in all courses with a '+' to progress in the program and to graduate.


# Associate of Applied Science in Industrial Technology Maintenance Technician/Mechatronics Concentration 

The Industrial Maintenance Technician not only troubleshoots and repairs the most highly advanced industrial equipment, but is responsible for the lay-out and installation. This individual will be versed in electrical, hydraulics, pneumatics, pipefitting, welding, machine repair and installation as well as motor control systems, PLC control systems, Instrumentation Control networking and Servo Robotics.

## Career Outlook

Employers trying to stay competitive with an international marketplace are hard pressed to find a multi-crafted maintenance employee who can accomplish a multitude of vocational qualities (electrician, plumber, pipefitter, hydraulics and pneumatics specialists, HVACR, machine set-up, machine installer, welder, systems troubleshooter and control systems programming). This program will provide those employers with such a skilled professional.

## PROGRAMLEARNING OUTCOMES

Students earning an Associate degree from this program should demonstrate:

1. Knowledge of electrical symbols and abbreviations.
2. Proficiency in basic electrical theory, motor starters, solenoid valves, various control devices, motor circuits, and variable frequency drivers.
3. Proficiency in the systematic elimination of the various parts of a system to locate a malfunctioning part safely but promptly.
4. Basic knowledge of PLC control systems, analog instrumentation, and Servo robotics systems.
5. Knowledge of the physics of fluids, components, troubleshooting and design applications for hydraulic and pneumatic systems.

| First Semester |  |  | Credits |
| :---: | :---: | :---: | :---: |
| + | IET105 | Industrial Computing I ** ................. | 3 |
| + | EET171 | Industrial Electricity I .......................... | 3 |
|  | ENG111 | Composition I .................................... | 3 |
| + | MET110 | Print Reading \& Sketching ................... | 3 |
|  | MTH109 | College Algebra ...... | 3 |
|  |  | General Studies Elective ...................... | $\underline{3}$ |
|  |  |  | 18 |

Second Semester ..... Credits

+ EET194 Industrial Electricity II ..... 3
ENG112 Composition II ..... 3
+ MET143 Benchwork ..... 2
+ MET144 Machine Repair ..... 3
MET103 Applied Geometry \& Trigonometry ..... 3
Technical Elective ..... 17
$\begin{array}{ll}\text { Third Semester } \\ +\quad \text { MET232 Industrial Fluid Power I ........................ } & \text { Cre } \\ 3\end{array}$
+ MET181 Applied Welding Techniques ..... 3
+ EET276 Motors \& Motor Controls ..... 3
+ PLC200 Programmable Controller I ..... 3
+ MET133 Industrial Pipefitting ..... $\underline{3}$
Humanities Elective ..... 18

| Fourth Semester |  |  | Credits |
| :---: | :---: | :---: | :---: |
| + | EET265 | Instrumentation \& Controls I ............... | 3 |
| + | MET252 | Industrial Fluid Power II ..................... | 3 |
| + | PLC230 | Servo/Robotic Systems ........................ | 3 |
|  |  | Science Elective . | 4 |
|  |  | Social/Behavioral Science Elective ......... | 3 |
| + |  | Technical Elective .. | $\underline{3}$ |


| Technical Electives: |  |
| :--- | :--- |
| MET290 |  |
| PET110 | Engineering Tech. Co-op/Internship |
| Principles of Plastics |  |

** Prior to taking IET105, students should have basic computer literacy in Windows and at least one Windows application.

+ Students must attain a minimum grade of "C" in all courses with a '+' to progress in the program and to graduate.


## Industrial Maintenance Related Trades Certificate

The Industrial Maintenance Technician not only troubleshoots and repairs advanced industrial equipment, but is responsible for the lay-out and installation. This individual will be versed in electrical, hydraulics, pneumatics, pipefitting, welding, machine repair and installation as well as motor control systems and PLC control systems.

## Career Outlook

Many manufacturing companies across the country no longer employ segregated trades (electrician, millwright, machinist, etc.) Instead, they are moving to a multi-craft classification that will perform: electrical, mechanics, machining, welding, etc. Therefore, positions for general maintenance and industrial maintenance are currently in great demand.

## PROGRAMLEARNING OUTCOMES

Students earning a certificate from this program should demonstrate:

1. Knowledge of electrical symbols and abbreviations.
2. Proficiency in basic electrical theory, motor starters, solenoid valves, various control devices, motor circuits, and variable frequency drivers.
3. Proficiency in the systematic elimination of the various parts of a system to locate a malfunctioning part safely but promptly.
4. Basic knowledge of PLC control systems.
5. Knowledge of the physics of fluids, components, troubleshooting and design applications for hydraulic and pneumatic systems.


| Second Semester |  |  |  | Credits |
| :---: | :---: | :---: | :---: | :---: |
|  |  | MET103 | Applied Geometry \& Trigonometry ...... | 3 |
|  | + | IET105 | Industrial Computing I ** .................... | 3 |
|  | + | EET194 | Industrial Electricity II ...................... | $\underline{3}$ |
|  |  |  |  | 9 |


| Third Semester |  | Credits |  |
| :--- | :--- | :--- | :--- |
| + | MET143 | Benchwork ............................................ | 2 |
| + | MET181 | Applied Welding Techniques ............... | $\underline{3}$ |
|  |  |  |  |


| Fourth Semester |  |  | Credits |
| :--- | :--- | :--- | :---: |
| + | MET144 | Machine Repair .................................... | 3 |
| + | EET276 | Motors \& Motor Controls .................. | $\underline{3}$ |
|  |  |  |  |



| Sixth Semester |  | Credits |
| :--- | :--- | :---: |
| $+\quad$ PLC200 | Programmable Controller I...................... | 3 |
|  | General Studies Elective ................... | $\underline{3}$ |
|  |  |  |

+ Students must attain a minimum grade of " $C$ " in all courses with a '+' to progress in the program and to graduate.


# Associate of Applied Science in Industrial Technology Millwright Concentration 



[^8]+ Students must attain a minimum grade of " C " in all courses with a '+' to progress in the program and to graduate.


# Millwright Related Trades Certificate 

The Millwright is trained to install, dismantle, or move machinery and heavy equipment according to engineered plans, blueprints or other drawings. The skill level of the Millwright ranges from rigger, welder and machine repairman to fabricator, pipefitter and machine reconditioner.

## Career Outlook

Openings for Millwrights will be found in areas where manufacturing is high. Related vocations are also a possibility with pipefitters and riggers, machine repairmen, structural iron and steel workers being in high demand through the year 2012.

## PROGRAM LEARNING OUTCOMES

Students earning a certificate from this program should demonstrate:

1. Knowledge of basic print reading skills including dimensioning practices, and calculations, sketching including orthographic, isometric, sectional and auxiliary views.
2. Knowledge of basic machining principles using lathes, mills, drills, band saw, and various handtools.
3. Proficiency in machining and fabricating projects with an emphasis on safety, fixturing, feeds and speeds, tooling, precision, and accuracy.
4. Proficiency in welding with an emphasis on shielded metal arc (stick), oxy-acetylene, gas metal (MIG) and gas tungsten (TIG).
5. Knowledge of the physics of fluids, components, troubleshooting and design applications for hydraulic and pneumatic systems.


| Second Semester | Credits |  |
| :--- | :--- | :--- |
| MET103 Applied Geometry \& Trigonometry ....... |  | 3 |
| $+\quad$ MET110 | Print Reading \& Sketching .................. | $\underline{3}$ |

## Third Semester

## Credits

+ MET122 Principles of Machining ......................... 3
+ MET181 Applied Welding Techniques .................. $\underline{3}$ 6

| Fourth Semester |  |  |
| :--- | :--- | :--- |
| $+\quad$ MET144 | Machine Repair ...................................... | 3 |
| $+\quad$ MET232 | Industrial Fluid Power I ................... | 3 |
|  | General Studies Elective .................... | $\underline{3}$ |
|  |  |  |
|  |  |  |

$\frac{\text { Fifth Semester }}{+} \quad \frac{\text { Credits }}{2}$

+ MET221 Rigging\& Erecting ................................... 2
+ MET133 Industrial Pipefitting ............................. $\underline{3}$
5

| Sixth Semester |  | Credits |
| :--- | :--- | :--- |
| + | MET201 | Industrial Applied Physics ..................... |
| + | QCT141 | Precision Measurement .................... |

+ Students must attain a minimum grade of " C " in all courses with a '+' to progress in the program and to graduate.


# Associate of Applied Science in Industrial Technology Machining CNC Programming Concentration 



## Technical: Electives

MET227 Die Theory \& Design
MET228 Patternmaking Fundamentals
MET290 Engineering Tech. Co-op/Internship
Any EET or MET Course
** Prior to taking IET105, students should have basic computer literacy in Windows and at least one Windows application.

+ Students must attain a minimum grade of "C" in all courses with a '+' to progress in the program and to graduate.

The Machining Related Trades Certificate is designed to meet the needs of a diverse vocational audience. Whether your interest is in Computer Numerical Control Programming, Tool and Die Maker or Patternmaker this program is designed to prepare the learner for a number of advantages as a skilled tradesman.

CNC or Computer Numerical Control Machining has literally replaced the Machinist trade. You will be trained in the proper use of mills, drills and lathes, the latest in programming software as well as set-up and operational procedures of CNC equipment to produce a precision part.

As a Patternmaker trainee you will learn the most up-to-date technology needed to build a pattern. To obtain this skill level the learner will become knowledgeable of the properties of metals, precision measurement and the fundamentals of repairing molds and dies.

The Tool and Die Maker will learn how to create tools, dies and fixtures. This individual will gain a broad understanding of tooling by learning how to properly use mills, drills, lathes and other machining related equipment including non-traditional machining techniques such as the Electron Discharge Machine.

## PROGRAMLEARNING OUTCOMES

Students earning a certificate from this program should demonstrate:

1. Knowledge of basic print reading skills including dimensioning practices, and calculations, sketching including orthographic, isometric, sectional and auxiliary views.
2. Knowledge of basic machining principles using lathes, mills, drills, band saw, and various handtools.
3. Proficiency in machining and fabricating projects with an emphasis on safety, fixturing, feeds and speeds, tooling, precision, and accuracy.
4. Proficency in welding with an emphasis on shielded metal arc (stick), oxy-acetylene, gas metal (MIG) and gas tungsten(TIG).

| First Semester | Credits |  |
| :--- | :--- | :--- |
| $+\quad$ MET110 Print Reading \& Sketching ....................... | 3 |  |
|  | MTH080 | Beginning Algebra .......................... |
|  | $\underline{3}$ |  |


| Second Semester |  |  | Credits |
| :--- | :--- | :--- | :--- |
| MET103 |  | Applied Geometry \& Trigonometry ...... | 3 |
| + | IET105 | Industrial Computing I **................. | $\underline{3}$ |
|  |  |  | 6 |



| Fourth Semester | Cedits |  |
| :--- | :--- | :--- |
| $+\quad$ MET122 | Principles of Machining ......................... | 3 |
| + | QCT141 | Precision Measurement ..................... |
|  | $\underline{3}$ |  |


| Fifth Semester |  | Credits |
| :--- | :--- | :---: |
| $+\quad$ MET123 | Machining Processes II .......................... | 3 |
| $+\quad$ MET150 | Tooling \& Fixtures .......................... | $\underline{3}$ |
|  |  |  |

Sixth Semester

+ MET222 Programming Computer Numerical Control ..... 3
+ MET231 Metallurgy \& Heat Treatment ..... $\underline{2}$


## ** Prior to taking IET105, students should have basic computer literacy in Windows and at least one Windows application.

+ Students must attain a minimum grade of "C" in all courses with a ' + ' to progress in the program and to graduate.

The Associate of Technical Studies Degree program provides the student an opportunity to develop a tailor-made program of instruction which may include already learned skills, life experiences, and course credits from appropriate trade schools, colleges, and universities. Such program needs may not necessarily fit into traditional program offerings.

## Admission Requirements

Admission requirements will adhere to the full requirement of the College. Upon application, the student will be advised and counseled in a program which matches the student's interest and aptitude in so far as possible. High school records, equivalency exams, and Course Placement Test scores will be evaluated.

Students may apply for the ATS program by presenting their intent to the appropriate department Dean or Department Chair, who will assist them in planning an individualized program of study. The program may be denied if:

1. Standards are not comparable to other technologies offered at Northwest State Community College.
2. The proposed ATS program duplicates an existing technology offered at Northwest State Community College.

For cases in which the College does not offer technical courses needed to fulfill the degree requirements, cooperative arrangements may be entered into with approved public and private colleges, as well as accredited correspondence schools, vocational centers, and schools conducted by business and industry. Transfer credits, credits by examination, or credit by any other acceptable method in current use at NSCC may be granted.

## Graduation Requirements

Graduation requirements for the ATS program will adhere to the same requirements of any technical program at NSCC.

1. Minimum of 60 semester credit hours of coursework.
2. Fifteen credit hours in general education, including 8 credit hours in communication skills, and 6 credit hours in behavioral and social sciences as approved by the faculty advisor.
3. Fifteen credit hours in basic studies.
4. Thirty plus credit hours in technical studies of which 15 are to be concentrated in a single discipline. (This is the area of study where ATS students will have the greatest input to define their occupational goals.)
5. Minimum of 2.00 grade point average overall.
6. A minimum of 30 semester credit hours of supervised coursework after acceptance into the ATS program.
7. A maximum of 12 semester credit hours can be earned through portfolio assessment.

## Community and Workforce Development

Some things in life aren't that serious -- basket weaving and cartooning, for example. Other things, though, mean a lot -- career planning, supervisory skills, conflict resolution at work. The range, from cartoons to conflict, may look like a lot, but Northwest State's Community Service Division covers it all.

## Professional Continuing Education Credits

Whether you sell real estate or insurance, or practice law, the state requires you to earn continuing education credits. Northwest State offers approved classes for professionals in these areas. Keep your license current. Meet state requirements. Attend our continuing education classes for professionals in real estate, insurance, law, or accounting.

## Workforce Development

It's a competitive world out there -- and very competitive in the office across the hall. How do you stay sharp? What are the latest trends in computer training, management skills, and technical training? Are you current? Can you deal with difficult situations on the job? Confronting today's workplace issues and developing today's workplace skills can make a big difference in today's business climate. Northwest's workforce development seminars and technical training, basic or advanced, on-campus or at your company, can help you keep a competitive edge.

## Enterprise Ohio Network

Northwest State Community College Business and Industry Training Division is a member of the EnterpriseOhio Network. This network of 53 two-year college campuses across Ohio partners with Ohio employers to provide employee training, implement new technologies and improve quality and production. One phone call by business can access all of the training resources across the state. Call the Business and Industry Training Division at Northwest State to see how your company can get involved.

Our Business and Industry Training Division prides itself on meeting community needs. Call (419) 267-1332 for further information.

Two-Year Campuses in Partnership - Making Learning for the Workplace Count

The field of Allied Health and Public Service is growing rapidly. Northwest State has many programs to help you see yourself in a whole new way.

## Prerequisites

All students are required to demonstrate proficiencies in reading, writing, and mathematics based on scores on the assessment test or take the recommended classes. If you have not taken these tests, see the testing coordinator in room C104 for information or referral to testing.

Some courses listed in this program have specific prerequisites. See course descriptions for these prerequisites in the Course Description section of this publication.

## General Education

For Northwest State Core Requirements, see page 34. For the NSCC Transfer Module, see page 39.

## Course Sequence

This is a suggested sequence of course(s) for full-time students. If you are a part-time student or have transferred course(s) in from another school, you should generally complete the courses listed under semester 1 before moving on to semester 2, 3, then 4. Elective courses may be taken at any time. Please meet with your advisor if you need assistance to register. Your advisor can help you make any necessary changes to this recommended sequence.

| Humanities Electives for all majors in Allied and Public Service: |  |
| :--- | :--- |
| ENG223 | Interpretation of Literature |
| ENG230 | Children's Literature |
| ENG234 | Narrative Literature of the Old Northwest Territory |
| ENG250 | American Literature Through the Mid 19 $9^{\text {th }}$ Century |
| ENG251 | American Literature Since the Mid 19 ${ }^{\text {th }}$ Century |
| ENG260 | British Literature Through the 18 $8^{\text {th }}$ Century |
| ENG261 | British Literature $19^{\text {th }}$ Century to Present |
| HIS101 | US History Pre 1876 |
| HIS102 | US History Post 1876 |
| HIS203 | US Since 1945 |
| HIS210 | The Modern World |
| HUM209 | Humanities and Cultures: Ancient \& Medieval |
|  | Worlds |
| HUM210 | Humanities and Cultures: Renaissance to Present |
| PHI110 | Critical Thinking \& Logic |
| PHI201 | Introduction to Philosophy |
| PHI220 | Ethics in Health Care |
| PHI222 | Ethics in the Helping Professions |
| PHI230 | World Religions |

Humanities Electives for all majors in Allied and Public Service:

ENG230 Children’s Literature
ENG234 Narrative Literature of the Old Northwest Territory
ENG250 American Literature Through the Mid 19 ${ }^{\text {th }}$ Century

ENG260 British Literature Through the $18^{\text {th }}$ Century
ENG261 British Literature $19^{\text {th }}$ Century to Present
HIS101 US History Pre 1876
HIS102 US History Post 1876
HIS203 US Since 1945
HIS210 The Modern World
HUM209 Humanities and Cultures: Ancient \& Medieval Worlds
HUM210 Humanities and Cultures: Renaissance to Present
PHI110 Critical Thinking \& Logic
PHI201 Introduction to Philosophy

PHI222 Ethics in the Helping Professions
PHI230 World Religions

Math/Science Electives for Criminal Justice Majors:
BIO101 Principles of Biology
BIO115 Ecology
BIO131 Nutrition
BIO150 The Human Body
BIO180 Genetics
BIO210 Botany
BIO220 Zoology
BIO231 Anatomy \& Physiology I

| BIO232 | Anatomy \& Physiology II |
| :--- | :--- |
| BIO257 | Microbiology |
| CHM101 | Principles of Chemistry |
| CHM138 | Principles of Forensics |
| CHM256 | Principles of Biochemistry |
| MTH109 | College Algebra |
| MTH112 | Trigonometry |
| MTH213 | Calculus I |
| MTH214 | Calculus II |
| PHY101 | Principles of Physical Science |
| PHY140 | Astronomy |
| PHY150 | Geology |
| PHY251 | Physics: Mechanics \& Heat |
| PHY252 | Physics: Electricity \& Magnetism |
| STA220 | Statistics |

## Career Outlook for Teachers

Employment of preschool teachers and child-care workers is projected to grow about as fast as average. Qualified persons who are interested in this field will have little trouble finding employment.

## Career Outlook for Nurses

Nationally, and in the state of Ohio, employment of Registered Nurses is expected to grow. The number of middle-aged and elderly people who need more health care services is expected to rise rapidly. Home health care services will probably show the fastest growth area for Registered Nurses. Many people are choosing to stay home rather than go to a long-term care facility, and these individuals will need nurses highly skilled in doing complex tasks. Hospitals are the largest employers of Registered Nurses; however, with more patients recuperating at home, the largest future growth will probably be in outpatient care, especially in chemotherapy and rehabilitation.

# Associate of Applied Science in Early Childhood Development Child \& Family Specialist Concentration 

The Early Childhood Child \& Family Specialist major blends human services courses and early childhood pre-kindergarten courses to better prepare individuals for non-classroom support roles. This program emphasizes skills in interviewing, training, and communicating with diverse families.

The student must have day-time availability for field and laboratory placements. All students are required to have a recent medical statement, conviction statement, three references, and records check through Bureau of Criminal Investigation and Identification. The appropriate forms are available from ECD personnel and/or the Division Secretary. Specific program policies are stated in the ECD Student Handbook. Students must also show completion of standard first aid, community CPR, common childhood illness recognition, and child abuse and neglect training through additional college courses or approved community providers prior to graduation.

## PROGRAM LEARNING OUTCOMES

Students who complete the Child \& Family Specialist program will:

1. Identify cognitive, affective, and psycho-motor developmental characteristics of children 0-8, recognizing indicators of developmental delays and giftedness.
2. Identify basic concepts of learning theories that influence early childhood practices as well as describe the history of early childhood programs in the U.S.
3. Utilize technology to enhance instruction and productivity.
4. Demonstrate awareness of respected authors, experts, advocates of early childhood, and publications which address early childhood issues and themes nationally and locally.
5. Communicate effectively with parents and other educational professionals.
6. Utilize various public and private human service agencies in the community, the organizational structure of the agencies, and its function.
7. Demonstrate an awareness of the special needs and issues of a diverse population.
8. Demonstrate basic knowledge, techniques and skills used in the group counseling process.
9. Work with parents dealing with child rearing issues such as discipline, sibling relationships and nutrition.
10. Demonstrate the basic principles and practices of interviewing parents as well as crises intervention in human service and family settings.

## Computer Electives:

CIS114 Microsoft Applications or any 3 one credit hour computer courses.

## Humanities:

Select any humanities course listed on page 87.

| Fall Semester | Credits |
| :---: | :---: |
| + ECD100 Principles of Early Childhood Edu ........ | 2 |
| + ECD101 Child Development Lab ....................... | 2 |
| ENG111 Composition I .................................... | 3 |
| + HST101 Principles of Human Services ............... | 3 |
| PSY110 General Psychology ........................... | 3 |
| SSC101 Sociology ......................................... | $\underline{3}$ |
|  | 16 |
| Spring Semester | Credits |
| + EDU120 Guidance \& Classroom Management ..... | 3 |
| ENG112 Composition II .................................. | 3 |
| + HST105 Counseling Techniques ........................ | 3 |
| + HST112 Group Counseling .............................. | 3 |
| PSY210 Abnormal Psychology ........................ | $\underline{3}$ |
|  | 15 |
| Summer Semester | Credits |
| Computer Elective ............................................. | 3 |
| Fall Semester | Credits |
| + ECD150 Infant Toddler Development ................ | 2 |
| + EDU110 Child and Youth Health ....................... | 2 |
| + EDU220 Special Education ............................... | 3 |
| + EDU230 Family, School, Community ................. | 2 |
| + HST208 Interviewing Techniques ...................... | 3 |
| + HST212 Substance Abuse ................................ | $\underline{3}$ |
|  | 15 |
| Spring Semester | Credits |
| + ECD282 Child Care Field Experience ................. | 2 |
| ENG113 Speech .............................................. | 3 |
| HST242 Marriage \& Family ............................. | 3 |
| SSC210 Cultural Diversity ............................. | 3 |
| Humanities Elective ............................ | $\underline{3}$ |
|  | 14 |

## Summer Semester

Computer Elective

## Credits

3

| Fall Semester | Credits |
| :---: | :---: |
| + ECD100 Principles of Early Childhood Edu ........ | 2 |
| + ECD101 Child Development Lab | 2 |
| ENG111 Composition I. | 3 |
| + HST101 Principles of Human Services | 3 |
| PSY110 General Psychology | 3 |
| SSC101 Sociology | $\underline{3}$ |
|  | 16 |
| Spring Semester | Credits |
| + EDU120 Guidance \& Classroom Management ..... | 3 |
| ENG112 Composition II .................................. | 3 |
| + HST105 Counseling Techniques | 3 |
| + HST112 Group Counseling | 3 |
| PSY210 Abnormal Psychology ......................... | 3 |
|  | 15 |
| Summer Semester | Credits |
| Computer Elective ............................................. | 3 |
| Fall Semester | Credits |
| + ECD150 Infant Toddler Development ................ | 2 |
| + EDU110 Child and Youth Health ........................ | 2 |
| + EDU220 Special Education ..... | 3 |
| + EDU230 Family, School, Community ................. | 2 |
| + HST208 Interviewing Techniques ...................... | 3 |
| + HST212 Substance Abuse ................................ | $\underline{3}$ |
|  | 15 |
| Spring Semester | Credits |
| + ECD282 Child Care Field Experience ................. | 2 |
| ENG113 Speech .............................................. | 3 |
| HST242 Marriage \& Family ............................. | 3 |
| SSC210 Cultural Diversity .............................. | 3 |
| Humanities Elective ............................ | $\underline{3}$ |
|  | 14 |

## Spring Semester <br> Credits

+ ECD282 Child Care Field Experience ..... 2
ENG113 Speech ..... 3
HST242 Marriage \& Family ..... 3
SSC210 Cultural Diversity ..... 3
Humanities Elective ..... 3
$+\quad$ Refers to technical coursework
+ Students must attain a minimum grade of "C" in these technical courses to graduate.


# Associate of Applied Science in Early Childhood Development Pre Kindergarten Concentration 

The Early Childhood Development (ECD) Associate Degree program prepares individuals for teaching positions in child care facilities, Head Start centers, and Pre-Schools as well as provides professional training for in-home child care providers. The curriculum integrates classroom and laboratory experiences to provide the student with the opportunity to apply skills and techniques in fostering the young child's social, emotional, physical, creative, and cognitive growth.

This program is approved by the Ohio Department of Education for the Pre-Kindergarten Associate License. This license is the minimum certification required of those teaching preschool classes in public school systems and Head Start classrooms. An ECD student who wishes to be recommended for the license must formally apply for admission to the Pre-K Associate License program and meet the criteria of the program as stated in the ECD Student Handbook. Students must also show completion of standard first aid, community CPR, common childhood illness recognition, and child abuse and neglect training through additional college courses or approved community providers.

The student must have day-time availability for field and laboratory placements. Community preschools and child care centers are used for laboratory placements.. All students are required to have a recent medical statement, conviction statement, three references, and records check through Bureau of Criminal Investigation and Identification. The appropriate forms are available from ECD personnel and/or the Division Secretary. Specific program policies are stated in the ECD Student Handbook.

## PROGRAM LEARNING OUTCOMES

Students who complete the Pre-Kindergarten program will:

1. Identify cognitive, affective, and psycho-motor developmental characteristics of children 0-8, recognizing indicators of developmental delays and giftedness.
2. Identify basic concepts of learning theories that influence early childhood practices as well as describe the history of early childhood programs in the U.S
3. Utilize technology to enhance instruction and productivity.
4. Demonstrate awareness of respected authors, experts, advocates of early childhood, and publications which address early childhood issues and themes nationally and locally.
5. Communicate effectively with parents and other educational professionals.
6. Plan, organize and implement language arts, science, math, social studies and fine arts curriculum for preschool age children based in best practices identified by the field.
7. Apply positive approaches in behavior and guidance of young children in group settings supporting independence, self-reliance, creativity, and social skills in one-to-one, small group, and large group situations.
8. Provide for basic health, safety, and physical growth needs of children in group settings.
9. Create and modify environments to accommodate needs of diverse group of learners, including children with special needs.
10. Assess the development of young children using a variety of informal and formal methods.
11. Analyze concepts of leadership, management, and teaching within the ethical-legal education standards, both state and nationally.

| Fall Semester |  | Credits |  |
| :--- | :--- | :--- | :--- |
| + | ECD100 | Principles of Early Childhood Edu ......... | 2 |
| + | ECD101 | Child Development Lab ...................... | 2 |
|  | ECD150 | Infant Toddler Development ................ | 2 |
| + | EDU100 | Introduction to Teaching ........................ | 2 |
|  | EDU110 | Child and Youth Health .................... | 2 |
|  | ENG111 | Composition I..................................... | 3 |
| + | PSY230 | Human Growth and Development ........ | $\underline{3}$ |



| Summer Semester | Credits |  |
| :---: | :---: | :---: |
| CIS114 | Microsoft Applications .......................... | 3 |
|  | Humanities Elective ........................ | $\underline{3}$ |
|  |  | 6 |


| Fall Semester | Credits |
| :---: | :---: |
| + ECD202 Early Childhood Diversity Lab ............. | 3 |
| + EDU220 Special Education ............................... | 3 |
| + EDU230 Family, School, Community ................. | 2 |
| + EDU240 Educational Psychology ...................... | 3 |
| ENG112 Composition II .................................. | 3 |
| SSC210 Cultural Diversity .............................. | $\underline{3}$ |
|  | 17 |
| Spring Semester | Credits |
| + ECD250 Early Childhood Program Adm ............. | 3 |
| + ECD290 PreKindergarten Practicum ................... | 3 |
| + EDU250 Education Seminar .............................. | 2 |
| + EDU260 Instructional Technology ..................... | 3 |
| ENG113 Speech | $\underline{3}$ |
|  | 14 |

ODE Pre-K Associate License requires grade of "B" or higher in ECD101, ECD201, ECD202, and ECD290.

Humanities Elective:
Select any humanities course listed on page 87.

Students must attain a minimum grade of " C " in all courses to Progress in the program and graduate.

[^9]
# Associate of Applied Science in Early Childhood Development Program Administrator Concentration 

This major in the Early Childhood Development (ECD) Associate Degree program is designed specifically for the individual who wants to provide child care services through ownership and /or management of a child care program. The degree blends the Early Childhood Pre-Kindergarten courses, emphasizing growth and development of the child from birth to age 8, with business courses emphasizing good management and supervision practices. Many preschool teachers who advance to director positions will find this technology helpful in making the transition from classroom teacher to program manager.

The student must have day-time availability for field and laboratory placements. All students are required to have a recent medical statement, conviction statement, three references, and records check through Bureau of Criminal Investigation and Identification. The appropriate forms are available from ECD personnel and/or the Division Secretary. Specific program policies are stated in the ECD Student Handbook. Students must also show completion of standard first aid, community CPR, common childhood illness recognition, and child abuse and neglect training through additional college courses or approved community providers prior to graduation.

## PROGRAM LEARNING OUTCOMES

Students who complete the ECD Program Administrator program will:

1. Identify cognitive, affective, and psycho-motor developmental characteristics of children 0-8, recognizing indicators of developmental delays and giftedness.
2. Identify basic concepts of learning theories that influence early childhood practices as well as describe the history of early childhood programs in the U.S.
3. Utilize technology to enhance communication and productivity.
4. Demonstrate awareness of respected authors, experts, advocates of early childhood, and publications which address early childhood issues and themes nationally and locally.
5. Support staff who plan, organize and implement language arts, science, math, social studies and fine arts curriculum appropriate for children from birth through school age.
6. Apply and promote positive approaches in behavior and guidance of young children in group settings, maintaining self-control and even temperament in difficult situations with children, parents, and other professionals.
7. Maintain an environment and polices reflecting standards of nutrition, health, and safety in daily activities for staff and children as well as to accommodate needs of children with special needs.
8. Exhibit appropriate written and verbal skills in Communications with the public administrators, families, staff and children.
9. Use evaluation methods and critical thinking to assess Program and staff effectiveness.
10. Act decisively, competently, and responsibly with administrative policies, finances, records, staff, and schedules.
> 11. Advocate the specialness of childhood, demonstrating a commitment to children within the program and community and an awareness of the current professional, legal, and social issues facing early childhood.
> 12. Act responsibly in applying regulations governing children in group settings.

| Fall Semester | Credits |
| :---: | :---: |
| + ECD100 Prin. of Early Childhood Education ....... | 2 |
| + ECD101 Child Development Lab ...................... | 2 |
| ECD150 Infant Toddler Development ................ | 2 |
| + EDU100 Introduction to Teaching ..................... | 2 |
| + EDU110 Child and Youth Health . | 2 |
| ENG111 Composition I.. | 3 |
| + PSY230 Human Growth and Development ......... | 3 |
|  | 16 |
| Spring Semester | Credits |
| CIS114 Microsoft Applications ....................... | 3 |
| + ECD250 Early Childhood Program Adm ............. | 3 |
| + EDU120 Guidance \& Classroom Mgt ................. | 3 |
| ENG112 Composition II .................................. | 3 |
| + MGT110 Management ..................................... | $\underline{3}$ |
|  | 15 |
| Fall Semester | Credits |
| BUS110 Business Math \& Calculators ............... | 3 |
| + EDU230 Family, School, Community ................. | 2 |
| + MGT210 Human Resource Management .............. | 3 |
| + Business Elective ............................... | 3 |
| Humanities Elective ............................ | 3 |
| Social/Behavioral Science Elective ......... | $\underline{3}$ |
|  | 17 |
| Spring Semester | Credits |
| ACC102 Office Accounting ............................... | 4 |
| + ECD291 Administrative Internship .................... | 3 |
| ENG113 Speech .............................................. | 3 |
| + MGT221 Entrepreneurship ............................... | $\underline{3}$ |
|  | 13 |

## Business Electives: For ECD Majors Only

| BUS221 | Business Law I |
| :--- | :--- |
| BUS250 | Labor Relations |
| ECO211 | Macroeconomics |
| ECO212 | Microeconomics |
| MKT110 | Marketing |
| MKT230 | Salesmanship |

## Humanities Elective:

Select any humanities course listed on page 87.

+ Refers to technical coursework
+ Students must attain a minimum grade of " C " in these technical courses to graduate


# Associate of Applied Science in Paraprofessional Education 

The Paraprofessional Education Associate Degree program prepares individuals for instructional teacher assistant positions in Pre-K to grade 12 settings. The program was developed to meet the Ohio Department of Education standards for the Paraprofessional Associate License. This license meets the "No Child Left Behind" guidelines for "highly qualified" paraprofessionals. The curriculum integrates classroom and laboratory experiences to provide the student with the opportunity to apply skills and techniques with multiple age groups.

The program has approval from the Ohio Board of Regents and the Ohio Department of Education. A student who wishes to be recommended for the Paraprofessional Associate License must meet the criteria of the program as stated in the Paraprofessional Student Handbook. Students must also show completion of standard first aid training, community CPR, common childhood illness recognition and child abuse and neglect training through additional college courses or approved community providers to be eligible for licensure

All students are required to have a recent medical statement, conviction statement, three references, and records check through Bureau of Criminal Investigation and Identification. The appropriate forms are available from Education faculty and/or the Division Secretary. Specific program policies are stated in the Paraprofessional Student Handbook.

## PROGRAM LEARNING OUTCOMES

Students who complete the Paraprofessional Educator program will:

1. Perform clerical and organizational tasks.
2. Assist with classroom management.
3. Provide specific personal care for students with special needs.
4. Operate audio-visual equipment and computer technologies to support instruction.
5. Implement teacher designed instruction with individual students, small groups, and large groups.
6. Provide tutoring to individual students in basic reading, writing, and math skills.
7. Write observations and conduct simple assessments under supervision of classroom teacher.
8. Demonstrate ethical and professional behavior consistent with the role of para-educator.

## Natural /Physical Science Elective:

Select any course with a BIO, CHM, or PHY prefix.

| Fall Semester |  |  | Credits |
| :---: | :---: | :---: | :---: |
|  | CIS114 | Microsoft Applications ....................... | 3 |
| + | EDU100 | Introduction to Teaching | 2 |
| + | EDU110 | Child and Youth Health | 2 |
|  | ENG111 | Composition I.. | 3 |
|  | PSY110 | General Psychology ........................... | 3 |
|  |  | Natural/Physical Science Elective ......... | 4 |
|  |  |  | 17 |



| Fall Semester |  |  | Credits |
| :---: | :---: | :---: | :---: |
| + | EDP200 | Special Education Lab Experience .......... | 2 |
| + | EDU220 | Special Education | 3 |
| + | EDU230 | Family, School, Community ................. | 2 |
| + | EDU240 | Educational Psychology ...................... | 3 |
|  | ENG214 | Discussion \& Conference Methods ....... | 3 |
|  | SSC210 | Cultural Diversity .............................. | $\underline{3}$ |
|  |  |  | 16 |


| Spring Seme |  | Credits |
| :---: | :---: | :---: |
| + EDP290 | Paraprofessional Internship ................. | 2 |
| + EDU210 | Creative Arts Curriculum | 3 |
| + EDU250 | Education Seminar | 2 |
| + EDU260 | Instructional Technology ...... | 3 |
| + MTH170 | Survey of Mathematics ....................... | 3 |
| PHI110 | Critical Thinking \& Logic ................ | $\underline{3}$ |
|  |  | 16 |

Students must attain a minimum grade of " $C$ " in all courses to progress in the program and to graduate. No course substitutions permitted in this program if planning to be eligible for the Ohio Department of Education Educational Paraprofessional Associate License.

For an ODE Paraprofessional Associate License, students must have a grade of "B" or higher in EDP150, EDP200, and EDP290.

+ Refers to technical coursework.

The Human Services program provides a foundation in social and behavioral sciences which will prepare students for challenging work in a variety of social services and correctional settings. The program is designed to integrate classroom work with practical, hands-on experience through method classes and practicums. These courses involve students in a supervised training and field placement experience in community social service agencies. The program meets the standards for the State of Ohio Counselor, Social Worker and Marriage \& Family Therapist Board certification as a Social Work Assistant and Chemical Dependency certification.

Students must meet all program requirements outlined in the Human Services Student Handbook to be eligible for certification. The student must have day-time availability for field placements.

## Career Outlook

The need for Social Work Assistants is increasing at both the national and state level. As the older adult population increases, so will the need for increased social services to meet the demand. As crime rates, homelessness and substance abuse problems increase, so will the need for Social Work Assistants in a variety of settings. The field has seen an increase in community based services for vulnerable populations such as the mentally ill and developmentally disabled. As social service agencies become more aware of the skill level and competence of Social Work Assistants, we have seen an increase in employment, which is expected to continue.

## PROGRAM LEARNING OUTCOMES

Graduates will be able to demonstrate the following skills / behaviors.

1. Develop an eclectic knowledge base that draws from the social and behavioral sciences and Social Work theories.
2. Demonstrate effective counseling skills necessary for working with clients at the micro, mezzo \& macro levels, including a repertoire of verbal responses, non-verbal behavior, facilitative relationships and entry level generalist practice skills.
3. Develop problem solving skills by learning to apply and analyze client problems/strengths utilizing a variety of paradigms, models, and critical thinking skills.
4. Identify and apply ethical standards of practice utilizing professional codes of ethics to assist in resolving ethical dilemmas.
5. Demonstrate understanding of how to utilize community resources when referring clients for services at community agencies.
6. Integrate and apply knowledge of diversity when working with populations at risk for social \& economic injustices so as to develop culturally sensitive interventions.
7. Demonstrate appropriate assessment, documentation, and record keeping skills as per standards of practice in Human Service settings.
8. Demonstrate work readiness skills, including but not limited to, timeliness, personal responsibility, ability to follow directives, meet deadlines and the ability to cooperate and perform as a team player with faculty, students, and in practicum settings.

| First Semester |  |  | $\frac{\text { Credits }}{3}$ |
| :---: | :---: | :---: | :---: |
|  | ENG111 | Composition I .................................... |  |
| + | HST101 | Principles of Human Services .............. | 3 |
| + | HST108 | Principles of Mental Retardation \& Developmental Disabilities or |  |
| + | CJT130 | Criminal Justice Principles ................... | 3 |
|  | HST212 | Substance Abuse ................................ | 3 |
|  | PSY110 | General Psychology ........................... | 3 |
|  | SSC101 | Sociology ......................................... | $\underline{3}$ |
|  |  |  | 18 |
| Second Semester |  |  | Credits |
|  | CIS114 | Microsoft Applications ....................... | 3 |
|  | ENG112 | Composition II .................................. | 3 |
| + | HST105 | Counseling Tech w/ Diverse Pop .......... | 3 |
| + | HST112 | Group Counseling .............................. | 3 |
| + | PSY210 | Abnormal Psychology ........................ | 3 |
|  | PSY230 | Human Growth and Development ......... | $\underline{3}$ |
|  |  |  | 18 |

Third Semester Credits

+ HST208 Interviewing Techniques ..... 3
+ HST210 Human Services Methods ..... 6
+ HST240 Social Problems ..... 3
PHI222 Ethics in the Helping Profession ..... 3
SSC210 Cultural Diversity ..... 318
Fourth Semester ..... Credits
+ HST214 Human Services Case Management ..... 3
+ HST242 Marriage and Family ..... 3
+ HST290 Practicum I ..... 6
Math/Science Elective ..... 15
Additional MR/DD Classes:
HST220 Principles of WorkMath/Science Electives:
BIO101 Principles of BiologyBIO150 The Human Body
BIO180 GeneticsBIO210 Botany
BIO220 Zoology
BIO231 Anatomy \& Physiology I
BIO232 Anatomy \& Physiology II
BIO257 Microbiology
CHM101 Principles of Chemistry
MTH109 College Algebra
MTH112 Trigonometry
PHY101 Principles of Physical Science
STA220 Statistics
+ Students must attain a 2.00 grade point average in each of these courses to graduate.
ALL coursework must be completed with a minimum grade of "C" or higher for state licensure.


# Associate of Applied Science in Criminal Justice Technology Corrections, Probation \& Parole Concentration 

The Criminal Justice Corrections, Probation \& Parole major is designed to prepare students for careers in corrections and probation. Graduates will be prepared to work with offenders in supervised environments, group homes, drug centers, detention centers, probation departments, juvenile institution, jails and prisons. Upon completion of the two-year program, students will graduate with an Associate degree in Applied Science.

Students who have prior felony convictions may be excluded from numerous criminal justice career opportunities. Students, who have prior misdemeanor charges or excessive civil infractions, including traffic citations, may be denied an opportunity for employment within the criminal justice field. In addition, students should note that the people they associate with may inhibit the College from finding an adequate internship. Policies regarding the criminal justice program are available in the Criminal Justice Student Handbook. All students entering the program must adhere to the regulations within the handbook as well as the division's Substance Abuse Policy.

## Career Outlook

Employment of corrections officers is expected to grow faster than the average through the year 2016, both nationally and in the state of Ohio. Reduced parole and longer prison terms are keeping inmates incarcerated for longer periods of time, while at the same time there has been an increase in the number of people being convicted of crimes. The outlook of parole and probation officers will remain stable and is often dependent on government funding. Jobs for parole and probation officers are usually more abundant in small towns and rural areas.

## PROGRAM LEARNING OUTCOMES

At the completion of the program students will be able to:

1. Have a general understanding and appreciation of the role of the CJ system at local, state, and federal levels.
2. Demonstrate knowledge of appropriate codes of professional Ethics and the capability to critically and reflectively engage ethical issues in CJ, particularly questions of social responsibility and professional decision-making.
3. Demonstrate knowledge of the theories, principles, and practices of criminal justice, including constitutional principles, judicial and correctional processes, legal institutions, and methods of law enforcement.
4. Have a sound basic education in CJ for graduates who choose to pursue a bachelor's degree.

## Humanities Elective:

Select any humanities course listed on page 87.

## Computer Elective:

Any 3 credit hour or 3 one credit hour computer course(s).

Math/Science Elective:
See Page 87 for list of courses
+Students must attain a 2.00 grade point average in each of these courses to graduate.

| First Semester |  | Credits |
| :---: | :---: | :---: |
| + CJT130 | Criminal Justice Principles ................... | 3 |
| ENG111 | Composition I .................................... | 3 |
| HST101 | Principles of Human Services ............... | 3 |
| PSY110 | General Psychology ........................... | 3 |
|  | Computer Elective .............................. | $\underline{3}$ |
|  |  | 15 |

Second Semester Credits

+ CJT134 Criminal Law ......................................... 3
+ CJT230 Corrections ............................................ 3
ENG112 Composition II ...................................... 3
PSY210 Abnormal Psychology ............................ 3
$+\quad$ Technical Elective .................................. 3
Math/Science Elective ........................... $\underline{3}$
18

| Third Semester |  | Credits |
| :---: | :---: | :---: |
| + CJT136 | Juvenile Delinquency ...... | 3 |
| + CJT240 | Evidence and Procedures ..................... | 3 |
| SSC101 | Sociology | 3 |
|  | Humanities Elective | 3 |
|  | Human Service/Social Science Ele .. | 3 |
|  |  | 15 |
| Fourth Semester |  | Cred |
| + CJT242 | Probation and Parole | 3 |
| + CJT244 | Criminal Investigation ......................... | 4 |
| + CJT290 | Criminal Justice Practicum * ................ | 4 |
| + HST214 | Human Service Case Management ........ | 3 |
|  |  | 14 |
| * Students currently employed full-time in a professional criminal justice setting may be allowed to substitute this course. |  |  |
| Technical Electives - Corrections, Probation \& Parole |  |  |
| CJT132 | Criminal Justice Administration |  |
| CJT140 | Constitutional Law |  |
| CJT252 | Seminar in Criminal Justice |  |
| Human Service/Social Science Electives - For Criminal Justice |  |  |
| Majors only: |  |  |
| HST105 | Counseling Techniques with Diverse | Populations |
| HST212 | Substance Abuse |  |
| HST240 | Social Problems |  |
| HST242 | Marriage \& Family |  |
| PSY220 | Social Psychology |  |
| PSY230 | Human Growth \& Development |  |
| PSY260 | Forensic Psychology |  |
| SPN111 | Spanish I |  |
| SSC110 | General Anthropology |  |
| SSC120 | American Government |  |
| SSC130 | Comparative Government |  |
| SSC210 | Cultural Diversity |  |

# Associate of Applied Science in Criminal Justice Technology Computer Crimes Investigation Concentration 


#### Abstract

The Criminal Justice Computer Crimes Investigation major is designed to prepare students for careers in law enforcement with an emphasis on using technology for investigative processes. Technical skills including hardware, software and the Internet are also included. The program blends criminal justice courses with computer programming courses. Upon completion of the two-year program, students will graduate with an Associate degree in Applied Science.


Students who have prior felony convictions may be excluded from numerous criminal justice career opportunities. Students, who have prior misdemeanor charges or excessive civil infractions, including traffic citations, may be denied an opportunity for employment within the criminal justice field. In addition, students should note that the people they associate with may inhibit the College from finding an adequate internship. Policies regarding the criminal justice program are available in the Criminal Justice Student Handbook. All students entering the program must adhere to the regulations within the handbook as well as the division's Substance Abuse Policy.

## Career Outlook

Nationally and in the state of Ohio, employment of law enforcement officers is expected to grow as fast as the average through the year 2016. Growth is attributed to a more security-conscious society than in the past and an increased concern about drug-related crimes. Candidates who have college training in law enforcement should have the best chances of being hired.

## PROGRAM LEARNING OUTCOMES

At the completion of the program students will be able to:

1. Have a general understanding and appreciation of the role of the CJ system at local, state, and federal levels.
2. Demonstrate knowledge of appropriate codes of professional ethics and the capability to critically and reflectively engage ethical issues in CJ, particularly questions of social responsibility and professional decision-making.
3. Demonstrate knowledge of the theories, principles, and practices of criminal justice, including constitutional principles, judicial and correctional processes, legal institutions, and methods of law enforcement.
4. Have a sound basic education in CJ for graduates who choose to pursue a bachelor's degree.

## Humanities Elective:

Select any humanities course listed on page 87.

## Computer Elective:

Any 3 credit hour or 3 one credit hour computer course(s).

## Math/Science Elective:

See page 87 for list of courses

* Students currently employed full-time in a professional criminal justice setting may be allowed to substitute this course.

| First Semester |  |  | Credits |
| :---: | :---: | :---: | :---: |
| + | CIS190 | Comp.Op. Generic Operating Sys ......... | 4 |
| + | CJT130 | Criminal Justice Principles ................... | 3 |
|  | ENG111 | Composition I ..................................... | 3 |
|  | PSY110 | General Psychology ........................... | 3 |
|  |  | Computer Elective .............................. | $\underline{3}$ |
|  |  |  | 16 |


| Second Semester |  |  | Credits |
| :---: | :---: | :---: | :---: |
| + | CJT134 | Criminal Law ..................................... | 3 |
| + | CJT230 | Corrections .................................... | 3 |
|  | ENG112 | Composition II .................................. | 3 |
|  | PSY210 | Abnormal Psychology ......................... | 3 |
| + |  | Technical Elective \#1 ........................... | 3 |
|  |  | Human Service/Social Science Ele .......... | $\underline{3}$ |
|  |  |  | 18 |

Third Semester Credits

+ CJT240 Evidence and Procedures ..... 3
SSC101 Sociology ..... 3
Humanities Elective ..... 3
Math/Science Elective ..... 3
+ Technical Elective \#2 . ..... 416
Fourth Semester Credits
+ CJT244 Criminal Investigation ..... 4
+ CJT250 Computer Crimes Investigation ..... 4
+ CJT290 Criminal Justice Practicum * ..... 4
Human Service/Social Science Ele ..... $\underline{3}$
Technical Electives- Computer Crimes Investigation
CIS155 Linux Networking I
CIS255 Linux Networking IICIS272 Microsoft Networking ICIS282 Microsoft Networking IIEET272 CISCO Networking I
EET282 CISCO Networking II
Human Service/Social Science Electives - For Criminal Justice
Majors only:
HST101 Principles of Human Services
HST105HST212
HST240
HST242PSY220 Social PsychologyPSY230 Human Growth \& DevelopmentPSY260 Forensic Psychology
SPN111 Spanish I
SSC110 General Anthropology
SSC120 American Government
SSC130 Comparative Government
SSC210 Cultural Diversity
+ Students must attain a 2.00 grade point average in each of these courses to graduate.


# Associate of Applied Science in Criminal Justice Technology Law Enforcement Concentration 

The Criminal Justice Law Enforcement major is designed to prepare students for careers in law enforcement. Students may work as police officers, deputy sheriffs, dispatchers, record clerks, and parking enforcement officers. Many police agencies are beginning to require a minimum of an associate degree for new employees. Upon completion of the two-year program, students will graduate with an Associate degree in Applied Science.

Students who have prior felony convictions may be excluded from numerous criminal justice career opportunities. Students, who have prior misdemeanor charges or excessive civil infractions, including traffic citations, may be denied an opportunity for employment within the criminal justice field. In addition, students should note that the people they associate with may inhibit the College from finding an adequate internship. Policies regarding the criminal justice program are available in the Criminal Justice Student Handbook. All students entering the program must adhere to the regulations within the handbook as well as the division's Substance Abuse Policy.

## Career Outlook

Nationally and in the state of Ohio, employment of law enforcement officers is expected to grow as fast as the average through the year 2016. Growth is attributed to a more security-conscious society than in the past and an increased concern about drug-related crimes. Candidates who have college training in law enforcement should have the best chances of being hired.

## PROGRAM LEARNING OUTCOMES

At the completion of the program students will be able to:

1. Have a general understanding and appreciation of the role of the CJ system at local, state, and federal levels.
2. Demonstrate knowledge of appropriate codes of professional ethics and the capability to critically and reflectively engage ethical issues in CJ, particularly questions of social responsibility and professional decision-making
3. Demonstrate knowledge of the theories, principles and practice of criminal justice, including constitutional principles, judicial and correctional processes, legal institutions, and methods of law enforcement.
4. Have a sound basic education in CJ for graduates who choose to pursue a bachelor's degree.

## Humanities Elective:

Select any humanities course listed on page 87

## Computer Elective:

Any 3 credit hour or 3 one credit hour computer course(s).

## Math/Science Elective:

See Page 87 for list of courses

[^10]| First Semester |  |  | Credits |
| :---: | :---: | :---: | :---: |
|  | ENG111 | Composition I .................................... | 3 |
| + | CJT130 | Criminal Justice Principles ................... | 3 |
|  | PSY110 | General Psychology ............................. | 3 |
|  |  | Computer Elective ............................. | 3 |
|  |  | Math/Science Elective ....................... | $\underline{3}$ |
|  |  |  | 15 |


| Second Semester |  |  | Credits |
| :---: | :---: | :---: | :---: |
| + | CJT132 | Criminal Justice Administration ............ | 3 |
| + | CJT134 | Criminal Law | 3 |
| + | CJT230 | Corrections ..... | 3 |
|  | ENG112 | Composition II . | 3 |
|  | PSY210 | Abnormal Psychology ........................ | 3 |
|  |  | Human Service/Social Science Ele ......... | $\underline{3}$ |
|  |  |  | 18 |


| Third Semester |  |  | Credits |
| :---: | :---: | :---: | :---: |
| + | CJT240 | Evidence and Procedures ..................... | 3 |
|  | SSC101 | Sociology | 3 |
|  |  | Human Services/Social Science Ele ......... | 3 |
|  |  | Humanities Elective ............................ | 3 |
| + |  | Technical Elective \#1 .......................... | $\underline{3}$ |
|  |  |  | 15 |


| Fourth Semester |  | Credits |
| :--- | :--- | :---: |
| + | CJT140 | Constitution Law ................................... |
| + | CJT244 | Criminal Investigation |
| + | 4 |  |
| + | CJT290 | Criminal Justice Practicum * |

## Technical Electives - Law Enforcement <br> CJT136 Juvenile Delinquency <br> CJT242 Probation and Parole <br> CJT252 Seminar in Criminal Justice

Human Service/Social Science Electives - For Criminal Justice
Majors only:
HST101 Principles of Human Services
HST105 Counseling Techniques with Diverse Populations
HST212 Substance Abuse
HST240 HST240 Social Problems
HST242 Marriage and Family
PSY220 Social Psychology
PSY230 Human Growth \& Development
PSY260 Forensic Psychology
SPN111 Spanish I
SSC110 General Anthropology
SSC120 American Government
SSC130 Comparative Government
SSC210 SSC210 Cultural Diversity

+ Students must attain a 2.00 grade point average in these technical courses to graduate.


# Associate of Applied Science in Criminal Justice Technology Law Enforcement - Academy Option 

The Criminal Justice Law Enforcement Academy option major will lead to State of Ohio Certification as a Peace Officer. The student must meet Academy qualifications to be accepted into the program. Students must be 19 years of age, with a high school diploma or GED. Students under 21 years of age will have limited employment opportunities. Students will be required to submit the Ohio Peace Officer Training Commission Student Enrollment Certification Record, a Statement of Understanding, physical form, training waiver and liability forms. Background and criminal record checks will be completed and an interview may be required. Students who have a weapons disability or have any felony, weapons, or domestic violence convictions or conviction of any related offenses as a result of Domestic Violence incidents will not be eligible for admission. To successfully complete the Academy, students must meet the attendance and physical conditioning requirements. Upon successful completion, students will graduate with an Associate degree in Applied Science and will be eligible to take the State certification exam. Students completing this major must successfully complete the Academy.

Policies regarding the criminal justice program are available in the Criminal Justice Student Handbook. All students entering the program must adhere to the regulations within the handbook as well as the division's Substance Abuse Policy.

## Career Outlook

Nationally and in the state of Ohio, employment of law enforcement officers is expected to grow as fast as the average through the year 2016. Growth is attributed to a more security-conscious society than in the past and an increased concern about drug-related crimes. Candidates who have college training in law enforcement should have the best chances of being hired.

## PROGRAM LEARNING OUTCOMES

At the completion of the program students will be able to:

1. Have a general understanding and appreciation of the role of the CJ system at local, state, and federal levels.
2. Demonstrate knowledge of appropriate codes of professional ethics and the capability to critically and reflectively engage ethical issues in CJ, particularly questions of social responsibility and professional decision-making.
3. Demonstrate knowledge of the theories, principles, and practices of criminal justice, including constitutional principles, judicial and correctional processes, legal institutions, and methods of law enforcement.
4. Have a sound basic education in CJ for graduates who choose to pursue a bachelor's degree.

## Computer Elective:

Any 3 credit hour or 3 one credit hour computer course(s).

## Math/Science Elective:

See Page 87 for list of courses

| First Semester | Credits |
| :---: | :---: |
| + CJT130 Criminal Justice Principles ................... | 3 |
| ENG111 Composition I................................... | 3 |
| PSY110 General Psychology ........................... | 3 |
| Computer Elective .............................. | 3 |
| Humanities Elective .. | 3 |
| Math/Science Elective ......................... | $\underline{3}$ |
|  | 18 |
| Second Semester | Credits |
| + CJT230 Corrections ....................................... | 3 |
| ENG112 Composition II .................................. | 3 |
| PSY210 Abnormal Psychology ........................... | 3 |
| SSC101 Sociology ........................................... | 3 |
| Human Service/Social Science Ele ......... | 3 |
| Human Service/Social Science Ele .......... | $\underline{3}$ |
|  | 18 |
| Summer Semester | Credits |
| + CJT290 Criminal Justice Practicum ................... | 4 |

Third and Fourth Semester
Law Enforcement Academy - All courses listed must be taken within the Academy hours.

| + | CJT134 | Criminal Law ............................................. | 3 |
| :--- | :--- | :--- | :--- |
| + | CJT240 | Evidence \& Procedures ................. | 3 |
| + | CJT244 | Criminal Investigation ............... | 4 |
| + | CJT246 | Technical Skills for Officers ............. | 3 |
| + | CJT281 | Vehicle Patrol/Traffic Enforcement... | 4 |
| + | CJT282 | Firearms/Driving .......................... | 4 |
| + | CJT283 | Defensive Tactics/Physical Fitness ... | 3 |
| + | CJT284 | Human Conditions ....................... | 4 |

## Humanities Elective: <br> Select any humanities course listed on page 87.

Human Service/Social Science Electives - For Criminal Justice
Majors only:
HST101 Principles of Human Services
HST105 Counseling Techniques with Diverse Populations
HST212 Substance Abuse
HST240 Social Problems
HST242 Marriage \& Family
PSY220 Social Psychology
PSY230 Human Growth \& Development
PSY260 Forensic Psychology
SPN111 Spanish I
SSC110 General Anthropology
SSC120 American Government
SSC130 Comparative Government
SSC210 Cultural Diversity

+ Students must attain a 2.00 grade point average in these technical courses to graduate.


# Associate of Applied Science in Nursing Registered Nursing (RN) 

The Associate Degree Nursing program is designed to prepare students to demonstrate competency in providing nursing care in a variety of health care settings and for employment as a registered nurse. The five semester program incorporates lectures, labs, and clinicals to prepare the student to function as a member of the healthcare team. Students must meet all admission criteria prior to taking a clinical nursing course. Policies regulating the nursing program are available in the Student Nurse Handbook.

Submit the following to the Admissions Office.
a. Application to Northwest State Community College
b. High School Transcript and/or G.E.D.
c. Official College Transcript(s) (if you have college work)

Admission to the Associate Degree Nursing Program:

1. Submit directly to the Nursing Office.
a. High school transcript or copy of GED
b. Application to the Associate Degree Nursing Program
2. All students are required to demonstrate proficiencies in reading, writing, and mathematics based on scores on the placement test or take the recommended classes. If you have not taken these tests, call 419-2671320 for a testing appointment; recommended courses must be completed.
3. Meet ONE criteria in each of the following areas to be assigned a starting date for the first Nursing course NRS106.
A. Academic Background

High School graduate from a North Central accredited High School can satisfy the academic requirement by meeting one of the following:

1. G.P.A. 2.5 or better on a 4.0 scale and maintain a 2.5 G.P.A. or better on any college work
2. Complete 16 semester hours ( 24 quarter hours) of college work with 2.5 G.P.A. or better
3. College degree with G.P.A. 2.5 or better
4. Complete National League for Nursing Pre-admission Exam with a composite score of 50 percentile on the AD scale

Students from a non-accredited high school/program or with a GED can satisfy the academic requirement by meeting one of the following:

1. An ACT composite score of $\geq 23$
2. Complete 16 semester hours ( 24 quarter hours) of college work with 2.5 G.P.A. or better
3. College Degree with G.P.A. 2.5 or better
4. Complete the National League for Nursing Pre-Admission Exam with a composite score of 50 percentile on the AD scale
B. Algebra
5. Meets course placement results for MTH090 Intermediate Algebra proficiency
6. MTH080 proficiency plus an ACT math score $\geq 24$.
7. College equivalent (MTH090 Intermediate Algebra) with a minimum grade of "C"
C. Chemistry
8. High School Chemistry with Lab with minimum grade of "B"
9. High School Chemistry with a "C", plus an ACT science score of $\geq 24$ or a NLN Pre-admission science raw score of $\geq 42$
10. College equivalent (CHM101) with minimum grade of "C"
D. Biology
11. High School Biology with Lab with minimum grade of "B"
12. High School Biology with a "C", plus an ACT science score of $\geq 24$ or a NLN Pre-admission science raw score of $>42$
13. College equivalent (BIO101) with minimum grade of "C"
E. Computer Competency
14. High school microcomputer course with a minimum grade of "C" since 1992
15. Successfully complete or proficiency CIS090 Introduction to Computers or equivalent
F. Keyboard competency
16. High School keyboarding course with a minimum grade of "C"
17. Successfully complete or proficiency OAS090, Keyboarding Basics or equivalent.
G. Students will not be admitted to the program if a grade of less than
" $C$ " is received more than one time in any of the above courses.
18. Acceptance into the program is based on completion of criteria and review by the Admissions Committee. Applicants will be
no tified by letter regarding their acceptance into the program.
a. Consideration will be given to students having the greatest number of credit hours completed from the Associate Degree Nursing curriculum.
b. Priority will be given to students who have completed course work at NSCC.
c. Technical grade point average will be used to determine placement when criteria are equal.
19. If taken prior to admission, the student must provide official documentation that knowledge of BIO231, BIO232, and BIO257 is seven (7) years old or less. If coursework is older than seven years, current knowledge may be demonstrated by taking a re-qualifying exam or by retaking the course.
20. Upon acceptance and prior to entry into the program, the applicant must submit:
a. Nursing Acceptance deposit fee (\$100.00) to hold a seat in the assigned clinical class.
b. Completed health and immunization forms and verify current CPR with Red Cross (BLS) or American Heart Association BLS for the Healthcare Provider.
c. Verification of current State-tested Nursing Assistant certification
21. This is a rigorous program. Full-time employment is not recommended during the clinical courses.
22. Guidelines from the Center for Disease Control state that "health care workers who have exudative lesions or weeping dermatitis should refrain from all direct patient care...until the condition resolves."
23. The following physical requirements are necessary to safely and accurately carry out the nursing duties:

Critical thinking ability sufficient for clinical judgment Physical abilities sufficient to move from room to room and maneuver in small spaces

- Tactile ability sufficient for physical assessment
- Ability to prepare and administer medications
- Ability to transfer patients

Ability to read medication labels and patient records

- Ability to take blood pressure and hear breath sounds through a stethoscope (special types are available)
Communicate English clearly enough for most patients to understand and understand the verbal communication of English speaking clients
Clear written communication

10. Anyone with a felony, misdemeanor, or a D.U.I. conviction will be required, after completing the nursing program, to attend a hearing before the Ohio State Board of Nursing to determine eligibility to sit for the national Licensure exam. Anyone who has been convicted of or pled guilty to aggravated murder, murder, voluntary manslaughter, felonious assault, kidnapping, rape, sexual battery, gross sexual imposi tion, aggravated arson, aggravated robbery or aggravated burglary will not be eligible for licensure in Ohio.
11. Clinical component must be completed within four (4) years.

# Associate of Applied Science in Nursing Registered Nursing (RN) 



| Second Semester |  |  | Credits |  |
| :--- | :--- | :--- | :---: | :---: |
|  | BIO232 | Anatomy \& Physiology II ..................... | 4 |  |
| + | NRS108 | Nursing Care of Clients with |  |  |
|  |  | Physiological Health Needs I ................. | 6 |  |
| + | NRS110 | Pharmacology ................................ | 3 |  |
| + | NRS131 | Health Assessment in Nursing ............. | 2 |  |
|  | PSY230 | Human Growth and Development........ | $\underline{3}$ |  |
|  |  |  | 18 |  |


| Summer Semester |  |  |  |
| :--- | :--- | :--- | :--- |
| + | NRS213 | Nurs Care of the Child |  |
| + | NRS214 | Nurs Care of the Childbearing Family Family ... | 3 |
|  | PSY110 | General Psychology ............................ | 3 |
|  |  | $\underline{3}$ |  |


| Third Semester |  | Credits |
| :--- | :--- | :--- |
| BIO257 |  | Microbiology ........................................ |$\quad 4$

SSC101 Sociology or
SSC210 Cultural Diversity ................................. $\underline{3}$ 15

## Fourth Semester <br> Credits

ENG112 Composition II ...................................... 3

+ NRS217 Nursing Care of Clients with Physiological Health Needs III ............. 5
+ NRS218 Concepts in Management of Groups of Clients

4
PHI220 Ethics in Health Care ............................. $\underline{3}$

+ Refers to technical coursework.

Students must attain a minimum grade of " C " in all courses to progress in the program and graduate. Students must also demonstrate the ability to be successful on the NCLEX-RN exam prior to completion of the program.

# Associate of Applied Science in Nursing <br> LPN to RN Advanced Standing Program 

## Admission to the College:

1. Submit to Admission Office:
a. Northwest State Community College application
b. High School Transcript or G.E.D.
c. Transcripts from Approved Practical Nursing School
d. Official College transcript(s) (if any)

Admission to the LPN to RN Advanced Standing Program:

1. Submit directly to the Nursing Office:
a. Application to LPN to RN Advanced Standing Program
b. High School transcript
c. Transcript from approved PN school
2. Must be a graduate of a Practical Nursing program and have current Ohio LPN licensure without restrictions and with medication administration privileges. One year continuous nursing experience (minimum 800 hours) within the past three years is required.
3. All students are required to demonstrate proficiencies in reading, writing, and mathematics based on scores on the placement test or take the recommended classes. If you have not taken these tests, call 419-2671320 for a testing appointment; recommended courses must be completed.
4. Meet ONE criterion in each of the following areas.
a. Algebra
5. Meets course placement results for MTH090 Intermediate Algebra proficiency.
6. MTH080 proficiency plus an ACT math score $>24$.
7. College equivalent (MTH090 Intermediate Algebra) with a minimum grade of "C"
b. Chemistry
8. High School Chemistry with Lab with minimum grade of "B"
9. High School Chemistry with a "C", plus an ACT science score of $>24$ or a NLN Pre-admission science raw score of $>42$
10. College equivalent (CHM101) with minimum grade of "C" c. Computer Competency
11. High School micro computer course with minimum grade of "C" since 1992.
12. Successfully complete or proficiency CIS090 Introduction to Computers or equivalent.
d. Keyboarding Competency
13. High School keyboarding course with a minimum grade of "C".
14. Successfully complete or proficiency OAS090 Keyboarding Basics or equivalent.
15. Complete the following courses with a "C" (2.0) grade or better prior to admission to advanced standing program:
a. BIO231 - Anatomy \& Physiology I
b. BIO232 - Anatomy \& Physiology II
c. PSY230 - Human Growth and Development
d. PSY110 - General Psychology
16. Students will not be admitted to the program if a grade of less than "C" is received more than one time in any of the above courses.
17. Pass with a maximum of 2 attempts, NLN Acceleration Challenge Exam I - Nursing Care During Childbearing and Nursing Care of the Child at a 70 decision score prior to the completion of NRS211, LPN-RN Transition Course. If unsuccessful, complete NRS209 Nursing Care During Childbearing \& Childhood with a "C" grade or better. Course only offered Summer Semester.
18. Acceptance into the program is based on completion of criteria and review by the Committee. Applicants will be notified by letter regarding their acceptance into the program. When more qualified applicants have applied than seats available:
a. Consideration will be given to students having the greatest number of credit hours completed from the Advanced Standing Curriculum.
b. Priority will be given to students who have completed coursework at Northwest State Community College.
c. Technical grade point average will be used to determine placement when criteria are equal.
19. If criteria (1 through 6) are not met, the LPN may apply to the generic ADN program.
20. This is a rigorous program. Full-time employment is not recommended during the clinical courses.
21. Upon acceptance and prior to entry into the program, the applicant must submit:
a. Nursing acceptance deposit fee (\$100.00) to hold a seat in the assigned clinical class.
b. Completed health and immunization forms and verify current CPR with either Red Cross BLS for the Professional rescuer or American Heart Association BLS for the Healthcare Provider.
22. Guidelines from the Center for Disease Control state that "health care workers who have exudative lesions or weeping dermatitis should refrain from all direct patient care... until the condition resolves."
23. The following performance standards are necessary to safely and accurately carry out nursing duties:

- Critical thinking ability sufficient for clinical judgment
- Physical abilities sufficient to move from room to room and maneuver in small spaces
- Tactile ability sufficient for physical assessment
- Ability to prepare and administer medications
- Ability to transfer patients
- Ability to read medication labels and patient records
. Ability to take blood pressure and hear breath sounds through a stethoscope (special types are available)
- Communicate English clearly enough for most patients to
- understand and understand the verbal communication of
- English-speaking clients
- Clear written communication

14. Anyone with a felony, misdemeanor, or a D.U.I. conviction will be required, after completing the nursing program, to attend a hearing before the Ohio State Board of Nursing to determine eligibility to sit for the national Licensure exam. Anyone who has been convicted of or pled guilty to aggravated murder, murder, voluntary manslaughter, felonious assault, kidnapping, rape, sexual battery, gross sexual imposition, aggravated arson, aggravated robbery or aggravated burglary will not be eligible for licensure in Ohio. State Law (Senate Bill 38 and Senate Bill 160) requires certain agencies providing care to children or adults age 60 or older to require a Bureau of Criminal Identification and Investigation (BCII) check of past misdemeanors and felonies. Job seekers are prohibited from holding such jobs if they have previously been convicted of (or pleaded guilty to) a variety of offences.
15. Clinical component must be completed within three (3) years

# Associate of Applied Science in Nursing LPN to RN Advanced Standing Program 

This three semester program is designed to prepare the Licensed Practical Nurse for licensure as a registered nurse. The program incorporates lectures, labs, and clinicals to prepare the student to function as a member of the health care team. Students must meet all admission criteria prior to taking a clinical nursing course. Policies regulating the nursing program are available in the Student Nurse Handbook.

Graduates are eligible to take the National Council Licensure Exam(NCLEXRN) for licensure as a Registered Nurse. Students who have prior misdemeanor, felony, or D.U.I. convictions may be denied the opportunity to take the NCLEX-RN.

The Associate Degree Nursing program is fully approved by the Ohio Board of Nursing and accredited by the National League for Nursing Accrediting Commission, 61 Broadway 33rd Floor, New York, NY 10006, (800)669-1656, extension 153.

## PROGRAM LEARNING OUTCOMES FOR ALL ASSOCIATE DEGREE NURSING PROGRAMS.

1. Integrate knowledge from physical, biological, behavioral and nursing sciences and general studies in providing comprehensive nursing care.
2. Integrate the nursing process to maintain, restore, and promote health of individuals, families, and groups of all ages in a variety of settings.
3. Incorporate principles and techniques of effective interpersonal relationships with clients, colleagues, and health team members.
4. Adapt nursing practice to reflect the worth and dignity of clients within the ethical-legal obligations of associate degree nursing.
5. Assume responsibility for continued learning and personal growth in nursing practice.
6. Accept accountability and responsibility to clients, to the nursing profession, and to society for own nursing practice.
7. Analyze the past, present and emerging roles of the associate degree nurse.
8. Apply concepts of leadership and management in utilizing human and material resources for nursing practice as an associate degree nurse.

## S C HEDULE



Students must attain a minimum grade of "C" in all courses to progress in the program and to graduate. Students must also demonstrate the ability to be successful on the NCLEX-RN exam prior to completion of the program.

NRS211 is considered a validation course and can only be taken one time. Students who are unsuccessful may apply to the two year associate degree program.

## Part-time Evening/Weekend Program

The LPN to RN Advanced Standing Program is also offered at Vantage Career Center in Van Wert, Ohio through a unique collaboration between NSCC, Vantage Career Center and Wright State University (Lake Campus). Necessary remedial and all general education courses are offered at the Vantage site either by NSCC or Wright State University. All nursing courses are through NSCC. Contact the nursing division for specific details.

## Admission To The College

1. Submit to the Northwest State Community College Admissions Office:
a. Completed Application to Northwest State Community College
b. Completed high school transcript or G.E.D. Certificate
c. Official college transcript(s) if applicable

Admission to The Practical Nursing Program

1. Submit directly to the nursing office:
a. Completed high school transcript or G.E.D.
b. Application to the Practical Nursing Program

## Admission Criteria

1. All students are required to demonstrate proficiencies in reading, writing, and mathematics based on scores on the placement test or take the recommended classes. If you have not taken these tests, call 419-2671320 for a testing appointment; recommended courses must be completed
2. Must meet ONE criterion in each of the following areas to be assigned a starting date for the first nursing course PNE120:
a. GPA
3. High school G.P.A. $\geq 2.0$.
4. College G.P.A. of 2.0 or better (if applicable)
b. Algebra
5. Course Placement Algebra score at the MTH080 level
6. College equivalent (MTH080 Beginning Algebra) with grade of "S"
c. Science
7. High school biology, with lab, with minimum grade of "C" and high school chemistry, with lab, with minimum grade of "C"
8. High school biology and high school chemistry with a "C" from a curriculum not accredited by North Central and an ACT science score $\geq 20$.
9. BIO101 Principles of Biology with minimum grade of " C " d. Computer Competency
10. High school microcomputer course since 1992 with minimum grade of "C"
11. Successfully complete or proficiency CIS090 Introduction to Computers or equivalent.
e. Keyboarding Competency
12. High School Keyboarding course with a minimum grade of "C"
13. Successfully complete or proficiency OAS090 Keyboarding Basics or equivalent.
14. Acceptance into the nursing program is based upon successful completion of admission criteria and review by the PN Admission Committee. Applicants will be notified by letter regarding their acceptance into the program.
When more qualified applicants have applied than seats are available:
15. Consideration will be given to students having the greatest number of credit hours completed toward the nursing program.
16. Priority will be given to students who have completed coursework at NSCC.
17. Technical grade point average will be used to determine placement when criteria are equal.
18. Upon acceptance and prior to entry into the program, the applicant must submit:
a. The nursing acceptance deposit fee (\$100.00) to hold a seat in the assigned clinical class.
b. Completed health and immunization forms.
c. Verify current CPR with Red Cross (BLS) for the Professional Rescuer or American Heart Association BLS for the Healthcare Provider.
d. Verification of current STNA certification.
19. If taken prior to admission, the student must provide official documentation that coursework in The Human Body (BIO150) or Anatomy \& Physiology I and II (BIO231 \& BIO232) is seven (7) years old or less. If coursework is older than seven years, current knowledge may be demonstrated by taking the course(s) or the proficiency exam(s).
20. Anyone with a felony, D.U.I. or misdemeanor conviction will be required, after completing the program to attend a hearing before the Ohio State Board of Nursing to determine eligibility to sit for the national licensure exam in Ohio. Anyone who has been convicted of or pled guilty to aggravated murder, murder, voluntary manslaughter, felonious assault, kidnapping, rape, sexual battery, gross sexual imposition, aggravated arson, aggravated robbery, or aggravated burglary will not be eligible for licensure in Ohio. State Law (Senate Bill 38 and Senate Bill 160) requires certain agencies providing care to children or adults age 60 or older to require a Bureau of Criminal Identification and Investigation (BCII) check of past misdemeanors and felonies. Job seekers are prohibited from holding such jobs if they have previously been convicted (or pleaded guilty) to a variety of offenses.
21. Guidelines from the Center for Disease Control state that "health care workers who have exudative lesions or weeping dermatitis should refrain from all direct patient care...until the condition resolves."
22. Clinical component must be completed within two (2) years.
23. The following performance standards are necessary to safely and accurately carry out nursing duties:

- Critical thinking ability sufficient for clinical judgment
- Physical abilities sufficient to move from room to room and maneuver in small spaces
- Tactile ability sufficient for physical assessment
- Ability to prepare and administer medications
- Ability to transfer patients
- Ability to read medication labels and patient records
- Ability to take blood pressure and hear breath sounds through a stethoscope (special types are available)
- Communicate English clearly enough for most patients to understand and understand the verbal communication of English-speaking clients
- Clear written communication

10. The PN program has been designed to facilitate articulation and to enhance further study in a student's area of interest. Instead of BIO150 The Human Body, students who are planning to articulate to the Advanced Standing Program may choose to take BIO231 Anatomy \& Physiology I and BIO232 Anatomy \& Physiology II. When the twosemester sequence of $\mathrm{A} \& \mathrm{P}$ is chosen, BIO231 must be taken prior to entrance into the clinical courses.

Northwest State Community College is an affirmative action, equal opportunity employer and educator that does not discriminate on the basis of race, color, national origin, religion, disability, sex, or age.

## Practical Nursing (PN) Certificate

The Practical Nursing program is a one-year (12 month) certificate program designed to prepare qualified persons to perform nursing services in the prevention of illness, the care of the sick, and in rehabilitation at the direction of a registered nurse, a licensed physician, or dentist. The licensed practical nurse may find job opportunities not only in hospitals and nursing homes, but also in doctor's offices, community health and government agencies. The program incorporates lectures, labs, and clinicals to prepare the student to function as a member of the health care team. Students must meet all admission criteria prior to taking a clinical nursing course. Policies regulating the nursing program are available in the Student Nurse Handbook.

Graduates are eligible to take the National Council Licensure Exam(NCLEXPN) for licensure as a Practical Nurse. Students who have prior misdemeanor or felony convictions may be denied the opportunity to take the NCLEX-PN. The Practical Nursing program is fully approved by the Ohio Board of Nursing.

## PROGRAMLEARNING OUTCOMES

1. Apply knowledge from the biological, physical, behavioral, and nursing sciences in providing individualized, safe, effective nursing care in structured, predictable settings within established legal and ethical guidelines.
2. Utilize effective verbal and written communication skills with patients, families, colleagues, and other members of the health care team.
3. Participate in the nursing process utilizing critical thinking skills to provide individualized nursing care to patients across the life span and health continuum.
4. Demonstrate responsibility for continued life-long learning and growth in nursing practice.

Part-Time Evening/Weekend PN Program
A part-time evening/weekend Practical Nursing program is also offered at Vantage Career Center in Van Wert, OH through a unique collaboration between Northwest State Community College, Vantage Career Center, and Wright State University, (Lake Campus). Necessary remedial and all required general studies courses are offered at the Vantage site either by NSCC or Wright State University. All general studies courses within the curriculum must be completed prior to starting the threesemester clinical sequence. Clinical sites are in the Van Wert area. Contact the nursing division for specific details.

** Required for Advanced Standing ADN program (LPN to RN):
Prerequisite for BIO232 is BIO231 in a preceding semester; equivalent of BIO101 - Principles of Biology required, CHM101 Principles of Chemistry strongly recommended.

Students must attain a minimum grade of "C" in all courses to progress in the program and to graduate.

+ Refers to technical coursework



# Associate of Applied Science in Medical Assisting 

Medical Assistants are multi-skilled allied, health professionals specifically trained to work in ambulatory settings, such as physicians' offices, clinics, and group practices, performing administrative and clinical procedures. This program will prepare competent entry-level medical assistants in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains.

The following performance standards are necessary to safely and accurately carry out Medical Assisting duties: critical thinking ability sufficient for clinical judgment, physical abilities sufficient to move from room to room and maneuver in small spaces, tactile ability sufficient for physical assessment, ability to prepare and administer medications, ability to transfer patients, ability to read medication labels and patient records, ability to take blood pressure and hear breath sounds through a stethoscope, communicate English clearly enough for most patients to understand and understand the verbal communication of English-speaking patients, clear written communication, and manual dexterity. The Medical Assisting program is accredited by the Commission on Accreditation of Allied Health Education Programs upon the recommendation of the Curriculum Review Board of the American Association of Medical Assistants Endowment (CRB-AAMAE, 1361 Park Street, Clearwater, FL. 33756, (727)210.2350.

## PROGRAMLEARNING OUTCOMES

1. Demonstrate knowledge of human structure and function and recognize common disorders of the body.
2. Completely perform clinical duties associated with assisting a physician in the diagnosis and treatment of patients in an ambulatory setting.
3. Understand the legal concepts and ethical responsibilities associated with patient care and the documentation of health information; display professionalism with interpersonal situations and business functions.
4. Understand and apply principles of office management; planning, policy development, supervisory process, personnel training, equipment and facility maintenance, and time management.
5. Apply principles of effective oral and written communication skills with patients, their families and other health care providers; teach patients methods of health promotion.
6. Demonstrate competence in performing administrative clerical duties and managing medical practice finances.
7. Demonstrate proficiency in computer operations and applications relative to patient care and the management of a medical office.
8. Think rationally, systematically, and logically; solve problems though proper means of analysis / synthesis.

Admission Requirements for the Program:

- High School Biology with a grade of "C" or higher or BIO101 Principles of Biology with a "C" grade or higher
- COMPASS testing. Complete any developmental courses needed.
- Course placement Algebra score at the MTH080 level or successful completion of MTH080
- GPA2.0 or higher


Felony Conviction Disclosure: Previous conviction of a felony may prevent an applicant from being eligible for the certification exam given by the American Association of Medical Assistants. "Individuals who have been found guilty of a felony or pleaded guilty to a felony are not eligible to take the Certified Medical Assistants exam. However, the certifying board may grant a waiver based upon mitigating circumstances."

Students must maintain a minimum grade of "C" in all courses to progress in the program and graduate.

ACC090 INTRO TO ACCOUNTING 3 Cr. Hrs.
This course is designed for students who have had no previous accounting instruction or for those desiring an introductory course before beginning the accounting sequence. This course covers accounting terminology, financial statement concepts, intensive drills on debits/credits, and a brief overview of the accounting cycle. (3+0) F - Day \& Eve, S - Day
DEVELOPMENTAL COURSES ARE GRADED PASS/ FAIL (S/U) AND DO NOT MEET COURSE REQUIREMENTS FOR GRADUATION

## ACC102 OFFICE ACCOUNTING <br> 4 Cr. Hrs.

This course is designed for Office Administrative Services and Early Childhood Development majors. It may not be used as a substitute for ACC111. The primary emphasis of this course will be on a sole proprietorship operating a service business and a merchandising business. The course includes a study of the accounting cycle, beginning with the business transaction and ending with the preparation of the financial statements and all of the necessary end of the period procedures. Other topics include bank reconciliations, petty cash funds, and cash change funds. Considerable emphasis will also be placed on payroll. Students will be able to calculate payrolls and be familiar with all of the necessary payroll forms. Students will complete a computerized payroll simulation.
(4+0) F-Day, S-Day \& Evening
ACC111 FINANCIAL ACCOUNTING 4 Cr. Hrs. The course includes a study of the accounting cycle beginning with the business transaction and ending with the preparation of financial statements along with other period end procedures for both sole proprietors as well as corporations. Other topics include: receivables, inventory, depreciation, liabilities, investments, and stock. $(4+0)$ F - Day \& Eve, S - Day \& Eve, SU - Day \& Eve

## ACC112 MANAGERIAL ACCOUNTING 4 Cr. Hrs.

This course has a prerequisite of Financial Accounting. This course builds on Financial Accounting and introduces Managerial Accounting. Topics include corporate stock transactions and dividends, investments in stock, and the Statement of Cash Flows. Managerial concepts are also introduced. Students learn both job order and process cost accounting. Other topics include developing budgets, using standard costs and determining variances, cost behavior and cost-volume-profit analysis, performance evaluation for decentralized operations, differential analysis and capital investment analysis.
(4+0) F - Day \& Eve, S - Day \& Eve, SU - Day
Prerequisite: ACC111 with a grade of "C" or better

ACC120 PAYROLL ACCOUNTING 3 Cr. Hrs.
This course includes the various phases of the Social Security Act, unemployment compensation, and federal withholding tax, with considerable emphasis on the study of timekeeping systems and systems of accounting used in keeping payroll and wage records. Students complete the necessary federal and state tax reports and apply payroll accounting concepts to microcomputer applications. (3+0) F - Day \& Eve, S - Day
Prerequisite: High school accounting, work experience, or concurrent registration in ACC090 or ACC111

## ACC140 INDIVIDUAL INCOME TAX 3 Cr. Hrs. ACCOUNTING

Major emphasis is on individual income tax laws and regulations. The course is designed to have both a personal and vocational value, covering tax return preparation, tax planning, and research. (3+0) S - Day \& Eve

ACC211 INTERMEDIATE ACCOUNTINGI 3Cr.Hrs. This course is a review and expansion of concepts learned in accounting principles. Topics studied are the accounting cycle, financial statements, revenue recognition, cash, receivables, and inventories.
(3+0) F - Day \& Eve
Prerequisite: ACC112 with grade of "C" or better.

## ACC212 INTERMEDIATE ACCOUNTINGII 3Cr.Hrs.

 This course is a continuation of Intermediate Accounting I. Subject matter includes: debt and equity financing, noncurrent assets, long term investments, income tax allocation, employee compensation, and additional disclosures.(3+0) S - Day \& Eve
Prerequisite: ACC211

## ACC221 COST ACCOUNTING I 3 Cr. Hrs.

This course teaches determination of product costs using different cost systems: primarily job order costing and process costing. Additional topics include: cost estimation, cost-volume-profit analysis, activity-based budgeting, standard costing, operational performance measures, flexible budgeting, and management of overhead activity costs.
(3+0) F - Day \& Eve
Prerequisite: ACC112 with a grade of "C" or better.
ACC222 COST ACCOUNTING II 3 Cr. Hrs.
This course is a continuation of Cost Accounting I. Topics studied are activity-based costing and management, responsibility accounting, investment centers, transfer pricing, relevant costs and benefits in decision making, cost analysis for pricing decisions, capital expenditure decisions, absorption costing, variable costing, and allocation of support activity costs and joint costs.
(3+0) S - Day \& Eve
Prerequisite: ACC221

## ACC230 AUDITING

3 Cr. Hrs.
This is a study of theories, procedures, and practices employed in audits. The course includes studies on auditor's reports, internal control procedures, tests, and generally accepted auditing standards used in the profession.
(3+0) S - Day \& Eve
Prerequisite: ACC112

## ACC240 BUSINESS INCOME TAX ACCT. 3Cr.Hrs.

This course teaches fundamentals of federal taxation in relation to business forms and rules. Studies include preparation of partnership, subchapter " S ", and corporation returns with related income tax forms.
(3+0) F - Day

## ACC261 QUICK BOOKS

1 Cr. Hr.
In this course students learn the capabilities of Quick Books software. Using a case study approach, the course covers core product features from writing checks and creating reports to theories of basic business accounting, including managing accounts payable/receivable, invoicing, inventory management, and payroll. Each of the 15 lessons begins with lesson objectives and suggested instructor preparation, followed by step-by-step educator instructions. Students learn all the key concepts through hands-on learning and practice.
(1+0) F - Day \& Eve

## ACC262 PEACHTREE

1 Cr. Hr.
In this course Peachtree software is used to apply the basic principles and procedures of accrual accounting. Computer accounting applications include general ledger, accounts receivable, accounts payable, invoicing, payroll, inventory, and job costs.
(1+0) F - Day \& Eve.

## ACC271 INTERMEDIATE QUICK BOOKS 1 Cr. Hr.

 In this course students learn specialized capabilities of Quick Books software. Using a case study approach, the course covers product features such as recording special transactions, exporting and importing data, and customizing reports. Students learn key concepts through hands-on learning and practice.(1+0)F, S, SU
Prerequisite: ACC261 or instructor permission

## ACC272 ADVANCED QUICKBOOKS 1 Cr. Hr.

In this course students learn specialized capabilities of Quick Books software. Using a case study approach, the course covers product features which apply to accounting procedures. Students learn key concepts through hands-on learning and practice.
(1+0) F, S
Prerequisite: ACC111 and ACC271 or instructor permission

## ACC291 ACCOUNTING INTERNSHIP 3Cr.Hrs.

This course is a job-related accounting experience in which the student works for a department within the college, a business, or an industrial organization. The student is chosen for this course on the basis of academic progress or job experience. Enrollment only with instructor permission.
(1+20)F, S, SU

## ART103 BEGINNING DRAWING 3 Cr. Hrs.

A basic drawing class facilitating students’ abilities to see objects rationally, developing expressive drawing skills using various approaches and a wide variety of graphic media.
(0+6)S
Note: Transfer Assurance Guide (TAG) approved effective summer 2008(Fine Arts)

## ART210 OIL/ACRYLIC PAINTING 3 Cr. Hrs.

An introductory painting class emphasizing building stretcher frames, preparing painting surfaces, using oil/acrylic media, using color, and framing.
( $0+6$ ) F
Note: Transfer Assurance Guide(TAG) approved effective fall 2005 (Fine Arts)

## ART220 BEGINNING SCULPTURE <br> 3 Cr. Hrs.

A basic level studio sculpture course facilitating students' abilities to see and create three dimensional works of art. In this introductory class, clay, plastilene and plaster is used in creating manipulative, subtractive and additive method sculptures, following examination of historical works and the guiding principles of design behind creation of sculpture.
(0+6)

## ATS101 PORTFOLIO DEVELOPMENT 3Cr.Hrs.

This course is designed for the student interested in developing a portfolio for submission and review for college credit. The student will work with his/her advisor in the development of the portfolio. (3+0)
Prerequisite: Course offered on demand with approval of the Dean of Engineering.

BAN110 BANK MANAGEMENT
3 Cr. Hrs. A study of the commercial banking industry and the interrelationships between the various types of financial institutions. Special emphasis is given to branch banking, bank financial statements, methods of evaluating bank performance, lending policies, and the management of deposit liabilities and loan assets. The regulatory environment receives significant emphasis throughout.
(3+0)S

## F = Fall; S = Spring; SU = Summer

## BAN210 CREDIT MANAGEMENT

3 Cr. Hrs.
An examination of the concept of credit with particular emphasis given to the process of credit management for both consumers and businesses. Also explored are the processes of granting and reviewing credit, collection practices, as well as the examination of financial statements leading to the credit decision. Dun and Bradstreet's business services, as well as those of the major consumer credit organizations, receive in-depth treatment.
(3+0)F

## BAN220 INVESTMENTMANAGEMENT <br> 3 Cr. Hrs.

A study of the types of investment vehicles available to the individual investor or business investment officer. The major emphasis of study is on various types of stocks and bonds, but convertibles, options, futures, commodities, and mutual funds are also studied. In addition, several special concepts receive emphasis, such as strategies associated with margin accounts and shortselling. Valuation of the firm and related financial analysis also receive appropriate treatment. Algebra proficiency is recommended. $(3+0) S$

## BIO101 PRINCIPLES OF BIOLOGY <br> 4 Cr. Hrs.

An introduction to principles and concepts of life, including topics on cell biology, genetics, diversity of life, and ecology. Laboratory work reinforces lecture.
(3+2) F, S, SU

## BIO115 ECOLOGY

4 Cr. Hrs.
An introduction to the field of ecology, including the organization, interrelationships and dynamitic of populations, communities and ecosystems. A major emphasis on the relationship of humans to the environment. Lab includes field trips and the study of local aquatic and terrestrial communities.
(3+2) Seven years
Prerequisite: High School Biology or BIO101 or consent of instructor.

## BIO131 NUTRITION

3 Cr. Hrs.
A study of nutrition and its role in promoting good health throughout the life span. Includes the study of proper nutrients and the various functions of the nutrients in the body's metabolism.
(3+0)F, S, SU
Note: Transfer Assurance Guide(TAG) approved effective summer 2007(OHL016-Basic Nutrition)

## BIO150 THE HUMAN BODY

4Cr. Hrs.
An integrated course in the normal structure and function of the human body. It forms a basis for the later understanding of dysfunctional conditions. Each body system is presented individually, then the interrelationships between body systems are studied. (4+0) F, S
Prerequisite: BIO101 or high school Biology and Chemistry with a grade of "C" or better.

## BIO180 PRINCIPLES OF GENETICS

4Cr.Hrs. The fundamentals of classical genetics and the basic principles of human genetics are reviewed. Topics covered include plant and animal genetics, cancer genetics, genetic engineering, genetics in human medicine and criminology, and ethical issues raised by DNA technology.
(3+2) F even years
Prerequisite: BIO101 or high school Biology and Chemistry with a grade of "C" or better.

BIO210 BOTANY
4Cr.Hrs.
A study of fungi, algae, and plants. Focuses on the vascular plants, primarily their morphology, physiology, growth, development, nutrition, ecology, and phylogeny. Emphasizes life forms important to humans. Laboratory reinforces and supplements lectures.
$(3+2)$ S - odd years
Prerequisite: BIO101 or high school Biology and Chemistry with a grade of "C" or better.

BIO220 ZOOLOGY
4 Cr. Hrs.
A comparative study of the major phyla within the animal kingdom, including animal classification, structure, function, ecology, and behavior. Laboratory work reinforces lecture and includes animal dissections.
(3+2) F - odd years
Prerequisite: BIO101 or high school Biology and Chemistry with a grade of "C" or better.

## BIO231 ANATOMY \& PHYSIOLOGY I 4 Cr. Hrs.

Anatomical and physiological aspects of cells and tissues and the integumentary, skeletal, muscular, and nervous systems of the human body. Lab emphasizes human anatomy and physiology and includes cat dissection.
(3+2) F, S, SU
Prerequisite: BIO101 or high school Biology and Chemistry with a grade of "C" or better, or equivalent; strongly recommend CHM101

## BIO232 ANATOMY \& PHYSIOLOGY II 4 Cr. Hrs.

 A continuation of BIO231, which focuses on anatomical and physiological aspects of the endocrine, digestive, respiratory, circulatory, cardiovascular, lymphatic, urinary, and reproductive systems of the human body. Lab emphasizes human anatomy and physiology and includes cat dissection.(3+2) F, S, SU
Prerequisite: BIO231

## BIO257 MICROBIOLOGY

A study of anatomy, physiology, taxonomy, identification, growth, and control of microorganisms, including bacteria, viruses, algae, fungi, and selected human parasites. Additional topics include bacterial metabolism, microbial genetics, immune responses, host defense mechanisms, and the spread of infectious diseases. Laboratory includes culture staining and identification of microorganisms.
(3+3) F, S, SU
Prerequisite: BIO101 or high school biology and chemistry with minimum grade of "C"

## BUS110 BUSINESS MATH/CALCULATORS 3 Cr. Hrs.

 Business Math/Calculators briefly reviews mathematical operations, then applies these fundamentals to realistic business problems involving discounts, markups/markdowns, payroll/deductions, simple interest, promissory/discount notes, compound interest and present value, installment buying, APR, Rule of 78, credit card accounts, mortgage payments/amortization schedules, and property taxes. In addition, 10-key skills are developed as well as the efficient use of table-model calculators.(2+2) F - Day \& Eve, S - Day \& Eve, SU - Day \& Eve
Prerequisite: MTH050

## BUS160 INTERNATIONAL \& GLOBAL BUSINESS

This course focuses on the economics, social and cultural considerations of doing business overseas. The globalization of markets and the growth of overseas business ventures is explored. The need to develop varied techniques for managing people from other cultural backgrounds, the means of minimizing risks in financial transactions, and development of systems for coordinating and controlling operations will be stressed. Techniques to overcome international business barriers are covered. Upon completion, students should be able to demonstrate an understanding of the economic, social and cultural considerations of doing business worldwide.
(3+0)F

## BUS221 BUSINESS LAW

3 Cr. Hrs.
This course is a study of the U.S. legal system and dispute resolution. Major units of study include: sources of law, torts and crimes, contract and sales law, personal property law, employment law, consumer credit/bankruptcy law, and a study of business organizations. In addition, units on ethics, cyber law, e-contracts, intellectual property law, and alternative dispute resolutions are presented. Cases and media presentations are used to highlight important concepts.
(3+0) F, S, SU

## BUS223 EMPLOYMENTLAW,SAFETY,AND 3 Cr. Hrs. SECURITY

This course focuses on the need to understand and comply with Employment Law, the benefits of Employee Assistance Programs, and compliance with Occupational Safety, Health, and Security programs within the workplace. Topics covered in the course include legal compliance, workplace violence, safety, security, emergency response plans, employee assistance programs, employee wellness programs, and chemical use and dependency.
(3+0)F

## BUS250 LABOR RELATIONS

3 Cr. Hrs.
This is a study of unions and their relationship with management. Major topics include negotiating and administering labor contracts, wages, benefits, and working conditions, as well as their impact on contract negotiations.
(3+0) F - Eve, S - Day

## BUS257 GLOBAL ECONOMICS 3 Cr. Hrs.

This course covers the economic analysis of international trade and foreign investment, including theories of international trade, balance of payments, exchange rates and international monetary arrangements, adjustments of payments disequilibrium, and government policies on trade and aid. Upon completion, students should be able to demonstrate an understanding of the international economic environment.
(3+0)F

## BUS260 INTERNATIONAL TRADE

3 Cr. Hrs.
This course is a study in how to do business internationally. Topics include international terms, credits, export/import paperwork, and currency exchange. International marketing, distribution, and financing are emphasized, as well as cultural effects and local customs.
$(3+0) S$

BUS280 FINANCE
3 Cr. Hrs.
This course is an in-depth study covering three units on the concepts of financial analysis and forecasting. The first unit emphasizes the reading and construction of business financial statements coupled with the concept of budgeting and pro forma statements. The second unit is a study of the concept of working capital and various ways which a firm can choose to appropriately finance this need. The third unit is a study of present and future values as they relate to capital budgeting and cash flow analysis. The entire course involves heavy use of accounting terminology and techniques.
(3+0) S - Day \& Eve
Prerequisite: ACC111, MTH080

## F = Fall; S = Spring; SU = Summer

## CAD100 CAD FOR MACHINING

3 Cr. Hrs.
A course in the fundamentals of Computer-Aided Design, utilizing state of the art microcomputer hardware and AutoCAD software. Covers fundamental Windows XP system commands and AutoCAD application commands. Gives the student the opportunity to become proficient, in a hands-on environment, in developing fundamental 3D solid models and producing fundamental 2D drawings from the solid models.
(1 + 2) Spring, Summer \& Fall
Prerequisite: IET105 or instructor permission

## CAD111 CAD I

4 Cr. Hrs.
A course in the fundamentals of Computer-Aided Design, utilizing state-of-the-art microcomputer hardware and AutoCAD software. Covers fundamental Window system commands and AutoCAD application commands. Gives the student the opportunity to become proficient, in a hands-on environment, in developing fundamental 2D drawings and utilizing an industrial quality CAD system.
(3+3) F - Day \& Eve, S - Eve, SU - Day

## CAD112 CAD II

4 Cr. Hrs.
A continuation of CAD I. The student progresses to more advanced commands and design features of the AutoCAD software. The student utilizes plotting equipment for finished projects. The goal is to become proficient in the operation of a CAD system to develop complex assemblies to learn the interrelationship of detailed and purchased parts and how it all comes together in a final set of working drawings.
(3+3) S - Day \& Eve
Prerequisite: CAD111 or instructor permission, MET 103
Recommended: MET110
CAD213 CAD III 4 Cr. Hrs.
Expanding on CAD II, students will develop and plot advanced 3D models, 2D details drawings and 3D assembly drawings as used in the modern industry today. Students will also learn how to link their 3D models to develop design tables and bill of materials. This course is an advanced course in mastering the commands utilizing SolidWorks 3D feature-based parametric sold modeling design tool software. (3+3)F-Day \& Eve, S-Day
Prerequisite: CAD112

## CAD299 SPECIAL TOPICS

1-5 Cr. Hrs.
This is a special topics course in the Computer Aided Design discipline that could be used for special student or class projects, with the student receiving college credit for the experience. The course would typically be different each time it is offered. An example of this course would be a special project design for industry that would not align with an existing CAD course.
On Demand

## CAO110 CAREER DECISION MAKING 2 Cr.Hrs.

 This class is designed for students' undecided in their career choice. They will investigate the world of work in relation to their career goals. Activities will include exploration of interests, values, personality, aptitudes and abilities as they relate to career decision making. By examining the results of these activities, students can learn how to effectively determine the right major and career options for them. Individual career plans will be designed.(2+0) F
## CAO210 JOB SEARCH SKILLS

1 Cr. Hr.
Develops basic job search techniques related to letter writing, resume writing, interview skills, employment applications, and resources of job/company. Presents information about employment agencies, affirmative action concerns, stress during job search, and dealing with employer rejection.(1+0) F

## CHM101 PRINCIPLES OF CHEMISTRY

4 Cr. Hrs.
A basic review of the field of chemistry, focusing on concepts, theory, and application. Topics include the study of atomic structure, ionization, chemical reactions, isotopes, chemical analysis, bonding, and other topics related to chemistry. Laboratory reinforces and supplements lectures.
(3+3)F, S, SU

## CHM138 PRINCIPLES OF FORENSICS 4Cr.Hrs.

Forensics is the application of the natural sciences to all phases of criminal investigation. The study of basic chemistry and biology are now an important aspect of modern forensic science. Current topics in forensics as DNA investigation, hair analysis, blood, grass and soil, body fluids, fingerprint analysis, drug analysis, arson, accelerants, explosives, toolmarks and firearms.
$(3+2) F$, even years

## CHM201 GENERAL CHEMISTRY I

3 Cr. Hrs.
This course is the first course in the sequence for students majoring in science, engineering, or other majors that require a strong chemistry background. Topics of study will include atomic structure, stoichiometry, chemical bonding, kinetic-molecular theory, thermochemistry, oxidation-reduction reactions and acid-base chemistry. (3+1 [recitation] +3 ) F, Su

## CHM256 PRINCIPLES OF BIOCHEMISTRY 3Cr.Hrs.

An introductory course that deals with inorganic and organic biomolecules. Emphasizes the synthetic and degradative reactions of carbohydrates, lipids, nucleic acids, and proteins. Examines the roles of water, buffers, enzymes, vitamins, minerals, and organic salts in cellular metabolism. Laboratory reinforces and supplements lectures.
(2+2)F
Prerequisite: CHM101 or equivalent
F = Fall; S = Spring; SU = Summer

CIS090 INTRODUCTION TO COMPUTERS $1 \mathrm{Cr} . \mathrm{Hr}$. This course is a beginner's introduction to computers (PC's). The text covers most of the fundamental concepts associated with computers including terminology, hardware and software issues, and introduces the student to some elementary skills via some of the well-known software applications. Students will practice basic computer skills using word processing and spreadsheets, as well as explore the Internet. No prior computer knowledge is necessary for this course.
(1+1) F - Day \& Eve, S - Day \& Eve
DEVELOPMENTALCOURSESAREGRADEDPASS/FAIL(S/U) ANDDONOTMEETCOURSEREQUIREMENTSFORGRADUATION

## CIS100 GAME THEORY AND SOFTWARE 4 Cr. Hrs. DEVELOPMENT

This course involves the students in creating a computer "arcade style" game beginning with a written description and plan of the game. The second phase is the document design phase, or a more detailed description including sprites, game flow, sounds, controls, scoring, and difficulty levels. The goal of the course is to be able to create software games based upon in class lectures and hands on lab experience.
(3+2)

## CIS104 DESKTOPMANAGEMENT

2 Cr. Hrs.
This is a basic course in which the students learn to understand and operate the personal computer using the Microsoft Windows Environment. They will also learn how to communicate with others using Microsoft Outlook. The basic features for Windows XP and Outlook will be covered.
(2+0) F, S Day, S Eve (Odd years)
Prerequisite: CIS090

## CIS108 INTERNETSCRIPTING

4 Cr. Hrs.
This course is designed to teach programming to a student using a current Internet scripting language. The course will teach the student traditional programming concepts such as variable usage, program flow statements and designing loops. The class will focus on using the scripting language to solve programming problems using Internet applications.
$(3+3) \mathrm{F}$

## CIS109 DATABASEMANAGEMENT 4 Cr. Hrs.

This course is designed to familiarize students with the concepts underlying client/server relational databases. This class will teach students the basics of using the SQL query language. It will also teach more advanced SQL concepts such as query optimization and using SQL in other high level programming languages. This class will teach the student how to manage and maintain a server based database system. This will include tasks such as creating, backing up, repairing, optimizing, securing, localizing and internationalizing databases.
$(3+3) S$

CIS111 VISUAL BASIC PROGRAMMING 4 Cr. Hrs. This is a computer programming course involving applications utilizing a Graphics User Interface (GUI) and serving the needs of users in an event driven environment. The course moves from fundamental input/output programs to applications accessing a database for the purpose of adding, deleting, and/or updating records. The course also covers user report processing needs and applications involving the Internet. Object Oriented techniques are introduced and important programming concepts are emphasized preparing students for C++. Students will be required to complete several laboratory assignments during the semester.
$(3+3)$ F- Day \& Eve (even years)

## CIS112 MICROSOFT WORD

3 Cr. Hrs.
This course uses basic and advanced commands in Microsoft Word software to create, format, edit, and save documents including letters, tables, reports, and merged documents. Other topics covered include desktop publishing features, web pages, styles and templates, master documents, online forms, workgroups, and information integration with other office programs. Keyboarding skills are required.
(3+0)F,S

## CIS113 MICROSOFT EXCEL <br> 3 Cr. Hrs.

This course emphasizes beginning to advanced features of Microsoft Excel. Some of the topics presented include handling multiple worksheets, as well as, creating and using formulas, macros, range names, data lists, data protection, data validation, pivot tables, and linking and embedding.
(2+2)F, S

## CIS114 MICROSOFT APPLICATIONS 3 Cr. Hrs.

This is a basic course in which the students learn to operate the personal computer using components of Microsoft Office 2007 software: Microsoft Word, Excel, Access, and PowerPoint. Basic features for each software package will be covered. This course is designed to be a Transfer Assurance Guide (TAG) course OBU003 Computer Applications that will transfer to any Ohio state college. $(2+2)$ F - Day \& Eve, S - Day \& Eve, SU - Day \& Eve
Prerequisite: CIS090 and OAS090

## CIS118 ACCESS

1 Cr. Hr.
This is a course in which students will use MS Access software to learn the basic concepts of database management. Creating databases, entering data, preparing a query, preparing graphs, and preparing forms and reports are all practiced in a lab setting.
(1+1) F - Day, S - Eve
Prerequisites: CIS090
F = Fall; S = Spring; SU = Summer

## CIS119 POWER POINT

This is a course designed for the beginner in using a presentation graphics program. Slide creation; use of graphics, charts, tables, and color to enhance slides; and methods of automation and use of sound will be areas of study. Hands on experience and the ability to demonstrate usage of Power Point will be provided.
(1+1) F - Eve, S - Day
Prerequisites: CIS090
CIS121 INTERMEDIATE WORD
1 Cr. Hr.
A continuation of CIS114emphasizing advanced features of Microsoft
Word are presented including creating charts, formatting text into columns, formatting with styles, merging documents, sorting, creating tables, and linking and embedding.
(1+1)F, S, SU
Prerequisite: CIS114 with grade of "C" or better

## CIS122 INTERMEDIATE EXCEL

1 Cr. Hr.
A continuation of CIS114 emphasizing advanced features of Microsoft Excel are presented including handling multiple worksheets, as well as creating and using formulas, macros, range names, data lists, data protection, data validation, pivot tables, and linking and embedding. (1+1)F, S, SU
Prerequisite: CIS114 with grade of "C" or better

## CIS129 WEBPAGEDEVELOPMENT

3 Cr. Hrs.
The student will learn the concepts of web page design and layout, write HTML, XHTML, and CSS code in preparing web pages for the internet.
(2+2) S - Day; online Fall \& Spring
CIS138 INTERMEDIATE ACCESS 1 Cr. Hr.
This course is a continuation of CIS118 Beginning Access and is designed for the student wanting to learn advanced functions of using a database program. Review of topics completed in CIS118 along with creation of custom forms and reports, action queries, table relationships, and integrating Access with other programs will be completed. Hands on experience and the ability to demonstrate use of Access will be provided.
(1+0)S

## CIS150 PROGRAMMING C++

4 Cr. Hrs.
This is an introduction to structured programming using the Borland ANSI C/C++ programming environment. Use of the environment tools, logic structures, and primary library functions of the language is emphasized. Additional subjects covered include variable types and declarations, math and logical operators, parameter passing, arrays and string handling and pointers.
$(3+3)$ F - Day \& Eve

CIS155 LINUX NETWORKING I 4 Cr. Hrs.
This course is the first in a series that will cover data communications and operating system technology as implemented in a Linux environment. Subjects covered include the history, theory, administration, and installation of Linux and its associated software. This class will focus on the administration of Linux workstations. This class makes extensive use of lab projects to reinforce essential concepts. This class utilizes course materials used to prepare for CompTIA Linux+ Certification.
Co-requisite: CIS190
(3+3)F

## CIS161 C \#

4 Cr. Hrs.
This course is a continuation of structured programming using the Borland ANSI C/C++ programming environment. Use of the environment tools, logic structures, and primary logic functions of the language are emphasized. Additional subjects covered include variable types and declarations, math logical operators, parameter passing, arrays, and string handling pointers.
(3+3) S-Day \& Eve (even years)

## CIS165 JAVA PROGRAMMING

4 Cr. Hrs.
This course utilizes the Java Programming Language and emphasizes object-oriented programming concepts. As a general purpose programming language Java can be utilized in traditional programming environments and support applications developed for a variety of computers. This course includes hands on laboratory assignments requiring students to complete and submit programming projects.
(3+3)S

## CIS180 COMPUTER OPERATIONS AND 4 Cr. Hrs. CL PROGRAMMING

This is a course in operating a computer system and ancillary equipment. The course includes organization of a typical computer, CL language programming, creating, storing, and executing programs, use of files, and error detection and correction. The computer used for this course is the IBM AS/400 minicomputer.
(3+3) F- Eve (odd years), S-Day

## CIS190 COMPUTER OPERATIONS <br> GENERIC OPERATING SYSTEMS

This class is an intensive study of operating systems and PC Hardware. Topics include study of the theory and tasks commonly assigned to system software, basic disk and program commands, configuration and installation commands and techniques, management of resources, and security. Hardware issues are also addressed, including memory allocation and interrupts, communications and I/O, and peripherals. This class will prepare the student for the Comp TIA A+ Certification Exams.
(3+3) F - Day \& Eve
Prerequisite: CIS090 or CIS114 and OAS090

## CIS230 PROGRAMMING RPG

4 Cr. Hrs.
This is a course in structured RPGIV(ILE) using programming with emphasis on business-oriented programs. Topics include input/ output processing, arithmetic calculations, control break processing, and table and array manipulations. Laboratory experiences include writing, debugging, and executing programs demonstrating proficiency in the above areas. The computer used is the IBM AS/ 400 minicomputer.
$(3+3)$ F - Day (odd years) \& Eve (even years)

## CIS255 LINUX NETWORKINGII

4 Cr. Hrs.
This course is the second in a series that will cover data communications and operating system technology as implemented in a Linux environment. Subjects covered include the history, theory, administration, and installation of Linux and its associated software in a networked environment. This class will focus on the administration of Linux servers. This class makes extensive use of lab projects to reinforce essential concepts. This class utilizes course materials used to prepare for LPI (Linux Professional Institute) Certification. Prerequisite: CIS155
(3+3)S

## CIS256 INTERNETSECURITY

4 Cr. Hrs.
This course is designed to teach students the basics of Internet security. The course will begin with an in-depth analysis of the Internet communication protocol TCP/IP. The class will cover the use of protocol analyzers. The course will teach the students how to secure different forms of network media such as wireless networks. The student will learn to implement and maintain a firewall. The student will learn to secure common Internet services such as Web Servers. The class will cover the use of Cryptography as a security tool. This class will also cover the Ethical implications of network security.
$(3+3) \mathrm{S}$
Prerequisite: CIS155Linux Networking I

## CIS272 MICROSOFTNETWORKINGI

4 Cr. Hrs.
This class teaches the basic and advanced concepts needed to manage Windows XP workstations in both a network and standalone environment. This class also teaches the student the basics of managing a Windows 2003 server in an Active Directory environment. This class makes extensive use of lab projects to reinforce essential concepts. Topics covered in this class map directly to Microsoft Certification Exams 70-270 and 70-290.
(3+3) S - Day \& Eve
Co-requisite: CIS190

CIS282 MICROSOFT NETWORKING II 4 Cr. Hrs. This class is a continuation of Microsoft Networking I. The class covers network concepts such as the OSI reference model as well as advanced TCP/IP concepts such as subnetting,. The class covers most of the services included with Windows 2003 including DHCP, DNS, Certificate Services, RAS, routing, IPSEC and WINS. This class makes extensive use of lab projects to reinforce essential concepts. Topics covered in this class map directly to Microsoft Certification Exams 70-290 and 70-293.
(3+3) F - Day \& Eve
Prerequisite: CIS272

## CIS283 MICROSOFT NETWORKING III 4Cr.Hrs.

 This is a continuation of Microsoft Networking II. The class covers advanced topics in Active Directory such as backing up, restoring, and replicating. In the class the student will learn advanced security concepts such as how to secure a web server and the theory and usage of PKI. The class also includes an introduction to database administration using either Oracle or Microsoft SQL server. This class makes extensive use of lab projects to reinforce essential concepts. Topics covered in this class map directly to Microsoft Certification Exams 70-294 and 70-297.(3+3)S
Prerequisite: CIS272

## CIS290 INFORMATIONTECHNOLOGY 4 Cr. Hrs. INTERNSHIP

This is a job-related computer experience in which the student works for a department within the college, a business, or an industrial organization. The student is chosen for this course on the basis of academic progress or job experience. Enrollment only with instructor permission.
(1+30) F, S, SU

## CJT130 PRINCIPLES OF CRIMINAL JUSTICE

3 Cr. Hrs.

Students will become familiar with the criminal justice system by exploring theories of criminology, examining the development of criminal and procedural law, understanding the roles of law enforcement, court, and correctional personnel, and by investigating critical issues surrounding criminal justice including multi-cultural and gender issues.
(3+0) F, S

## CJT132 CRIMINAL JUSTICE ADMINISTRATION

3 Cr. Hrs.

Students will be examining the role of management versus leaders in the American criminal justice system focusing on the organization of bureaucratic systems, their basic principles, and the interrelationships between the major players. Students will also become familiar with organizational theory, leadership skills, disciplinary action and union issues.
(3+0)S

## CJT134 CRIMINAL LAW

This course is designed as a study of the development and mentation of criminal law. Emphasis will be placed on exploring elements of criminal statutes, understanding Ohio's criminal statutes, investigating affirmative defenses and sentencing practices. Students will analyze the law based on their own personal opinions and beliefs by critically examining and discussing certain laws, procedures, court cases, and case outcomes.
(3+0)S

## CJT136 JUVENILE DELINQUENCY PRINCIPLES

This course examines the problems of today's "youth in trouble", with an emphasis placed on prevention, causes and methods of approach and disposition of cases.
(3+0)F
Prerequisites: CJT130

## CJT140 CONSTITUTIONAL LAW 3 Cr. Hrs.

This course is a study of contemporary constitutional issues. Discussed are critical issues in criminal justice including detention, arrest, search and seizure, interrogations and confessions, selfincrimination, due process and right to counsel. Also included are constitutional aspects of criminal and civil liabilities of justice personnel, and constitutional and civil rights in the workplace. (3+0)S

## CJT230 CORRECTIONS

3 Cr. Hrs.
A survey of the general field of corrections, including the institutions and resources which are used. A historical overview of corrections is explored.
(3+0)S
Prerequisite: CJT130

## CJT240 CRIMINAL EVIDENCE AND PROCEDURE

An overview of criminal procedure and law including constitutional provisions, rules of evidence, trial and pre-trial procedures, arrest, search and seizure, admissibility and confessions.
(3+0)F
Prerequisite: CJT130 and CJT134

## CJT242 PROBATION AND PAROLE 3 Cr. Hrs.

This course will explore the philosophies and guidelines utilized in both the juvenile and adult probation setting. The dilemma of surveillance involving custody/control factors verses supervision and treatment will be examined. A strong emphasis will be placed on developing citizen agency relationships in utilizing citizen volunteer programs to help rehabilitate offenders.
(3+0)S
Prerequisite: CJT130 and CJT230

CJT244 CRIMINAL INVESTIGATION 4 Cr.Hrs. A study of investigative procedures; initial contact by the investigator, interviewing, case development, follow-up investigation, handling of leads, hot or cold information, in custody interviews and procedures. Crime scene labs will be incorporated into this class. (3+2)S
Prerequisites: CJT130, CJT134
CJT246 TECHNICAL SKILLS 3 Cr. Hrs. FOR OFFICERS
This course will focus on developing technical skills necessary for the performance of jobs in the Criminal Justice field. Topics covered will include Report Writing, Sketching, Interrogation, and Testifying in Court.
(3+0)F
Prerequisite: Admission to Law Enforcement Academy

## CJT250 INTERNET SECURITY \& 4 Cr. Hrs. COMPUTER CRIME INVESTIGATION

This is a network and computer security-based course. The course will include securing networks as well as identifying techniques used by offenders who compromise them. The tracking of information as well as data retrieval will also be covered. This course will place special emphasis on tasks useful to investigation of criminal cases in the criminal justice field, and will include a laboratory component to assist the student in developing practical skills. (3+2)S
CJT240, CIS190, and two of the following courses: CIS155, CIS272, CIS255, CIS282,EET272, orEET282
Co-requisite: CJT244
CJT252 SEMINAR IN CRIMINAL JUSTICE 3 Cr. Hrs. This course examines current critical issues in criminal justice. Topics to be considered for discussion and analysis include: terrorism, capital punishment, restorative justice, ethics, race and class issues, drugs, the decision making process, issues in policing and the future of crime and justice.
(3+0)F
Prerequisite: CJT130, CJT134

## CJT281 VEHICLE PATROL/TRAFFIC 4 Cr. Hrs. ENFORCEMENT

Police academy cadets will become familiar with O.P.O.T.C.requirements for proper patrol techniques including identifying traffic offenses and correct tactical procedures for stopping and approaching vehicles. (3+3) F,S
Prerequisite: Admission to Law Enforcement Academy

## CJT282 FIREARMS/DRIVING

4 Cr. Hrs.
Police academy cadets will become proficient in O.P.O.T.C. firearms techniques including identification of firearms and nomenclatures, secure handling of firearms, and will become certified in the firing of firearms. Students will also become adept in defensive and pursuit driving techniques and vehicle maneuverability. (2+6) F, S
Prerequisite: Admission to Law Enforcement Academy

## CJT283 DEFENSIVE TACTICS/PHYSICAL 3 Cr. Hrs. FITNESS

Police academy cadets will become experienced with several levels of defensive tactics including hand to hand and baton techniques as well as weapon retention. Students will also become physically ready to pass the O.P.O.T.C. physical fitness standards. (1+6) F, S Prerequisite: Admission to Law Enforcement Academy

## CJT284 HUMAN CONDITIONS 4 Cr. Hrs.

Police academy cadets will become certified in first aid and CPR techniques. Students will also identify cultural differences and how to effectively interact and communicate in diverse settings. Cadets will also become knowledgeable in preventing and controlling civil disorders. (3+3) F
Prerequisite: Admission to Law Enforcement Academy

## CJT289 SPECIAL TOPICS FOR CRIMINAL 1 Cr. Hr. JUSTICE PROFESSIONALS

This course will examine special topics within criminal justice including sociological, criminological and philosophical discussions of criminal justice. Topics within the course will challenge students to examine the underlying theory and assumptions behind many of their current beliefs. (1+0)
Prerequisite: CJT132, CJT136, CJT230, CJT240
Co-requisite: CJT242, CJT244, HST214
CJT290 CRIMINAL JUSTICE PRACTICUM I 4 Cr.Hr.
A basic exposure to a particular criminal justice agency through observation and limited participation. This course will provide an understanding of how this agency fits into the entire criminal justice system and local community.
(3+8) F, S
Prerequisite: CJT132, CJT136, CJT230, CJT240
Co-requisite: CJT242, CJT244

## ECD100 PRINCIPLES OF EARLY CHILDHOOD EDUCATION

This course provides an overview of teaching young children in today's schools. An emphasis will be placed on the history of early childhood education and theories which influence program and curriculum development. Ohio's Early Learning Standards for Preschool children and Content and Achievement standards for K3 will be introduced.
$(2+0)$ F, S

ECD101 CHILD DEVELOPMENT LAB 2 Cr. Hrs. This lab experience places the student at a child care center observing the development of young children. The lab will consist of observation and gradually move the student into interaction experiences with preschoolers. Through the study and application of various observation methods the student will be able to understand how social groups function and to recognize factors and situations that are likely to promote student motivation and learning.
(1+3) F, S
Prerequisites: Documentation file
Co-requisites: ECD100, PSY230
ECD150 INFANT TODDLER DEVELOPMENT 2 Cr. Hrs. An understanding of the important role of adults in controlling, intervening and interpreting the environment so that infants and toddlers receive protective care, stimulation, and relaxation necessary to enhance physical, social, emotional, cognitive, and language development.
$(2+0) \mathrm{F}$
ECD201 PRE K CURRICULUM \& METHODS 3 Cr. Hrs. This courses focuses on the role of the teacher in connecting content, teaching and learning for preschool children when building curriculum based on best practices. Ohio's PreK Early Learning Standards will be used as students compare and contrast a variety of curriculum models. Students will apply understandings of how children learn to create healthy, respectful, supportive, and challenging learning environments for all children. Participation in a preschool classroom seven hours each week will give students an opportunity to develop, implement and reflect on lesson plans that they selected and prepared to meet the needs of individual children and the group.
$(2+7) S$
Prerequisites:ECD100,ECD101,PSY230
Co-requisite: EDU120

## ECD202 EARLY CHILDHOOD DIVERSITY LAB.

This lab will give students experience working with and interacting with toddlers (age 18 months - 36 months), preschool children in the Head Start program including going on home visits and children in the integrated special needs preschool programs. Students will develop an understanding of how their knowledge of student background and experiences are used to support planning of relevant learning experiences. Students will rotate through three different lab sites for a total accumulation of 105 lab hours.
(2+7) F
Prerequisites: ECD101,EDU120, PSY230
Co-requisites: EDU220, EDU230

## ECD250 EARLY CHILDHOOD PROGRAM 3 Cr.

## ADMINISTRATION

The course reviews philosophy, organizational structure, personnel issues, policy formation, record keeping, and budgeting as related to start up of a child care program. Emphasis will be placed on understanding major differences in programs reflecting minimum licensing standards and accreditation standards. Students will develop a business plan for hypothetical program for children 0-6. $(3+0) S$
Prerequisites: ECD100

## ECD270 SPECIAL TOPICS IN EARLY CHILDHOOD

An independent study course permitting the student to explore issues affecting children and families. May be required by ECD faculty to assist students in meeting requirements for the Ohio Department of Education Pre-Kindergarten Associate License.
(3+0)F, S
Prerequisite: Determined by ECD Coordinator's recommendation

## ECD280 CHILDCARE FIELD EXPERIENCES 3 Cr. Hrs.

A 60-hour field experience appropriate to student's focused interest area. May be required by ECD faculty to assist students in meeting requirements for the Ohio Department of Education Pre-Kindergarten Associate License.
(1+4)F, S
Prerequisite: Determined by ECD Coordinator's recommendation

## ECD282 EARLY CHILDHOOD FIELD EXPERIENCE

A 105-hour field experience appropriate to student's focused interest area. Placement of 8 weeks in two different sites will give the student a broad view of services available.
$(1+7) S$
Prerequisites: ECD Coordinator Permission

## ECD290 PREKINDERGARTEN PRACTICUM

Participation in a preschool center. Planning and carrying out specific activities providing experiences in working with children individually and in groups. Principles are assimilated through practical experiences.
(1+14)S
Prerequisite: Completed training in First Aid, CPR, Common Childhood Illness Recognition, Child Abuse Recognition; per ODJFS requirement; Practicum application and requirements filed with ECD coordinator by October 1; and attend practicum orientation meeting in December. Student must demonstrate that the PreK Associate Degree can be completed within 6 months of completing practicum.

## Hrs.

ECD291 ADMINISTRATOR INTERNSHIP 3 Cr.
Hrs.
Directed field experience where the student participates in minimum of 14 hours per week at an early childhood program where the administrator's role is regulated by ODJFS Revised Code 5101:2-1225. The student will have two placement sites during the semester arranged by NSCC faculty.
(1+14)S
Prerequisite: 75\% completion of degree requirements

## ECO211 MACROECONOMICS

3 Cr. Hrs.
Macroeconomics is a study of the U.S. economy emphasizing supply and demand, total production, total employment, and the general price level. Issues of inflation, recession, international trade, and federal budget deficits are also investigated. Economic solutions through fiscal policy and monetary policy are included.
(3+0) Eve (odd years), S Day

## ECO212 MICROECONOMICS

3 Cr. Hrs.
Microeconomics is a study of the U.S. economy emphasizing supply and demand, the individual firm, competition, and the industry. Issues of revenue, expense, profit, loss, and break-even are also investigated. Decisions such as price determination and production output are included.
(3+0) F Day, S Eve

## EDP150 CHILD AND CLASSROOM 2 Cr. Hrs.

 OBSERVATION SKILLSThe lab will consist of observation and gradually move the student onto interaction experiences with children. Through the study and application of various observation methods the student will be able to understand how social groups function and to recognize factors and situations that are likely to promote student motivation and learning.
$(1+3) \mathrm{S}$
Prerequisites: EDU100
3 Cr. Hrs. Co-requisites: EDU120, PSY230

## EDP200 SPECIAL EDUCATION 2 Cr. Hrs.

 LABEXPERIENCEThis special education lab experience is designed to give the student diverse experiences at different age and ability levels. These include early intervention, integrated pre-school, early childhood, middle school and secondary education through age 21. The student will obtain knowledge of and be given the opportunity to apply effective instructional strategies to assist teaching and learning in these various settings. Also stressed in this lab is the importance of family involvement and the IFSP and IEP process.
(1+7)F
Prerequisites: EDP150, EDU120, PSY230
Co-requisites: EDU220

## EDP290 PARAPROFESSIONAL INTERNSHIP

This experience requires the student to be available for a continuous experience in a school system for not less than 14 hours per week. Assignments will be coordinated through local schools so that the student has the opportunity to apply knowledge and develop skills appropriate to the role of the educational paraprofessional.
$(0+14) S$
Prerequisites: 75\% completion of degree requirements
Co-requisite: EDU 250

## EDU100 INTRODUCTIONTOTEACHING 2 Cr. Hrs.

Students will investigate the teaching profession and the many reforms which affect teacher preparation and licensure. Philosophies and the organization of American schools will be viewed both historically and in contemporary society. Students must be available to make several school visits, and access the internet to research relevant topics. $(2+0) \mathrm{F}, \mathrm{S}$.

## EDU110 CHILD AND YOUTHHEALTH EDUCATION

2 Cr. Hrs.

A multi-disciplinary approach to health, safety and nutrition education for children of all ages. Included in this class is an in-depth study of subject matter as well as health methods and classroom activities to give students the tools they need to become successful health educators. Course does not substitute for ODJFS rule 5101:2-12-27. (2+0)F

## EDU120 GUIDANCE AND CLASSROOM MANAGEMENT

Classroom management is a major concern of all educators from the preschool classroom through secondary education. This course explores various guidance theories providing a variety of techniques to be used in the development of a personal philosophy that can be put into practice in the classroom.
(3+0) S
Prerequisites: EDU100 or ECD100

EDU130 PHONICS AND EARLY LITERACY 3 Cr. Hrs. Emphasis is placed on the understanding of phonics and its role in beginning reading and writing instruction. Students will explore strategies to teach the relationship between letters and sounds.
$(3+0) \mathrm{S}$
Prerequisites: PSY110 or PSY230

EDU210 CREATIVE ARTS CURRICULUM 3 Cr. Hrs.
This course is designed to teach theory and practice supporting play to develop children's creative expression in music, drama, art, and movement. Principles and elements of the arts are introduced as the student advances own understanding of the arts and their contribution to child development and learning.
(3+0) S
Prerequisites: PSY230
F = Fall; S = Spring; SU = Summer

## EDU260 INSTRUCTIONAL TECHNOLOGY 3 Cr.Hrs.

 This is a hands-on course addressing technology's role in education at all grade levels. The focus is on processes and tools that are available to teachers to enhance classroom organization, instruction, and assessment. Students will research pedagogical issues regarding appropriate use of computers with young children and in the classroom.(2+2) S
Prerequisites: CIS114, EDU100

## EET171 INDUSTRIAL ELECTRICITYI 3 Cr. Hrs.

This is an introductory electricity course for skilled trades personnel. The course is a study of DC and AC electricity principles, with a practical approach to applications in an industrial environment. The learner will obtain a knowledgeable understanding of the key symbols and abbreviations associated with the electrical trade, acquire a comprehensive understanding of basic electrical terminology, apply Ohm's Law to a number of relevant electrical applications, synthesize a number of components into a working system involving series, parallel, and series parallel circuits, and analyze and organize information gleaned from a malfunctioning circuit and restore that circuit to its original intention.
(2+2)F
Prerequisite: MTH050 or satisfactory score on Course Placement Test or instructor permission (based on experience).

## EET174 ELECTRICAL PRINTS \& TROUBLESHOOTING

This course is a study of the systematic elimination of the various parts of a system or process to locate a malfunctioning part. The learner will obtain a knowledgeable understanding of the key symbols and abbreviations associated with the electrical trade, acquire a comprehensive understanding of the various devices associated with an electrical circuit, synthesize a number of electrical components associated with a viable sequence of operation, recognize a malfunctioning circuit through proper meter application, and apply informed terminology while troubleshooting and restoring a malfunctioning system to its original intention promptly but safely. (3+0)S
Prerequisites: EET194 or instructor permission

## EET194 INDUSTRIAL ELECTRICITYII 3 Cr. Hrs.

This course is an advanced study of Industrial Electricity providing comprehensive coverage of the control devices used within a contemporary industrial electrical system. The learner will apply a knowledgeable understanding of key symbols and abbreviations and apply that terminology to a number of components synthesizing them into a workable electrical circuit. Upon completion of this course the learner will be able to analyze and organize information gleaned from a malfunctioning circuit and restore that circuit to its original intention.
(2+2) S
EET171 or instructor permission based on previous experience

EET221 DIGITAL ELECTRONICS 4 Cr. Hrs.
An introduction to logic, using the theorems from Boolean Algebra. Truth tables of logic expressions are used to design logic circuits using TTL and CMOS Logic IC’s. Additionally flip-flops, numbering systems, codes, counters, multiplexers, decoders, timers, and displays will be studied. Laboratory experience allows a chance to build up circuits designed and observe the properties of the logic families.
$(3+3)$ F - Day \& Eve (odd years)
EET240 ENGINEERING PROGRAMMING 3 Cr. Hrs. This course is the study of the popular Visual Basic 6.0 programming language. The focus will be on the student learning statement language and visual programming. Projects and learning activities will include Engineering and Industrial Maintenance applications. (2+2)F
Prerequisite: IET105, MTH 090 or instructor permission
MET255 FLUID MECHANICS
3 Cr. Hrs.
Fluid power is an efficient way to move energy without mechanical belts, chains, or levers. The physics of fluids, components, troubleshooting, and design applications for hydraulic and pneumatic systems are covered in this class. This class will introduce the student to both hydraulic and pneumatic components. Safety: This course will simulate an industrial environment; following all safety procedures will be required. Everyone will wear safety glasses while working in the lab! Failure to comply will result in not being able to work in lab and therefore lowering your lab grade(s).
$(2+2)$ Fall
Pre-requisite: PHY251 Physics Mech. \& Heat
EET265 INSTRUMENTATION \& CONTROLS I 3 Cr. Hrs. This course is a study of the operation and troubleshooting of Industrial Instrumentation systems. The focus will be on analog monitoring and controlled devices, connected to stand alone and PLC based controller systems. The concepts of temperature, pressure, level and flow will be discussed, as well as the transmitters that connect the analog sensor signals to the analog I/O.
$(2+1) S$
Prerequisite: EET171, PLC200

## EET272 CISCO NETWORKINGI

4 Cr. Hrs.
This class is designed to teach students the skills to configure and maintain a small to medium sized, multi-protocol, routed and/or switched network. Specific topics covered include the OSI reference model and how it relates to real world protocols such as Ethernet, Token Ring, TCP/IP, and others. Logical and physical network topologies are discussed. TCP/IP addressing topics such as subnet masks are covered. Several TCP/IP routing protocols such as RIP and OSPF are covered. The materials and labs cover the use of Cisco equipment and help to prepare the student for the testing needed to seek CCNA (Cisco Certified Network Administrator) certification.
(3+3) S-Day
F = Fall; S = Spring; SU = Summer

## EET276 MOTORS AND MOTOR CONTROLS

This course is designed to be a comprehensive reference for use in industrial maintenance and electrical training programs. Each topic covered includes activities which reinforce the objectives presented. Topics covered range from motor types and controls to installing and troubleshooting electric motor drives.
$(2+2) S$
Prerequisite: EET194 or instructor permission

## EET277 INDUSTRIAL ELECTRONICS 3 Cr. Hrs.

This course is a study of the electronic devices used in modern day industrial machinery. Solid state switching devices will be discussed, that includes transistors, SCRs and Triacs, as well as the firing devices used in current controlled circuits. Power supply circuits and basic amplifier circuits using Operational Amplifiers will also be discussed. Students will focus on operation, application and troubleshooting of the various electronic devices.
$(2+2) \mathrm{F}$
Prerequisite: EET171

## EET281 INDUSTRIAL WIRING (NEC) 3 Cr. Hrs.

The primary purpose of this course is to acquaint the learner with a ready source of information relevant to the NEC (National Electric Code), IEC(International Electrotechnical Commission), AISI(American Iron and Steel Institute), NFPA, (National Fire Protection Association), ANSI (American National Standards Institute), UL (Underwriters Laboratories, Inc.), OSHA (Occupational Safety and Health Act), and various Local Codes. This information will focus primarily on the electrical design and engineering of most site work including, but not limited to, industrial, commercial, and residential occupancies.
(2+2)F
Prerequisite: EET171 or instructor permission

## EET282 CISCO NETWORKING II

4 Cr. Hrs.
This class is designed to teach the student how to configure and maintain Internetworking data communication equipment in an enterprise environment. Topics include multi-protocol routing, advanced distance vector routing, advanced link state routing, border gateway protocol routing, LAN switch placement, Virtual LAN filtering and tagging, LAN switch architecture and advanced LAN switch troubleshooting. The materials and labs cover the use of Cisco equipment and help to prepare the student for the testing needed to seek CCNA (Cisco Certified Network Administrator) certification.
(3+3)F-Eve
Prerequisite: EET272 or instructor permission

EET289 SYSTEMS INTEGRATION
3 Cr. Hrs.
This course is a capstone for the Manufacturing Maintenance, Industrial Electrical, PLC Certificate and Maintenance Technician/ Mechatronics programs. Upon the completion of the requirements for the previously mentioned programs, the learner will display his/ her newly developed skills by designing an industrially related system, (electrical and pneumatic), install the appropriate electrical and mechanical devices and troubleshoot the system to $100 \%$ of the design specifications.
$(2+2)$ Spring \& Fall
Prerequisites: PLC200 \& MET232

## EMS101 EMT BASIC

6 Cr. Hrs.
This course will overview the components of the Emergency Medical Services system, roles and responsibilities of the Basic EMT. Topics include basic medical emergency management, patient assessment and triage, multi-system trauma management, patient stabilization and transportation. Includes hands-on laboratory and clinical experiences. This course is taught at Four County Career Center; students must submit verification of current certification to receive credit for the course.
(5+3)

## EMS105 EFFECTIVE COMMUNICATIONSKILLS1Cr.Hr FOR THE HEALTH CARE PROFESSIONAL

The ability of health care professionals to communicate accurately and effectively in the context of a helping relationship is vital. The course provides tools with which to establish open therapeutic communication with clients, foster teamwork with colleagues, and deal with conflict and aggression in a constructive manner. (1+0) F

## EMS110 EMTINTERMEDIATE <br> 6 Cr. Hrs.

This course emphasizes the roles and responsibilities of the EMTI. Includes medical / legal considerations, basic pharmacology, medication administration, airway management, patient assessment, emergency medical treatment procedures for trauma and various medical emergencies. The laboratory component includes procedures necessary for the care of patients requiring invasive therapy techniques. This course is taught at Four County Career; students must submit verification of current certification to receive credit for the course. (5+3)
Prerequisite: EMS101
F = Fall; S = Spring; SU = Summer

## ENG080 READING COMPREHENSION 3 Cr.Hrs.

ENG080 is a critical reading and thinking course for improving comprehension and vocabulary needed in college level course requirements. Emphasizing skills for efficient, independent learning from textbooks and other college reading materials, this course will emphasize a variety of skills including vocabulary in context, main ideas and supporting details, implied main ideas, relationships, facts and opinion, inferences, tone and purpose, and argument.
(3+0) F, S, SU
DEVELOPMENTAL COURSES ARE GRADED PASS/ FAIL (S/U) AND DO NOT MEET COURSE REQUIREMENTS FOR GRADUATION

## ENG090 BASIC COMPOSITION

3 Cr. Hrs.
This course provides an understanding of the writing process and English fundamentals to ensure success in college writing assignments. It reviews grammar, usage, punctuation, and spelling. However, the emphasis is on writing, with the primary goal of paragraph composition and development, culminating in the five paragraph essay. Some familiarity with computers and word processing is definitely an asset
(3+0) F, S, SU

## DEVELOPMENTAL COURSES ARE GRADED PASS/ FAIL (S/U) AND DO NOT MEET COURSE REQUIREMENTS FOR GRADUATION

## ENG111 COMPOSITION I

3 Cr. Hrs.
An expository composition course emphasizing the expectations of college-level writing, including thesis development, support, and coherence. Students will gain experience using a variety of rhetorical modes. In addition to a number of full-length essays, a short documented paper, based on research materials and using parenthetical references, is required.
(3+0) F, S, SU
Prerequisite: Satisfactory score on Course Placement Test or completion of ENG090.

## ENG112 COMPOSITION II

3 Cr. Hrs.
Building on the skills learned in Composition I, this course further develops the student's writing and research experience, with an emphasis on analytical writing in response to critical reading and class discussion. Using MLA parenthetical documentation techniques, the student will write a number of essays, usually including summary - response, analysis-evaluation, synthesis, and argument. A research paper is required.
(3+0) F, S, SU
Prerequisite: Must have received a "C" or better in ENG111

ENG113 SPEECH
3 Cr. Hrs.
This course provides experience in public speaking in a small group situation and emphasizes interpersonal communications, the organization and presentation of a public speech, and group discussion skills. Improvement of listening skills and the use of visual aids are important parts of the course. Student speeches are analyzed and critiqued for effectiveness.
(3+0)F, S, SU
NOTE: Transfer Assurance Guide (TAG) approved effective summer 2007 (OCM004-Basic Public Speaking/Oral Communication)

## ENG210 TECHNICAL COMMUNICATIONS 3Cr.Hrs.

 This course develops written and oral communication skills needed in technical fields, focusing on producing documents, effectively conducting group discussions, and giving presentations. It includes formal individual and group technical reports as well as shorter documents common to technical fields, emphasizing clear, concise, and logical communication strategies, format and visual aids.(3+0)F
Prerequisite: ENG112 or permission of instructor

## ENG214 DISCUSSION AND CONFERENCE METHODS

Focuses on the elements of communication and small group theory as employed in a group discussion situation with emphasis on the individual's responsibility in the discussion setting. Focuses on the development of the leadership abilities within the group, including analysis of group interaction in the decision-making process for task-oriented groups.
(3+0) F
Note: Transfer Assurance Guide(TAG) approved effective summer 2007 (OCM003-Small Group Communication)

## ENG220 BUSINESS WRITING 3 Cr. Hrs.

Using interpersonal and administrative communication skills, concise and organized business letters, memoranda, and reports are written, emphasizing tone, format, content, and use of graphic aids. The analytical, problem-solving report and oral presentation, based uponlibrary research, field experience, and interviews and/or questionnaires, are required.
(3+0)S
Prerequisite: ENG112 or instructor permission
ENG223 INTERPRETATIONOFLITERATURE 3 Cr. Hrs. Introduces the elements of critical reading of literature, specifically fiction, poetry, and drama. Topics such as structure, character, point of view, style, theme, tone, and symbolism first are defined, then applied to selected pieces of literature. Examines the importance of historical, cultural, and literary contexts for understanding literature. $(3+0) S$
Prerequisite: ENG111

ENG230 CHILDREN'S LITERATURE 3 Cr. Hrs. Reading and evaluation of nonfiction and fiction, folklore, myth, poetry, and illustrated books for children and adolescents from critical and multicultural points of view.
(3+0) F, S
Prerequisite: ENG111

## ENG234 NARRATIVELITERATURE OFTHE 3Cr.Hrs. OLD NORTHWEST TERRITORY

Explores non-fiction narrative accounts from early travelers and settlers ranging from the Ohio River to the Upper Great Lakes as revealed through journals, diaries, oral histories, and novels by such writers as Schoolcraft, Thoreau, Eckhart, Edward, Dickens, Goldthwaite, and others.
(3+0)S
Prerequisite: ENG111

## ENG240 INTRODUCTION TO POETRY 3 Cr.Hrs.

Introduces the elements of critical reading of poetry, including poetic language, imagery, and forms. Focuses on poems as expressions of important themes of human experience and as products of their historical and cultural contexts.
Prerequisite: ENG111

## ENG241 INTRODUCTION TO FICTION 3 Cr.Hrs.

Focuses on a critical reading of fiction, particularly short stories, examining formal elements, including plot, character, setting, point of view, and theme. Introduces various critical perspectives for the interpretation of fiction, including the importance of historical, cultural, and literary contexts for understanding fiction.
Prerequisite: ENG111
ENG250 AMERICANLITERATURETHROUGH 3Cr.Hrs. THE MID-19th CENTURY
Surveys American literary works ranging from recorded Native American oral tradition through the literature of the Civil War period. Places works in historical and cultural contexts, focusing on the development of major themes and movements in American literature. (3+0)F
Prerequisite: ENG111
Note: Transfer Assurance Guide (TAG) approved effective fall 2005 (OAH033-American Literature Survey)

ENG251 AMERICANLITERATURE SINCE 3 Cr. Hrs. THE MID-19th CENTURY
Surveys American literary works from the late nineteenth century through the contemporary period. Places works in historical and cultural contexts, focusing on the development of major themes and movements in American literature.
(3+0)S
Prerequisite: ENG111
Note: Transfer Assurance Guide (TAG) approved effective fall 2005 (OAH033 - American Literature Survey)

## ENG260 BRITISH LITERATURE THROUGH 3 Cr. Hrs. THE 18th CENTURY

Focuses on British literature from the Old English period through the Restoration and eighteenth century examining writers and representative literary texts, including poetry, drama, and prose fiction and non-fiction, as they reflect cultural and historical contexts.
(3+0)F
Prerequisite: ENG111
Note: Transfer Assurance Guide(TAG) approved effective fall 2005
(OAH032-British Literature Survey)

## ENG261 BRITISHLITERATURE 19th CENTURYTOPRESENT

3 Cr. Hrs.

Focuses on British literature from the Romantic period through the twentieth century, examining writers and representative literary texts, including poetry, drama, and prose fiction and non-fiction, as they reflect cultural and historical contexts.
(3+0)S
Prerequisite: ENG111
Note: Transfer Assurance Guide(TAG) approved effective fall 2005 (OAH032-British Literature Survey)

## ENG271 NON-WESTERNLITERATURE 3 Cr. Hrs.

Examines twentieth-century, non-western writers and literary works that contribute to an understanding of the experiences of nonWestern peoples. Provides an overview of literary figures and forms in their historical and cultural contexts, with emphasis on their significance to our understanding of global issues. Reading selections emphasize examples from Asia, Africa, Latin America, and the Middle East.
(3+0)F
Prerequisite: ENG111
Note: Transfer Assurance Guide (TAG) approved effective summer
2008 (OAH034 - Non-Western Literature Survey)
GEO110 WORLD GEOGRAPHY 3 Cr. Hrs.
This course conveys the nature, challenges, and component interrelatedness of the discipline of geography. The geographic method of inquiry is used to describe, explain, and analyze our environment. The principal goal of the course is to give the student a global perspective from which he or she can view the uniqueness of the discipline. Thus the student is introduced to the tools, vocabulary, and the spatial orientation used by the geographer.
(3+0) F, S, SU
Note: Transfer Assurance Guide(TAG) approved effective fall 2005 (OSS008 - World Regional Geography)

GEO210 GEOGRAPHY-US \& CANADA 3 Cr. Hrs. A study of the human geography of the U.S. and Canada, covering the geographic influence on the demographic, economic, political, and cultural themes of these neighboring countries, which share a common geography and history in many respects. Major focus is on human patterns and the interaction among these patterns as well as the actual physical environment.
(3+0) F, S, SU

F = Fall; S = Spring; SU = Summer

GSD050 BRIDGES TO OPPORTUNITY 4 Cr. Hrs.
As part of Northwest State Community College’s Bridges to Opportunity Initiative, this course is designed for students who are committed to (1) achieving Adult Basic Lit eracy Skills, (2) entering an associate degree program (3) completing a personalized academic action plan, and/or (4) reaching proficiency as a non-native speaker of the English language.
(4+0)
Course offered on demand with the approval of the Dean of General Studies.

## GSD100 SUCCESS SEMINAR

1 Cr . Hr.
This course teaches self-management principles and practices for life-long learning that increase a student's success in college and in life by enhancing the student's skills in time management, effective living and learning skills, technology skills, effective study habits, note taking, and test anxiety reduction. Students will examine factors which impact learning, select relevant methods of enhancing learning and thinking processes, and develop strategies for maximizing effectiveness in college, work, and community settings.
Required course for students who test into either MTH050 or MTH080 and either ENG080 or ENG090; required for students on Academic Probation; required for students returning from Academic Suspension. This course is open to any student and could be used as a 1 credit General Studies elective.
(1+0)

## GSD101 GENERALSTUDIESPORTFOLIO DEVELOPMENT

This course is designed for students who wish to apply for college credit by developing a portfolio of prior learning and/or personal and professional competencies. The student will work with the course instructor and his/her advisor in the development of the portfolio. The prior learning portfolio may be used to request additional college-level academic credit in a specific program area. The career portfolio may be used to demonstrate personal and professional competencies for career advancement or job candidacy purposes. (3+0)
Prerequisite: To take this course, the student must demonstrate college-level reading, writing, and mathematics skills by satisfactory score on the college placement exam; completion of English 111 required.

## HIS101 US HISTORY PRE-1876 3 Cr. Hrs.

 A study of the social, political, and economic development of the United States through the Post Civil War period. Several critical periods in early American History are examined: colonization, settlement, rebellions, revolutions, constitution making, Jeffersonian and Jacksonian democracy, slavery, the westward movement, the Indian problems, and the Civil War.$(3+0)$ F, SU - even years; S - odd years
Co-requisite: ENG111
Note: Transfer Assurance Guide(TAG) approved effective summer 2008(OHS043-U.S. American History I; OHS010-U.S. American History Sequence, Course 1 of 2)

HIS102 US HISTORY POST-1876
United States from the Reconstruction period to the present. Topics include reconstruction, impact of industrialization, agricultural revolution, populism, rise of monopoly capital in the "progressive" era, the age of imperialism, WWI, Great Depression, WWII, the New Deal, the Welfare State, the Vietnam War and the popular protests, the civil rights movement, the rejection of the welfare state and rise of Neo-Conservatism.
(3+0) F, SU - odd years; S - even years
Co-requisite:ENG111
Note: Transfer Assurance Guide (TAG) approved effective summer 2008(OHS044-U.S. American History II; OHS010-U.S. American History Sequence, Course 2 of 2)

## HIS203 US SINCE 1945

## 3 Cr. Hrs.

A contemporary history of the United States which provides a balanced account of foreign affairs, domestic politics, and social and cultural change. Presents change from U.S. global hegemony to a truly global economy as the backdrop for the replacement of the liberal-welfare state with the neo-conservative state. Relates this important transition to the form and content of popular protest since 1945. Topics include the New Deal, the Cold War, confronting the Third World, struggles for equality, and mass media effects on popular culture.
(3+0)F, S, SU
Co-requisite: ENG111

## HIS210 THE MODERN WORLD

3 Cr. Hrs.
Joins a study of the history of the modern world with students' understanding of their place in the contemporary world. Competing histories of the modern world's origins are followed by a comparative study of western and non-western societies and the forces giving rise to modernism, reaction, revolution, and post modern tendencies from the 13th century to the present times.
(3+0)S
Co-requisite: ENG111

## HIS234 HISTORY OF THE OLDNORTHWEST 3Cr.Hrs. TERRITORY

Explores the many historical and cultural influences in this area beginning with the generations of Indian tribes through the Euro/ American arrival beginning with early missionaries, explorers, traders and the multi-ethnic settlement that overwhelms the area in the early 20th. century. The course includes a coverage of the rapid transformation of this still rural landscape into the continents manufacturing core. The old Northwest and its development is still responsible for stamping the unique characteristics of what we call "American culture."
Strongly recommend ENG111
(3+0)

HIS290 HISTORIC PRESERVATION INTERNSHIP 3 Cr. Hrs.
The Co-Op/Internship is an experience in which the student works in a position consistent with the program major. The student is expected to integrate skills learned in program courses with job responsibilities, while applying work experience to class activities. Primary work duties are documented through a work log, incident summary, focused report, and a site visit.
Prerequisite: Permission of Instructor

## HPF106 BEGINNING WESTERN/ENGLISH 1 Cr. Hr. HORSEMANSHIP

This course is designed for the novice or beginner who has had little or no exposure to horses or riding. Students will learn horses and riding from the "ground-up" in which the very basics of horsemanship is taught. The instructor tries to match each students abilities with specific horse while keeping in mind everyone's safety is of the highest concern. All classes conducted at Sanderson Stables, located on the corner of Union and Washington Streets, Cygnet, Ohio 43413; phone 655-2253. Sanderson Stables owns and maintains horses, tack, and grounds specifically for appropriate instruction. This course can also be taken as many times as the student desires. This course is many times used to fulfill the physical education requirement at the university level.
(1+0) F, S, SU

## HPF107 INTERMEDIATE WESTERN/ENGLISH 1 Cr.. Hr. HORSEMANSHIP

This course is designed for the Intermediate level rider who has mastered the HPF106 course. Skills and thus builds on those skills. The instructor tries to match each students abilities with a specific hours while keeping in mind everyone's safety is of the highest concern. The focus of this course is on handling the horse on the ground and in the saddle, as well as practicing the jog, lope and lead departures.

## HPF108 ADVANCED WESTERN/ENGLISH HORSEMANSHIP

This course is designed for the advanced level rider who has mastered the HPF107 Level Skills and thus builds on those skills. The focus of this course is on tack room procedures, as well as advanced riding methods, trail riding, trotting, buggies, cards and using a driving harness.

## HRM100 ESSENTIALS OF HUMAN RESOURCE MANAGEMENT

This course is the first course in a series that prepares students for a career in human resource management. Students taking this course for credit must attend and successfully complete the SHRM Essentials of Human Resource Management seminar. In addition to the seminar students will complete a three page paper reflecting your Philosophy of Management. The final paper is a report of the benefits that you gained and can apply on the job as a human resource employee or if not employed in the human resource department how the information has affected your philosophy of management.
$(3+0) \mathrm{F}, \mathrm{S}$

## HST101

## PRINCIPLES OF HUMAN SERVICES

Examines the field of human services, study of social work, social policy, and social welfare organizations, their history and fields of practice. This course includes the goals of the human services delivery system, the role of the paraprofessional and social work assistant, and an overview of the various public and private human services agencies in the community, the organizational structure of the agencies, its function, client services, and role of worker in the agency.
(3+0) F, S

## HST105 COUNSELING TECHNIQUES WITH 3 Cr.Hrs. DIVERSE POPULATIONS

This course describes special needs and diverse issues of the following populations: African American, Asian American, Native American, and Hispanic/Latin American in addition to persons with disabilities, diversity with sexual orientation, women, children/ adolescence and the elderly.
(3+0)S
Prerequisites: HST101, PSY110
Co-requisites: SSC101

HST108 PRINCIPLES OF MRDD
3 Cr. Hrs.
A principles course in the field of Mental Retardation and Developmental Disabilities and the historical and legal perspectives within the field. Course includes service delivery models, current trends, prevention issues, causes, conditions and characteristics.
(3+0) F, S

## HST112 GROUP COUNSELING

3 Cr. Hrs.
Basic knowledge, techniques, and skills to be used in the group counseling process. Group dynamics, counseling practices, and techniques will be examined and applied to a variety of group situations. The use of group counseling techniques and use in the treatment of clients is explored as one of the many social work interventions available to the human service worker.
$(3+0) S$

## HST208 INTERVIEWING TECHNIQUES 3 Cr. Hrs.

 Presents the basic principles and practices of interviewing clients, as well as crisis intervention in human services settings. The basic principles of oral communication are examined as the impact on effective interviewing techniques along with developing basic crisis intervention skills and techniques.(3+0)F
Prerequisites: PSY110,HST101,HST105

HST210 HUMAN SERVICES METHODS 6 Cr. Hrs. A practical, in-house lab experience meant to prepare students for their actual experience in a human service agency. Seminar format provides for discussion and integration of experiences with academic courses. Open only to Human Services Technology majors who have completed 18 credit hours of Human Services technical courses with a grade of "C" or better. Labs for this course will consist of supervised labs-lab hours to be arranged in-house along with field lab hours. Supervised by Master Level Social Worker, State Licensed.
(4+4)F
Prerequisites: HST101, HST105, PSY210, HST112
Co-requisite: HST208

## HST212 SUBSTANCE ABUSE

3 Cr. Hrs.
Presents substance abuse and addictive problems from an addictions model approach. A historical, cultural, and social context is presented as well as an overview of the theories of addiction. Other major topics: recognizing early signs and symptoms of substance abuse, differences in counseling strategies with substance abusers, and other derivative problems. This is a foundation course with a scientific base. Family systems are reviewed.
(3+0)F, S

## HST214 HUMAN SERVICES CASE MANAGEMENT

Provides the experience and knowledge of the human service worker providing case management functions. Areas of concentration include service provisions when working with special populations. The provisions include, but are not limited to, client identification, individual assessment and diagnosis, determining service needs of the client, service planning and resource identification, linking the client to appropriate services, service implementation, how to monitor service delivery, how to advocate, and evaluation of service delivery. Special emphasis is on specific target populations, and services available.
(3+0)S
Prerequisite: HST101, PSY210

## HST220 PRINCIPLES OF WORK

3 Cr. Hrs.
This course will provide students with skills and knowledge for preparing persons with disabilities for productive work. The emphasis of the course will be on the development of supported work options. The course will address principles and practices of: supported work options, job analysis, job development, marketing, job training and relevant state and federal requirements. This course will satisfy Adult Services MR/DD Certification Program (3+0) F even

## HST221 PRINCIPLES OF HABILITATION 3 Cr. Hrs. PROGRAMMING

This course will provide the student with knowledge and performance objectives in the field of habilitation programming related to understanding the special needs of individuals with disabilities in relations to legal issues, community based training, habilitation programming, assessment and identification, and minority issues. This course will satisfy Adult Services MR/DD Certification Program.
$(3+0)$ S odd

## HST222 ETHICS IN THE HELPING PROFESSIONS

3 Cr. Hrs.

The practice of counseling and related helping professions is regulated both by law and by professional standards of practice or codes of ethics, which provide only general guidelines. This course will look at historical and contemporary theories of relevant ethical theories and provide exposure to real-life ethical issues from a multi disciplinary approach.
(3+0) F, S
Prerequisite: HST101

## HST240 SOCIAL PROBLEMS 3 Cr. Hrs.

An examination of the major social problems existing in western society and how various conditions within society come to be defined as social problems. Topics include such areas as poverty, racism, sexism, unemployment, AIDS, and abusive behaviors (physical, psychological, sexual abuse, and neglect). Analysis of each of these problems along with the social welfare system's responses and the role of the human services worker.
(3+0) F, SU
Prerequisite: SSC101

## HST242 MARRIAGE AND THE FAMILY 3 Cr. Hrs.

A comprehensive look at relationships in which the content includes: marriage, cohabitation, singles, family dynamics (parenting, adoption, etc) historical and cultural differences in both traditional and contemporary settings; life span development, divorce, domestic violence, death and dying issues. Theoretical frame works as well as practical application of those theories will be covered.
(3+0) F, S
Prerequisite: SSC101

## HST280

SPECIAL PROBLEMS IN
1-6 Cr. Hrs. HUMAN SERVICES I
Human Services instructor. Content, methodology, and purpose to be arranged on an individual basis. Credit will be determined by the nature and extent of the independent study.
F, S, SU
Prerequisite: Permission of Instructor

## HST282 SPECIAL PROBLEMS IN HUMAN SERVICES II

An independent study which focuses on a topic or individual selected problems in Human Services. Subject to approval and supervision of an assigned Human Services instructor. Content, methodology, and purpose to be arranged on an individual basis. Credit will be determined by the nature and extent of the independent study.
F, S, SU
Prerequisite: Permission of Instructor

## HST290 PRACTICUM I <br> 6 Cr. Hrs.

Practical experience in a human services agency. Two-hour seminar provides for discussion and integration of experiences with academic courses. Open only to Human Services Technology majors who have completed a minimum of 45 credit hours of work and have completed 24 credit hours of Human Services technical courses with a grade of "C" or better.
(2+16)S
Prerequisite: HST208, HST210
Co-requisite: HST214

## HUM121 CONCERT BAND 1 Cr. Hr.

Provides an opportunity to experience music from easy to difficult as a performing member of a large ensemble. Will be expected to perform portions of music literature during examination period. Course meets at Defiance College and will require Sunday afternoon concerts as well as rehearsals. Can be repeated for credit but only 3 hours may be used toward Humanities requirement for AA and AS degrees.
(1+0)F, S
Prerequisite: Ability to play band instrument

## HUM209 HUMANITIES AND CULTURES: 3 Cr. Hrs. ANCIENT AND MEDIEVAL WORLDS

Surveys Western and non-Western humanities of the ancient and medieval worlds. Examines creative expression, such as art, literature, and philosophy, as evidence of the evolution of ideas which serve as the roots of modern cultures.
(3+0)F
Co-requisite: ENG111
Note: Transfer Assurance Guide(TAG) approved effective summer 2008(OHS041 - Western/WorldCivilization I; OHS009 - Western/ World Civilization Sequence, Course 1 of 2)

## HUM210 HUMANITIES AND CULTURES: 3 Cr. Hrs. RENAISSANCE TO PRESENT

Examines various Western and non-Western creative traditions, including art, literature, and philosophy, during and after the Renaissance. Focuses on the interaction of ideas and traditions in the modern world
(3+0)S
Co-requisite: ENG111
Note: Transfer Assurance Guide (TAG) approved effective summer 2008 (OHS042 - Western/World Civilization II; OHS009 Western/World Civilization Sequence, Course 2 of 2)

HUM221 MUSIC APPRECIATION 3 Cr. Hrs.
The study of vocal and instrumental music from the standard repertoire primarily through listening. Previous music training is not required, but regular listening is part of the course.
(3+0)S
Co-requisite: ENG111

## HUM230 ART APPRECIATION 3 Cr.Hrs.

Theories and philosophies of art history and aesthetics covering prehistoric art to modern art. Students will learn to analyze and respond actively to art, using appropriate artistic concepts and vocabulary.
(3+0)F
Co-requisite: ENG111

## IET105 INDUSTRIAL COMPUTING I 3 Cr. Hrs.

This course is a study of the application of computer systems as found in an industrial environment. The focus of this class will be on operating systems, networking and computer hardware. This class will be taught at an applied level for the Skilled Trades Person, Technician, and Engineer.
(2+2) F - Day \& Eve, S - Day \& Eve, SU - Day

## IET107 INDUSTRIAL COMPUTING II 3 Cr. Hrs.

 An advanced study of industrial computer and networking technology. The focus of this class will be an in depth study on factory floor networking including Ethernet, DeviceNet, Profibus and ControlNet. Students will learn how to terminate and install networking components, and systems. A focus will also be how these networks interface to modern day PLC systems used in automation.$(2+2)$ Fall
Prerequisite: PLC200 \& IET105

## INT120 HVACR I

3 Cr. Hrs.
An introductory $\underline{\text { Heating, Ventilation, Air Conditioning and Refrig- }}$ eration course for skilled trades personnel. The course is a study of basic thermo-dynamic principles, with a practical approach to applications in a residential, commercial and industrial environment. The course will cover basic heating and cooling concepts, refrigerant properties, Psychometrics, terminology, safety, troubleshooting and applications of basic mechanical heating and cooling components and their electric / mechanical control.
(2+2) On Demand
Prerequisites:EET171

## INT220 HVACR II

3 Cr. Hrs.
An intermediate study of the HVAC field. Studies will include commercial and industrial designs and equipment, Load Calculations and System Sizing. Concepts of equipment control will be introduced featuring Low Voltage, High Voltage methodologies.
(2+2)F
Prerequisites: INT120

INT221 HVACR III HEATING SYSTEMS 3 Cr. Hrs. Learning outcomes to be developed in this course focus on the heating aspect of climate control. Topics to be covered would include "forced air" heating applications including natural gas, propane, fuel oil, electric resistance and heat-pump systems and their controls. Other heating topics would include Hydronics applications; i.e. residential, commercial and institutional boiler systems and their controls. Heat-pump technology will feature both "air-to-air" and geothermal technologies.
(2+2)
Prerequisite: INT220

## INT222 HVACR IV ADVANCED HVAC 3 Cr. Hrs. CONTROL SYSTEMS

Learning outcomes to be developed in this course will focus on the various controls now being applied to HVAC-R systems. Electromechanical, pneumatic and Direct Digital Control (DDC) will be featured during this coursework with particular attention to DDC applications. The Programmable Logic Controller and its networking capabilities and user interface will be explored. Other topics explored will be the integration of fire/life safety systems with modern environmental equipment as well as system controlled environmental quality.
(2+2)
Prerequisite:INT221

## INT223 HVACR V ADVANCED TOPICS 3 Cr. Hrs. IN HVAC

Learning outcomes to be developed in this course will focus on some of the advanced and alternative energy efficient designs affecting climate control systems. Other topics to be covered may include energy auditing and energy management, energy procurement and energy cost accounting and advanced building architectural blue print interpretation.
(2+2)
Prerequisite: INT222
INT230 HIGH PRESSURE WELDING 3 Cr. Hrs.
The high pressure pipe welding course is designed to prepare the student for welding qualification and certification in accordance with the ANSI/ASME Boiler and Pressure Vessel Code, Section IX. Through classroom and hands-on skill training the student will be afforded the opportunity to develop the knowledge and skill necessary to weld high pressure pipe, utilizing the shielded metal arc welding (SMAW) process in all four welding positions. Uphill welding progression will be utilized for the vertical welding.
$(2+2)$ On Demand
Prerequisite: MET181
MEA101 MEDICAL ASSISTING CLINICALI 3 Cr. Hrs. This course is designed to provide the basic knowledge assisting physicians, or medical office staff with medical exam room preparation, routine patient examination preparation, as well as assisting with basic clinical procedures and in office diagnostic testing.
(1+4)S
Co requisites: BIO150, MEA105 F = Fall; S = Spring; SU = Summer

MEA201 MEDICAL ASSISTING CLINICAL II 3 Cr. Hrs Clinical II is a continuation of Clinical I. Following the Clinical II experience students will be able to administer various forms of medication, demonstrate proper technique for venipuncture for purpose of obtaining blood specimens and preparing intravenous medications and fluids and demonstrate skills in assisting with minor surgical procedures.
$(1+4) \mathrm{S}$
Pre requisites: MEA101,MEA110, MEA205

## MEA202 MEDICAL ASSISTING CLINICALEXTERN

This course provides opportunities to observe, perform, and discuss various clinical competencies under supervision, with learning experiences obtained in selected physician's offices, clinics or hospitals. This course will also review the following basic principles of psychology as they apply to the medical assistant: developmental stages of the life cycle, hereditary, cultural and environmental influences on behavior, mental health and applied psychology. (2+6) S
Prerequisites: MEA101
Co requisites: MEA201

## MEA205 DISEASE CONDITIONS

3 Cr. Hrs.
This course presents the basic concepts of diseases, their courses and function disturbances as they relate to body systems. This course includes the precipitating risk factors and appropriate methods of patient education regarding various disease processes. $(3+0) \mathrm{F}$
Pre requisites: BIO150

## MET102 APPLIED ALGEBRA 2 Cr. Hrs.

Basic elementary algebra. Material covered includes fundamental operations of positive and negative numbers, grouping symbols, algebraic axioms, equations, formula manipulation, special products, factoring, quadratic equations and related applications to the shop.
(2+0)F, S, SU
Co-requisite: MTH050 or instructor permission

## MET103 APPLIED GEOMETRY \& TRIGONOMETRY

Geometry includes definitions and descriptions of geometric terms, axioms, theorems, propositions dealing with straight lines, triangles, polygons, and circles, as well as perpendicular and parallel relationships. Trigonometry includes definitions of basic trigonometric functions, use of trigonometric tables, solutions of right triangle and oblique triangle problems, use of sine, cosine, tangent and their reciprocals in the solutions of unknown angles, logarithms, and practical shop problems.
(2+2)F,S,SU
Prerequisite: MET102, MTH080 or instructor permission

MET110 PRINT READING AND SKETCHING 3 Cr. Hrs. Print reading and sketching includes the alphabet of lines, orthographic projection, ordinary views, section views, auxiliary views, pictorial sketching, dimensioning, tolerancing, screw threads and fasteners, mathematics for design and an introduction to geometric dimensioning and tolerances.
(2+2)F, S, SU

## MET113 MECHATRONICS I

3 Cr. Hrs.
This class will introduce the student to the new field of engineering called Mechatronics. Mechatronics is the study of mechanics, hydraulics, pneumatics, and electronics. The student will build lab assignments that will incorporate these disciplines. The students will build, design, and troubleshoot machines using - pneumatics, hydraulics, and electronics.
$(2+2) S$
Prerequisite: MET122
MET121 MANUFACTURING PROCESSES 3 Cr. Hrs. The focus of this course is to provide the student with an introduction to the theory of the common major manufacturing processes. The major manufacturing processes (methods used to convert raw materials into finished products) are described and compared. Emphasis is placed on how each process works and its relative advantages and disadvantages. Students will have the opportunity to observe processes via field trips as such opportunities are available.
(3+0)

## MET122 PRINCIPLES OF MACHINING 3 Cr. Hrs.

The focus of this course is to provide the student with a basis foundation in the skills needed to perform basic machining methods. The student will develop key techniques that will aid in proper selection, identification, and application of machines and machining methods. Hands-on laboratory work with the lathes, mills, drills, grinders, fixture utilization, feeds and speeds, is emphasized. Special emphasis will be placed on safety, precision, accuracy, and teamwork in completion of assigned lab projects. The student will be required to interpret basic blueprints and manufacture parts to print specifications.
$(2+3)$ F \& S
Prerequisite: MET110 or permission of instructor

## MET123 MACHINING PROCESSES II 3 Cr. Hrs.

MET 123 is continuation of MET 122.
Theory and hands-on skills learned in MET 122 will be applied to more advanced projects. Students will machine and manufacture industrial parts from well documented and professional prints and floor sketches. This class is intended to enhance and develop more advance machining skills with the student. Students will be assessed by their safety, accuracy, team work, efficiency, and finished product.
(2+2)S
Prerequisite: MET122

## MET130 INDUSTRIAL SAFETY

2 Cr. Hrs.
This is a course in hazard recognition based on OSHA recommended standards. Although students learn to identify potential hazards in the workplace, they will also develop a greater awareness of hazards in their environment. Students will also certify in CPR through the American Heart Association.
$(2+0)$ F \& S

## MET133 INDUSTRIALPIPEFITTING

3 Cr. Hrs.
A study of the specifications, application, installation, and maintenance of various kinds of pipe, fittings, valves, pumps, and hand tools. The analysis of job requirements in terms of materials, time utilization and sequence of operation is discussed.
(2+2) F

## MET134 ENGINEERING MATERIALS

3 Cr. Hrs.
This course combines major elements of ferrous and non-ferrous metallurgy with polymeric materials, organics and refractories. Student learns basic physical and chemical properties of common engineering materials and their design considerations.
(3+0) S - Day \& Eve (odd years)
MET140 APPLIED STATISTICAL METHODS 2 Cr. Hrs.
This course is intended for Related Trades students or as a technical elective in other programs. Class work reveals reasons for and philosophies behind statistical applications integral to a quality system. Study covers how to use probability , X-bar and R charts, and ANSI/ASQ Z1.4, acceptance sampling, for quality systems applications. The course is designed for Independent Study. Three modules are delivered via the web. The fourth module, Acceptance Sampling is completed by studying instructor furnished materials and passing materials and passing a multiple choice test. (2+0)
Prerequisite: MTH080 or MET102 \& Ability to access Web courses

MET143 BENCH WORK 2 Cr. Hrs.
This is the first basic machine shop course. Students learn the use of hand tools, hand work, and floor work. Students are required to read prints, layout, machine, and fabricate projects utilizing the lab environment with emphasis placed on safety, tooling, precision and accuracy. Topics include: materials, mechanical fasteners, measurement, tolerance, fit, layout, hand tools, power tools, drilling, grinding, sharpening, hardening, burring, filing, polishing, layout work on the bench, use of hand taps, and cutting threads with a die.
(2+0) F, S
Prerequisite: MET110 or instructor permission

## MET144 MACHINE REPAIR

3 Cr. Hrs.
Basic fundamentals of methods and means to rebuild a production machine such as realignment of columns of tables, scraping of ways, replacing spindles, gears, bearings, gibs, etc.
(2+2) F, S
Prerequisite: MET143

## MET150 TOOLING AND FIXTURES/ 3 Cr. Hrs. LUBRICANTS AND COOLANTS

Tooling and fixtures are an integral part of modern machine practices. This course will provide the student with a basic foundation in tooling and fixture application and theory. Tool selection, tool application, tooling speeds and feeds will be emphasized. Fixture application will introduce the student to the use of fixtures in machining practices, datums of fixtures, and choice of fixtures for specific applications. The function, use, and types of lubricants and coolants will be covered in depth.
(2+2) S
Prerequisite: MET122 or instructor permission

MET181 APPLIED WELDING TECHNIQUES 3 Cr.Hr. A general orientation of three non-pressure processes commonly used in industry to join metal fusion alone - the oxy-acetylene, arc, and TIG methods. Topics covered include welding theory and practice, study of equipment safety measures, welding symbols and techniques, electrode classification, types of welds, and fusion of various types of metals.
(2+2) F, S
Prerequisite: MET110 or instructor permission
MET201 INDUSTRIAL APPLIED PHYSICS 3 Cr. Hrs. Includes the application of Laws of Physics to machine operations, fluids, material properties, electricity, rigging and erecting, the efficient use of levers, gears, pulleys, parallel and non-parallel forces, uniformly accelerated motion and momentum in machining operations, machinery installation, and safe working methods in today's modern factory. Also includes properties of solids, liquids, gases, expansion of materials, friction, and heat.
(2+2) S
Prerequisite: MET103 or instructor permission

## MET221 RIGGING AND ERECTING 2 Cr.Hrs.

Applies the Laws of Physics to moving, setting up, and securing machines. Leverage and mechanical advantage, and the care and selection of equipment are other considerations in this course. Learners also will calculate weight and center of gravity of various machines and equipment using static equilibrium, site preparation, vibration control, and anchoring, moving and setting, leveling, and aligning, checking and the "test" running of equipment.
(2+0) F (even years)

## MET222 PROGRAMMING COMPUTER NUMERICAL CONTROL

The student will view a blueprint of a mechanical part to determine the datum, the order of operations and appropriate fixtures to make the part in a CNC machine. G \& M code programs will be written and loaded to the CNC mill or lathe which will create the machined surfaces of the part. Conversational programming will be demonstrated. A familiarity with geometry, trigonometry, computers, and CAD is helpful.
(2+3) S - Day \& Eve.
Prerequisite: MET122, MET103, IET105 or Instructor Permission

## MET223 CAM I 4 Cr. Hrs.

This course is a study in the basic fundamentals of Computer-Aided-Manufacturing-Machining (CAM). The student will become proficient in the use of manipulating CAM software in a hands-on environment. Datums, tool selection, speeds, feeds, and part identification will beemphasized.
(3+3) F - Day \& Eve
Prerequisite: MET 122, MET 222 or instructor permission

MET226 JIG, FIXTURE \& MOLD DESIGN 3 Cr. Hrs. To study and learn the function and design of basic drilling, boring, milling, and welding jigs, and fixtures that are either standardized or commercial, plus special applications from problems occurring in shop situations.
(2+2)S
Prerequisites: MET103, MET110 or instructor permission

## MET227 DIE THEORY \& DESIGN 3 Cr. Hrs. FUNDAMENTALS

This course investigates the details and techniques of die design theory and practice. Included is a study of forming and cutting dies and their component parts such as die blocks, strippers, stock guides, shredders, knockouts, nest gages, pushers, die stops, strip layout die sets, stock utilization and engineering formulas. A die design project will be required in which manipulative skills of design will be developed. Project areas include piece dies, blank dies, compound dies, progressive dies, forming dies, trim dies, cam dies and press dies.
(2+2) F (even years)
Prerequisites: MET103, MET110 or instructor permission

MET228 PATTERNMAKING FUNDAMENTALS 3 Cr.Hrs. The selection use, and maintenance of hand tools, pattern shop tools and the materials used in building patterns for industry. Also included are the concepts of shop theory as applied to the molder and core maker. It includes the processes from melting to the production of cores, sand types and binders, metallurgy, cooling and heat treatment.
(2+2) S (even years)
Prerequisite: MET 226, course should be taken near the end of apprenticeship program.

## MET231 METALLURGY AND HEAT 2 Cr. Hrs. TREATMENT

A basic course covering the nature and behavior of metals, crystalline structure, theory of alloys, principles of heat treatment, properties of metals and alloys and testing applications. The Rockwell and Brinell hardness testers will be used.
(2+0) S, SU
Prerequisite: MTH080 or MET102

## MET232 INDUSTRIAL FLUID POWER I 3 Cr. Hrs.

 Fluid power is an efficient way to move energy without mechanical belts, chains, or levers. The physics of fluids, components, troubleshooting and design applications for hydraulic \& pneumatic systems are covered in this class.(2+3) F - Day, S - Eve (even years)
Prerequisite: MET103
MET234 STRENGTH OF MATERIALS 3 Cr. Hrs.
Learn how to analyze the mechanical and thermal loads on structures, beams, and columns, and how to calculate stress, strain, and deflection. Application of formulas and design considerations are stressed.
(3+0) S-Day \& Eve (odd years)
Prerequisite: MET235, PHY251

## MET235 STATICS

3 Cr. Hrs.
A study of resolution of forces on rigid bodies using conditions of equilibrium and vector analysis. Includes the analysis of trusses, friction, and moments of inertia.
(2+2) S-Day \& Eve. (even years)
Prerequisite: PHY251
MET252 INDUSTRIAL FLUID POWERII 3 Cr. Hrs. In this class, the student will use electro-pneumatic valves, programmable logic controllers (PLCs), in/out boxes, and various types of electrical switching devices. The students will build, design, and troubleshoot machines using - pneumatics, hydraulics, and electronics.
$(2+2) \mathrm{S}$
Prerequisite: MET232
F = Fall; S = Spring; SU = Summer

## MET260

CAM II
CAM II is a continuation of CAM I This is an advanced course that introduces the student to Advanced milling, Solids, Surfaces, and $3 D$ cutter-pathing. Lathe and $4^{\text {th }}$ and $5^{\text {th }}$ axis programming will be introduced as time allows. 3D drawings, solids and surfaces will be created by the student. Toolpaths and NC files will be created to the 3D drawings, solids and surfaces. The tool paths created will be used to create a part on a CNC machining center.
(2+2)S
Prerequisite: MET223

## MET262 CAD/CAM PROJECT 4 Cr. Hrs.

This is a capstone class that requires the student to design, fabricate and test a working machine component. Solid Modeling and CAM technology will be the focus, with supporting CMM technology. The students will be required to apply the technology they learned in individual technology classes.
(3+2)S
Prerequisite: CAD213, MET223, QCT141

## MET265 MACHINE DESIGN <br> 3 Cr. Hrs.

This course is designed to assist students with the basic approach to machine design through the analysis of static and dynamic stresses. The course will focus on the strength of materials and how they relate to machine design. Design projects will be included.
(3+0) S - Day, S - Eve (even years)
Prerequisite: PHY251

## MET290 ENG.TECH. CO-OP/INTERNSHIP 1-4Cr.Hrs.

 The Co-op/Internship is a job-related experience in which the student works in a position consistent with the program major. The student is expected to integrate skills learned in the educational program with job responsibilities, while applying work experience to classroom activities. Primary work duties are documented through a work log, incident summary, and a focused report. Enrollment only with permission of the instructor.F, S, SU

## MGT110 MANAGEMENT

3 Cr. Hrs.
Management is an introductory course in the principles of coordinating an organization's objectives. Major emphasis is devoted to planning, organizing, directing, and controlling skills. Issues such as decision making, communication, motivation, and leadership are addressed.
(3+0) F - Day \& Eve, S - Day \& Eve, Su - Day \& Eve

## MGT120 SUPERVISION

3 Cr. Hrs.
This course focuses on the supervisor/employee relationship. Primary topics include motivation, goal setting, performance appraisal, and management of a team of employees.
(3+0)

MGT210 HUMAN RESOURCE MANAGEMENT 3Cr.Hrs.
 tion, training, performance appraisal, and contract administration. Safety and government regulations are included.
(3+0) F - Day, S - Eve
MGT221 ENTREPRENEURSHIP
3 Cr. Hrs.
This course is a study of opportunities and challenges facing entrepreneurs in a dynamic marketplace. Topics include Recognizing and Exploiting viable business opportunities, Writing a Business Plan, Managing Inventory, Cash Management, Employee Management (including Hiring, Training, and Evaluation), Marketing, and using technology. Emphasis is placed on Self Employment and the issues of efficiently and effectively running a business Prerequisite: MGT110

S

MGT230 RETAIL MANAGEMENT
3 Cr. Hrs.
Retail management is an overview of retailing functions. Major topics include organizational structure, merchandising practices and procedures, physical layout, buying, and store control. Issues of chain stores and franchising are included.
(3+0) F - Day (odd years), S - Eve (even years)
MGT280 BUSINESS CLIMATE ANALYSIS 3 Cr. Hrs. This course includes research, analysis, and summary of the business climate in a specific region. Students will assess regional, cultural, political, commercial, and financial issues. They will also investigate availability of manufacturing, transportation, labor, and technological resources. Students are required to travel to the region and develop a Business Climate Summary. The finished product will be developed and presented by a team of students.
(3+0)S

## MGT281 GLOBAL BUSINESS CLIMATE 3 Cr. Hrs. ANALYSIS

This course includes research, analysis, and summary of the business climate in a specific region. Students will assess regional, cultural, political, commercial, and financial issues. They will also investigate availability of manufacturing, transportation, labor, and technological resources. Students are required to travel to the international region and develop a Business Climate Summary. The finished product will be developed and presented by a team of students.
(3+0)

## MGT290 BUSINESS MANAGEMENT INTERNSHIP

This is a management experience related to the student's program of study. The student is accepted on the basis of academic progress and available
work site. Enrollment only with instructor permission.
(1+20) F, S, SU

## MKT110

MARKETING
Cr. Hrs.
Marketing is an introductory course that exposes the student to the "marketing mix" (Product, price, promotion, distribution)
Topics include the global environment and social and ethical responsibilities; using technology and information to build customer relation-ships; target markets and customer behavior; product decisions;distribution decisions; promotion decisions; and pricing decisions. The topics are looked at from the profit and nonprofit viewpoint. Global as well as domestic strategies are examined. The student is introduced to the above topics through lecture, textbook readings, electronic media presentations, classroom discussions, and a team marketing project.
(3+0) F - Eve, S- Day
Corequisite: ECO212 Microeconomics

## MKT210 ADVERTISING

3 Cr. Hrs.
This is a study of sales promotion. Major topics include audience identification, ad preparation, media selection, budgeting, and research. Emphasis is placed upon coordination of advertising efforts and sales promotion.
(3+0) F - Day (even years), S - Eve (odd years)

## MKT230 SALESMANSHIP

3 Cr. Hrs.
This course focuses upon persuasion and personal promotion. Major topics include the preparation of a presentation and the techniques of effective delivery. Students will develop and participate in a sales presentation.
(3+0) F - Eve (odd years), S - Day

## MTH050 BASICMATHEMATICS <br> 4 Cr. Hrs

Designed to improve basic computation skills, as well as introduce the student to computational techniques related to their degree and preliminary algebraic concepts. The material will cover operations with whole numbers, fractions, decimals, integers, and application problems.
(4+0)F, S, SU
DEVELOPMENTAL COURSES ARE GRADED PASS/ FAIL (S/U) AND DO NOT MEET COURSE REQUIREMENTS FOR GRADUATION

## MTH080 BEGINNING ALGEBRA 3 Cr. Hrs.

Designed for students with no previous algebra experience or those needing a review of basic algebraic techniques before takingMTH090. Introduces the properties, rules and basic techniques of algebra as well as translation between English and the language of algebra. Topics include integers and operations, variables and operations, algebraic expressions, equations, percent's, word problems, and graphing.
(3+0) F, S, SU
Prerequisite: MTH050, high school equivalent, or satisfactory score on Course Placement Test
DEVELOPMENTAL COURSES ARE GRADED PASS/ FAIL (S/U) AND DO NOT MEET COURSE REQUIREMENTS FOR GRADUATION

3 MTH090 INTERMEDIATE ALGEBRA 3 Cr. Hrs. Intended for those students who have passed a previous algebra class. Designed to review topics introduced in MTH080 but at an accelerated pace and with more depth and rigor. Introduces many new topics including functions, several types of inequalities, radical expressions and equations, rational exponents and the quadratic formula.
(3+0) F, S, SU
Prerequisite: MTH080, high school equivalent, or satisfactory score on Course Placement Test

## DEVELOPMENTAL COURSES ARE GRADED PASS/ FAIL (S/U) AND DO NOT MEET COURSE REQUIREMENTS FOR GRADUATION

MTH109 COLLEGE ALGEBRA
3 Cr. Hrs.
This course is designed for those students who have mastered the fundamental manipulations of algebra. Algebraic topics include: non-linear equations and inequalities; linear, quadratic, polynomial, rational, exponential and logarithmic functions; complex numbers; and introduction of conics. The use of a graphing calculator is a required component in the course.
(3+0) F, S, SU
Prerequisite: MTH090 or satisfactory score on the Course Placement Test

MTH112 TRIGONOMETRY
3 Cr. Hrs. Topics include defining trigonometric functions from right triangle and unit circle perspectives, solving all types of triangles, using trigonometric identities, manipulating trigonometric functions algebraically, solving trigonometric equations and application problems, writing vectors in both rectangular and polar form, and developing an algebra of vectors including solving vector equations and applied problems. Use of a graphing calculator is recommended. (3+0) F, S
Co-requisite: MTH 109 or satisfactory score on the Course Placement Test

## MTH170 SURVEY OF MATHEMATICS 3 Cr. Hrs.

This course presents a variety of mathematical ideas and concepts to give students an idea of the breadth and vitality of mathematics. Among others, topics will include geometry, number theory, statistics and probability. Although some manipulational techniques will be reviewed, this course in not intended for improvement of algebra skills or other specific content. Instead the emphasis is on understanding how fundamental concepts of mathematics work together as a unified whole. This course is specific to education majors preparing for early childhood or middle grade teaching.
$(3+0) S$
Prerequisites: MTH080, high school equivalent, or satisfactory score on course placement exam.

## MTH213 CALCULUS I

5 Cr. Hrs.
Designed for those students who have mastered algebra and trigonometry and who are planning to pursue a four-year degree program. Topics include a review of functions, limits, derivatives of algebraic and transcendental functions, applications of derivative, and an introduction to integrals.
(5+0)F
Prerequisite: MTH110, MTH 112 or MTH122, or satisfactory score on the Course Placement Test
Note: Transfer Assurance Guide(TAG) approved effective fall 2005 (OMT017 - Calculus I and II Sequence [Course 1 of 2]; - OR -OMT005-Calculus I)

## MTH214 CALCULUS II

5 Cr. Hrs.
This course is designed for those students who have completed MTH 213. Topics include techniques of integration, applications of integrals, sequences and series, introduction to differential equations, conics, and parametric and polar graphing.

## (5+0)S

Prerequisite: MTH213
Note: Transfer Assurance Guide (TAG) approved effective fall 2005 (OMT017 - Calculus I and II Sequence [Course 2 of 2]; - OR - OMT006 - Calculus II)

## MUS120 CHORUS

3 Cr. Hrs.
This course is a vocal ensemble for students, faculty, staff, and community members with an interest in singing. A variety of music is studied, emphasizing techniques of singing and musical concepts. The group performs several times each term.
$(3+0)$ F, S

## MUS121 BEGINNING CHORUS

1 Cr . Hr.
This beginning course is a vocal ensemble for students, faculty, staff, and community members with an interest in singing. A variety of music is studied, emphasizing techniques of singing and musical concepts. The group performs several times each term.
$(1+0)$ F, S

## MUS122 INTERMEDIATE CHORUS

1 Cr. Hr.
This intermediate course is a vocal ensemble for students, faculty, staff, and community members with an interest in singing. A variety of music is studied, emphasizing techniques of singing and musical concepts. The group performs several times each term.
$(1+0)$ F, S

## MUS123 ADVANCED CHORUS

1 Cr . Hr.
This advanced course is a vocal ensemble for students, faculty, staff, and community members with an interest in singing. A variety of music is studied, emphasizing techniques of singing and musical concepts. The group performs several times each term.
(1 + 0) F, S

NRS100 NURSE AIDE CERTIFICATION 4 Cr. Hrs. This course will prepare students for employment as a nurse aide. Students are eligible to take the state certification exam upon successful completion of the program. This course is taught in cooperation with Four County Career Center and includes 24 clinical hours held at a local long-term healthcare facility.
(3.5+0.5)

NRS105 MATH FOR NURSES
$1 \mathrm{Cr} . \mathrm{Hr}$.
This math course is designed for the student who will be in a nursing health care technology. It includes study of metric, apothecary, and household systems of weights and measures relating to the calculation and administration of medications. The course emphasizes solving oral and parenteral drug dosage problems as they might occur in the clinical area.
(1+0)F, S
Prerequisite: MTH080

## NRS106 NURSING PERSPECTIVES <br> 2 Cr. Hrs.

This course introduces the student to concepts related to the history of nursing, selected roles of the nurse, the nursing process, selected professional issues and educational trends. Included in this course is an examination of theory-based nursing concepts with an emphasis on the Roy Adaptation Model.
(2+0) F, S
Prerequisite: Admission to the Nursing Program
Co-requisites: BIO231,ENG111,NRS107

## NRS107 BASIC CONCEPTS IN NURSING 6 Cr. Hrs.

 This course introduces the student to concepts of theory-based nursing with the emphasis on the nursing process and application of the Roy Adaptation Model. Included will be presentation and application of basic care concepts, use of computers in nursing and related medical terminology in dealing with common stimuli experienced by the adult client.(3+9) F, S
Prerequisite: Admission to the Nursing Program
Co-requisites: BIO231,ENG111,NRS106

## NRS108 NURSING CARE OF CLIENTS WITH 6 Cr. Hrs. PHYSIOLOGICAL HEALTHNEEDSI

The course provides for the development and application of concepts of nursing for assisting clients in adapting to the physiological mode and related health needs.
(3+9) F, S
Prerequisites: NRS106, NRS107,BIO231,ENG111
Co-requisites: NRS110,NRS131,BIO232,PSY230 or PSY110

## NRS110 PHARMACOLOGY

3 Cr. Hrs.
Pharmacological theory of broad classifications of common medications in current use with application to nursing. Includes federal drug legislation and the responsibility of drug administration.
(3+0)F, S, SU
Prerequisite: NRS107 or PNE120 or permission of Nursing Department

## NRS131 HEALTH ASSESSMENT IN NURSING

The course focuses on the application of the nursing process related to physical assessment and history taking skills with emphasis on the adult client.
(1+3) F, S
Prerequisites: NRS106, NRS107, BIO231, ENG111
Co-requisite: BIO232

## NRS133 CARDIOPULMONARY RESUSCITATION (CPR) HEALTH

A basic course in cardiopulmonary resuscitation for cardiac arrest and respiratory emergencies. Includes infant, child, adult, and twoman CPR. Certificate issued upon completion.
(1+0) F, S

## NRS209 NURSING CARE DURING CHILDBEARING \& CHILDHOOD

This course will substitute for NRS213 and NRS214 for the LPN graduate who is not successful on the Nursing Care During Childbearing and Nursing Care of the Child NLN ACE I. This course focuses on the development and application of knowledge and skills in providing care for the child-bearing family. The nursing process is used to assist clients of the developing family to adapt to their changing role.
(3+0)SU
Prerequisite: Permission by nursing department

## NRS211 LPN TO RN TRANSITION 3 Cr. Hrs.

This three-credit hour course is designed to enable the student to explore integrative concepts in nursing and to assist the student in the transition from licensed practical nurse to registered nurse. Students refine and update previous learning in addition to identifying goals for a successful transition into the registered nursing program. Combined with classroom and nursing laboratory experience, the student learns through the application of concepts. The student will demonstrate the ability to solve problems though the use of the nursing process with a focus on client assessment and to communicate more effectively. This course meets requirements of the Ohio Nursing Articulation Model.
$(2+2) \mathrm{S}$

NRS212 LPN TO RN BRIDGE COURSE 1 Cr. Hr. This course is designed to meet the needs of the LPN who will be entering the Associate Degree Program at the second level. The focus of the course will be on the Roy Adaptation Model for Nursing and its use within the nursing process. Utilization of computers within nursing will also be completed.
$(1+0) \mathrm{S}$

## NRS213 NURSING CARE OF THE CHILDBEARINGFAMILY

3 Cr. Hrs

This course focuses on the development and application of knowledge and skills in providing care for the mother/parents and newborn. The nursing process is used to assist clients of the developing family to adapt to their changing role.
(3+9) SU
Prerequisites: NRS108, PSY230
Co-requisites: PSY110 or ENG112

## NRS214 NURSING CARE OF THE 3 Cr. Hrs. CHILDREARING FAMILY

This course focuses on the development and application of knowledge and skills in providing care for the child and the child-rearing family. The nursing process is used to assist clients of the developing family to adapt to their changing role.
(3+9) SU
Prerequisites: NRS108, PSY230
Co-requisites: PSY110 or ENG112

## NRS215 NURSING CARE OF CLIENTS WITH 5 Cr. Hrs. PSYCHOSOCIALHEALTHNEEDS

The focus is on the development and application of knowledge and skills in providing nursing care to clients with common psychosocial health needs within a variety of settings.
(3+6) F, S
Prerequisites: NRS108 or NRS211/212, PSY110
Co-requisites: SSC101 or SSC210

## NRS216 NURSING CARE OF CLIENTS WITH 3 Cr. Hrs. PHYSIOLOGICALHEALTHNEEDSII

The focus is on the development and application of knowledge and skills in providing nursing care to clients with common long-term physiological health needs within a variety of settings.
(1+6) F, S
Prerequisites: NRS108 or NRS211/212
Co-requisite: BIO257

## NRS217 NURSING CARE OF CLIENTS WITH 5Cr. Hrs. PHYSIOLOGICALHEALTHNEEDSIII

This course provides for further development and application of concepts of nursing for assisting clients in adapting to the physiologic mode and related health needs.
(3+6) F, S
Prerequisites: NRS213, NRS214, NRS215, NRS216
Co-requisite: PHI220
F = Fall; S = Spring; SU = Summer

## NRS218 <br> CONCEPTS IN MANAGEMENT OF 4 Cr. Hrs. GROUPS OF CLIENTS

This course provides an introduction to the skills and knowledge necessary to manage care of a group of clients in a cost-effective manner. Content includes organization of care, principles of working with others, concepts of leadership, research, management and organizational structure. Current issues in the political and cultural systems which impact the nursing profession are examined. The transition from student to practitioner is facilitated through course concepts and clinical placement.
(1+9) F, S
Prerequisites: NRS213, NRS214,NRS215, NRS216
Co-requisites: NRS217, PHI220

## NRS220 SPECIAL PROBLEMS IN NURSING I

An independent study which focuses on a topic or selected problem in nursing, subject to the approval and supervision of an assigned nursing instructor. Content and methodology to be arranged on an individual basis. Credit will be determined by the nature and extent of the independent study.
F, S, SU
Prerequisite: Permission of the Dean of Allied Health \& Public Service

## NRS221 SPECIAL PROBLEMS IN NURSING II

An independent study which focuses on a topic or selected problem in nursing, subject to the approval and supervision of an assigned nursing instructor. Content and methodology to be arranged on an individual basis. Credit will be determined by the nature and extent of the independent study.
F,S,SU,
Prerequisite: Permission of the Dean of Allied Health \& Public Service
OAS090 KEYBOARDING BASICS $1 \mathrm{Cr} . \mathrm{Hr}$.
This is a beginning keyboarding course on the computer designed for students in any program. Major objectives are to develop touch control of the keyboard and proper typing techniques, while building basic speed and accuracy. This course is useful for beginning keyboarding students as well as those who want to review the basics of the computer keyboard.
$(1+0)$ F - Day \& Eve, S - Day \& Eve, SU - Day \& Eve
DEVELOPMENTAL COURSES ARE GRADED PASS/ FAIL (S/U) AND DO NOT MEET COURSE REQUIREMENTS FOR GRADUATION

## OAS101 COLLEGE KEYBOARDING 3 Cr. Hrs.

This is a mandatory course for OAS majors which introduces students to document formatting techniques as well as editing and proofreading of keyed copy. The development of key stroking accuracy and speed is stressed. Students will learn the Gregg Keyboarding program as well as reinforce Microsoft Office features in creating documents at the keyboard (3+0) F - Day \& Eve, S Day Prerequisite: OAS090 or Passing of OAS090 Placement Test

OAS102 KEYBOARDING APPLICATIONS 3 Cr. Hrs. This keyboarding course on the computer leads students toward higher speed, greater accuracy, improved communication skills, and refinement of document formatting ability using keyboarding and Microsoft Office software. (3+0) S - Day \& Eve, F Day
Prerequisites: OAS101 within the previous five years
OAS105 DOCUMENTEDITING AND PROOFREADING
This is a course in which the students develop skills in proofreading, editing, and formatting written business communications. Topics covered include use of possessives, spelling, capitalization, sub-ject-verb agreement, pronouns, adjectives, verbs, sentence structure and wording, as well as proper use of punctuation marks. The student will be more proficient in proofreading documents keyed in any word processing program on the computer. Editing of documents using proofreader's marks will also be stressed. There is no prerequisite, although basic computer knowledge will be helpful in completing at-the-computer editing projects.
$(2+0)$ F - Eve, (odd years), S
OAS110 RECORDS MANAGEMENT
3 Cr. Hrs.
This is a course emphasizes principles and practices for manual and automated records systems. A practice set is used in which students practice card filing and correspondence filing using the alphabetic, subject, numeric and geographic filing systems. Computer applications are used in applying alphabetic indexing rules to a computer records database.
(3+0) F - Day, S - Eve (odd years)

## OAS160 OFFICE PROCEDURES <br> 3 Cr. Hrs.

This is a comprehensive course based on the knowledge and skills necessary to perform duties in a modern office. Practical experiences and simulated work experiences are included.. Telephone techniques, mail processing, creation of other business document information, and case studies are addressed. Development of the career professional will be included.
$(3+0)$ F - Eve (even years), S - Day
Prerequisites: ENG111 and OAS101 or concurrent

## F = Fall; S = Spring; SU = Summer

## OAS180 MEDICAL TERMINOLOGY 3 Cr. Hrs.

This is a study of prefixes, suffixes, and word roots used in developing a medical vocabulary. Special emphasis is placed upon the usage, spelling, and pronunciation of these terms as they apply to the major body systems in terms of health and disease.
(3+0) S - Day

## OAS200 SPEEDBUILDING

1 Cr. Hr.
This course emphasizes the development of speed and accuracy at the keyboard through timed writings and corrective drills at the computer. This course may be repeated for further improvement in keying speed and accuracy.
(1+0)F
Prerequisite: OAS101
OAS221 MEDICAL INFORMATION CODING 3 Cr. Hrs.
This is a course in the coding of diseases and operations using International Classification of Disease - 9th Revision - Clinical Modification (ICD-9-CM), and coding for reimbursement of procedures using Current Procedural Terminology-4(CPT-4). Information will be covered regarding basic rules, sequencing, and coding principles. The use of a computerized encoding system will be demonstrated and used by the student to properly code examples from the clinical setting.
(3+0) F - Day
Prerequisite: OAS180

## OAS222 INTERMEDIATEMEDICAL <br> INFORMATION CODING

This is a course in which students develop further skills in the coding of diseases and operations using the International Classification of Diseases - 9th . revision - Clinical Modification (ICD-9-CM) and coding for reimbursement of procedures using the Current Procedural Terminology - 4 (СРТ04). Students will use a computerized encoding system to gain practice in coding and will learn abstracting and DRG assignment on the encoding system. Prospective Payment reimbursement methodologies for several different health care settings will be discussed and practiced. An overview of other coding systems will be presented.
(3+0) S - Day
Prerequisites: OAS221 or instructor permission

## OAS230 TRANSCRIPTION

3 Cr. Hrs.
This course is designed to develop skill in listening and transcribing recorded dictation using the computer. A variety of business correspondence is transcribed at the computer with an emphasis on developing language arts skills such as grammar, spelling, word usage, and vocabulary. The importance of mailable documents is stressed.
(3+0)S
Prerequisites: ENG111, OAS102, and CIS112 Microsoft Word

OAS249 ADVANCED MICROSOFT SUITE 3 Cr. Hrs. This is a comprehensive course stressing the refinement of word processing, spreadsheet, database management, and presentation concepts and procedures; along with reviewing workplace requirements, updating of skills, and prioritizing work assigned. The assignments will go beyond the mechanics of the software. Students will learn design layout, writing, problem solving, analysis, critical thinking, and information management skills. This course is based on prior experience in Microsoft Office: Word, Excel, Access, PowerPoint,; keyboarding; records management; and office procedures.
(3+0)F
Prerequisite: CIS112 Word and CIS113 Excel
Co-requisites: CIS118 Access and CIS119 PowerPoint

## OAS250 INTEGRATED BUSINESS PROJECTS 3 Cr. Hrs.

 This is designed to prepare students to complete a variety of projects using Microsoft Office Suite. Emphasis is on the integration and teamwork of gathering information to be used in working on the projects.(3+0) S - Day, S - Eve. (even years)
Prerequisite: OAS249

## OAS281 MEDICAL INSURANCE 3 Cr. Hrs.

This course orients the student to special medical office procedures. Included are skills in managing accounts receivable, techniques of recording financial accounts, and abstracting information from patient records to complete insurance claim forms. The use of procedure and diagnostic coding for professional services will be covered.
(3+0) S - Day
Prerequisites: OAS221 and ACC102 Co-requisite: ACC102
OAS282 MEDICAL TRANSCRIPTION 3 Cr. Hrs. This course uses transcription equipment to develop skill for accurately transcribing medical dictation on a computer. Dictation will cover patient history and physical examinations, discharge summaries, surgical, pathology, and laboratory reports. Knowledge of medical terminology, keyboarding accuracy, and speed of transcription will be expanded.
(3+0) F - Day
Prerequisites: ENG111, OAS180, OAS101 andCIS112
OAS290 INTERNSHIP
3 Cr. Hrs.
This is a job-related internship in which the student is employed in a position related to student's major in Administrative Office Services technology. Student may work within the College or an outside organization. Second-year student or instructor permission expected.
(1+20)F, S, SU
Prerequisites: ENG111

OAS291 INTERNSHIP 1 Cr. Hr.
This internship is a continuation of the job-related office services experience. The student is responsible for actively seeking the position within the College or for an outside organization. Secondyear student or instructor permission expected.
(1+10)F, S. SU
Prerequisites: ENG111

## OAS292 INTERNSHIP

1 Cr . Hr.
This internship is a continuation of the job-related office services experience. The student is responsible for actively seeking the position within the College or for an outside organization. Sec-ond-year student or instructor permission expected.
(1+10) F, S, SU
Prerequisites: ENG111
PAR100 INTRODUCTION TO PARALEGAL 3 Cr. Hrs. This course covers the basics of legal assisting, emphasizing the fundamental concepts of the legal system. The course includes an overview of the legal assistant career and ethical considerations related to the job.
$(3+0)$ F - Day (odd years) \& Eve (even years)
PAR101 LAW OFFICE MANAGEMENT 3 Cr. Hrs. This is an introduction to the day-to-day operation of a law office. Emphasis is placed on the development of accurate management systems, common procedures and structures of various law firms emphasizing time keeping, client files, record maintenance and retrieval, planning, billing, collections, and software usage.
$(3+0)$ F - Day (odd years) \& Eve (even years)

## PAR110 CIVIL PROCEDURES 3 Cr. Hrs.

This is a study of the Federal and State Rules of Evidence and civil procedures. The basic elements of civil claims will be discussed and the initial phase of an action, the complaint, and the discovery process are examined. Emphasis is placed on the role and responsibilities of paralegals in discovery procedure and trial practice.
(3+0) S - Day (even years) \& Eve (odd years)

## PAR115 FAMILY LAW

3 Cr. Hrs.
This course covers domestic relations law including marriage, divorce, annulment, separation, adoption, and the rights of children. The paralegal is introduced to the various documents and procedures used pertaining to these family matters.
$(3+0)$ S - Day (odd years) \& Eve (even years)

## PAR205 REAL ESTATE TRANSACTIONS 3 Cr. Hrs.

This course introduces the student to the law and terminology involved in real estate and real estate conveyances. The course also examines various contracts, mortgages, deeds, and leases. A case project is included in which students prepare an abstract of title by examining recorded documents. The course is designed to acquaint students with basic real property law, ownership, easement, and mortgages. Course also covers problems arising from sales agree-

F = Fall; S = Spring; SU = Summer
(3+0) F - Eve

## PET210 INJECTION MOLDING 4 Cr. Hrs.

A hands-on study of plastics injection molding techniques. The study of the theory of injection molding will be supplemented by extensive laboratory exercises using plastics injection molding machines. The operation, set-up, optimization, and programming of the injection molding process will be performed using several different molds which students will remove and install. Injection molding molds will be discussed, including basic mold design principles.
(3+2)S
Prerequisite: PET110
PET220 ADVANCED INJECTION MOLDING 4Cr. Hrs. This class is a continuation of the basic injection molding class. Topics covered are process optimization and troubleshooting. Special injection molding processes including co-injection, lost core, gas-assisted, injection-compression, structural foam, and others will be discussed also. Knowledge of these topics will be gained through text, computer simulations and hands-on lab exercises.
(3+2)S
Prerequisite: PET210

## PET225 EXTRUSION, BLOWMOLDING \& 3 Cr.Hrs. THERMOFORMING

This class is a basic overview of the plastics extrusion, blow molding, and thermoforming processes. Topics covered will include the materials and properties important to the process, the equipment used in extrusion, blow molding, and thermoforming processes, both primary and secondary, and basic dies, molds, and tooling used for those processes. Job setting and establishing the process will be a large focus of the class. Knowledge of these topics will be gained through text, hand-outs, computer simulations, and hands-on lab exercises.
(2+2) S
Prerequisite: PET110

## PET231 PLASTIC MATERIALS TESTING 4 Cr. Hrs.

This class is an overview of the more common plastic material properties and performance tests used in industry today. The properties covered will include mechanical, physical optical, and other properties including a section on color specification and color testing. ASTM and ISO standard test methods will be used to establish and document tests and results. The class will also cover methods of determining an unknown material and general quality standards. Knowledge of these topics will be gained through text, demonstrations and hands-on lab exercises.
(3+2)F
Prerequisite: PET110, MTH090

PET240 INJECTION MOLD TOOLING 4 Cr. Hrs. An overview of the tooling used in injection molding. The study will cover general mold construction and materials used in the mold. Topics will include the different mold styles such as 2plate, 3-plate, hot runner, and cold runner. The different systems of a mold including runners, gates, vents, cooling, and ejection will be studied. Part design for acceptable tooling along with tooling practices used in current industry will also be studied. Knowledge of these topics will be gained through text, lecture, and some lab time.
$(3+2) \mathrm{F}$
Prerequisite: PET210, MET103

## PET250 PLASTICS SECONDARY 4 Cr. Hrs. OPERATIONS

This course is an overview of the different secondary processes and equipment used in the plastics industry. Topics will include thermoforming equipment and processes. Fabrication methods including welding and bonding will be covered. Processes such as hot stamping, pad printing, and other methods of decorating will be covered. Also, secondary operations such as trimming and forming will be discussed. The course will be taught as a lecture with some demonstration and hands-on labs.
(3+2)S
Prerequisite: PET110
PHI110 CRITICAL THINKING \& LOGIC 3 Cr. Hrs. An introduction to the principles of valid reasoning, emphasizing both deductive and inductive logic. Includes analyzing and evaluating arguments, as well as creating arguments in the form of the short, argumentative essay.
(3+0)S
Co-requisite: ENG111
PHI201 INTRODUCTION TO PHILOSOPHY 3Cr.Hrs. Examines enduring human concerns such as religion, science, knowledge, identity, morality, and justice, using a variety of philosophical perspectives.
(3+0)F
Co-requisite: ENG111
Note: Transfer Assurance Guide (TAG) approved effective spring 2008 (OAH045 - Introduction to Philosophy)

## PHI210 ETHICS

3 Cr. Hrs.
An introduction to basic ethical theories and their applications. Students examine the relationship between personal and social values in particular cultural contexts.
(3+0)S
Co-requisite: ENG111
Note: Transfer Assurance Guide (TAG) approved effective spring 2008 (OAH046 - Introduction to Ethics)

PHI220 ETHICS IN HEALTH CARE 3 Cr. Hrs.
Ethics in health-related issues will be explored. Includes the impact of scientific and technological advances on health care decisions.
(3+0) F, S
Co-requisite: ENG111

## PHI222 ETHICS IN THE HELPING 3 Cr. Hrs. PROFESSIONS

The practice of counseling and related helping professions is regulated both by law and by professional standards of practice or codes of ethics, which provide only general guidelines. This course will look at historical and contemporary theories of relevant ethical theories and provide exposure to real-life ethical issues from a multi disciplinary approach.
(3+0)F, S
Prerequisite: HST101

## PHI230 WORLD RELIGIONS 3 Cr. Hrs.

Study and comparison of the major attitudes toward life, human existence and the world embodied in major religions of the world. Hinduism, Buddhism, Confucianism, Taoism, Judaism, Christianity, and Islam will be several of the religions examined along with the cultural backgrounds of lands of their development.
(3+0)F
Co-requisite: ENG111
PHY101 PRINCIPLES OF PHYSICAL 4 Cr. Hrs. SCIENCE
An introduction to the basic principles of the physical sciences. Includes subjects of physics, chemistry, geology, astronomy, and meteorology. Understanding of basic concepts is developed through emphasis on scientific methods and basic laboratory procedures and report writing. Includes simple problem solving, lab work and a research paper.
(3+2)F
Prerequisite: MTH080 or satisfactory score on college math placement test.

PHY140 ASTRONOMY
4 Cr. Hrs.
An introduction to the science of astronomy. The course will cover elements of the history and development of astronomy, our new understanding of the solar system, stellar astronomy, the galaxies and the structure of the universe. Laboratory reinforces and supplements lectures.
$(3+2) S$

## PHY150 PRINCIPLES OF GEOLOGY 4Cr. Hrs.

An introduction to the field of geology and the study of the earth. Covers minerals and rocks and their formation within the context of the earth's geologic history. Emphasis on rocks, soils, and land formations, plate tectonics and natural disasters such as earthquakes. Lab includes field trips and the identification of rocks and minerals. Some chemistry is recommended.
$(3+2) \mathrm{F}$

## PHY251 PHYSICS: <br> MECHANICS AND HEAT <br> 4 Cr. Hrs.

An algebra based course covering mechanics including force, work, energy, and simple machines, heat and basic thermodynamic concepts, wave motion and sound. It includes problem solving, laboratory work and the writing of technical lab reports.
(3+3)F
Prerequisite: MTH109, MTH112
Note: Transfer Assurance Guide (TAG) approved effective fall 2005 (OSC021 - General Physics Sequence [Not for Physics majors] Course 1 of 2) - OR - (OSC014 - General Physics [Not for Physics majors] Course 1 of 1 )

## PHY252 PHYSICS: <br> ELECTRICITY ANDMAGNETISM

4 Cr. Hrs.
An algebra based course covering electricity and magnetism, light and optical concepts, and basic concepts of modern physics. It includes problem solving, laboratory work and the writing of technical lab reports.
(3+3)S
Prerequisite: MTH109, MTH112
Note: Transfer Assurance Guide(TAG) approved effective fall 2005 (OSC021 - General Physics Sequence [Not for Physics majors] Course 2 of 2) - OR - (OSC015 - General Physics [Not for Physics majors] Course 1 of 1 )

PLC200 PROGRAMMABLE CONTROLLERI 3 Cr. Hrs. A study of the installation, programming and troubleshooting of programmable controlled systems, currently used in an industrial environment. The primary PLC used for this class will be the Allen Bradley SLC-500 and PLC-5 units, using RSLogix and RSLinx software. The focus will be on Engineering and Maintenance tasks performed with PLC systems. This course was formerly RTI279 \& EET251.
(2+2) F \& S
Prerequisite: EET194

## PLC210 PROGRAMMABLE CONTROLLER II (AB)

3 Cr. Hrs.

This course is an advanced study of the Programmable Automation Controller (PAC) instruction set, such as Allen Bradley, and hardware interface systems. PLC networks such as Devicenet and Controlnet are discussed, as well as Ethernet interfaces. Students will study industrial applications of the PLC's focusing on problem solving and project completion. This course was formerly EET253. (2+2)S
Prerequisite: PLC200

PLC220 PROGRAMMABLE CONTROLLER III 3 Cr. Hrs. An advanced study of human machine interfaces (HMIs) and peripherals to the industrial PLC. Students will learn how to create programs for hard panels (Panelview) units and computer based HMIs (Wonderware). Students will also be introduced to HMI scripting with a VBA type of interface. Students will learn how to setup, install and troubleshoot these systems. Students will study industrial applications of the PLC/HMI, focusing on problem solving and project design.
(2+2)
Prerequisite: PLC210, EET240

## PLC230 SERVO/ROBOTIC SYSTEMS 3 Cr. Hrs.

A course to study the various types of motion control in an industrial manufacturing environment. The focus will be on the operation and troubleshooting of DC and AC servo systems, as well as the associated sensors used in motion. The students will also learn the basics of robotic systems programming.
(2+2)
Prerequisite: PLC200, EET276, or Instructor Permission

## PLC231 ROBOTIC SYSTEMS II 3 Cr. Hrs.

This course studies the various electrical components, theory of operation and troubleshooting procedures focused on the ABB S4C+ controller and an ABB IRB 1400 series robot. Study will include servo and robotic theory regarding hardware, firmware, software, design and maintenance, as well as the origins and future of robotic systems in industry. Hands on set-up and programming are included in the training.
$(2+2)$ On demand
Prerequisite: PLC230

## PLC270 INSTRUMENTATION \&

 CONTROLS IIThis course is an advanced study of the operation and troubleshooting of Industrial Instrumentation and Control systems. The focus will be on the programming of stand alone controllers and PLC based control systems. The concepts of temperature, pressure, level and flow will be discussed, as well as the transmitters that connect the analog sensor signals to the analog I/O.
$(2+2)$ Spring
Prerequisites: EET265, PLC200 or instructor's permission
PNE105 EFFECTIVE COMMUNICATION SKILLSFOR THE HEALTH CARE PROFESSIONAL
The ability of health care professionals to communicate accurately and effectively in the context of a helping relationship is vital. The course provides tools with which to establish open therapeutic communication with clients, foster teamwork with colleagues, and deal with conflict
and aggression in a constructive manner.
(1+0)SU

PNE110

## SPECIAL TOPICS IN PRACTICAL NURSING

An independent study which focuses on a topic or selected problem in nursing, subject to the approval and supervision of an assigned nursing instructor. Content and methodology to be arranged on an individual basis. Credit will be determined by the nature and extent of the independent study.
F, S, SU
Prerequisite: Permission of the Dean of Allied Health \& Public Service

## PNE120 ESSENTIALS OF 8 Cr. Hrs.

 PRACTICAL NURSINGAn introduction to the body of nursing knowledge and skills essential for safe and accurate delivery of care utilizing the nursing process. Basic therapeutic communication, multicultural concepts, IV therapy, fluid and electrolyte balance, and ethical concepts are introduced.
(4+12) F, S
Prerequisites: Admission to the Practical Nursing Program
Co-requisites: BIO150 orBIO232, ENG111, PSY230
PNE121 NURSING CARE OF MOTHER 2.5 Cr. Hrs. AND NEWBORN
This course focuses on nursing care of women related to reproductive health patterns. Emphasis is placed on pregnancy, childbirth, postpartum, and the newborn with nursing care directed in a familycentered holistic approach. Selected women's health issues and potential complications are included that pertain to the childbearing cycle. Legal and ethical directives are reviewed.
(3+6) F, S
Prerequisites: PNE120, PSY230
Co-requisites: BIO131,NRS110, PNE122
PNE122 NURSING CARE OF THE CHILD 2.5 Cr. Hrs. This course focuses on nursing care of the child from infancy through adolescence with health care needs. Emphasis is placed on growth and developmental concepts with nursing care directed in a family-centered holistic approach. Health promotion, maintenance, and restoration of the child are examined. Legal and ethical directives are reviewed.
(3+6) F, S
Prerequisites: PNE120, PSY230
Co-requisites: BIO131,NRS110, PNE121
PNE123 NURSING CARE OF ADULTS I 5 Cr. Hrs. Focuses on the care of adults with both acute and chronic medical and surgical conditions. A body systems approach is utilized. Mental health concepts and basic concepts of bioterrorism are introduced. Students continue to develop skills in problem solving through the use of the nursing process as applied to individual situations.
(6+12) S, SU
Prerequisites: PNE120
Co-requisite: NRS110
F = Fall; S = Spring; SU = Summer

PNE124 NURSING CARE OF ADULTS II 5 Cr. Hrs. The course builds on previous knowledge and concepts. Acute and chronic conditions of adults are presented over the remaining body systems. Legal issues in practical nursing are discussed as well as the leadership / management role of the practical nurse in caring for groups of individuals.
(6+16) F, SU
Prerequisites: NRS110, PNE121, PNE122, PNE123
Co-requisite: PSY110

## PSY110 GENERAL PSYCHOLOGY 3 Cr. Hrs.

This course examines the complex individual, the many factors believed to drive the individual and the resulting behavior. Students discuss empirical investigation and learn how to use these methods as tools in the discovery of individual functioning. This class also explores specific area of inquiry such as cognition, social and developmental psychology, learning, perception, consciousness, organizational, and health psychology. Personality, abnormal behavior, and psychological therapies are discussed.
(3+0) F, S, SU
Co-requisite: ENG111
Note: Transfer Assurance Guide(TAG) approved effective summer 2007 (OSS015 Intro/Fundamentals of Psychology)

## PSY210 ABNORMAL PSYCHOLOGY 3 Cr. Hrs.

This course is designed to provide students with an understanding of maladaptive behavior, its causes and consequences. Emphasis is on research methods and clinical assessment skills. Utilizing the DSMIV, special emphasis is placed on symptom recognition and treatment planning of psychological disorders. The impact of mental illness on the client's interpersonal relationships as well as cultural differences and societal response to mental illness will be explored. (3+0) F, S, SU
Prerequisite: PSY110
Co-requisite: ENG111
Note: Transfer Assurance Guide (TAG) approved effective spring 2007 (OSS017-Abnormal Psychology)

## PSY220 SOCIAL PSYCHOLOGY 3 Cr. Hrs.

This course provides students with the opportunity to explore the influences of other people, groups, and situations on the individual. Students should also gain a basic understanding of the research process and how it is used to investigate social psychological issues. Topics covered in this class include social perception and cognition, social influence, social relationships and applied social psychology. Students will have many opportunities to apply their new knowledge to critical thinking exercises and group projects. (3+0)S
Prerequisite: PSY110
Note: Transfer Assurance Guide(TAG) approved effective fall 2005
(OSS016-Social Psychology)

PSY230

## HUMAN GROWTH AND DEVELOPMENT

This course addresses the study of human development over the entire life span. Topics included in this course are emotional, cognitive, moral, social, and biological development. In addition to these topics, this course offers an analysis of the interaction of human characteristics within the individual and the relationship between individuals, environment, and culture at various stages of development.
(3+0)F, S, SU
Prerequisite: PSY110
Note: Transfer Assurance Guide (TAG) approved effective spring 2008(OSS048-Life Span)

PSY240 PSYCHOLOGY OF ORGANIZATIONAL BEHAVIOR
This course is designed to introduce the students to the psychological and social influences in the work world. Emphasis is on communication, motivation, beliefs, values, attitude, structure, and changes as these influence the behavior of management and employees. A special emphasis will be placed on small group dynamics. (3+0)F
Prerequisite: PSY110

## QCT100 QUALITY CONCEPTS

3 Cr. Hrs.
This class examines reasons for and philosophies leading to quality. We will look at quality from management, practitioner, and customer perspectives.
Students concentrate on quality problem solving and process control tools. Course work includes measurement system analysis and control charting principles. In addition, the student is introduced to probability and studies philosophies espoused by Deming, Crosby, and Juran.
(3+0)F
Prerequisite: MTH090
QCT131 QUALITY FOR LEAN MFG 3 Cr. Hrs.
This course deals with managing production operations in manufacturing plant. Two topics, "The 5S's: Workplace Organization" and "Mistake-Proof It!" prepare the student for a "Lean Manufacturing" project. Course is web based. Instructor is available for consultation via e-mail and telephone.
(2+2) On Demand
Prerequisite: QCT100 \& Ability to Access Web Courses

## QCT141 PRECISION MEASUREMENT 3 Cr. Hrs.

This course provides the student with theory and skills needed to perform dimensional inspections. Students will learn to study a part print, select, and use the proper measuring tool(s).Concepts introduced include precision, discrimination, accuracy and calibration. Previously learned print reading skills are expanded to include Geometric Dimensioning and Tolerancing.
(2+2)F, S, SU
Prerequisite: MET110 or work with part drawings in occupation. MET 103, Applied Geometry \& Trigonometry recommended.

F = Fall; S = Spring; SU = Summer

QCT142 ADVANCED CONCEPTS OF G D \& T 3 Cr. Hrs. This second course in geometric dimensioning and tolerancing requires the student to already have an understanding of the basics of GD\&T.There are more in depth discussions on select topics not covered in detail in fundamentals classes. Examples are more complex and include explanations of concepts that create problems in the workplace.A method for dealing with tolerance stacks, another layer of GD\&T expertise, will be demonstrated and practiced.
(2+2)F-Day,S-Eve
Prerequisite: MET110 or QCT141

## QCT243 ADVANCED QUALITY <br> 3 Cr.

Hrs.

## IMPROVEMENT

This course is one of a series of quality classes. The student learns more complex quality improvement methods by studying at least three of the following distinct topics: Advanced SPC; Six Sigma Start-Up; DOE: Screening Experiments; Measurement Systems Analysis; and Problem Solving. Topics are selected based on student's work experience and previously completed quality course content. All but two sessions may take place via the internet. Two, 3-hour laboratory workshops are planned for Design of Experiment and Cp, CpK practice.
(2+3) S - Day
Prerequisite: QCT100 \& Ability to Access Web Courses
QCT250 CERTIFIED QUALITY TECHNICIAN/ 3 Cr. Hrs. CERTIFIED MECHANICAL INSPECTOR REVIEW
Review of the requirements and topics to become certified as an American Society for Quality Control Technician or Mechanical Inspector.
(3+0) OnDemand
Prerequisite: QCT100, QCT141

## REA210 REAL ESTATE PRINCIPLES <br> 3 Cr. Hrs.

This is an introductory course taught in accordance with guidelines set by the National and Ohio Real Estate Associations, and the Ohio Real Estate Commission. It is designed for professional real estate people, as well as the general public. The course covers elementary characteristics of real estate and various influences on real estate values and basic real estate math. It also is a foundation for further study and preparation of securing a sales license.
(3+0) F - Weekend, S - Weekend

## REA220 REAL ESTATE LAW

3 Cr. Hrs.
This is a study of all the areas of law dealing with real estate. Emphasis is on the law of agency as applied to real estate brokers and salespersons.
Law of fixtures, estates, leases, conveying of real estate, real estate managers, license laws of Ohio, zoning, cooperatives, and condominiums are also included. This prepares students for sales license testing.
(3+0) F - Weekend, S - Weekend

REA230 REAL ESTATE FINANCE 3 Cr. Hrs.
This is an examination of the nature of financing real estate. Primary consideration is understanding mortgage loans and the mortgage market. The effects of governmental monetary and fiscal policies are also considered. Qualifying applicants and loan procedures are discussed throughout. This is a required course to prepare students for sales license testing.
(3+0) F - Weekend, S - Weekend
REA240 REAL ESTATE APPRAISAL 3 Cr. Hrs. Theory and principles of appraising urban real property using the three basic techniques of appraising are studied in depth. A term project is assigned to give the students practical experiences in applying these techniques. This is a required course to prepare students for sales license testing.
(3+0) F - Weekend, S - Weekend
SCM200 SUPPLY CHAIN MANAGEMENT 3 Cr. Hrs. This course focuses on the flow of information and goods between abusiness, its suppliers and its customers. Special attention is given to the development of relationships with a firm and its suppliers. Both internal and external aspects of the supply chain are analyzed. (3+0)F

## SCM210 PURCHASING AND MATERIALS 3 Cr. Hrs. MANAGEMENT

This course focuses on supplier identification, evaluation, selection, and measurement. The relationship between the purchasing function and the rest of the organization is explored along with the correlation between supplier performance and inventory levels.
(3+0)F
SCM220 OPERATIONS MANAGEMENT 3 Cr. Hrs. This course focuses on the internal production process found in manufacturing facilities. Critical areas such as production planning, production line balancing, TOC analysis, lean, quality, MRP/MRPII, and inventory management are explored.
$(3+0) \mathrm{F}$

## SCM230 <br> PHYSICAL DISGTRIBUTION LOGISTICS

This course focuses on the management of the movement of goods between local, national and international locations. Shipping documentation and packaging requirements are explored. The various modes of transportation are examined in detail.
(3+0)F
SPN111 SPANISH I 4 Cr. Hrs. Introduction to Spanish through oral-aural drills, controlled conversations, reading and writing, with attention paid to grammatical structures and cultural awareness. Spanish I is the first half of a two-semester sequence designed primarily for beginners.
(4+0) F
F = Fall; S = Spring; SU = Summer

## SPN112 SPANISH II

4 Cr. Hrs.
Continuation of Introduction to Spanish with practice in speaking, reading, writing, and listening comprehension conducted within a culturally significant framework.
(4+0)S
Prerequisite: SPN111 or permission with instructor

## SSC101 SOCIOLOGY

3 Cr. Hrs.
An introduction to the sociological perspective with a focus on the United States. "Order" and "conflict" theories are applied to broad areas of sociological concern, such as social inequality, sexual inequality, work and family, law and crime, race and ethnic relations, education and popular culture, modern urbanism, politics of food, health care, and the global society.
(3+0)F, S, SU
Note: Transfer Assurance Guide (TAG) approved effective spring 2007 (OSS021 - Intro/Fundamentals of Sociology)

SSC110 GENERAL ANTHROPOLOGY 3 Cr. Hrs.
Introduction to anthropological theory and observation. Topics will include a range of cultural phenomena, including evolution, adaptation, ecology, language, kinship, religion, and status systems. Emphasis is placed on cross-cultural perspectives.
(3+0)S
NOTE: Transfer Assurance Guide (TAG) approved effective spring 2008 (OSS001-Cultural Anthropology)

SSC120 AMERICAN GOVERNMENT 3 Cr. Hrs. A study of power as it occurs in the formation and implementation of public policy in the United States; based on the recognition that politics is an activity that creates the "realm of we" and molds personal identities. Special attention is given to the concepts of politics, justice, and democracy as a basis for examining our responsibility in the public realm. Topics covered are media, interest groups, political parties and campaigns, federal government structure and process, effects of power in domestic and foreign affairs, and making democracy.
(3+0)F, SU
Note: Transfer Assurance Guide (TAG) approved effective spring 2007 (OSS011 - American Politics/Government)

## SSC130 COMPARATIVE GOVERNMENT 3 Cr.Hrs.

A study of contemporary political systems, processes and policies of Western and non-Western countries. This will include aspects of political processes such as interest groups, political parties, elections, political socialization, and political culture.
(3+0) S
Note: Transfer Assurance Guide (TAG) approved effective spring 2007 (OSS013 - Comparative Government)

SSC21

## CULTURAL DIVERSITY

3 Cr. Hrs.
Explores ways that our society has served as a context for either more or less "cultural diversity." Emphasizes how historical relations among different people have affected images of "self" and "others" in U.S. society. Topics include thinking about culture, historical patterns and methods, the "American dilemma," race and class, and culture and gender.
(3+0) F, S, SU

## STA220 STATISTICS

3 Cr. Hrs.
An introductory course introducing the student to the collection, analysis, and presentation of data. Major topics include Correlation and Regression, Hypothesis Testing, Analysis of Variance, and CHI-Squared analysis. Student will learn to use Financial Calculator and Excel spreadsheets to accomplish.
(3+0) F - Day \& Eve, S - Day \& Eve, SU - Day \& Eve
Prerequisite: MTH109 College Algebra

## TRN100 TRACTOR-TRAILER DRIVER 5 Cr. Hrs. REFRESHER

This course will provide students with a classroom refresher and additional driving experience. This program consists of 100 hours, including 50 hours of classroom study and 50 lab hours of driving and observing on the range and on the road. Students who successfully complete the course, in addition to TRN200, will be eligible for CDL testing.

## TRN150 STRAIGHT TRUCKDRIVER 7 Cr. Hrs.

 This course will provide students with the basic knowledge and practical skills to become an entry-level straight truck driver. This program consists of 150 hours, including 50 hours of classroom study and 100 lab hours of driving and observing on the range and on the road. Students who successfully complete the course will be eligible for CDL testing.TRN200 TRACTOR-TRAILER DRIVER 9 Cr. Hrs. This course will provide students with the basic knowledge and practical skills to become an entry-level tractor-trailer driver. This program consists of 200 hours, including 50 hours of classroom study and 150 lab hours of driving and observing on the range and on the road. Students who successfully complete the course will be eligible for CDL testing.
F, S, SU

## VCT108 PHOTO EDITING

2 Cr. Hrs.
This course introduces the student to the fundamental process of creating camera-ready copy and art, color separation and proofing, image manipulation, scanning, and photo conversion methods. Various software packages, including Photoshop, will be investigated. Basic computer knowledge required. Should be taken in conjunction with Photography. Lab Fee
$(1+2) \mathrm{F}$
F = Fall; S = Spring; SU = Summer

## VCT111 LAYOUT \& DESIGN

3 Cr. Hrs.
This course covers the relationship among various design elements: balance, proportion, typography, and layout. Message composition, art presentation, copy layouts, the design process, and page makeup will be analyzed using current layout software. Lab Fee (2+2)S

## VCT182 PHOTOGRAPHY

3 Cr. Hrs.
This course is an introductory course, teaching basic camera and PhotoShop skills. The main emphasis of this course will be on camera operations and the capture of visual situations on film. PhotoShop techniques will be limited to cropping, contrast and brightness, removal of unwanted flaws, and other correcting procedures. (1+4) F - Day, S - Eve

## VCT204 CONCEPTS OF VISUAL COMMUNICATIONS

This is an overview of advanced visual communication concepts including problem solving, research, ideation, design, script writing, storyboarding, training techniques, proposal preparation, cost estimating, and analysis. Overall project management techniques and environmental factors are covered in depth.
$(2+2) S$

## VCT205 VISUAL COMMUNICATION 2 Cr. Hrs.

This introductory course in visual communication theory and processes will lay the foundation for developing presentations, desktop media production techniques, the basics of video production, web page development, and image transfer systems. The lecture portion will come from BGSU, with hands on lab experience in Adobe Illustrator at Northwest State Community College.
(1+2)S
VCT260 3D COMPUTER ANIMATION 3 Cr. Hrs.
This course provides the opportunity for students to become familiar with the fundamental concepts of 3D modeling and animation.
$(2+2) \mathrm{F}$

## VCT266 MULTIMEDIAPRODUCTION

3 Cr. Hrs.
A capstone course in the vct curriculum featuring Macromedia Dreamweaver and Flash programs-the software used to create multimedia presentations and web pages. The student will learn how to plan, design, and develop web content; will review previous studies and incorporate knowledge into creating a major project showcasing their work.
(2+2)S
Prerequisite: CIS129 and VCT268

## VCT268 VIDEO PRODUCTION 3 Cr. Hrs.

The study of video production is to provide a basic knowledge of the process used in pre-production, production, and cost-production activities. Video recording theory, concept planning, and production techniques, and linear and non-linear editing will be studied using a variety of hardware and software to accomplish the project objectives.
(2+2)F
VCT289 VCTCO-OP EXPERIENCE 3 Cr. Hrs.
This is a work experience in visual communications. The student is accepted on the basis of academic progress and available work site at the College or an outside organization. Enrollment with instructor permission.
(1+20)F, S, SU

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09/02/86

ANDREW KOZAL, Instructor Criminal Justice
B.A. Siena Heights University
M.S., Bowling Green State University 08/19/02

CINDYKRUEGER,
A.D.N., Owens Technical College
B.S.N., Bowling Green State University
M.S.N., Medical College of Ohio

08/01/89

DANIEL LIGHT, Instructor Business Technologies
B.S., Ohio State University
M.A., Asbury Seminary

09/02/86

MINDY MANAHAN, Instructor Nursing
A.A.S. Northwest State Community College
B.S.N. Bowling Green State University
M.S.N., Medical College of Ohio

8/20/01

JO McCORMICK, Instructor Arts \& Sciences
B.A. Adrian College
M.A., Western Illinois University
M.S.Ed., Western Illinois University

Kellog Certified Developmental Educator 08/16/06

DEBRA MIGNIN, Instructor Nursing
B.S.N., Bowling Green State University
M.S.N., Medical College of Ohio 08/20/96

CAROL MOORE, Instructor Business Technologies B.S., University of Toledo
M.B.E., Bowling Green State University 09/14/83

ANNETTE OBERHAUS, Clinical Teaching Assistant
B.S., Bowling Green State University 08/16/06

MARTHA PHILLIPS, Instructor Human Services B.S., Otterbein College M.S.S.A., Case Western Reserve University 09/04/91

TERRY PHILLIPS, Instructor, Engineering Technologies
B.S. University of Findlay 08/25/03

CHRISTINE ROBINSON, Instructor Business Technologies
A.A.B., Northwest Technical College
B.S., Defiance College
M.A., Bowling Green State University 09/19/96
J. RICHARD SEALSCOTT, Instructor Business Technologies B.S., Bowling Green State University M.B.A., University of Dayton 09/03/85

EDWARD SINGER, Instructor Arts \& Sciences
B.A., University of Notre Dame
M.S., Ohio State University

Ph.D., Ohio State University
09/02/86

JON SPEER, Instructor Arts \& Sciences
B.S., Ohio Northern University Ohio Professional Engineer 09/03/85

GREG TEFFT, Instructor Arts \& Sciences
B.A. Kentucky Christian College
B.S., Bowling Green State University
M.S. University of Toledo

08/18/98

DIANNE WENDT, Instructor Nursing
B.S.N., Ohio State University
M.S.N., Medical College of Ohio

11/30/92

STAFF

ROBERT AUSTERMILLER, Custodian 07/01/83

HOLLY BARTON, Allied Health Department Chair
A.A.S., Michigan College
B.S., Tri-State University
M.S., Indiana Wesleyan University

01/03/06

PAMELABAYER, InterimLibrary Director
B.S., University of Dayton
M.L.I.S., Wayne State University 06/02/08

DOUG BECK, Director of Plant Operations 07/14/86

KRISTINE BELTZ, Custodian 12/08/92

KAREN BLEEKS, Tech Prep Director B.A., Bowling Green State University M.A., Bowling Green State University 08/02/99

GRETCHENBOOSE, Retention Coordinator
B.A., University of Oklahoma
M.A., Heidelberg College

07/17/00

NATALIE BRANDON, Coordinator Career Services
B.S., Defiance College
M.A., Bowling Green State University

09/18/86

MICHAEL BROWN, Director of Public Relations \& Marketing B.A., Saint Michael's College 05/02/05

SANDRABUCHHOP, Custodian 02/10/97

MARSHA BUEHRER, Division Secretary - Allied Health \& Public Services
A.A.B., Northwest State Community College 03/22/93

DANIEL BURKLO, Dean of Engineering Technology
A.A.S. University of Toledo
B.S., I.P.F.W. Purdue University Branch 01/14/02

LORI CAIN, Staff Accountant
A.A.B., Bowling Green State University

DENIS CIACIUCH, Director of Human Resources
B.S. University of Toledo 09/07/04

MARY CLARK, Human Resource Clerk
A.A., Northwest State Community College
B.A., Bowling Green State University 12/03/07

RACHEL COBB, Food Preparation Worker 10/09/06

KYLECOOPER, Director of Technology
A.A.S. Northwest State Community College 4/18/05

JENNIFER CORDES, Copy Center Assistant 04/02/97

JULIE CURRY, Student Services Support Specialist A.A.S. Northwest State Community College 08/6/07

SCOTT, DECAVITCH, Manager of Network-Systems Engineering and Support
A.A.D., Electronic Technology Institute 06/09/08

KATHY DOMINIQUE, Division Secretary - Arts \& Sciences
A.A.B., Northwest Technical College

07/11/78

TRACY DOPP, Copy Center Assistant 10/01/02

ROBERTDUNCAN, Network/Systems Technician A.A.B., Northwest State Community College 08/13/07

NANCY DUNSON, Accountant
A.A.B., Northwest State Community College
B.A. Bluffton University College 08/29/90

ANGELA DURHAM, Copy Center Operator/Mailroom Clerk Diploma, International Business College 10/02/86

DREAMA ECK, Food Preparation Worker 09/18/06

BONNIE EGGERS, Food Preparation Worker 04/04/01

LANA EVANS, Dean of Arts \& Sciences
B.B.A. Marshall University
M.Ed., University of Toledo

07/22/02
Kellogg Certified Developmental Educator
AMY A FRANCIS, Director of Financial Aid/Student Life
B.S., Defiance College 03/27/06

CHERYL GEER, Administrative Assistant/Student Success Advocate Liaison (Metamora)
B.I.S., Lourdes College 05/01/06

JULIE GILGENBACH, BookstoreClerk, Office 08/20/90

JUAN GONZALEZ, Student Service Support Specialist B.A., CESA

09/03/07

GLORIA GRABER, Division Secretary - Engineering Technologies
A.A.B., Northwest State Community College 12/02/85

BETSY GRAHN, Secretary, Admissions
A.A.S., Northwest State Community College B.S. Defiance College 10/26/98

VICKIGRIESER,Cook
09/18/06

BRADLY HATHAWAY, Network/Systems Technician
B.A. Bowling Green State University 6/27/02

DAVIDHEER, Maintenance Technician 01/24/05
C. ANN HELM, Coordinator of Practical Nursing
A.S.N., Indiana University/Purdue University
B.S.N., Ball State University
M.S.N., Medical College of Ohio

07/22/04

LOU HELSEL, Registrar’s Assistant
A.A.B., Northwest Technical College 09/01/88

LOU HISSONG, Student Services Support Specialist
A.A.B., Northwest State Community College 10/11/04

KIM HURTUBISE, Accounts Payable
B.S., Central Michigan University 08/07/07

TERRY KING, Senior Data Systems Administrator 02/01/78

CONNIE KLINGSHIRN, Registrar/SSA Center Office Supervisor M.B.O.L., Defiance College 08/16/06

JOHN KROCHMALNY, Industrial Training Specialist
A.T.S. Terra Community College
B.S., Bowling Green State University 10/15/01

CINDY KRUEGER, Vice President of Academics
A.D.N., Owens Technical College
B.S.N., Bowling Green State University
M.S.N., Medical College of Ohio 08/01/89

MARY KRUSE, Secretary, Student Resources A.A.B., University of Toledo Community \& Technical College 06/09/99

PAT MAASSEL, Food Preparation Worker 08/07/95

ALVIN MANZ, Programmer I
A.A.B. Northwest State Community College 05/20/02

KELLY MATTIN, Student Accounts Assistant
A.A.B., Northwest State Community College 09/30/91

GAYLE MCINTOSH, Library Assistant - Circulation A.A.B., Northwest State Community College 04/21/03

AMBER NICHOLLS, Financial AidCounselor
A.A.B., Northwest State Community College 02/13/07

DAVIDNIESE, Custodian 02/23/98

VICTORIA NIESE, Custodian 03/17/03

TAMARA NORRIS, Computer Training Coordinator
B.Ed., University of Toledo
M.B.A., University of Toledo 10/17/05

ROBERTA OBERLIN, Food Preparation Worker 10/06/06

JOHN ORDWAY, Maintenance Technician 02/04/91

ROBERT OVERSTREET, Technical Training Coordinator A.A.S., Terra State Community College 09/10/07

VON PLESSNER, Dean-Business Technologies
A.A.B., Northwest Technical College
B.S., Defiance College
M.B.A., University of Toledo

09/03/85

AMANDA POTTS, Coordinator of Communications and Publications
B.S., Bowling Green State University 3/27/06

RICHARDPOWELL, Director of Administrative Services
B.S., The Defiance College
M.A., Winebrenner Theological Seminary 01/11/99

JUDY PRESTON, Training Coordinator Business and Industry
B.S., Waynesburg College 07/01/04

LISA RAMIREZ, Employment and Benefits Supervisor
A.A.B., Owens Community College

10/18/04

ENCIL REBEAU, Campus Police Officer Diploma, Ohio State Patrol Academy 06/03/02

JASON RICKENBERG, Transfer Coordinator
B.B.A., Tiffin University
M.B.O.L.,The Defiance College 03/07/05

MINERVA RIVAS, Library Assistant-Clerical/Acquisitions
A.A.B., Northwest Technical College 11/22/88

CHERIE RIX, Student Success Center Tutoring Lab Supervisor A.A.B., Northwest State Technical College B.S., Defiance College 08/23/04

BEVERLY ROBINSON, DivisionSecretary-Business Technologies A.A.B., Northwest Technical College 09/02/86

ROSALIE ROSEBROCK, Part-time Administrative Assistant to the

## President

B.S.C., International Business College
A.T.S. Northwest Technical College

11/17/87
KRISTIANA ROTROFF, Director of Student Resources
B.A., The Ohio State University
M.L.S., Kent State University

10/28/02

CAROL SCHWARTZ, Coordinator of Instructional Support
A.A., Lourdes College
B.S., University of Toledo
M.Ed., University of Toledo

04/10/06
CHRISTINA SCHWIEBERT, Technology Help Desk
B.S., Wright State University

01/02/07
KAREN SHORT, Interim Dean of Allied Health and Human Services B.S.N., Goshen College
M.S.N., Medical College of Ohio 09/01/89

REBECCA SLATTMAN, Switchboard/Receptionist/Scheduler 03/04/02

DEB SMITH, Bookstore Clerk 09/15/00

KATHY SOARDS, Chief Fiscal Officer
A.A.B., Northwest Technical College 03/30/98

LYNN SPEISER, Director of Finance and Business Services
B.S., Bowling Green State University 04/23/03

THOMAS STUCKEY, President
B.S., Goshen College
M.S., Bowling Green State University

Ph.D., Bowling Green State University 08/10/98

KATHY THOMPSON, Director of Admissions
B.S., Central College 06/18/07

GUILLERMINA TIJERINA, Student Accounts
A.A.B., Northwest Technical College 05/23/83

JILL VANHORN, BookstoreClerk 01/03/94

KEITH VANHORN, Part-Time Coordinator of Extracurricular Student Programs
B.A., College of Wooster
M.S., St. Francis College

11/03/86
BETHANY VARGAS, Administrative Assistant to CLO
A.A.B., Northwest State Community College 10/23/06

LYNDA VONDEYLEN, Executive Administrative Assistant to the President
A.A.B., Northwest Technical College 10/10/83

ROBBINWILCOX, Director of Development
A.A.B, Jackson Community College
B.A., Tri-State University

08/01/06

PETER WILHELM, Part-Time Coordinator for Arts and Historic Preservation Program
B.S., Bowling Green State University
M.A., Bowing Green State University 07/01/00

MARY ANN WINTERS, Food Preparation Worker 10/06/06

## ALAN WORD, Chief of Police <br> B.S., Defiance College 01/03/06

THOMAS WYLIE, Associate Vice President of Workforce Development
B.S., Bowling Green State University
M.Ed., Bowling Green State University 09/01/00

LORI YODER, Division Secretary - Community and Workforce Development
A.A.B., Northwest State Community College
B.A., Bluffton University

03/07/05
MARI YODER, Vice President of Institutional Advancement
B.A., Bowling Green State University 05/05/08

LAWRENCE ZACHRICH, Part-Time ProgramCoordinator for Experiential Learning
B.S., Bowling Green State University
M.Ed., Bowling Green State University

Ph.D., Bowling Green State University 03/27/78

LARRY ZUVERS, Bookstore Manager
B.S., Defiance College

07/09/90

| BUSINESSMGT.ADV.COMMITTEE |  | EARLY CHILDHOODADVISORY COMIMITTEE |  |
| :---: | :---: | :---: | :---: |
|  |  | Sherry Dewyer | Julie Mangas |
| Lance Bowsher | Debbie Nelson | Hope School | Four County Career Center |
| Edgerton, Ohio | Wauseon Chamber of Commerce | McClure, Ohio | Archbold, Ohio |
| Doug Daoust | Wauseon, Ohio |  |  |
|  |  | Janet Engler | Deb Middleton |
| Daoust Drugs, Inc. <br> Defiance, Ohio | Linda Nofziger | NOCAC | NOCAC |
|  | First Federal Savings \& Loan | Defiance, Ohio | Defiance, Ohio |
|  | Montpelier, Ohio | Lana Evans | Pat Mobley |
| Bill Eichenauer |  | NSCC | Popular Ridge Training Station |
| NSCC | Al Phipps | Archbold, Ohio | Defiance, Ohio |
| Archbold, Ohio | Pioneer, Ohio |  |  |
|  |  | Donna Hershberger | Melissa Rupp |
| Kenneth Esterline | Steve Raymond | NSCC | Enrichment Center |
| NSCC | Mont. Area Chamber of Commerce | Archbold, Ohio | Montpelier, Ohio |
| Archbold, Ohio | Montpelier, Ohio | Patricia Hofbauer | Marilyn Sachs |
|  |  | NSCC | OSU Extension |
| Mike Farmer | BrentSchlegel | Archbold, Ohio | Bryan, Ohio |
| Paulding Chamber of Commerce | Toledo, Onio |  |  |
| Paulding, Ohio |  | Elaine Krauss | Carole Schultz |
|  | Tim Small | TLC ChildCare | Lourdes College |
| Jill Jacoby | Def. Area Chamber of Commerce | Wauseon, Ohio | Sylvania, Ohio |
| Autoform Tool \& Mfg., Inc. | Defiance, Ohio | Fred Coulter | Janet Yaros |
| Fremont, Indiana |  | Defiance College | NOCAC |
|  | Wally Snyder | Defiance, Ohio | Defiance, Ohio |
| Pam Johnson | Mayor |  |  |
| Northwest Ohio Job Center | Holgate, Ohio | April McNeil Hope School McClure, Ohio |  |
| Bryan, Ohio |  |  |  |
|  |  |  |  |
| Jan Lauro | Swan.Area Chamber of Commerce | ACCOUNTINGADVIS | MITTEE |
| Defiance County Juvenile | Swanton, Ohio | Diane Bechtel | Sue Irving |
| Probation |  | NSCC | Napoleon, Ohio |
| Bryan, Ohio | Bruce Vanarsdalen | Archbold, Ohio |  |
|  | ITW Tomco |  |  |
| Marcy LeFevre | Bryan, Ohio | Chris Lee | Pat Michaelis |
| Delta Area Chamber of Commerce | Bran, Orio | Defiance City Schools | NSCC |
| Delta Area Chamber of Commerce |  | Defiance, Ohio | Archbold, Ohio |
| Delta, Ohio | Greg Whitacre |  |  |
|  | Archbold, Ohio | Carol Moore | Toni Neuenschwander |
| Joel Miller |  | NSCC | Rassini Chassis Systems |
| Napoleon Chamber of Commerce | Dan Yarhaus | Archbold, Ohio | Montpelier, Ohio |
| Napoleon, Ohio | Bryan Area Chamber of CommerceBryan, Ohio | Jennifer Roth | Randy Schroeder |
|  |  | Napoleon, Ohio | Farmers \& Merchants State |
| Ken Miller |  |  | Bank |
| Archbold Chamber of Commerce | Dr. Larry Zachrich | Richard Sealscott | Archbold, Ohio |
| Archbold, Ohio | NSCC | NSCC |  |
|  | Archbold, Ohio | Archbold, Ohio | Amy Trowbridge |
| Jerry Monnin |  |  | Delta, Ohio |
|  |  | Janet Wagner |  |
| Defiance, Ohio | Diamond Zimmerman WEDCO | CK Technologies | Cindy Wendell |
|  | Bryan, Ohio | Montpelier, Ohio | Defiance, Ohio |


| PARALEGALADVISORYCO | MITTEE |
| :---: | :---: |
| ErwinBandy | Sara Boyd |
| Paulding, Ohio | Defiance, Ohio |
| Judge Michael J. Bumb | Paul Croy |
| Fulton County Courthouse | Croy \& Hendel |
| Wauseon, Ohio | Perrysburg, Ohio |
| KimberlyKazimier | Pat Michaelis |
| Gallagher, Stelzer \& Yosick, Ltd. | NSCC |
| Bryan, Ohio | Archbold, Ohio |
| Kathleen Reed | Carrie Schlade |
| University of Toledo | Montpelier, Ohio |
| Toledo, Ohio |  |
| Marleen Shumaker |  |
| Bryan, Ohio |  |

## INFORMATIONTECHNOLOGYADVISORYCOMIMITEE

## Catherine Aldrich

NWOCA
Defiance, Ohio

## Bill Brandt

RDSI Banking Systems
Defiance, Ohio

Joe Ferrall
Northwest Ohio
Computer Association
Archbold, Ohio
Jim Hornyak
Bryan, Ohio

Dan Light
NSCC
Archbold, Ohio

Doug Nafziger
Fulton Co. Auditor's Office
Wauseon, Ohio

Von Plessner
NSCC
Archbold, Ohio

Mary Beth Royal
Royal Computer
Sales \& Service
New Bavaria, Ohio

Kevin Anderson
Bryan, Ohio

Kyle Cooper
NSCC
Archbold, Ohio

Tony Hills
NSCC
Archbold, Ohio

Terry King
NSCC
Archbold, Ohio

Larae Meyer
Napoleon, Ohio

Sam Petros
Toledo, Ohio

John Robinson
Bryan, Ohio

Bill Wolfrum
The Ohio Art Company
Bryan, Ohio

| SUCCESS CENTER ADVISORY COMMITTEE |  |
| :--- | :--- |
| Charles Rooney | Natalie Brandon |
| NSCC | NSCC |
| Archbold, Ohio | Archbold, Ohio |
|  |  |
| Cheryl Conway | Cathy Dukes |
| NSCC | Adult Basic Literacy Ed. Corr. |
| Archbold, Ohio | Four County Career Center |
|  |  |
| Darrell Handy | Elisha Higginbotham |
| General Tire | Archbold, Ohio |
| Defiance, Ohio |  |
| Jan Lauro | Cecily Rohrs |
| Defiance Co. Juvenile Prob | NSCC |
| Bryan, Ohio | Archbold, Ohio |

OFFICESERVICESADVISORYCOMMITTEE
Carolyn Brown Kathy Dominique

NSCC
Archbold, Ohio

Tim Funchion
Arrow Tru-Line, Inc.
vices
Archbold, Ohio Bryan, Ohio

Barb Lause Betty Mowery
Tenneco Automotive
Napoleon, Ohio

Chris Robinson
NSCC
Archbold, Ohio

Marleen Shumaker
Retired OAS Instructor
Bryan, Ohio

| PARAPROFESSIONAL ADVISORY COMMITTEE |  | Steve Lab | Sheriff David Westrick |
| :---: | :---: | :---: | :---: |
| Patricia Devlin Ed. D | Jean Hefflinger | Bowling Green State University | Defiance Co. Sheriff Dept. |
| Univeristy of Toledo | NWOESC | Bowling Green, Ohio | Defiance, Ohio |
| Toledo, Ohio | Wauseon, Ohio |  |  |
|  |  | HUMANSERVICESADVISORY COMIMITTEE |  |
| Wendy Hogrefe | Dennis Myers | Pat Deatrich-Daily, L.S.W., | Connie Planson, L.P.C.C. |
| NSCC | Wms. Co. Enrichment Ctr. | First Call for Help | Maumee Valley Guidance Ctr |
| Archbold, Ohio | Montpelier, Oh | Napoleon, Ohio | Bryan, Ohio |
| Sherry Dewyer | Donna Hershberger | Pam Donaldson, L.I.S.W. | Linda Schlacter-McDonald, |
| Hope School | NSCC | NSCC | CCDCII |
| McClure, Ohio | Archbold | Archbold, Ohio | FiveCounty Alcohol/DrugProg Bryan, Ohio |
| Kathy Link | Carol Shultz | Karen Moore, LISW |  |
| NWOESC | Lourdes College | The Turning Point | Dr. Deb Stanforth |
| Wauseon, Ohio | Sylvania, Oh | Paulding, Ohio | Easy Living |
|  |  |  | Defiance, Ohio |
| Kerri Gearhart | Pat Hofbauer | Angie Franklin |  |
| NWOESC | NSCC | Northwest Ohio Community | Marty Phillips, L.I.S.W |
| Bryan, Ohio | Archbold, Oh | Action Commission | NSCC |
|  |  | Defiance, Ohio | Archbold, Ohio |
| April McNeil |  |  |  |
| Hope School |  |  |  |
| McClure, Oh |  |  |  |

## CRIMINALJUSTICEADVISORY COMMITTEE

Judge Michael Bumb Connie Maasse

Fulton County Courthouse
Wauseon, Ohio
Jim Dennis
CCNO
Stryker, Ohio

JillDewitz
Adult Parole Authority
Tiffin, Ohio

Richard Hupe
Four County Career Center
Archbold, Ohio
Don Knueve
DefianceCollege
Defiance, Ohio

Andrew Kozal
NSCC
Archbold, Ohio

Cindy A. Krueger
NSCC
Archbold, Ohio

Connie Maassel
Adult Parole Authority
Defiance, Ohio

Darryl Miller
Four County Career Center
Archbold, Ohio

Sheriff John Nye
Henry County Sheriff Dept.
Napoleon, Ohio

Michelle Oyer
Fulton Co Probation Office
Wauseon, Ohio

Steve Sonderguard
Defiance College
Defiance, Ohio

Asst. Chief Tim Tobias
Defiance Police Department
Defiance, Ohio

Chief Norman Walker
Defiance Police Department
Defiance, Ohio

## NURSING ADVISORY COMMITTEE

Patti Altman, R.N.
NSCC
Archbold, Ohio

LoriBird,R.N.
NSCC
Center
Archbold, Ohio
Kathleen Boff, R.N., C.N.O.
Defiance Regional Medical Ctr
Defiance, Ohio

Annette Crews, R.N.
St. Luke’s Hospital
Maumee, Ohio

Jan David, R.N., C.N.O.
Community Hospital \&
Wellness Centers
Bryan, Ohio

Cathy Day, R.N.
Community Hospital \&
Wellness Centers
Bryan, Ohio

Deborah Hartzell, R.N.
NSCC
Archbold, Ohio
Cindy Krueger, R.N.
NSCC
Archbold, Ohio

Jonathon Liechty, R.N.
Parkview Hospital
Fort Wayne, Indiana

Mindy Manahan, R.N.
NSCC
Archbold, Ohio

Lynn Miser, R.N.
Community Health Services
Montpelier, Ohio

Susie Moore, R.N.
Harborside
Bryan, Ohio
Karen Niese, R.N.
Defiance Regional Medical
Defiance, Ohio

Sharon Reddington, R.N.
Fulton County Health Center
Wauseon, Ohio

Jo Short, R.N., C.N.O.
Fulton County Health Center
Wauseon, Ohio
Karen Short, R.N.
NSCC
Archbold, Ohio

Mary Jo Smallman, RN
Fulton Manor
Wauseon, Ohio

Becky Snyder, RN
Williams County Combined
Health Dept
Bryan, Ohio
Dodi Thompson, R.N., C.N.O.
Mercy Hospital of Defiance
Defiance, Ohio

Karen Walker, R.N.
Four County Career Center
Archbold, Ohio

Dianne Wendt, R.N.
NSCC
Archbold, Ohio

Jane Zachrich, R.N., C.N.O.
Community Memorial Hospital
Hicksville, Ohio

Academic Advisor - Students are assigned an academic advisor. An advisor can provide guidance regarding classes scheduling and program requirements.

Academic Divisions - There are four divisions at NSCC - Allied Health and Public Services, Business, Engineering, and Arts and Science.

Academic Probation - Students are placed on academic probation at the end of any semester, including summer term, in which their cumulative grade point average falls below the minimum levels.

Academic Suspension - A student on academic probation will be suspended at the end of any semester, including summer, if the minimum cumulative grade point average is not reached while on probation.

Accreditation -NSCC is accreditation by the Higher Learning Commission and the member of the North Central Association of Colleges and Schools.

Admission - the department to which you submit an application
Audit - the term "audit" refers to a course which is taken without credit and must be defined on date of registration.

Cost of Attendance - The total amount it will cost a student to go to school. This amount includes, but not limited to, tuition and fees, books, living expenses, transportation, and supplies. The students’ direct cost is tuition, fees, and books.

Credit Hour - a unit of academic credit measured in semester hours; one credit hour usually represents one hour of class time per week.

COMPASS Testing - assessment of a student's reading, writing, and mathematical skills.
$\mathbf{C R N}$ - course reference number, which is four-digits.
Cumulative Grade Point Average - a student's grade point average for all college work based on a total number of quality points earned and the total numbers of semester hours.

Dean - this administrator directs an academic division (such as "Business") at the college.

Dean's List - honoring students for academic achievements.

Developmental Courses - any course that is below a 100 level (e.g. MTH080, CIS090, etc). These pre-college courses in reading, mathematics, science, and English help develop basic skills and prepare students for college level course work. These courses are graded pass/fail (S/U) and do not meet course requirements for graduation.

Drop/Add - If students want to add a course after the term has begun, they have to complete an add form and obtain signatures from the instructor and dean of that division. To drop a course after the refund period is a "withdrawal" and can be completed on the web.

Estimated Family Contribution (EFC) - this amount is generated from a student's Free Application for Federal Student Aid (FAFSA) and is used to determine all financial aid eligibility.

Federal Parent Loan (PLUS loan) - a federally guaranteed loan program that allows parents to borrow funds to help pay educational expenses. The program requires the borrower to pass a credit check.

Federal Stafford Loan - a federal loan program that enables students to borrow money for his/her education costs. Students must complete a FAFSA and be enrolled in at least six credit hours a semester. This is a loan that must be paid back upon graduation or enrollment of less than six credits. Repayment is usually based on a ten-year schedule.

Federal Supplemental Educational Opportunity Grant - available to undergraduate students who demonstrate exceptional financial need according to the results of the FAFSA.

Federal Work Study Program - opportunity to work and earned dollars on or off campus.

Free Application for Federal Student Aid (FAFSA)- application to apply for federal/state grants, loans, and work study programs at www.fafsa.ed.gov.

Financial Aid - a combination of scholarships, awards, loans, grants, and work study programs to help students meet education costs.

Fresh Start Policy - a student may apply to change a D, F, U or WF grade to a W in a maximum of two courses. Specific requirements apply.

Full-time Ohio Instructional Grant (OIG) - State grant monies for Ohio residents.

Full-time Student-Carries 12 or more credithours in a full term(fall or spring), or carries 6 or more credit hours during the summer term.

First-Year Student - a student with 29 or less earned credit hours.
myNSCC - online access to student registration and account information.

National Student Loan Database System (NSLDS) - centralized database for student financial aid records.

NSCC ID Card - a student ID card issued by the College.
Ohio College Opportunity Grant (OCOG) - State grant monies awarded to part-time and full-time students.

Part-time Student-Carries 11 credit hours or less in a full term (fall or spring), or carries 5 or less credit hours during the summer term.

PELL - a federal program where free monies is awarded to undergraduate students with the highest amount of financial need and have not earned a bachelor degree.

Satisfactory Academic Progress (SAP)-level of academic standing that a student must maintain in order to continue receiving federal student aid.

Second-Year Student - has earned at least 30 credit hours.
Student ID number - a computer generated number issued to students upon admission to the College. The number begins with an " N " and contains 8 -digits.

NOTES

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## NOTES

NOTES

## NOTES

## NOTES

2008-2009

22600 State Route 34
Archbold, Ohio 43502
(419)267-5511
www.northweststate.edu


[^0]:    + Students must attain a 2.00 grade point average in these technical courses to graduate.

[^1]:    + Students must attain a 2.00 grade point average in these technical courses to graduate.

[^2]:    + Students must attain a 2.00 grade point average in these technical courses to graduate.

[^3]:    + Students must attain a 2.00 grade point average in these technical courses to graduate.

[^4]:    + Students must attain a 2.00 grade point average in these technical courses to graduate.

[^5]:    + Students must attain a 2.00 grade point average in these technical courses to graduate.

[^6]:    + Students must attain a 2.00 grade point average in these technical courses to graduate.

[^7]:    + Students must attain a 2.00 grade point average in these technical courses to graduate.

[^8]:    ** Prior to taking IET105, students should have basic computer literacy in Windows and at least one Windows application.

[^9]:    + Refers to technical coursework

[^10]:    * Students currently employed full-time in a professional criminal justice setting may be allowed to substitute this course.

