## GENERAL INFORMATION

## CLEVELAND COMMUNITY COLLEGE <br> "An Equal Opportunity Educational Institution"

## DIRECTORY OF CORRESPONDENCE

Telephone (704) 484-4000
Inquiries will receive prompt attention if addressed to the Administrative Offices below at Cleveland Community College, 137 South Post Road, Shelby, North Carolina 28152.
Academic Programs Vice President, Academic ProgramsAdministrative AffairsThe President
Admissions Dean of Enrollment Management
Adult Basic Education Dean, Basic Skills Programs
Adult High School Program Dean, Basic Skills Programs
Entrance Procedures Dean of Enrollment Management
Evaluation of Credits Admissions Counselor
Financial and Business Affairs Vice President, Finance/Administrative ServicesGED ExamGED Examiner
Gifts and Bequests The President,
Dean, Community Relations and Development
High School Program Dean, Basic Skills Programs
Human Resources Development Program ..... Coordinator, HRD
Industrial Training Vice President, Continuing Education
Job Placement Service Coordinator, Academic Support Center
Non-Credit Courses Director of Occupational Extension
Placement Testing Coordinator, Academic Support CenterRegistrar
Student Activities Student Activities Advisor
Student Affairs Vice President, Student Services
Student Financial Aid Director of Financial AidRegistrar
Veterans Affairs Director of Financial Aid

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## CALENDAR OF EVENTS

## SUMMER TERM 2003

| May 15 | Thursday . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Registration |
| :---: | :---: |
| May 23 | Friday. . . . 1st Session \& 10 wk Session - Summer Classes Begin |
| May 23 | Friday . . . . . . . . 1st Session \& 10 wk Session - Late Registration |
| June 18 | Wednesday. . . . . . 1st Session - Last Day for Official Withdrawal |
| June 18 | Wednesday . . . . . . . . . . . . . . . . 1st Session - Last Day to Change from Credit to Audit |
| June 26 | Thursday . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 1st Session Ends |
| June 27 | Friday . . . . . . . . . . . . . . . . . . . . . . . 2nd Session - Classes Begin |
| June 27 | Friday . . . . . . . . . . . . . . . . . . . . 2 2nd Session - Late Registration |
| July 4 \& 5 | Friday \& Saturday . . . . . . . . . . . . . . . . . . . . . . . . . . . . Holiday |
| July 16 | Wednesday . . . . 10 wk Session - Last Day for Official Withdrawal |
| July 16 | Wed. . . 10wk Session - Last Day to Change from Credit to Audit |
| July 24 | Thursday . . . . . . . 2nd Session - Last Day for Official Withdrawal |
| July 24 | Thurs.. . . . 2nd Session - Last Day to Change from Credit to Audit |
| August 1 | Friday . . . . . . . . . . . . . . . . . . . 2nd Session \& 10 wk Session End |

## FALL SEMESTER 2003

| August 5 | Tuesday . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Registration |
| :---: | :---: |
| August 18 | Monday . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Fall Classes Begin |
| August 18 | Monday . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Late Registration |
| September 1 | Monday . . . . . . . . . . . . . . . . . . . . . . . . . . . . Labor Day Holiday |
| Sept. 29 \& 30 | Monday \& Tuesday . . . . . . . . . . . . . . . . Fall Break (No Classes) |
| November 12 | Wednesday . . . . . . . . . . . . . . . . Last Day for Official Withdrawal |
| November 12 | Wednesday . . . . . . . . . Last Day to Change from Credit to Audit |
| Nov. 26-29 | Wednesday - Saturday . . . . . . . . . . . . . . . Thanksgiving Holidays |
| December 15 | Monday . . . . . . . . . . . . . . . . . . . . . . . . . . . . Fall Semester Ends |

SPRING SEMESTER 2004

| January 6 | Tuesday . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Registration |
| :---: | :---: |
| January 9 | Friday . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Spring Classes Begin |
| January 9 | Friday . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Late Registration |
| January 19 | Monday . . . . . . . . . . . . . . . . . . . . Martin Luther King Jr. Holiday |
| March 24-27 | Wednesday - Saturday. . . . . . . . . . . . . Spring Break (No Classes) |
| April 7 | Wednesday . . . . . . . . . . . . . . . . Last Day for Official Withdrawal |
| April 7 | Wednesday . . . . . . . . . . Last Day to Change from Credit to Audit |
| April 9 - 13 | Friday - Tuesday . . . . . . . . . . . . . . . . . . . . . . . . Easter Holidays |
| May 10 | Monday . . . . . . . . . . . . . . . . . . . . . . . . . . . Spring Semester Ends |
| May 11 | Tuesday . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Graduation |


|  | CALENDAR OF EVENTS |
| :--- | :--- |
|  | SUMMER TERM 2004 |

FALL SEMESTER 2004



## MESSAGE FROM THE PRESIDENT

Dr. L. Steve Thornburg, Ed. D.

All around us we see Cleveland Community College students and graduates involved in important work and making meaningful contributions to the communities throughout Cleveland County and the surrounding area.

Since Cleveland's beginning in 1965, the College has provided education and training that makes a difference in an individual's life. The faculty and staff have touched positively the lives of thousands and thousands of area citizens. Your College takes great pride in our past, but more importantly, we look forward to the opportunities to work with you in our future.

This catalog describes a wide variety of programs and services that can be of help to you as you plan for your future. You will see an array of Associate Degree, Diploma, and Certificate programs ranging from college transfer to high tech to occupational, all designed to assist you in reaching your educational goals.

The faculty and staff at Cleveland are here to help you to achieve your individual goals, to grow and develop as an individual, to prepare for your future, and to develop a lifelong love of learning. We are here to serve you and your needs.

Each member of Cleveland's faculty and staff has an interest in your success and welcomes you to our College community. I look forward to seeing you at Cleveland Community College and wish for you a successful and rewarding experience. Welcome to your future!

## HISTORY OF THE COLLEGE

The 1963 North Carolina General Assembly authorized a system of comprehensive community colleges, technical institutes, industrial education centers, and extension units to be established and placed under the jurisdiction of the State Board of Education.

The Cleveland Unit of Gaston College was established on July 1, 1965, as a result of the vision and effort of many individuals over several years. The Shelby Chamber of Commerce and the County Commissioners worked with the State Board of Education and Gaston College in establishing a unit of the College. Two buildings were rented by the County Commissioners at 118 North Morgan Street to start the school.

On July 11, 1965, James B. Petty was elected director of the Unit. The first classes began in September 1965, in the old Porter Brothers and McBrayer buildings. The number of classes and students has grown rapidly since that date.

On October 3, 1967, a local Board of Trustees was officially appointed and the Extension Unit became Cleveland County Technical Institute, a unit of the Department of Community Colleges of North Carolina.

In July 1969, the institute leased the County Home property at 137 South Post Road for a campus and moved to the new location.

Having secured a grant of $\$ 500,000$ from the Cleveland County Board of Commissioners and matched by a like amount from the State of North Carolina, architects were commissioned in 1972 to plan a long-range building program on the present campus and the first two buildings for the new campus layout. The first two buildings were completed and placed in use for the Fall Quarter 1974.

In June 1977, the voters of Cleveland County approved a $\$ 5,000,000$ bond referendum to construct the next two phases of the long-range development plan for the campus.

Construction began in summer 1979 on these buildings to add approximately 100,000 additional square feet of permanent facilities including a new Learning Resources Center, classrooms, shops, laboratories, snack bar, bookstore, and offices. Shop additions were placed in use for Fall Quarter 1980. The main additional construction, known as the Campus Center Building, was placed in use in March 1981. Formal dedication was held October 18, 1981.

On March 3, 1980, the Cleveland County Board of Commissioners voted to concur with the request by the Board of Trustees for a name change of Cleveland County Technical Institute to Cleveland Technical College.

By action of the state legislature, effective July 1, 1987, the College was authorized to become Cleveland Community College and to offer two-year college transfer programs. The first college transfer students were enrolled in the Fall Quarter 1987.

A Field House building was completed in July 1987 and became part of the College's physical education complex.

Contracts were awarded in December 1987 for the construction of a new Student Activities Center building. This building was placed in use for Spring Quarter 1989.

A Maintenance building was completed in August 1990. The James Broughton Petty Amphitheater was completed and dedicated April 24, 1991.

The founding president, Dr. James Petty, retired as President Emeritus on July 31, 1990. The College's second president, Dr. L. Steve Thornburg, assumed the presidency on August 1, 1990.

During years 1995, 1996, and 1997 the College pursued an extensive reengineering process to completely redesign every course and every program of study in order to accommodate converting from a quarter hour system to a semester hour system. Cleveland, along with all other community colleges in North Carolina, began offering semester credit hours in the summer term of 1997.

On May 20, 1997, the voters of Cleveland County again expressed their confidence in the College by approving a $\$ 3.1$ million bond referendum to construct a new classroom building and an emergency training center that will provide job training and instructional space for the 21st Century. The technology classroom building was placed in use for Fall Semester 1999.

On November 7, 2000, the voters of North Carolina approved a $\$ 3.1$ billion bond referendum for the North Carolina Community College System and the University of North Carolina System. Cleveland Community College will be the recipient of approximately $\$ 5$ million $-\$ 3.8$ million for new construction and $\$ 1.2$ million for repairs and renovation.

In 2000-2001, Cleveland Community College celebrated its 35th Anniversary. In December 2001, the Southern Association of Colleges and Schools reaffirmed the College's accreditation for the next ten years. In addition, no follow-up report was requested.

After four years of anticipation, the Emergency Training Center was completed and dedicated on December 12, 2002. This facility is one of the most advanced in the Southeast. The Emergency Training Center will provide a higher quality and variety of training for volunteer and professional firefighters, rescue workers, EMS personnel and law enforcement officers.

## MISSION STATEMENT

Cleveland Community College - established in 1965 by and for the people of Cleveland County - is a comprehensive, public two-year college and member institution of the North Carolina Community College System. The College's mission is threefold: (1) to help students achieve professional and personal goals by providing quality, accessible educational programs and services, (2) to serve as an agent for economic development by responding to the educational and training needs of business and industry, and (3) to contribute to the improvement of the quality of life in Cleveland County by actively participating in collaborative community initiatives.

CCIPSS (Cleveland's Continuous Improvement Plan for Student Success) Strategic Goals:
I. To offer quality educational and training programs designed to meet the needs of a diverse student population and which are responsive to the changing educational and training needs of the College's service area.
II. To provide comprehensive student support services with an emphasis on access and a focus on student success.
III. To provide a comprehensive program of professional development and performance evaluation for all College personnel.
IV. To provide a quality work environment with the necessary infrastructureboth space and technology-, equipment, and learning resources to support the Mission of the College.
V. To serve as a prominent educational and training resource in the economic development of the College's service region.
VI. To be an integral part of Cleveland County's lifelong learning processes (early childhood through late adulthood) which enhance the community's quality of life.
VII. To provide a sound and comprehensive institutional effectiveness program dedicated to student success and the assurance of continuous improvement in all areas of the College.

## CLEVELAND COMMUNITY COLLEGE VISION STATEMENT

Cleveland Community College is a community of learners where the joy of learning is espoused, where hopes are realized, where dreams become realities, where excellence is an attitude instilled in all aspects of the institution, and where all learners participate in a dynamic process dedicated to making life better for all involved.

## GENERAL ADMINISTRATION - PURPOSE AND GOALS

General Administration at Cleveland Community College includes the President's Office, Planning and Institutional Effectiveness, and the Community Relations and Development. Under the leadership and direction of the President, General Administration serves the College through its primary functions of planning, research, and resource development in fulfilling its mission of ensuring student and institutional success. Both the Assistant to the President for Planning and

Institutional Effectiveness and the Dean of Community Relations and Development report directly to the President.

The Office of Planning and Institutional Effectiveness is responsible for facilitating the College's planning process, generating information for internal and external constituencies, and monitoring quality improvement initiatives.

Founded in 1983 to promote private support for the College's educational goals, the Cleveland Community College Foundation, part of the Community Relations and Development Unit, provides a margin of excellence for the College by soliciting support for those projects which have as a focus the Cleveland Community College students and graduates who are a key to the continued success of business and industry in our community.

## Goals:

1. Lead the College in refining the Institutional Effectiveness Plan with a focus on three major areas: planning, research, and assessment/evaluation.
2. Lead the College in refining the Development Plan.
3. Continuously evaluate and improve services.
4. Provide leadership that promotes systems thinking to ensure a more effective Student Information System.
5. Continue staff development that encompasses current national trends and issues specifically related to institutional effectiveness and institutional advancement.
6. Identify and acquire human and fiscal resources to meet student needs.
7. Continuously evaluate College/community partnerships and events to improve and expand services to students and the community.

## ACCREDITATION

Cleveland Community College is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, Georgia, Telephone Number 404-679-4501) to award associate degrees.

## VISITORS

Visitors need to receive permission from Student Services prior to visiting classrooms, shops, or labs.

## CHILDREN ON CAMPUS

Children under sixteen must be accompanied by an adult at all times. Children are not allowed in classrooms or in the gymnasium except for approved events.

## NIGHT OFFERINGS

The College offers an extensive night program which includes most of the credit and non-credit courses given in the daytime.

The availability of credit courses at night allows the student who must work while attending school the opportunity to coordinate school activities with employment. A student may enroll for both day and night classes in most programs.

With the exception of Allied Health Programs (ADN, PN, RAD, and PHLEB), it is possible to complete all work toward a degree or diploma by attending at night. The rate of progress through a program will depend upon the number of courses taken each semester. A reduced load will require a longer period to complete program requirements.

## CANCELLATION OF CLASSES

The College reserves the right to cancel any class, day or night, for which there is insufficient enrollment.

## INCLEMENT WEATHER

The College President will make the decision as to whether or not classes will be held during periods of inclement weather. Announcements will be made on local radio and television stations. If day classes are canceled, night classes are automatically canceled.

## NOTICE OF COLLEGE REGULATIONS

The College has a genuine interest and concern for the integrity of all students; therefore, all regulations found in this Academic Bulletin and Student Handbook, and announcements posted on bulletin boards will be followed by all students. Each student is responsible for becoming familiar with these publications and for reading official announcements in order to stay informed of current policies. Current information may be found on the college website.

## LIBRARY AND AUDIO-VISUAL SERVICES

| Monday - Thursday | $7: 30 \mathrm{am}-9: 00 \mathrm{pm}$ |
| :--- | :--- |
| Friday | $7: 30 \mathrm{am}-2: 00 \mathrm{pm}$ |

Semester break and holiday hours as posted

The purpose of the Cleveland Community College Library is to help fulfill the mission of the College by providing carefully selected resources and versatile programs and services which reinforce and enrich the curriculum and which are responsive to the needs of the College community. The Library is a multimedia facility designed to support the total educational program of the College and to enhance the teaching/learning experience for students, faculty, administration and community patrons. The Library contributes to the educational program of the College by collecting, making readily available, and assisting in the use of materials particularly suited to the objectives and programs of the College.

The collection of 35,000 items housed in the Library includes the general book collection, reference books, video and other multi-media items, sound recordings, and microforms. Access to these materials is provided through the CCLINC (Community College Libraries in North Carolina) catalog, a joint database of the holdings of 44 community college libraries in North Carolina. Library patrons have access to this catalog from computers in the library and other locations on campus and from home through the library web page.

The Library also subscribes to approximately 200 print periodicals and provides access, both on campus and from remote locations, to numerous online indexes and full-text databases, including a variety of online resources made available through NC LIVE. The library staff provides research and bibliographic assistance, library instruction, and reserve material services. Computerized interlibrary loan service is available to expedite the delivery of materials from other locations.

The audio-visual services department performs support functions for faculty and staff, including lamination, production of overhead transparencies, and licensed off-air taping of educational telecourses, teleconferences, and resource programming. This department maintains up-to-date equipment, including portable equipment for classroom use and a campus-wide closed circuit TV system.

## EDUCATIONAL ACCESS CABLE CHANNEL

The Broadcasting and Production Technology program at Cleveland Community College is responsible for the operation of Time Warner Cable's local educational access channel which provides capabilities for delivery of educational, cultural, and public service programming to cable subscribers throughout Cleveland County.

## NON-DISCRIMINATION POLICY

From its founding, Cleveland Community College's Board of Trustees and staff have recognized the importance of equal opportunity in all phases of the College's operations and have adhered to a policy of non-discrimination on the basis of race, color, sex, age, religion, national origin, physical or mental disability, or other nonrelevant factors. This policy continues to apply to both students and employees at all levels of the school's operations. Anyone who believes this policy has been violated may seek satisfaction through the Due Process procedures outlined in this catalog.

## DISABILITY SERVICES AMERICANS WITH DISABILITIES ACT/ SECTION 504 REGULATIONS

Cleveland Community College, in compliance with The Americans with Disabilities Act and Section 504 Regulations, does not discriminate and is dedicated to providing equal educational and employment opportunities for qualified adults. The College will make reasonable accommodations in its programs, services and facilities for disabled students and disabled employees who are otherwise qualified. Students with special needs should contact the Student Services Department for assistance such as notetakers, readers, interpreters, etc.

## CRIME AWARENESS/CAMPUS SECURITY ACT

Cleveland Community College, in compliance with the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act, presents information to students and staff at orientations regarding campus security/safety, crime prevention, alcohol and drug abuse prevention, sexual assault prevention, rape awareness, and procedures to follow if a sex offense occurs.

## VICTIMS OF TRAFFICKING AND VIOLENCE PROTECTION ACT OF 2000

The Victims of Trafficking and Violence Protection Act of 2000 requires colleges and universities to inform students and employees how to learn the identity of registered sex offenders on campus. This law contains the Campus Sex Crimes Prevention Act which became effective October 28, 2002. Sex offender information is completed by the North Carolina State Bureau of Investigation, and posted at http://sbi.jus.state.nc.us/. Information about registered sex offenders can also be obtained from the Cleveland County Sheriff's Department.

## DISCLOSURE REQUIREMENT/STUDENT RIGHT TO KNOW INFORMATION

Certain information must be disclosed to students. A list and description of required disclosures and information on how to obtain them are listed below:

Completion/Graduation rate: Completion or graduation rate of cohort of certificate or degree seeking, full-time undergraduates who graduated or completed their program within $150 \%$ of the normal time for graduation or completion.

Campus Security/Sexual Harassment Report: Statistics for the three most recent calendar year concerning the occurrence on campus, in or on non-campus buildings or property, and adjoining public property of the following offenses reported to campus security authority or local police - murder, manslaughter, sex offenses, robbery, aggravated assault, arson, burglary, motor vehicle theft, and hate/prejudice crimes.

The following arrests and referrals are reported - liquor law violations, drug violation/abuse, and weapons possessions.

Also included in the report are policies regarding procedures to report crimes, policies concerning the security of and access to campus facilities, policies to follow when a sex offense occurs.

Financial Aid Refund Policy: A summary of requirements for the return of Title IV grant assistance by withdrawn students.

Each of the reports is found on the Cleveland Community College web-site at www.clevelandcommunitycollege.edu Click on the financial aid link to view each report. A paper copy of the disclosure information will be provided upon request in Student Services.

## DRUG-FREE WORKPLACE POLICY

Cleveland Community College, in compliance with the Drug-Free Workplace Act, Jeanne Clery Disclosure of Campus Security Policy, and Campus Crime Statistics Act certifies that it works to prevent the unlawful possession, use, or distribution of illicit drugs and alcohol by students and employees.

Cleveland Community College is engaged in a continuing campaign against substance abuse. This campaign includes information presented at New Student Orientations and a Campus Safety Policies at Cleveland Community College brochure that is made available to all students.

## BLOOD BORNE PATHOGENS AND HAZARDOUS MATERIALS

Body fluid spills, hazardous chemical spills, or spills of unknown fluids should be reported immediately to the receptionist - Dial O - and evacuate the area until College personnel arrive.

## COMMUNICABLE DISEASE POLICY

Policies regarding diseases at Cleveland Community College are as follows:
Persons infected with a communicable disease will not be excluded from enrollment or restricted in their access to college services or facilities unless medically-based judgments in individual cases establish that exclusion or restriction is necessary to the health and safety of the individual or to the health and safety of other members of the College community.

Any student, College employee (either full-time or part-time) and any employee of contractors or contracted services who knows or has reasonable basis for believing that he or she is infected with a communicable disease has the responsibility of reporting this fact, on a confidential basis, to the appropriate dean or vice president.

Persons who know or have reasonable basis for believing that they are infected with a communicable disease are expected to seek expert advice about their health circumstances and are obligated ethically and legally to conduct themselves
responsibly in accordance with such knowledge for the protection of other members of the community.

## SEXUAL HARASSMENT

The policy of Cleveland Community College, consistent with its effort to foster an environment of respect for the dignity and worth of all members of the college community, prohibits sexual harassment of students and employees of Cleveland Community College and views sexual harassment as unacceptable conduct which will not be tolerated. The policy, definition of, and complaint procedures can be found in the Cleveland Community College Policies and Procedures Manual, and students should contact the Vice President of Student Services for a Campus Safety Policies at Cleveland Community College brochure.

## DUE PROCESS PROCEDURES ON GRIEVANCES

1. Students or employees wishing to appeal a decision affecting their status at Cleveland Community College should first attempt to resolve the situation with the supervisor, administrator, instructor or whoever is involved.
2. If not satisfied, and if the individual wishes to appeal, the appeal shall be made in writing within two weeks of the incident to the chairman of the Due Process Committee, the Vice President of Student Services. The letter should include a summary of all pertinent dates and information concerning the incident. A hearing will be scheduled within two weeks before the Due Process Committee. The Due Process Committee will recommend action to the President.
3. Further appeal may be made in writing within two weeks of the Due Process Committee's decision, directly to the President.
4. Final appeal may be made in writing, within two weeks of the President's decision, directly to the Chairman of the Board of Trustees. The Board will make a decision based on the petitioner's written appeal and the forwarded recommendations of the President and the Due Process Committee.

## ADMISSIONS

## ADMISSIONS INFORMATION

## POLICY AND PROCEDURES

Cleveland Community College operates under an "open door" admissions policy to offer college transfer, occupational and adult education to all persons who are able to profit from instruction. Placement of students in the various programs of instruction includes a special emphasis on career guidance and individual admissions counseling. The objective is to assist the student in establishing realistic goals to assure reasonable success in the particular program of instruction the student desires to pursue.

As part of the admissions process for curriculum students, placement tests may be required. Transcripts of previous education are required, and a personal interview is suggested with each student.

Application for admission forms and detailed information on programs of instruction offered may be secured by writing to: Student Services, Cleveland Community College, 137 South Post Road, Shelby, North Carolina 28152 or by calling (704) 484-4081.

## ADMISSIONS REQUIREMENTS FOR ALL CURRICULUM PROGRAMS

1. Be at least eighteen years of age, or the applicant's high school class must have graduated. Dual enrollment is allowed for high school students, (16 years of age) with semester permission of the high school principal.
2. High school graduation or its equivalent is required for the Practical Nursing curriculum and the Associate in Arts, Associate in Science, Associate in General Education, Associate in Applied Science degree curriculums, Phlebotomy, Cosmetology and technical diploma or technical certificate programs.
3. High School graduation or its equivalent is not required for other vocational diploma and vocational certificate programs.
4. All students enrolling in curriculum programs must have their high schools send official transcripts (showing graduation date or highest grade completed), or must present an official GED score ( 225 or above if taken prior to January 1, 2002 or a score of 2250 if taken after January 1, 2002). In addition, official transcripts of all colleges attended must be submitted.
5. Applicants who are applying to the Associate in Arts, Associate in Science, Associate in General Education, Associate in Applied Science degree curriculums, Practical Nursing, Phlebotomy, Cosmetology and technical diploma or technical certificate programs must take placement tests in English,
mathematics, reading and algebra. Students seeking a one-year vocational diploma must take the mathematics placement test (through MAT 060) or receive the advisor's approval to enroll in MAT 101.
Exceptions:
a. Applicants (excluding Associate Degree Nursing, Practical Nursing, and Radiography applicants) who have scored 450 on the verbal section of the SAT are not required to take the English and reading placement test. Applicants (excluding Associate Degree Nursing, Practical Nursing, and Radiography applicants) who have scored 450 on the mathematics section of the SAT are not required to take the mathematics and algebra placement test.
b. Applicants (excluding Associate Degree Nursing, Practical Nursing, and Radiography applicants) who have scored 19 on the American College Test are not required to take any placement test.
c. Applicants (excluding Associate Degree Nursing, Practical Nursing, and Radiography) who have earned the Associate degree, Bachelor's degree or higher degree are exempt from placement testing.
d. Applicants (excluding Associate Degree Nursing, Practical Nursing, and Radiography applicants) who transfer in a college-level mathematics course with a "C" or better are not required to take the math or algebra placement tests. Applicants (excluding Associate Degree Nursing, Practical Nursing, and Radiography applicants) who transfer in a college-level English course with a "C" or better are not required to take the English or reading placement tests.
e. Applicants (excluding Associate Degree Nursing, Practical Nursing, and Radiography applicants) who have successfully completed their required developmental mathematics, English, reading, or algebra courses at an accredited college or university are not required to take Cleveland Community College's placement tests or complete the developmental course(s).
f. All Allied Health applicants must repeat science courses which are more than five years old.
g. Special credit students and dual enrollment students (those who are not pursuing a degree, diploma or certificate) are not required to take placement tests. Some individual courses do, however, require prerequisites, testing, or exemption from testing.
If the applicant /student does not pass the appropriate placement test(s) or meet exceptions as stated above, the applicant/student must enroll in and successfully complete the applicable developmental course(s) prior to enrolling in courses that have a developmental course(s) as prerequisites.
To determine if you may be exempt from placement testing, contact the Vice President of Student Services at 704-484-4041 or the Dean of Enrollment Management at 704-484-4073.
6. On acceptance, a complete physical and dental examination is required for Practical Nursing applicants. A complete physical examination is required for Radiography, Phlebotomy, and Associate Degree Nursing (RN) accepted applicants.
7. Selected applicants to Allied Health programs (ADN, PN, and RAD), excluding Phlebotomy, must have a personal interview with an admissions office representative and a faculty member after Psychological Services Bureau (PSB) testing and ranking. PSB testing is not required for Phlebotomy applicants.
8. Personal references are required for Allied Health applicants (ADN, PN, and RAD), excluding Phlebotomy.
9. Students who wish to enroll in a distance learning course must receive approval to enroll from the instructor of the course or the Distance Learning Coordinator. The instructor will discuss course requirements, explain course procedures and processes, and assess the student's readiness for the rigors of a distance learning course. Students who enroll in a distance learning course must have access to equipment and/or a means of coming to campus to use equipment. Also, applicants must have successfully completed CIS 110 - Introduction to Computers (or its equivalent) with a grade "C" or higher or provide other evidence of competency deemed appropriate by the instructor of the distance learning course or the Distance Learning Coordinator.
10. The College reserves the right to refuse admission to a student if it appears that such action is in the best interest of the College and/or the student. Any student so refused may appeal this action through Due Process.
11. Specific procedures for admission to Continuing Education courses or programs will be found under that section of the Academic Bulletin and Student Handbook.

## ADMISSION PROCEDURE FOR ALL CURRICULUM PROGRAMS

1. Submit completed application form. Social Security number is voluntary and is used for record-keeping purposes.
2. Applicants may request a counseling interview in Student Services by calling 704-484-4073. All Allied Health applicants (ADN, PN, and RAD), excluding Phlebotomy, are required to attend an Allied Health informational meeting. Call 704-484-4081 for a meeting schedule. An interview is required for selected Allied Health applicants (ADN, PN, and RAD) after Psychological Services Bureau testing. Phlebotomy applicants do not take the PSB.
3. Have official transcripts of all previous education (high school/GED and college) mailed to the College prior to the completion of the first semester. The applicant who is not pursuing a diploma, degree, or certificate is not required to have transcripts sent unless the transcripts are needed to prove that course prerequisites have been satisfied. (To be official, a transcript must be certified by the school/college attended and received by Cleveland Community College, in a sealed envelope.)
4. Degree-seeking applicants, Phlebotomy, Cosmetology and technical diploma or technical certificate applicants must take placement tests in English, algebra, math and reading or must satisfy the exceptions stated in the

Admissions Criteria. Associate Degree Nursing, Practical Nursing and Radiography applicants MUST take placement tests. To determine if you may be exempt from Academic Placement Testing, contact the Vice President of Student Services at 704-484-4041 or the Dean of Enrollment Management at 704-484-4073.
5. If required, call the Curriculum Office, at 704-484-4026, to schedule a date and time to take the ASSET Placement Test. Sample test questions are available. The Placement Tests cover math, English, reading and algebra. (Your application should be on file before we can schedule your test appointment.)
6. Distance learning applicants must schedule an interview with the Distance Learning Coordinator or instructor.
7. Receive a letter of acceptance from the Dean of Enrollment Management prior to the end of the student's first semester. Allied Health applicants must be accepted prior to Fall Semester.
8. Allied Heath applicants (those who are applying for Associate Degree Nursing program, Practical Nursing program, the Radiography program, and the Phlebotomy program) must satisfy separate, previously-established qualitative and quantitative admission requirements. These applicants are required to meet the academic and technical standards of the Allied Health curriculums.

## PROVISIONAL ACCEPTANCE

Applicants for admission who have not submitted high school transcripts and/or GED scores and college transcripts before the beginning of the semester for which entry is desired are granted provisional acceptance for one academic semester. All admission requirements must be met within that semester in order to be eligible to register for the following semester. There is no provisional acceptance available for Allied Health applicants.

## SPECIAL CREDIT CLASSIFICATION

Special credit students are those who are enrolled for course credit but not in a curriculum leading to the diploma, certificate, or to the associate degree. Students enrolled in this status will normally be required to meet the prerequisites for the course or to demonstrate a necessary level of competence although they do not have to meet all the admission requirements for curriculum programs.

## READMISSION

Any student who officially withdraws from the College and later wishes readmission should contact Student Services. Readmission conditions will depend upon the individual circumstances, but generally a student is eligible to return at such a time as an appropriate course schedule can be worked out. Students who wish to
reapply to an Allied Health program (ADN, PN, RAD and PHLEB.) must see the Dean of Enrollment Management. Students who qualify may be readmitted to the Practical Nursing or the Associate Degree Nursing program only once.

A former student will not be readmitted until all former and current expense obligations to any program or activity under the administrative jurisdiction of the College have been satisfied.

Students who have been academically suspended may enroll again after a onesemester absence. Allied health students who have been academically suspended must confer with the Dean of Enrollment Management.

Any student who is financially indebted to the College by failure to completely meet any outstanding debt such as the following: bad check, tuition, bookstore, library, activity fee, graduation, parking fines, or any required payment to the College will not be eligible for readmission or graduation nor acquire any transcript until such indebtedness is completely cleared.


## ACADEMIC REGULATIONS

## DROP-ADD AND CLASS SCHEDULE CHANGE

Students may add courses, drop courses, and change their course schedules up through the $10 \%$ point of the course(s). Some course adds may require instructor/dean approval.

All students must complete forms in the Student Services Department to drop or add a course or change a course schedule.

## PROCEDURE TO DROP A COURSE(S) AND REFUND POLICY

Official drops must be processed in the Student Services Department. Students may drop a course(s) prior to or on the official $10 \%$ point of the course(s). The course(s) is deleted from the student's registration and from the student's official transcript.

1. If a student officially drops from course(s) prior to or on the official 10\% point or the course(s) - or the $10 \%$ point of the semester if the student is officially dropping all courses - the student will receive a $75 \%$ tuition refund. Refunds will not be given after the $10 \%$ point. (The refund does not include the activity fee.)
2. A pre-registered curriculum student who officially drops all course(s) prior to the first day of the college's academic semester will be eligible for a $100 \%$ tuition refund. (The refund does not include the activity fee.)
3. A pre-registered student who officially drops a curriculum course prior to the day the class begins will be eligible for a $100 \%$ tuition refund. (The refund does not include the activity fee.)
REMINDER: Since a curriculum student is charged hour for hour up to 16 credit hours, a refund would not be applicable unless the credit hours enrolled were reduced to less than 16. This policy is subject to change.

## PROCEDURE TO WITHDRAW FROM A COURSE(S)

Students desiring to withdraw from a course(s) after the $10 \%$ point of the course(s) should go to the Student Services Department to complete the official Withdrawal Form. Withdrawal with a grade of "W" will be allowed after the $10 \%$ point of the course and before the $75 \%$ point of the term. A course(s) which was officially withdrawn from will show on a student's transcript as a grade of "W."

Students who stop attending a course(s) and who are not officially withdrawn or whose absences exceed the allowed maximum during the last $25 \%$ of the term will receive a grade (A, B, C, D, F) for the course(s).

## GRADING SYSTEM

Grading the performance of students in course work is the responsibility of individual faculty members as dictated by the course syllabi.

At the end of each semester students will be evaluated as follows:
Letter Explanation Quality Points

| A | Excellent | 4 points per sem./hr. |
| :---: | :---: | :---: |
| B | Good | 3 points per sem./hr. |
| C | Average | 2 points per sem./hr. |
| D | Below Average | 1 point per sem./hr. |
| F | Failure (No Credit) | 0 point per sem./hr. |
|  | Non-completion of course requirements. |  |
| 1 | Incomplete; Requirements must be completed in next semester or receive an $F$. | 0 point per sem./hr. |
| W | Official Withdrawal | 0 point per sem./hr. |
| CE | Credit by Exam | 0 point per sem./hr. |
| AU | Audit | 0 point per sem./hr. |
| MT | Military Training | 0 point per sem./hr. |
| EL | Experiential Learning | 0 point per sem./hr. |
| AP | Advanced Placement | 0 point per sem./hr. |
| TR | Transferred In | 0 point per sem./hr. |
| AR | Articulated Course | 0 point per sem./hr. |
| CL | College-Level | 0 point per sem./hr. |
|  | Examination Program (CLEP) |  |

Any student who receives an "l" may request to negotiate a contract with the instructor involved. Contracts negotiated between the student and the instructor will specify a definite completion date for the requirements. The contract completion date must be within the semester following receipt of the "l". Also included will be the types of activities set forth by the instructor to help the student achieve the minimum objectives of the course. If the student does not complete the minimum objectives in the negotiated time period, the student will receive an "F" in the course. Upon completion of the contract in the specified time, the instructor will notify the Registrar to change the " "" to a letter grade.

## GRADE POINT AVERAGE

The GPA is the most important example of a student's academic progress. The computation of a GPA is shown below as an example to simplify the average. It is determined by dividing the total number of grade points earned by the total number of semester hours attempted, excluding I, W, CE, AU, MT, EL, AP, TR, AR, CL grades, and grades made on developmental courses. The cumulative GPA is based on all eligible grades while a student is enrolled at Cleveland Community College as a curriculum student. The current GPA is based on one semester's work (current) for all eligible grades.

EXAMPLE OF COMPUTING THE GPA


## CLASS ATTENDANCE POLICY

Absences are a serious deterrent to good scholarship; it is impossible to receive instruction, obtain knowledge or gain skills when absent. Although there are numerous reasons for absences such as personal illness, death in the family, work conflicts, or unexpected emergencies, all absences will be counted in the $20 \%$ maximum. A student, who, during a semester, incurs in any course absences in excess of twenty percent (20\%) of the class hours for that course may be dropped from the course (without credit).

Absences may be considered legitimate and eligible for makeup at the discretion of the instructor. The student is responsible for seeing the instructor, giving the reason for the absences, and requesting a make-up assignment. This is to include students on rotating shift work schedules.

An instructor may refuse admission to class to any student who arrives more than ten minutes late to a class. One-half day's absence will be counted if a student leaves thirty minutes or more early.

The student may appeal any decision under these policies to the Due Process Committee.

## ACADEMIC PROGRESS

The following cumulative grade point averages are the minimums which must be attained in order for a student to make reasonable progress toward graduation. A 2.00 grade point average is required for graduation.

## ASSOCIATE DEGREE PROGRAMS



Students enrolled in certificate programs must maintain a 2.0 cumulative GPA to achieve satisfactory academic progress.

## PROBATION AND SUSPENSION

Any student who falls below the specified minimum at the end of any semester will be placed on academic probation for the following semester. To be removed from probation the student must attain the appropriate minimum grade point average by the end of the probation semester; otherwise, the student will be suspended from that program for at least one semester. In the Radiography program, every major specialty course must be passed with a "C" or higher each semester before the student can enroll for the following semester. In the ADN (Registered Nursing) and Practical Nursing programs, a grade of C must be made on every major specialty course each semester before the student can enroll for the following semester. Students in these programs who are academically ineligible to enroll for the following semester may reapply for admission. ADN and Practical Nursing students may be reaccepted only once. ADN students must earn a minimum grade of $C$ on all Biology courses.

Reentry in cases of suspended students is handled on an individual basis. Suspended students should contact the Registrar prior to reenrolling.

The privilege of appeal is provided to the suspended student. The student is required to write a letter to the Due Process Committee explaining the appeal and must appear before the Committee in person.

## COURSE REPEAT REGULATIONS

A student may repeat a course taken for credit or audit. A course may be taken a total of three (3) times for credit and/or audit. The appropriate academic dean must justify, in writing, any exception to this policy. The written justification will be placed in the student's academic file in Student Services. Repeated courses will appear on the student's transcript. Each grade will be shown on the transcript, but only the last grade ( $\mathrm{A}, \mathrm{B}, \mathrm{C}, \mathrm{D}, \mathrm{F}$ ) will be computed into the cumulative grade point average.

Students accepted into certain curriculum programs-such as Associate Degree Nursing, Practical Nursing, and Radiography - are precluded from repeating some courses. Regulations are stated in their program application materials.

## AUDIT STUDENTS

A student may elect to audit a course or courses by notifying Student Services and the appropriate instructor(s). Those auditing receive no credit and do not have to take any examinations; otherwise, participation in class is on the same basis as a credit student. The fee for auditing is the same as the fee for credit. By completing the appropriate form in Student Services and notifying the appropriate instructor, a student may change a course classification from credit to audit until the $75 \%$ point of the semester in which he/she is enrolled in the course. Students may change from audit to credit classification for an enrolled course during the Add Period only. The Add Period is posted in Student Services each semester.

## CREDIT HOURS, CONTACT HOURS, AND COURSE LOAD

Each course listed in the course description section of this Academic Bulletin and Student Handbook is followed by a notation for the number of semester hours credit it carries. Normally, the number of semester hours earned is based on the number of class, laboratory or shop hours spent under the supervision of the course instructor per week for the semester.

Usually one (1) semester hour credit is given for each hour of class per week, or for each two hours of laboratory or shop per week.

Contact hours are the number of actual clock hours a student is in attendance during one week.

Students enrolled for 12 or more credit hours are classified as full-time students. Students enrolled in less than 12 credit hours are classified as part time.

## THE OFFICIAL ACADEMIC RECORD (TRANSCRIPT)

An official record (transcript) of all the student's courses, credits, grades, current and cumulative Grade Point Average is available in Student Services. The record may also help determine eligibility for any club activity or club membership that requires specific scholastic standards. Copies of the official record are available to the student upon written request.

Records of Progress (Grade Reports) are provided by Cleveland Community College on all students - including veterans. Progress records (grade reports) are furnished to students (including veterans) at the end of each semester.

## POLICY ON RETENTION AND DISPOSAL OF CURRICULUM RECORDS

The retention and disposal of students' records at Cleveland Community College complies with the General Statutes of North Carolina as well as the North Carolina Community College System guidelines. Official transcripts are secured and kept permanently in Student Services. Other materials such as registration forms, high school and other college transcripts are destroyed after five years.

## RELEASE OF INFORMATION FROM OFFICIAL STUDENT RECORDS

Student records are maintained in accordance with the Family Educational Privacy Act of 1974. The College recognizes the responsibility for maintaining records for each student to preserve authentic evidence of the events and actions that are important and can contribute to the efforts to educate the student and to facilitate the achievement of the educational goals of the College. The following general principles and procedures govern the release of information from official student records:

1. Written consent from the student is required before a transcript or information may be released from the official, academic record. Exceptions are:
a. The Registrar may release information from official records including reports of academic directory information from student records which include the following: student's name, address, telephone number, date and place of birth, major field of study, participation in officially recognized activities and sports, dates of enrollment, degrees and awards received, and the most recent previous educational agency or institution attended by the student.
b. The Registrar may release information pertaining to honor achievements for publications.
2. A hold may be applied to the release of a transcript or other information requested from an official record for a student who has an overdue indebtedness to the College. Such a student continues to have the right to see the official record upon request.
3. The use and release of information from student official records will be determined as outlined above and in compliance with state and federal legislation relating to such records. Action in situations that may not have been anticipated and/or defined above will at all times be based upon the best knowledge available to the professional staff of the College.

## USA PATRIOT ACT

Cleveland Community College complies with the USA Patriot Act of 2001.

## RELEASE OF INFORMATION FROM ASSET PLACEMENT TEST SCORES

Written consent from the student is required before ASSET test scores may be released. A form for release is available in Student Services.

## CREDIT BY EXAMINATION

A student may be allowed credit toward graduation for past schooling, work, or military experience through proficiency examinations. The student should confer with the appropriate Academic Dean for qualifications for these provisions and to be informed of the procedure to follow.

A grade symbol of CE (credit by examination) will be awarded for courses for which credit is given on the basis of proficiency examination. The course hours for such courses posted as CE will be computed toward graduation requirements but not for the computation of Honors, nor for computation of overall GPA.

## CREDIT FOR EXPERIENTIAL LEARNING

Cleveland Community College endorses the concept of credit for experiential learning in recognition of valid learning experiences to areas which are applicable to the degree/diploma/certificate program being completed. Credit is not extended automatically.

To receive credit for experiential learning, a student must submit to the appropriate faculty member, the Registrar, and the appropriate Academic Dean a typed summary of experiences learned, proof that the experiences did occur and demonstrate skills learned (if requested). The Registrar, after consultation with the appropriate Academic Dean, may grant full credit for a comparable course(s) as a transfer course(s).

The student will receive hours earned on the official transcript with a grade of "EL." The hours will be computed towards graduation requirements but not for the computation of honors nor the overall GPA. There is no charge for receiving this credit.

## HONORS PROGRAM

Cleveland Community College is one of the few North Carolina Community Colleges to offer academically advanced students an Honors Program. Upon faculty recommendation, students of exceptional academic accomplishments or promise are invited to enter. Those who do so face challenges designed to test and develop their skills in ways not ordinarily available. Through faculty mentoring and special Honors courses, these students enjoy a special learning community. The rewards of participation are many: enhanced self-esteem, collegial development among peers,
and a competitive edge when leaving the College. The Honors Program is open to students in all academic programs.

## COOPERATIVE EDUCATION

Cooperative Education (Co-op) is designed to give students enrolled in many programs within the College a chance to work on a job while completing their degrees. This combination of classroom instruction with practical/related work experience provides numerous benefits to participating students.

Eligibility. Any full-time students who are enrolled in programs offering Co-op for academic credit and who have earned a minimum of 12 hours toward their degree requirements are eligible to participate if they meet the following conditions:

1. Approval of instructor/coordinator
2. Have a minimum 2.0 GPA
3. Approval from program director

Academic Credit. Credit hours for cooperative education work periods are determined by dividing the average number of hours worked per week by 10 and rounding to the nearest whole number. Co-op students may earn from two to twelve semester hours of Co-op credit toward their degree requirements. (See individual curriculum programs for number of elective hours available.)

## DISTANCE LEARNING

## Statement of Purpose

The Distance Learning Program at Cleveland Community College is designed to support the mission of the College by increasing access to educational opportunities for a diverse community of learners. The College, committed to accessible quality education and services, uses creative technological teaching methods to deliver instruction when and where it is needed.

## Goals

- To provide learners with access to quality education in a flexible, nonrestrictive form.
- To address needs of students who prefer to learn through non-traditional media.
- To facilitate a meaningful exchange of knowledge through collaboration among instructors, resource persons, and learners.
- To increase diversity of students and faculty by involving learners and instructors who could not participate in traditional methods of instruction.
- To create a learner-centered community in which participants actively engage in the creation of knowledge through interaction and communication between learners and instructors and between learners and learners.
- To meet the needs of students with various learning styles by delivering synchronous or asynchronous instruction.
- To provide access and instruction to technologies and resources that support course offerings and foster lifelong learning.
- To plan for partnerships and other educational and business/industry entities.


## Distance Learning Pre-Enrollment Guidelines

Students who wish to enroll in a distance learning course must receive approval to enroll from the instructor of the course or the Distance Learning Coordinator. The instructor will discuss course requirements, explain course procedures and processes, and assess the student's readiness for the rigors of a distance learning course.

Students who enroll for a distance learning course must have access to equipment and/or a means of coming to campus to use equipment. Also, applicants must have successfully completed CIS 110, Introduction to Computers (or its equivalent) with a grade of " $C$ " or higher or provide other evidence of competency deemed appropriate by the instructor of the distance learning course or the Distance Learning Coordinator.

## ACADEMIC SUPPORT CENTER

The mission of the Academic Support Center at Cleveland Community College is to provide quality instruction for students who need pre-college instruction in English, reading, and mathematics. The Center's staff schedules, administers, scores, and interprets placement test scores; offers limited tutorial services in identified college courses; and provides study skills instruction for the College's instructional programs.

## DEVELOPMENTAL COURSES

Developmental courses are designed to provide instruction in the basic skills so that the student will be successful in regular, collegiate-level courses. These courses earn credit hours for the semester in which they are taken and do not count toward graduation. Grades for developmental courses are $\mathrm{A}^{*}, \mathrm{~B}^{*}, \mathrm{C}^{*}, \mathrm{D}^{*}$, or $\mathrm{F}^{*}$. These grades are not computed with other courses in the current or cumulative GPA, nor are they used in the computation to determine Dean's List, President's List, Graduation High Honors or Graduation Honors. Developmental courses must be passed with a grade of " $C$ " before students can enroll in higher level English, reading, and mathematics courses. Please read the Admissions section of the Academic Bulletin and Student Handbook to determine who may be required to take developmental courses.

## COMPREHENSIVE EDUCATION PROJECT

The Comprehensive Education Project is a curriculum-based vocational training program offered to selected medium custody inmates at the Cleveland Correctional Center. Inmates complete classroom hours required toward the certification of oneyear diploma programs in Carpentry, Electrical/Electronics Technology, Plumbing, and Welding Technology.

Related subjects are Applied Communications (designed to enhance reading and
writing skills for the workplace) and Applied Mathematics (designed to enhance mathematical skills for the area of study). Preparation for the GED examination is also available with the test being administered monthly.

It is anticipated that each inmate who completes the Comprehensive Education Project will acquire the necessary vocational skills to obtain and retain permanent employment under the work-release program.

## TRANSFER CREDIT TO CLEVELAND COMMUNITY COLLEGE

Cleveland Community College permits admission with transfer credit for students from member institutions of the North Carolina Department of Community Colleges and other accredited institutions. Students must have official transcripts sent to Cleveland for evaluation prior to the end of the first semester in which they are enrolled. Courses accepted for transfer credit must closely parallel those for which credit is sought at the College. Evaluation is made by the Admissions Counselor and appropriate Academic Dean. Grades and quality points do not transfer. Credit is given to accepted courses in which a C or better was made.

For program completion in associate degree, diploma and certificate programs, at least $25 \%$ of the required hours for graduation must be earned at Cleveland.

## NOTIFICATION OF TRANSFER CREDIT

All transfer students will receive, prior to the completion of their first semester, an "Evaluation of Transfer Credit" form denoting hours and courses accepted for transfer credit. Questions regarding transfer credit may be addressed to the Admissions Counselor in Student Services.

## ADVANCED PLACEMENT COURSES (AP)

A list of approved Advanced Placement Courses and required test scores are listed below:

| AP Course | (1) <br> Credit <br> Grade | (2) <br> Credit <br> hours <br> awarded | (3) <br> Placement <br> grade | (4) <br> CCC <br> equivalent <br> course(s) |
| :--- | :---: | :---: | :---: | :--- |
| Art History | 3 | 3 | AP | ART 114 |
| Biology | 3 | 8 | AP | BIO 111 \&112 |
| Chemistry | 3 | 8 | AP | CHM 151 \& 152 |
| Computer Science A | 3 | 3 | AP | CIS 110 |
| *English, Language and Composition | 3 | 3 | AP | ENG 111 |
| **English, Literature and Composition | 3 | 3 | AP | ENG 111 |
| Government and Politics, US | 3 | 3 | AP | POL 120 |
| History, European | 3 | 6 | AP | HIS 121 \&122 |
| History, US | 3 | 6 | AP | HIS 131 \& 132 |
| Macroeconomics | 3 | 3 | AP | ECO 252 |
| Mathematics, Calculus AB | 3 | 4 | AP | MAT 271 |
| Mathematics, Calculus BC | 3 | 8 | AP | MAT 271 \& 272 |
| Microeconomics | 3 | 3 | AP | ECO 251 |
| Physics B | 3 | 8 | AP | PHY 151 \& 152 |
| Psychology | 3 | 3 | AP | PSY 150 |
| Spanish, Language | 3 | 8 | AP | SPA111 \& 181, <br> 112 \& 182 |
| Statistics | 3 | 4 | AP | MAT 151 \& 151A |

$\begin{array}{ll}* & \text { A score of } 4 \text { or } 5 \text { will earn } 6 \text { hours of credit awarded (ENG 111 \& 113) } \\ * * & \text { A score of } 4 \text { or } 5 \text { will earn } 6 \text { hours of credit awarded (ENG 111 \& 113) }\end{array}$

## COLLEGE-LEVEL EXAMINATION PROGRAM (CLEP)

Credit may be allowed for up to 6 semester hours of college work based on appropriate scores on the CLEP General Examinations when appropriate to the student's program of study. Maximum credit for CLEP Subject Examinations is 22 semester hours when appropriate to the student's program of study. A list of approval CLEP courses and test scores are listed below:

| Examination | Credit Credit <br> granting hours |  |
| :--- | :--- | :--- | :--- |
|  | score equivalent course(s) | awarded |


| American Literature | 50 | 6 | ENG 231 \& 232 |
| :--- | :--- | :--- | :--- |
| Composition, Freshman | 50 | 6 | ENG 111 \& 113 |
| English Literature | 50 | 6 | ENG 241 \& 242 |
| Algebra | 50 | 3 | MAT 161 |
| Biology | 50 | 6 | BIO 111 \& 112 |
| Chemistry | 50 | 6 | CHM 151 \& 152 |
| Calculus with Elem. Functions | 50 | 3 | MAT 271 |
| Trigonometry | 50 | 3 | MAT 162 |
| Spanish, Level 1 | 50 | 8 | SPA 111 \& 112 |
| Spanish, Level 2 | 66 | 12 | SPA 111 \& 112, |
| American Government | 50 | 3 | PPA 211 \& 212 |
| United States History I | 50 | 3 | HIS 131 |
| United States History II | 50 | 3 | HIS 132 |
| Macroeconomics, Principles of | 50 | 3 | ECO 252 |
| Microeconomics, Principles of | 50 | 3 | ECO 251 |
| Psychology, Introductory | 50 | 3 | PSY 150 |
| Sociology, Introductory | 50 | 3 | SOC 210 |
| Western Civilization I | 50 | 3 | HIS 121 |
| Western Civilization II | 50 | 3 | HIS 122 |
| Accounting, Principles of | 50 | 4 | ACC 120 |
| Business Law, Introductory | 50 | 3 | BUS 115 |
| Information Systems   <br> \& Computer Applications 50 3 <br> Management, Principles of 50 3 <br> Marketing, Principles of 50 3$\quad$ BUS 137 |  |  |  |

## NO ACADEMIC CREDIT FOR NON-CREDIT WORK

Cleveland Community College does not award academic credit for course work taken on a non-credit basis.

## MAXIMUM CREDIT ALLOWED FOR ALL FORMS OF NON-TRADITIONAL LEARNING

A maximum of 25 hours may be awarded for all forms of non-traditional learning.

## MILITARY EXPERIENCE

Military training and experience may earn semester hour credit as determined by the Admissions Counselor and appropriate Academic Dean. Course credit with a grade of "MT" will be given if the learning experience or training closely resembles the student's program of study.

## SERVICEMEMBERS OPPORTUNITY COLLEGES

Cleveland Community College has been designated as a member of the Servicemembers Opportunity Colleges (SOC) General Registry-a network of institutions sponsored by the American Association of Community Colleges. Servicemembers are encouraged to take college level courses offered by accredited institutions and made available to military personnel through SOC. Records are evaluated, files are retained, counseling is provided, and recognition is given for learning through non-institutional sources when appropriate. Transcripts must be sent to the Registrar directly from the institution offering the course.

## TRANSFER OF CREDIT FROM ASSOCIATE IN ARTS (AA) AND ASSOCIATE IN SCIENCE (AS) DEGREE PROGRAMS TO OTHER COLLEGES AND UNIVERSITIES


#### Abstract

A student who desires to transfer course work from Cleveland Community College's A.A. and A.S. degree programs to a four-year college or university should contact the Student Services Department for assistance. Four-year college and university academic bulletins and transfer agreements are on file in Student Services.


## TRANSFER CREDIT TO OTHER COLLEGES FROM TECHNICAL AND GENERAL EDUCATION PROGRAMS

Even though the technical and general education degree programs are not planned as transfer programs, some colleges do accept courses for credit toward the bachelor's degree. Most of these colleges consider each applicant's record individually, and the courses for which credit is sought must be similar to the
course(s) offered by that institution. Some colleges give credit on the basis of examinations. Many colleges give full credit for the Associate in Applied Science degree or Associate in General Education degree toward a Bachelor of Arts, Bachelor of Science, or Bachelor of Technology.

Some colleges will consider some transfer courses on an individual evaluation basis. Any student interested in pursuing that possibility should talk with the department chairman of the planned major field at the particular college to which transfer is desired.

## TRANSFER RESPONSIBILITY

The College will cooperate with each student in planning a transfer program. However, it is the responsibility of the student to determine what courses and credit will transfer to the receiving institution.

The acceptance of courses taken at Cleveland Community College is determined solely by the institution to which the student transfers.

The student planning to transfer will have less difficulty if he/she will follow these steps:

1. Decide early which senior college to attend. Contact the college/university for recommendations concerning appropriate courses.
2. Obtain a current copy of the catalog of that college and study its entrance requirements and general education courses.
3. Confer with a counselor in Student Services and with an academic advisor.
4. Complete a transcript release form in Student Services.

Changes in the student's major field of study or in the choice of a senior institution may result in transfer problems. Such changes should be made only after careful consultation with an advisor and Student Services counselor.

## TRANSFER OF CREDIT WITHIN CLEVELAND COMMUNITY COLLEGE

Credit earned in any institutional degree/diploma/certificate program may be credited toward another degree, diploma, or certificate program upon evaluation by the Admissions Counselor and appropriate Academic Dean. If graduation requirements change during the time a student is enrolled, the student may elect to satisfy the requirements in effect at the time of the original enrollment or the new requirements.

Any student who is currently enrolled or has graduated from a curriculum program of the College and wishes to transfer to another curriculum program must follow these procedures:

1. Go to Student Services and complete a "Student Data Change Form," stating the new curriculum and semester of entrance.
2. Meet the admission requirements for the desired program as stated in the College catalog.
Applicants will receive notification of admission by letter from the Dean of Enrollment

Management along with an "Evaluation of Transfer Credit" form from the Admissions Counselor denoting courses and semester hours for which credit will be given.

## NORTH CAROLINA COMPREHENSIVE ARTICULATION AGREEMENT

This is a statewide agreement which governs the transfer of credits between North Carolina community colleges and public universities in North Carolina. The agreement provides for a smooth transfer of students. North Carolina community college students who earn an associate's degree according to the Comprehensive Articulation Agreement will be treated as juniors ( 64 semester hours of credit will transfer) at any of the UNC institutions after being admitted. Brochures describing the agreement are available in Student Services.

## APPALACHIAN STATE UNIVERSITY'S OFF-CAMPUS BACCALAUREATE DEGREE COMPLETION PROGRAM

Appalachian State University is offering to Associate in Arts and Associate in Science graduates the junior and senior years of various bachelor degree programs on the campus of Cleveland Community College and surrounding Community Colleges. Contact the Vice President of Academic Programs for more information.

## REGISTRATION

At registration, students will be assigned class schedules, will have ID cards made, will receive parking decals, will pay tuition and fees, and will purchase books. Each student is expected to register and begin classes on schedule. A student is not registered and cannot attend classes until tuition and activity fees are paid in the Business Office. All students must process their registration forms through the Business Office even though their tuition may be free or paid by another source.

## GRADUATION WITH HIGH HONORS

To graduate with High Honors, a student must earn a GPA of $3.8-4.0$ in courses presented for graduation. If a "D" or "F" was ever made on a course presented for graduation, even though the course may have been repeated, the student is disqualified from receiving High Honors. Developmental course grades are not used in the computation for High Honors.

## GRADUATION WITH HONORS

To graduate with Honors, a student must earn a GPA of $3.5-3.79$ in courses presented for graduation. If a "D" or "F" was ever made on a course presented for graduation, even though the course may have been repeated, the student is disqualified from receiving Honors. Developmental course grades are not used in the computation for Honors.

## REQUIREMENTS FOR GRADUATION

The following are established as minimum requirements for graduation from curriculum programs.

1. Complete course requirements outlined by the curriculum pursued and earn at least a 2.0 GPA in courses presented for graduation. Students may graduate under the program requirements in effect at the time the student declared the major or under the current program requirements at the time of graduation.
2. Make a " $C$ " or higher on the following courses presented for graduation in a degree program: ENG 111; ENG 112 or ENG 113; COM 231; CIS 110 or another approved course; and MAT 140 or another approved math course. Make a " C " or higher on the following courses presented for graduation in a diploma program: ENG 101 and MAT 101.
3. Complete 64-65 credit hours for the Associate in Arts, Associate in Science, or Associate in General Education degree, 64-76 credit hours for the Associate in Applied Science degree, 36-48 credit hours for a diploma, and 12-18 credit hours for a certificate. At least $25 \%$ of the hours presented for graduation from Associate degree, diploma, or certificate programs must have been earned at Cleveland Community College.
4. Meet with assigned faculty advisor no later than the third (3rd) week of the semester in which graduation applications are due. Summer applications must be completed in the Spring. Complete a graduation application, get proper signatures, and submit application to the Business Office or the College Store with payment. The Business Office or College Store will return the completed graduation application to Student Services. The Registrar will make a complete check of the student's record to verify that all graduation requirements have been met. The Student's academic advisor will be notified by the Registrar if everything is not in order. Students that have not met all graduation requirements will be contacted by their advisor. Students that have met all graduation requirements will be notified by mail about the graduation ceremony.
5. Complete evaluation forms and return them to Student Services.
6. Cap and gown charges are included in the Graduation Fee. Students will be notified by mail as to when the cap and gown will be available in the College Store.
7. Attend graduation practice.
8. Be present for graduation exercise. Exceptions to this requirement, in case of unavoidable absences, may only be granted by the Vice President for Student Services.

## INDICATORS OF STUDENT SUCCESS

In February 1999, the North Carolina State Board of Community Colleges adopted 12 performance measures for accountability. This action was taken in response to a mandate from the North Carolina General Assembly to review past performance measures and define standards of performance to ensure programs and services offered by community colleges in North Carolina were of sufficient quality. The following table is a Summary Report of the achievement of those performance measures for the System's 58 colleges for the 1999-2000 College Year.


## SUMMARY REPORT OF NORTH CAROLINA COMMUNITY COLLEGE SYSTEM PERFORMANCE MEASURES, 1999-2000

| PERFORMANCE MEASURE | STANDARD | SYSTEM AVERAGE | CLEVELAND COMMUNITY COLLEGE | \# COLLEGES MEETING STANDARD | \# COLLEGES <br> MADE <br> SIGNIFICANT <br> IMPROVEMENT |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Progress of Basic Skills Students | 75\% | 79\% | 85\% | 45 | 3 |
| Passing Rates on Licensure and Certification Examinations for First-Time Test Takers | Aggregate =80\% <br> Each Exam =70\% <br> or Greater | 83\% | 80\% | $\begin{aligned} & 40 \\ & 13 \\ & 11 \end{aligned}$ | $\begin{gathered} 13 \\ \text { (Includes CCC) } \end{gathered}$ |
| Goal Completion for Completers and Non-Completers | 90\% | Completers 99\% Non- <br> Completers 64\% | $\begin{aligned} & \hline 99 \% \\ & 90 \% \\ & \hline \end{aligned}$ | 25 |  |
| Employment rate of Graduates Performance of College Transfer Students | $90 \%$ (adjusted) $84 \%>2.0$ | $\begin{gathered} 99.8 \% \\ 76 \% \end{gathered}$ | $\begin{gathered} 100 \% \\ 63 \% \end{gathered}$ | $\begin{gathered} 58 \\ 8 \end{gathered}$ | 12 |
| Passing Rates of Students in Developmental Courses | $\begin{gathered} 70 \% \text { with a } \\ \text { grade } \\ \text { of "C" or better } \end{gathered}$ | 78\% | 89\% | 45 | ** |
| Success Rate of Developmental Students in Subsequent College Level Courses | No Statistically Significant Difference Between Developmental and NonDevelopmental Students |  | No Statistically Significant Difference | 36 | ** |
| Student satisfaction of Completers and Non-Completers | 85\% | 95\% | 98\% | 58 |  |
| Curriculum Student Retention and Graduation | 60\% | 62\% | 58\% | 47 | ** |
| Employer Satisfaction with Graduates | 85\% | 89\% | 91\% | 58 |  |
| Business/Industry Satisfaction with Services Provided | 85\% | 99\% | 98\% | 58 |  |
| Program Enrollment | Three-Year <br> Average <br> Annual <br> Enrollment <br> less than 10 | 1.3 | 1 | 23 | ** |

[^0]Of the performance measures:

- Cleveland Community College exceeded the state standard of nine performance measures and made significant improvement in a tenth measure.
- The College exceeded the System average of six performance measures.
- The College exceeded the state standard for the aggregate Passing Rate of Licensure/Certification Examinations for First-Time Test Takers.
- There was no statistically significant difference between the College's developmental and non-developmental students in their success rate in subsequent college level courses.

In addition, the College's Allied Health (Associate Degree Nursing, Practical Nursing, Radiography) students and Basic Law Enforcement Training students had a 100 percent passing rate on state licensure exams for 2000, 2001, and 2002.

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# STUDENT SERVICES 

## STUDENT SERVICES STRATEGIC VISION (Statement of Purpose)

Student Services, in partnership with internal and external constituencies, nurtures an environment that responds to student needs and the attainment of their educational goals by providing current, accurate information and quality services.

Broad categories of these services include: entry and exit services, student records, advisement and counseling, financial aid, and student support.

## Goals:

1. Lead the College in refining the College-wide Enrollment Management Plan with a focus on three major areas: marketing, recruitment, and retention.
2. Continue refinement of entry services to students such as admissions, the student orientation programs, registration, financial aid, and information services.
3. Continue refinement of student support and exit services to students such as student records, student activities, graduations, etc.
4. Provide leadership that promotes systems thinking to ensure a more effective Student Information System.
5. Continue staff development that encompasses current national trends and issues by providing specific training for Student Services team needs and which results in a Student Services identity.
6. Identify and acquire human and fiscal resources to meet student needs.
7. Continuously evaluate College/community partnerships and events to improve and expand services to students and the community.

## GENERAL INFORMATION

Student Services is generally open from 8:00 AM to 8:00 PM Monday through Thursday and from 8:00 AM to 4:00 PM on Fridays. Services are offered to all day and night, part-time and full-time students. A full program of student activities is offered. All students (including those off-campus) are encouraged to participate in all appropriate services.

## STUDENT'S ROLE AND PARTICIPATION IN INSTITUTIONAL DECISION-MAKING

All curriculum students are members of the Student Government Association. The president of the Student Government Association represents the student body on the Board of Trustees of the College as a non-voting member. The Student Government Association president is encouraged to offer comments and suggestions to the Board on institutional decision making. The Student Government Association president or designee is also a member of the College Admissions Committee, Campus Security Committee, Energy Conservation and Recycling Committee, and Traffic Violations Committee.

Students are also represented on other College committees, organizations, and clubs, such as:

Due Process Committee Financial Aid Committee Library Advisory Committee Student Clubs

## ACADEMIC ADVISING AND COUNSELING

Counselors are available in Student Services to assist all students with educational and vocational problems and concerns. Students are assigned academic advisors to assist in planning academic programs and in developing the course schedule each semester. Students in need of personal counseling will be referred to appropriate agencies.

## CAREER TESTING AND ASSESSMENT

Career testing and assessment is offered free to Cleveland Community College students and to the general public. Student Services utilizes CAPS (Career Ability Placement Survey) to provide information regarding an individual's interests and abilities. Please contact the Admissions Counselor in Student Services (704-4844103) who will provide guidance, assistance, and discussion related to career searches.

## JOB PLACEMENT

Cleveland Community College maintains a placement service to help interested students and alumni find employment. Cleveland Community College and the North Carolina Employment Security Commission (Shelby) participate in a cooperative agreement whereby an ESC representative maintains an office in the Academic Support Center. The ESC representative is responsible for helping current and former students find part-time and full-time employment.

## STUDENT HOUSING

The College does not have dormitory accommodations available. Any student who needs to locate housing in Shelby should contact the local Chamber of Commerce who will provide a list of local realtors, a local map and other newcomer information.

## ORIENTATION

All part-time and full-time new students and families are strongly encouraged to participate in a free orientation program each semester in order to promote adjustment to the educational programs and services of the College.

## ALUMNI

All Cleveland Community College students receiving a degree, diploma, or certificate are alumni. Alumni are encouraged to take advantage of the College's job placement services which are located in the Academic Support Center on campus. Alumni are also encouraged to continue to be a part of the College's growth, activities, and services.

## STUDENT HEALTH \& HEALTH SERVICES

The College does not provide medical, hospital, or surgical services nor does the College assume responsibility for injuries incurred by accidents when taking part in intramural sports, class, or student activities. Medical services are available at the emergency room of Cleveland Regional Medical Center. A doctor is on duty 24 hours a day in the emergency room. A first-aid kit is available at the visitor reception area at Cleveland Community College. Ambulance and rescue services are available by calling the receptionist ("0") or by securing an outside telephone line and dialing 911. Student Services regularly provides or cosponsors programs on health education to interested students and staff - such as "Woman's World." The College certifies and promotes a drug-free workplace and adheres to a communicable disease policy.

The Shelby City Fire Department (SFD) has determined that response time to Cleveland Community College for medical/trauma emergencies is no more than four (4) minutes. Also, Cleveland County Emergency Medical Services (EMS) shares the same building with the Shelby City Fire Department and would be dispatched to Cleveland Community College at the same time as the SFD.

## SMOKING AND TOBACCO PRODUCTS POLICY

Cleveland Community College is concerned with the health, safety, and wellness of all employees and students. Being aware of the health hazards associated with smoking and the use of other tobacco products, the Board of Trustees resolves that the College provide a smoke-free and tobacco product-free environment. The Board
further resolves that there be no smoking or use of tobacco products permitted within all College-owned or leased buildings, facilities, and vehicles.

Designated out-of-doors "fresh air" smoking areas are identified for smokers and other tobacco product users. All other areas are smoke and tobacco product free.

## COSMETOLOGY BENEFITS

All Cleveland Community College students, faculty, and staff with current ID's are eligible for discounts in the Cosmetology Department. These discounts may apply to haircuts, color, perms, and nail services.

## STUDENT ACTIVITIES

Cleveland Community College is interested in developing students to their fullest potential. The College strives to offer the utmost in academics as well as social, cultural and physical activities to help build a well-rounded person. Student activities offer every student an opportunity to make new friends and to help the academic community at large. All student activities are assisted and supported by the Student Government Association. Cultural activities (e.g., concerts, plays, art exhibits, readings, etc.) and special events (e.g., SPRINGFEST, Welcome Back Students, Awards Night, receptions, tributes, etc.) are sponsored by the SGA for the enjoyment of all Cleveland Community College students and personnel. The cultural activities are open to the community as well.

The Snack Bar/Student Lounge is open from 7:00 a.m. - 8:30 p.m. Monday Thursday, and Friday 7:00 a.m. - 12:30 p.m. The Student Government Association and Gamma Beta Phi offices and student showers and lockers are located in the Student Activities Center. The gymnasium and athletic fields are available for College courses, organized college events, and general student use as posted.

A number of clubs have been organized, and faculty and staff serve as advisors. No student will be excluded from membership in an organization because of race, creed, religion, sex, age, color, disability, or national origin. Students interested in forming new organizations should consult the SGA President and SGA Advisor for assistance.

The Advisor of the Student Government Association is responsible for supervising the student activities program. Initial requests and plans may come from the student body through the Student Government Association. Every effort is made, within the limited scope of financing and facilities, to conduct a comprehensive program of activities. The SGA budget must be approved by the SGA President and college administration. Clubs and organizations are free to operate their organizations as they choose within the legal framework of college rules, and local and state laws.

## ATHLETICS AND SPORTS

Intramural sports are encouraged and are periodically provided for students by the Student Government Association. These include basketball, softball, volleyball, tennis, and horseshoes. The College does not participate in intercollegiate sports.

## STUDENT PUBLICATIONS

Cleveland Community College encourages students to participate in the production of student publications. The College supports the student's right to express himself/herself through journalistic endeavors which can contribute to an atmosphere of responsible discussion. Roles of student publications are to allow for student expression regarding the College - its mission, policies, programs, services, faculty, staff, facilities, student activities and events - and to keep students abreast of current events, rules, regulations.

The Student Government Association, with the assistance of College staff, publishes a student newsletter - ClevelandLINKS - monthly.

## student Government Association

In order to promote better student government and unite the Student Body as a common bond, the Student Government Association shall strive to: represent the individual thinking, the integrity, the ideas and interests of the students within Cleveland Community College; encourage cooperation between students and College personnel; sponsor activities or endeavors that will be of benefit to the students, the College, and the community; and do all things necessary to promote the welfare of the students. All currently enrolled curriculum students are members of the SGA and they are represented by elected officers (President, Vice President, Secretary, Treasurer) and selected Senators through the election and selection processes outlined in the SGA Constitution.

Officers of the Cleveland Community College SGA may attend the North Carolina Comprehensive Community College Student Government Association meetings. This enables the students to meet new people from different colleges and exchange ideas for the enhancement of their respective organizations. The SGA Constitution and By-Laws are available in the Office of Student Services.

## STUDENT CLUBS

Student clubs may be organized with the approval of the SGA and the Vice President for Student Services. These may be related to the vocational goals of the students or may serve as civic organizations or special interest areas of the students.

Gamma Beta Phi Honor Society is a national honor and service organization which emphasizes service, character, and scholarship. Memberships, based on a 3.50 grade point average and completion of 15 semester hours, are extended twice a year.

Lamplighters is a club that promotes the high standards and ideals of the nursing profession.

Mu Epsilon Delta is comprised of students within the Medical Office Administration Curriculum. The club's purpose is to broaden the students' awareness and interest in the medical environment by engaging in educational and civic projects.

Beta Iota Pi Chapter of Phi Theta Kappa is an international honor society of two-year college students, which emphasizes scholarship, leadership, fellowship, and service. Memberships, based on a 3.25 grade point average and completion of 12 semester hours, are extended twice a year to students enrolled in a two-year program.

The National Vocational-Technical Honor Society is a group which believes that outstanding student effort and achievement in the vocational-technical area should be rewarded and encouraged, and seeks to cultivate the ideals of scholastic excellence, service, and leadership in our citizens of tomorrow.

Campus Crusade for Christ is an interdenominational group open to all students that meets weekly for Bible study.

Black Awareness Club promotes knowledge and appreciation of black history.
Eta Alpha Alpha Chapter of Phi Beta Lambda is a state and national organization for all college students enrolled in programs designed to develop vocational and professional competencies for business and office occupations.

Linux Users Group is an organization of students and interested members of the larger local community dedicated to the advocacy, education, and support of the free operating system GNU/Linux and variants such as BSD. We invite anyone with an interest in the most stable and quickly growing alternative to proprietary computer systems to come to a meeting. The group meets monthly and runs its own web server and mailing list.

## SNACK BAR/STUDENT LOUNGE

A variety of hot and cold foods is available in the campus Snack Bar/Student Lounge. Hours of operation are from 7:00 a.m. - 8:30 p.m. Monday - Thursday, and Friday 7:00 a.m. - 12:30 p.m.

## STUDENT BEHAVIOR

## Student Rights and Responsibilities

The rights of students as citizens are acknowledged and reaffirmed. The College recognizes the right of an enrolled student to receive a full opportunity to learn and develop, unfettered by any and all obstacles not conducive to a sound, fundamental educational program.

Students are responsible for reading and understanding the College Academic Bulletin and Student Handbook. Students are responsible for acting as responsible adults, for proper completion of their academic programs, for familiarity with all
requirements of the curriculums from which they intend to graduate, for maintaining the grade average required, for knowing their academic standing, and for meeting all other degree requirements. Their advisors will counsel them, but the final responsibility remains with the student. Students are required to keep Student Services up to date on their current addresses, telephone numbers, and name changes.

## STUDENT CODE OF CONDUCT AND JURISDICTION OF JUDICIAL BODIES DISCIPLINARY RESPONSIBILITIES OF COLLEGE OFFICIALS, DISCIPLINARY PROCEDURES, AND APPEAL

It is expected that students will conduct themselves as responsible adults at all times. The College has an inherent responsibility to maintain order on its campus; therefore, students may be suspended or expelled by the appropriate Vice President for behavior deemed incompatible with the mission, the regulation or responsibility of the College. Threatening or disruptive behavior, destruction of school property, stealing, cheating, plagiarizing, gambling, use of profane language, engaging in personal combat or in lewd behavior, possession of dangerous weapons, or the possession and/or use of alcoholic beverages and/or the use of any drug as defined under the North Carolina Controlled Substance Act G.S. 90-89 through G.S. 90-94 in or on any part of the Cleveland Community College campus or at any off-campus official student-related activity will not be tolerated. Any violation of these regulations will result in expulsion from the College. In addition, any infraction which is a violation of North Carolina law will be turned over to local authorities. Students who believe their rights have been violated may appeal using Due Process.

## COMPUTER NETWORK USE

The College provides computer, network, and Internet access to students, faculty, staff, and other authorized individuals in support of instructional, educational, administrative, and research purposes of the College. Use of College facilities and equipment for other purposes is not acceptable. Computer, network, and Internet access is a privilege, not a right, which may be revoked at any time for abusive conduct. Abusive conduct includes, but is not limited to, the following: altering equipment or peripherals; installing a "virus" or other software; running files to alter the system; placing unlawful information on a system; using abusive or objectionable language in messages; hindering other users' ability to work; causing congestion on the networks; using other people's computer resources without authorization; violating software license copyrights; entering accounts without full authorization; using College resources for a commercial venture or for personal profit; allowing others to use a password or account other than their own; violating system security; transmitting any unlawful, harmful, threatening, abusive, harassing, defamatory, vulgar, obscene, hateful, racial, ethnical, or otherwise objectionable material; distributing advertisements; displaying materials which may be construed as
obscene; misrepresenting the identity of the user; or using the network for game playing.

The administrators of the College's computer systems may view users' files, read mail, monitor keystrokes, view screens, and otherwise observe all users' activities. If a conflict arises between system security/operation and the integrity of an individual's data, keeping the system operational will take precedence. Ownership of the contents of all disk storage on the network is retained by the College.

Violations will be treated as academic misconduct with immediate loss of privileges. Any misdemeanor or felony violations will be reported to the proper authorities.

## sTUDENTS OF THE SEMESTER

Each Fall and Spring semester the faculty selects one outstanding student as the "Student of the Semester" for each academic division. These students receive a certificate, and information is released to local media for publicity purposes.

## DEAN'S AND PRESIDENT'S LISTS

Students who receive a 4.0 grade point average at the end of either the Fall or Spring semester and are enrolled full-time will be on the President's List for that semester. Students who receive a 3.5 to 3.99 grade point average at the end of the semester and are enrolled full-time will be on the Dean's List for that semester. Developmental course grades are not used in the computation for the Dean's List or President's List.

## WHO'S WHO AMONG STUDENTS IN AMERICAN JUNIOR COLLEGES

Each academic year, the faculty selects students for inclusion in the nationally-recognized program, Who's Who Among Students in American Junior Colleges. These students are selected because of their outstanding performance in academics, extracurricular activities, or community service.

## OUTSTANDING GRADUATE AWARDS

These awards are made to graduating students who have distinguished themselves by being most outstanding in terms of scholastic achievement, performance and maturity of purpose during the program of instruction at the College. Students may be recognized for each degree, diploma, or certificate program.

## ALL-USA COMMUNITY AND JUNIOR COLLEGE ACADEMIC TEAM

Each Fall semester, two students are selected as nominees to the ALL-USA Community and Junior College Team. Students who are selected must be in the second year of a degree program, must excel academically and must be involved in extracurricular or community activities. Phi Theta Kappa, USA Today and the American Association of Community Colleges are co-sponsors of the All-USA Academic Team.

## NORTH CAROLINA COMMUNITY COLLEGE SYSTEM ACADEMIC EXCELLENCE AWARDS

Each Spring semester, two students from each community college in North Carolina are selected to receive Academic Excellence Awards at a luncheon held in Raleigh, North Carolina, to honor their academic achievement.

## COLLEGE BOARD'S TALENT ROSTER OF OUTSTANDING COMMUNITY COLLEGE TRANSFER STUDENTS (TRCC)

The TRCC program is an effort to recognize the exceptional academic achievements of transfer students from community colleges and to encourage their recruitment and financial support by colleges and universities. Two students are selected annually for this honor.


## FINANCIAL INFORMATION

## FINANCE/ADMINISTRATIVE SERVICES Statement of Purpose

Finance/Administrative Services supports and promotes learning through responsible management of financial resources and by providing a safe and healthy environment in which to study and work. Services include institution-wide budget preparation, management, and accountability; expansion and maintenance of facilities, equipment and instructional resources; auxiliary services; campus security; information infrastructure; human resources management; and plant operations.

Goals:

1. Manage institutional funds efficiently and effectively by refining the planning and budgeting processes.
2. Lead the College in refining the Campus Master Plan with a focus on three major areas: existing facilities renovation, facilities expansion, and instructional equipment.
3. Continue refinement of plant operations, auxiliary services, and campus security.
4. Lead the College in refining the Student Information System so that it promotes systems thinking and easy access to current, accurate information.
5. Continue staff development that encompasses current national trends and issues by providing specific training for Finance/Administrative Services team needs and which results in a Finance/Administrative Services identity.
6. Identify and acquire human and fiscal resources to meet student needs.
7. Strengthen the commitment to quality by leading the College in promoting human resource management policies and practices that maximize the recruitment, development, and retention of highly competent, dedicated employees.

## TUITION

Cleveland Community College operates on the semester system. Each semester is sixteen weeks in length. Students pursuing a program of study are required to register and pay all fees at the beginning of each semester. A student is not
registered until tuition and fees are paid in the Business Office. Every effort is made to keep the student's expenses at a minimum. Tuition cost is set by the State Board of Community Colleges and is subject to change.

Current tuition rates for all college transfer, general education, technical or vocational curriculum students are listed below. These charges are subject to change.*

North Carolina Students:
16 or more credit hours
548.00

Less than 16 credit hours
(per semester hour) 34.25
Out-of-State Students:
16 or more credit hours
3052.00

Less than 16 credit hours
(per semester hour) 190.75

## TUITION REFUNDS

A refund shall not be made except under the following circumstances:

1. If a student officially drops from course(s) prior to or on the official $10 \%$ point or the course(s) - or the10\% point of the semester if the student is officially dropping all courses - the student will receive a $75 \%$ tuition refund. Refunds will not be given after the $10 \%$ point.
2. A pre-registered curriculum student who officially drops all course(s) prior to the first day of the College's academic semester will be eligible for a $100 \%$ tuition refund.
3. A pre-registered student who officially drops a curriculum course prior to the day the class begins will be eligible for a $100 \%$ tuition refund.
REMINDER: Since a curriculum student is charged hour for hour up to 16 credit hours, a refund would not be applicable unless the credit hours enrolled were reduced to less than 16. This policy is subject to change.
[^1]
## FINANCIAL RESPONSIBILITY

Students are not permitted to default in the payment of fees, fines, loans, or other financial obligations due the College. All tuition, fees, and other expenses must be paid prior to entering class. Any deviation from this policy must be approved by the President of the College.

## RESIDENCE STATUS FOR TUITION PAYMENT

Contact the Dean of Enrollment Management regarding the requirements for residence status for tuition payments.

## COLLEGE STORE

A student is required to buy the necessary textbooks and supplies. Books and supplies are sold during regular College Store hours.

## STUDENT INSURANCE

Certain risks are inherent in any work involving regular contact with mechanical and electrical equipment. While stringent precautions will be taken to insure safety, it is felt to be in the best interest of all students to provide some measure of insurance protection.

A group accident policy is available through the Business Office. The cost of the insurance is approximately $\$ 10.00$ per year. If students are not already covered by accident insurance, we strongly recommend this policy to them. The policy is limited to coverage, both in the time period covered and the amounts provided for each accident. Information concerning the policy and coverage is distributed during each registration period and is also available in the Business Office. It is strongly recommended for all students in physical education classes.

Any accident, regardless of how minor it may be, must be reported to the instructor in the area.

Personal liability insurance (malpractice) is required of all Practical Nursing, Associate Degree Nursing, Radiography, and Phlebotomy students and the cost of coverage is $\$ 16.00$ per year.

## GRADUATION FEE

Students eligible to graduate from all curriculum programs will be required to pay a graduation fee prior to graduation.

## STUDENT ACTIVITY FEE

All students enrolled for seven or more credit hours are required to pay a student activity fee of $\$ 19.00$ for each Fall and Spring semesters. Students enrolled for less than seven credit hours will pay a student activity fee of $\$ 10.00$. These fees are subject to change. The Student Government Association budgets this money yearly with the approval of the Administration. Included in the budgeting are the following items: Fall and Spring festivals, SGA dues and conventions, ID cards, parking decals, and other student related activities. Student Activity Fees are not refundable.

## PARKING (MOTOR VEHICLE AND TRAFFIC REGULATIONS FOR CLEVELAND COMMUNITY COLLEGE)

## I. General Information

The control and enforcement of motor vehicle conduct is necessary both for the safety of the individual and the efficient operation of Cleveland Community College.
A. In the following information the term "campus" shall refer to that property operated by Cleveland Community College and those other properties when used by Cleveland for educational purposes.
B. The term "motor vehicle" shall include all vehicles which are covered by the motor vehicle laws of North Carolina.
C. No student with an outstanding traffic infraction may receive a transcript nor register until receiving clearance from the Business Office and paying all fines.
D. Student parking is in the large lot on the fairground side of the campus.
II. Registration of Vehicles
A. All faculty, staff and students, part-time and full-time, shall be required to have their vehicle or vehicles registered by the Business Office and to affix an appropriate decal on the driver's side of the rear window (inside). There shall be no charge to register vehicles.
B. Campus visitors, law enforcement vehicles, and service vehicles are specifically exempted from registering their vehicles. However, they are expected to obey all other regulations.
III. Regulations
A. It shall be the responsibility of the Campus Security Committee to recommend traffic regulations to the President of the College for presentation to the Board of Trustees for approval.
B. Enforcement of regulations shall be administered by the Campus Security Committee.
C. Those students assessed fines shall pay those to the Business Office. (For redress, see part IV.)
D. The following shall be considered violations of campus motor vehicle regulations and the corresponding fine:

1. Vehicle showing no registration . . . . . . . . . . . . . . . . . . . . . . . . $\$ 15.00$
2. Parking in improper area. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 15.00
3. Parking by backing vehicle into area . . . . . . . . . . . . . . . . . . . . . . . 5.00
4. Double parking or blocking a legally parked vehicle. . . . . . . . . . . 10.00
5. Speeding in excess of 10 m.p.h.. . . . . . . . . . . . . . . . . . . . . . . . . 15.00
6. Failure to yield right-of-way to pedestrian. . . . . . . . . . . . . . . . . . 15.00
7. Reckless driving . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 25.00
E. This College reserves the right to remove any illegally parked vehicle by a College vehicle, privately owned wrecker, or other means. The violator shall be responsible for any tow charge in addition to the violation fee.
F. The registered operator is responsible for the use of the vehicle.

## IV. Redress

A. A committee shall be made to exist which will be known as the Campus Security and Traffic Committee.
B. It shall be the responsibility of this committee to determine final disposition of fines for which anyone may feel that he/she was unnecessarily charged.
C. This committee shall be composed of the following:

1. One member of the Campus Security Committee, not the chairman.
2. One member of the Campus Safety Committee, not the chairman.
3. One member of the Student Government Association.
V. The Campus Security Committee shall have power to recommend changes in the above regulations provided the change is properly communicated to the administration, faculty, staff, and students of Cleveland Community College.

## FINANCIAL AID INFORMATION

The fundamental process of the Financial Aid Program at Cleveland Community College is to provide financial assistance, based on financial need, to students who normally could not attend post-secondary school without aid. Financial aid at Cleveland is based on a needs analysis. The needs analysis form used by Cleveland is the Free Application for Federal Student Aid. This form, located in the Financial Aid Office, or on the Internet at www.fafsa.ed.gov, must be completed by students applying for financial aid. For aid other than the PELL Grant, additional forms may be required.

In accordance with the Omnibus Drug Initiative Act of 1988, as a precondition to receive federally funded financial aid (e.g., PELL Grant, Campus Based Programs), each student receiving assistance must certify that he or she will not engage in the unlawful manufacture, distribution, dispensation, possession or use of a controlled substance during the period of enrollment covered by a grant. If convicted of a drug related Federal or State offense, the institution must withhold any further Title IV payments to the student until it is determined by the appropriate authority regarding fraud on the part of the student.

- Financial aid at Cleveland Community College consists of scholarships, grants and work study or any combination of these as determined by the Financial Aid Office.
- The student or family of the student has the primary responsibility for postsecondary educational cost. Financial aid awarded by the College is based on the need of the student to supplement the family or student contributions.
- Recipients of financial aid who withdraw from the College must personally notify the Financial Aid Office of this action. Also, any changes in name, marital status, address, academic program, or enrollment status must be reported to the Financial Aid Office.
- The primary purpose of financial aid is to assist the student in receiving an education. To be assured of continued financial aid, students must maintain "satisfactory progress" in accordance with the College's grading policy, listed in
the catalog under "Satisfactory Progress Standards For Financial Aid" and "Academic Progress".
- Any commitment of federal and state funds (PELL Grant, SEOG, CWS, NCCCG, NCSIG) is tentative and contingent upon subsequent Congressional and state appropriation and actual receipt of funds by the College.
- The Financial Aid Office reserves the right, on behalf of the College, to review and adjust or cancel an award any time there is indication of changes in financial status, academic program, good academic standing, or failure to observe reasonable standards of conduct.
- Recipients of financial aid from the College are to notify the Financial Aid Office of any other financial aid extended to them from sources outside the College prior to acceptance of outside aid.
- Most awards are based on full-time attendance. Some funds may be paid for $1 / 2$ or $3 / 4$ time but may be reduced proportionately. College Transfer and Technical students are required 12 or more credit hours for full-time status; $3 / 4$ time is 9 to 11 credit hours, and $1 / 2$ time is 6 to 8 credit hours. No awards are made for less than $1 / 2$ time. Vocational classes are subject to Title IV credit hour conversion which means, attendance is based on contact hours instead of credit hours: Full-time is 23 or more contact hours, $3 / 4$ time is 17 to 22 contact hours, and $1 / 2$ time is 12 to 16 contact hours.


## FINANCIAL AID APPLICATION PROCESS

There are several ways to apply for financial aid at Cleveland Community College. The Free Application for Student Aid (FAFSA) can be obtained through the Internet. The web address is www.fafsa.ed.gov. From the web site a student just follows the simple instructions to apply for financial aid electronically. The FAFSA can also be obtained by picking up a paper application in the Financial Aid Office or in Student Services. This paper application can be completed and mailed from the student's home. All students will apply for the PELL Grant if they wish to be considered for other federal, state, or institutional financial aid that is based on need. Students are encouraged to complete the application process as soon as income taxes and reports are filed or the source of income has been verified. Students will be notified if the Financial Aid Department requires additional information. Students should submit the FAFSA on or before the first of July to insure completion of the application process prior to Fall Semester. Students completing the FAFSA on the day of registration are not awarded their grant until the application process is complete.

## SATISFACTORY PROGRESS STANDARDS FOR FINANCIAL AID

## Introduction

The Higher Education Act of 1965, as amended by Congress in 1980, mandates institutions of higher education to establish minimum standards of "Satisfactory Progress" for students receiving financial aid. For the purpose of maintaining a
consistent policy for all students receiving financial aid administered by the College's Financial Aid Office, these standards are applicable to all financial aid programs including all Federally sponsored Title IV programs. These standards may be amended to comply with federal regulations, Institution, and program requirements as applicable.

## Satisfactory Progress Defined

To initially receive or continue to receive financial aid, a student must demonstrate BOTH A QUALITATIVE AND QUANTITATIVE STANDARD OF satisfactory progress as defined below:

1. Satisfactory progress for Financial Aid at Cleveland Community College is defined as any student in good academic standing, not on academic probation, and who has a G.P.A. at or above the required standards as established by the college catalog. (Qualitative)
2. Continuing students applying for financial assistance (Title IV funds) which include (PELL GRANT, SUPPLEMENTAL EDUCATION OPPORTUNITY GRANT, COLLEGE WORK STUDY AND STATE STUDENT INCENTIVE GRANT) will be evaluated each semester to determine, by the Standards of Satisfactory Progress, whether the student has successfully completed the minimum percentage of work toward his/her objective, degree, or certificate. Other students entered during the same academic year mentioned above will be evaluated by the Financial Aid Office the entering semester. (Quantitative)
3. The maximum time frame a full-time student would have to complete his/her course should be $150 \%$ of normal required time:

3 years or 6 semesters for technical and general education programs and transfer programs; $11 / 2$ years or 3 semesters for vocational programs.
A half-time or three-quarter time student must satisfactorily complete the appropriate fractional hours of the maximum time frame established for completion of his/her course work.
Students who CHANGE FROM ONE CURRICULUM PROGRAM TO ANOTHER are subject to the maximum time frame mentioned in the above paragraph.
4. Students registered under the Special Credit Programs are NOT ELIGIBLE FOR THE TITLE IV PROGRAM.
If a curriculum student is placed on academic probation or suspension for the first time and applies for admission as a "new" student in another program, the financial aid award is terminated. The student may reestablish eligibility for the federal student aid funds after attending one or more semesters on his/her own and removing the academic probation/suspension.

Reentry status is determined by internal evaluation and transfer of credits. After the reentry semester, the first definition of satisfactory progress applies.

## STUDENT FINANCIAL AID REFUND POLICY

Any student withdrawing, or planning to withdraw, or who stops attending class must consult with the Financial Aid Director on any charges that are to be repaid or refunded. (Students must attend beyond the $60 \%$ point of each semester to be exempt from repayments.)

Cleveland Community College enforces a fair and equitable refund policy that follows mandated federal, state, and institutional requirements. There are currently two possible refund policies for a Financial Aid student who does not complete the enrollment period for which they were charged under the Student Financial Assistance program (SFA). The institution will determine and apply the appropriate calculation, which yields the largest eligible refund to the SFA program.

## Institutional/State Calculation

- A 100\% tuition refund if student withdraws before classes meet.
- A $75 \%$ tuition refund if student withdraws before the $10 \%$ point of the semester.


## Federal Refund Calculation

- Withdraws before first day of class equals $100 \%$ tuition refund.
- Withdraws on or before the $60 \%$ point of the semester, student may owe an overpayment to the institution or to the Department of Education.
- Withdraws after the $60 \%$ point of the semester, student has earned $100 \%$ of financial assistance and does not owe any overpayment.

There are five steps that need to be followed in determining a refund or overpayment:

1. Determine the percentage of the semester the student attended before withdrawing.
2. Determine the amount of Title IV aid earned by the student based on the percentage of time of enrollment.
3. Compare the amount earned by the student to the amount disbursed or could have been disbursed to the student. If less aid was disbursed than was earned, the student may receive a post-withdrawal disbursement for the difference. If more aid was disbursed than was earned, determine the amount of Title IV aid that must be returned.
4. Allocate the responsibility for returning the unearned aid between the school and the student.
5. Distribute the unearned aid back to the Title IV programs either by the institution or the student.

The amount of assistance a student earns is calculated on a pro-rated basis. For example, if a student completed $40 \%$ of the semester, the student has earned $40 \%$ of the financial assistance that he/she was scheduled to receive.

If the student is responsible for returning funds, the student does not have to return the full amount. The law provides that $50 \%$ of the overpayment received by
the student does not have to be returned.
If a student has an overpayment (monies that must be paid back) and fails to repay that amount to either the institution or the Department of Education, that student loses eligibility for all Title IV program funds. The only way to regain eligibility is to make satisfactory arrangements with the institution or the Department of Education.

The student's withdrawal date or last day of attendance (LDA) must be established to calculate the refund. The following will be used as a guide to determine that date:

ACTION: Student officially withdraws from all classes
WITHDRAWAL/LDA: The date the student notifies the school of withdrawal

## ACTION: Student drops out completely (Unofficial withdrawal)

WITHDRAWAL/LDA: The last date of student's recorded attendance.
ACTION: Leave of absence
WITHDRAWAL/LDA: The last date of student's recorded attendance.

## ACTION: Expelled

WITHDRAWAL/LDA: Date of expulsion.
All institutional charges will be subject to the refund policy. These charges include tuition, equipment, books, or supplies issued to the student. The documented cost of returnable equipment and books will be included in institutional cost if not returned in good condition within 20 days of the students withdrawal. That is to say, students who purchased equipment/books/supplies from financial aid sources must return the items in good condition to the Financial Aid Office within 20 days of withdrawal contingent upon College Store approval or acceptance of returned material.

Refund example: Student attends four weeks of classes and officially withdraws. Withdrawal date established. Student attended 20 of the 80 days in the semester (20/80=25\%). Student has earned $25 \%$ of their financial assistance. Institutional charges are counted in the refund formula because the student failed to return books. After taking into consideration the student's earned aid and the institutional charges, it is concluded that the student owes a refund back to the institution or the Department of Education. However, the student is only responsible for $50 \%$ of the amount owed.

Refund example: Student attends eight weeks of classes before unofficially withdrawing. Student does return books and supplies. Withdrawal date used is the students last date of attendance. Student attended 40 of the 80 days in the semester (40/80 $=50 \%$ ). Student has earned $50 \%$ of his/her financial assistance. However, after comparing the amount earned by the student to the amount disbursed, or that could have been disbursed to the student, it was discovered the student is eligible for a late disbursement. See Post-Withdrawal Disbursements.

Post-Withdrawal Disbursements: If a student has received less aid than the
student earned, he/she may be eligible for a Post-Withdrawal Disbursement. If a student is eligible, the student will have 14 days to accept or decline the disbursement. If an acceptance is not received within this time frame, the institution will not make the Post-Withdrawal Disbursement to the student. In this case, the student will receive another letter from the institution stating why the Post-Withdrawal Disbursement is no longer valid.

Any student withdrawing or anticipating withdrawal should consult with the Financial Aid Department for information on any charges that are to be refunded or repaid.

## TYPES OF FINANCIAL ASSISTANCE

All Financial Aid programs fall into one of two categories: grants or employment. Grants and scholarships are outright gifts of money and do not have to be repaid. Employment allows the student to work and earn needed money.

Application procedures and eligibility requirements, as stated in the academic bulletin, apply for any program. Students having a four-year degree may apply for any program except PELL Grant and Supplemental Education Opportunity Grant (SEOG), and the North Carolina Community College Grant.

## GRANTS

## PELL Grant

All financial aid applicants are required to apply for the PELL Grant. The PELL Grant is a federal student aid entitlement program which provides a foundation of financial assistance to which other forms of aid may be added.

The U.S. Department of Education determines the student's eligibility for financial aid based on the formula developed annually and reviewed by Congress. This formula is applied consistently to all applicants and takes into account income, assets, family size, etc. The formula uses the information provided on the application to produce an eligibility index number which determines the amount of aid to be received. The Student Aid Report (SAR) will be mailed directly to the student approximately four to six weeks after submitting the written application. The Institutional Student Information Record (ISIR) will be received by Cleveland approximately five to ten days after submission of the electronic application.

## Supplemental Education Opportunity Grant (SEOG)

SEOG is also a federal program. However, it is not an entitlement program as is the PELL Grant. Recipients are determined by the Director of Financial Aid who awards the grant according to the exceptional financial need of the student.

## North Carolina Student Incentive Grant (NCSIG)

These grants are available to legal North Carolina residents who are full-time students in good standing with Cleveland Community College and who have demonstrated need. Recipients are selected by the State of NC and based on
completing the FAFSA by March 1 before the academic year begins.
Amounts are determined by the student's financial need in relation to available resources and the cost of education. Grants may range up to $\$ 2000$ per academic year but may not exceed one-half the cost of unmet need. Repayment is not required

## North Carolina Community College Grant

Students must apply for the Federal PELL Grant to be eligible for this program. These financial aid funds are available to the neediest students who are not eligible for other financial aid programs that fully cover the required educational expenses of the student. Students must meet all requirements for a Federal PELL Grant, must be enrolled in an eligible program, must be a North Carolina resident, and must be enrolled at least half time.

## EMPLOYMENT

## College Work-Study Program (CWS)

A work-study program is awarded to students (enrolled at least half-time) demonstrating an unmet need beyond Pell Grant. This program allows students to earn a portion of the cost of their education. Work-study participants will work a supervised schedule, usually 10-15 hours per week. Job descriptions outline the responsibilities of the assigned work study.

## CLEVELAND COMMUNITY COLLEGE FOUNDATION

Established in 1983, the Cleveland Community College Foundation's mission is to build a strong endowment program to ensure quality education and financial stability for the College. The Foundation is committed to fulfilling several specific objectives including the following:

Increasing the number and diversity of scholarship offerings.

Securing financial support for the technical needs of the College.

Providing support for development of programs and services.
The Foundation is governed by a volunteer Board of Directors comprised of the Chairman of the Board of Trustees of the College, the President of the College, the Dean of Community Relations and Developmentof the Foundation, and local community and business leaders. The Chief Development Officer of the Foundation is the Executive Director.

The Foundation receives support from friends of the College, corporations and businesses, private foundations, alumni, and College faculty and staff.

The Cleveland Community College Foundation is a 501(c)(3) non profit corporation. All contributions to the Foundation are tax deductible as provided by law.

## CLEVELAND COMMUNITY COLLEGE FOUNDATION SCHOLARSHIPS

Scholarships offered through the Foundation are classified as endowed and annual. Only the interest earned on endowed gifts may be used by the College. Annual scholarships are awarded from contributions to the annual scholarship fund. Applications for Foundation scholarships are available through the guidance counselors' offices of the four area high schools, and the Financial Aid Office of the College. Applications must be submitted to the Financial Aid Office by April 1.

Criteria for Foundation scholarship consideration: Foundation scholarships are open to all qualified residents of Cleveland County. Scholarship recipients are expected to be full-time students in Associate Degree or Diploma Programs with financial need and/or academic promise. Selection is determined by the Scholarship Committee of the College based on applicants good citizenship, interest, ability to succeed at the College level, and if appropriate, demonstrated a need for financial support. Students wishing more information about scholarships should contact the Financial Aid Office.

## Foundation Endowed Scholarships

The Ruth B. Anthony Memorial Scholarship provides an annual scholarship for an Office Systems Technology curriculum applicant. It is a fully endowed scholarship established by Mrs. Anthony's employer, Fields Young, Jr. of Shelby, to honor her years of dedicated service.

The Hoyt Q. Bailey Scholarship was established by Mr. Bailey, the Chairman of the College's Board of Trustees. The award provides an annual scholarship for a student enrolled in any curriculum program.

The John and Sally Barker Scholarship provides an annual scholarship for a student enrolled in any curriculum program. It was established by the Cleveland Community College Foundation Board of Directors to recognize the Barker's contributions to the community.

The Gene Borders Memorial Scholarship was established by his family in his memory. The scholarship is awarded to a student enrolled full-time in Vocational/Engineering Technologies program.

The Cleveland Community College Student Government Association Scholarship is awarded annually to a student in any curriculum program. The scholarship was established by the Student Government Association to support education in the community.

The Cleveland Community College Tech Prep Scholarship is awarded annually to a student enrolled in the tech prep program. It is a fully endowed
scholarship established by business, industry, and citizens of Cleveland County.
The Cleveland County Fair Association Inc. Scholarship was established by Joe A. and Sophia Goforth of Shelby, North Carolina, and Reithoffer Shows of Florida. Mr. Goforth is past Chairman of the Cleveland Community College Foundation's Board of Directors. The award provides an annual scholarship for a student enrolled in any curriculum program.

The Fraley Family Merit Scholarships (2) are awarded annually to two recent high school graduates from any of the four area high schools who have demonstrated academic excellence.

The John L. And Margaret S. Fraley Scholarship is awarded annually to two students, one from the business curriculum and the second in the tech prep program. This is a fully endowed scholarship established by the Fraley Family of Cherryville to support education in the community.

The Sam P. Goforth Memorial Scholarship provides an annual two-year scholarship for a student enrolled in any curriculum program. It is a fully endowed scholarship established by the Goforth Family to support education in the community.

The Dr. Stan Hardin Memorial Scholarship provides an annual scholarship for a student enrolled in any curriculum program. This is a fully endowed scholarship established by friends and family. As a Doctor of Chiropractic and a multi-talented professional, Dr. Hardin entertained audiences throughout the southeastern United States with his music, song, and humor.

The LeGrand Family Scholarship was established by local businessman Stuart LeGrand. The fully endowed scholarship provides an annual award for a student enrolled in any curriculum program.

The Dr. William Simpson Memorial Scholarship provides an annual scholarship for a student enrolled in either the Practical Nursing or the Associate Degree Nursing Program. It is a fully endowed scholarship established by Dr. Simpson's wife, Barbara, of Shelby, in his memory.

The Thornburg/DeChant Scholarship is a fully endowed scholarship established by College President Dr. L. Steve Thornburg and his wife Margaret (Peg) in honor of their parents. The scholarship is awarded to a student enrolled in either the Practical Nursing or the Associate Degree Nursing Program.

The Joe Whisnant Memorial Scholarship provides an annual scholarship for a student enrolled in any curriculum. It is a fully endowed scholarship established by Mr. Whisnant's wife, Lou Alice, of Shelby, in his memory.

## Academic Merit Scholarship (Pooled Income Scholarship Fund)

The Academic Merit Scholarships (Pooled Income Scholarships) are awarded from the partially funded endowed scholarships named in honor of Alan Ford, Dr. Dorothy McIntyre, Dr. James Petty, and Board of Trustees Chairman Emeritus, John F. Schenck, III and his wife, Glenda. Ralph and Clevie Spangler and Fields and Margaret Young have established scholarships. Scholarships are also named in memory of Clyde C. Cash, Colonel Pat Hamner, Robert Hoover and Violet B. Thomas.

## Annual Scholarship Awards

The Anonymous Fireman Scholarship is awarded to a student enrolled fulltime in any curriculum program of the College and is the relative of a fireman. It is an annual award given by an anonymous donor established to support education in the community.

The Edgar B. Hamilton/First National Bank Scholarships (4) are awarded annually to a recent graduate of Burns, Crest, Kings Mountain or Shelby High School enrolled in any curriculum program of the College.

The Cleveland Community College Student Government Association Scholarships (4) are awarded to one graduate each, from Burns, Crest, Kings Mountain, and Shelby High Schools enrolled in any curriculum program of the College. These are annual scholarships established by the Student Government Association to support education in the community.

The Time Warner Cable of Shelby Scholarship is awarded annually to a student enrolled in the Broadcasting and Production Technology curriculum of the College. This is an annual scholarship established by Time Warner Cable of Shelby to support education in the community.

## Other Scholarships

Gamma Beta Phi Scholarship - Gamma Beta Phi Honor Society offers a scholarship of one hundred dollars per semester to a worthy student.

The Wachovia Technical Scholarship is awarded annually to a student who is enrolled full-time in the second year of a technical curriculum.

Vocational Rehabilitation - Students with mental, physical or emotional handicaps which limit employment opportunities may be eligible. For information, students should contact the nearest Vocational Rehabilitation Services, Shelby, NC 28150.

The North Carolina Nurse Education Scholarship Loan Program (NESLP) was established by the General Assembly in 1989 to provide need-based scholarship loans. NESLP awards are available for North Carolina residents enrolled in the Practical Nursing or the Associate Degree Nursing programs. Recipients agree to work for one year as a full-time nurse in North Carolina for each year of NESLP funding.

## Veterans, National Guard and Reserve Programs

N.C. National Guard Tuition Assistance Programs (NCNG) - Tuition assistance is available for members of the North Carolina National Guard. Applications are available at guard units and the Office of the Adjutant General, P.O. Drawer 2628, Raleigh, NC 27611.

Veteran Benefits - Cleveland Community College is approved to certify eligibility for veterans and for wives, widows and children of disabled or deceased veterans. Applications may be obtained at the Cleveland Community College

Financial Aid Office or the nearest county Veterans Office.
Veterans and War Orphans Grant - These grants are available to immediate family members of deceased or disabled veterans (service connected). Families of POW's and MIA's classified as such for ninety days are eligible. Students should contact: Division of Veterans Affairs, P.O. Box 26206, Raleigh, NC 27611 or the Cleveland County Veterans office at 704-484-4803.

North Carolina Reservist Benefits - Tuition and benefits may be obtained through the Reserve.

## Veterans Affairs

The Department of Veterans Affairs (DVA) provides information and assistance to eligible veterans and dependents of disabled or deceased veterans in applying for educational benefits.

To be eligible for educational benefits, the student must be enrolled in an approved curriculum, taking only those courses required for graduation in the chosen curriculum. Students must, in the judgment of the College, maintain satisfactory progress for continued eligibility.

Veterans and eligible dependents must report without delay such information on enrollment, entrance, reentrance, change in the hours of credit or attendance, pursuit, interruption and termination of attendance of an approved course. Notification of any change in status must be reported by the student to the DVA college representative in time for the DVA to receive it within 30 days of the date on which the change occurs.

DVA regulations governing institution-approved training of veterans and/or dependents of veterans require that certain documents be on file prior to certification of enrollment:

1. Application for admission;
2. Proper application for DVA benefits (Forms 22-1990, 22-5490, or 28-1990);
3. High school transcript or GED scores and transcript of academic record for each college previously attended;
4. If no DVA benefits have been received for prior training;
a. DD-214
b. marriage certificate (if applicable)
c. divorce decree (if applicable)
d. dependent children's birth certificates (if applicable)
5. If DVA benefits have been received for prior training, the student submits a change of program form (22-1995).
6. Students may be required to provide written verification of class attendance.

The DVA will not approve for enrollment any of the following: (1) course audits (2) repeated courses previously passed (3) courses not required in chosen curriculum (4) work experience (5) more than two course substitutions per curriculum.

Cleveland Community College will not approve for DVA enrollment any of the following: (1) independent study (2) telecourses.

## HOPE SCHOLARSHIP TAX CREDIT and/or LIFETIME LEARNING TAX CREDIT

The Hope "Scholarship" is a tax credit available to eligible students beginning with postsecondary education expenses paid after December 31, 1997. The Hope "Scholarship" is not technically a "scholarship" but a tax credit to eligible students during their first two years of postsecondary education. The tax credit covers 100\% of the first $\$ 1,000$ of tuition and fees plus $50 \%$ of the second $\$ 1,000$ during the qualified period. The credit is non-refundable. The amount of tuition and fees covered by the HOPE tax credit is reduced by other grants and/or scholarships received (PELL Grant, SEOG, scholarships, etc.) Student eligibility is as follows: (1) enrolled in a degree, certificate, or other program leading to a recognized educational credential and (2) enrolled at least half-time.

Beginning on July 1, 1998, taxpayers may be eligible to claim a non-refundable Lifetime Learning Tax Credit (LLTC) against their federal income taxes. The LLTC can be claimed only for qualified tuition and fees paid after June 30, 1998. That is to say, to claim the LLTC, the tuition and fees required to be paid in order to be enrolled must be paid for classes beginning on or after July 1, 1998. (Charges and fees associated with student activities, insurance, books, equipment, transportation, etc., are not qualified expenses.)

Through 2002, the amount that may be claimed as a credit is equal to $20 \%$ of the taxpayer's first $\$ 5,000$ and after 2002, the credit amount is equal to $20 \%$ of the taxpayer's first $\$ 10,000$ of out-of-pocket qualified tuition expenses. Thus, the maximum credit a taxpayer may claim for a taxable year is $\$ 1,000$ through 2002 and $\$ 2,000$ thereafter. The credit is available for "enrollment in any course of instruction to acquire/improve a student's job skills during the calendar year."

# CURRICULUM PROGRAMS AND ARTICULATION PRE-MAJORS 

CLEVELAND COMMUNITY COLLEGE ACADEMIC PROGRAMS

Strategic Vision (Statement of Purpose)
The Academic Programs Unit prepares students for successful employment and meaningful living in an increasingly technological and culturally diverse society by providing student-centered programs of study and support services. Programs of study include college transfer Associate in Arts and Associate in Science degrees; Associate in Applied Science degrees; Associate in General Education degree; technical and vocational diplomas and certificates. Support services include academic advisement, developmental support, library/media services, and instructional technology.

Academic Programs also prepare graduates for lifelong learning and active participation in a global economy by providing a comprehensive core of general education enabling students to: express themselves clearly and correctly in speech and writing; read and analyze relevant literature; employ various modes of inquiry; think critically and analytically; demonstrate mathematical competency; and demonstrate computer literacy.

In addition, the Unit promotes and participates in active partnerships with business and industry; school districts; colleges and universities; community organizations; and other entities in keeping with the College Mission.

Unit Goals:

1. Lead faculty in refining the Academic Programs Plan with its emphasis on continuous evaluation of program effectiveness, instructional delivery, student progress, academic advisement, the Academic Support Center, the College Library, and media resources.
2. Lead the College in continuous refinement of the campus-wide Information Technology Plan.
3. Lead the institution in establishing the Cleveland Community College Center for Excellence in Teaching and Learning.
4. Provide leadership that promotes systems thinking to ensure a more effective Student Information System.
5. Continue staff development programs which encompass current national trends and issues which impact student learning.
6. Identify and acquire human and fiscal resources to meet student needs.
7. Continuously evaluate College/community partnerships in order to improve and expand services to students and the community.

## The UNC System and the North Carolina Community College System have identified the following specific articulation pre-majors:

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ASSOCIATE IN ARTS DEGREE
    Pre-Art Education (AA)
    Pre-Business Administration (AA)
    Pre-Business Education and Marketing Education (AA)
    Pre-College Transfer Nursing (AA)
    Pre-Elementary Education, Middle Grades Education,
        and Special Education (AA)
    Pre-English (AA)
    Pre-English Education (AA)
    Pre-Health Education (AA)
    Pre-History (AA)
    Pre-Physical Education (AA)
    Pre-Political Science (AA)
    Pre-Psychology (AA)
    Pre-Social Science: Secondary Education (AA)
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ASSOCIATE IN SCIENCE DEGREE
Pre-Biology and Biology Education (AS)
Pre-Engineering (AS)
TECHNICAL AND GENERAL PROGRAMS
ASSOCIATE IN GENERAL EDUCATION DEGREE
ASSOCIATE IN APPLIED SCIENCE DEGREEAccounting (AAS)Associate Degree Nursing (RN) (AAS)
Broadcasting and Production Technology (AAS)
Business Administration (AAS)
Business Administration - Electronic Commerce (AAS)
Business Administration - Marketing and Retailing (AAS)
Community Spanish Interpreter (AAS)
Computer Programming (AAS)
Criminal Justice Technology (AAS)
Early Childhood Associate (AAS)
Professional Business and Management Option (AAS)
Professional Fundamentals Option (AAS)
Early Childhood Associate/Special Education (AAS)
Early Childhood Associate/Teacher Associate (AAS)
Electrical/Electronics Technology (AAS)
Electronics Engineering Technology (AAS)
Fire Protection Technology (AAS)
General Occupational Technology (AAS)

Industrial Management Technology (AAS)
Information Systems (AAS)
Information Systems - Network Administration and Support (AAS)
Internet Technologies (AAS)
Mechanical Drafting Technology (AAS)
Medical Office Administration (AAS)
Networking Technology (AAS)
Office Systems Technology (AAS)
Office Systems Technology-Legal (AAS)
Radiography (AAS)

## ONE-YEAR DIPLOMA PROGRAMS

Air Conditioning, Heating and Refrigeration Technology
Auto Body Repair
Broadcasting and Production Technology
Business Administration-Marketing and Retailing
Carpentry (Comprehensive Education Project)
Cosmetology
Criminal Justice Technology
Early Childhood
Electrical/Electronics Technology
Electronics Engineering Technology
Facility Maintenance Technology (Proposed for Fall 2003)
Industrial Systems Technology
Machining Technology
Mechanical Drafting Technology
Medical Transcription (Proposed for Spring 2004)
Office Systems Technology
Plumbing (Comprehensive Education Project)
Practical Nursing
Welding Technology

## CERTIFICATE PROGRAMS

Advanced Leadership
Air Conditioning, Heating, and Refrigeration
Commercial Refrigeration
HVAC System Design
Heating Systems
Auto Body Repair
Basic Child Care
Basic Electronics
Basic Law Enforcement Training
Broadcasting and Production
Business Administration
Business Administration-Marketing and Retailing

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Business Presentation
Carpentry
Childcare Administration
Cosmetology
Cosmetology Instructor
Crime Scene Investigator
Criminal Justice
Database Management
Digital Electronics
Electrical
Fire Science Technology
Industrial Electronics
Industrial Fire Safety Specialist
Infant and Toddler
Internet Administration
Machining Technology
Machining Technology: Computer Numerical Control
Mechanical Drafting
Medical Office Administration-Basic Certificate
Medical Office Administration-Intermediate Certificate
Network Administration
Nursing Assistant Certificate (Proposed Fall 2003)
Office Systems Technology-Basic Certificate
Office Systems Technology-Intermediate Certificate
Phlebotomy
Plumbing
Real Estate
School-Age Children
Spreadsheet Management
Teacher Associate
Technical Support
Welding
Welding: GMAW (MIG) Welding
Welding: GTAW (TIG) Welding
Welding: SMAW (Stick) Welding
(The College reserves the right to cancel any class or curriculum, day or night, for which there is insufficient enrollment.)

## COLLEGE TRANSFER PROGRAMS

## Associate in Arts

## Associate in Science

Cleveland Community College offers students the opportunity to complete the first two years of various four-year college or university general education requirements. For example, students interested in the areas of study listed below can spend their first two years at Cleveland Community College qualifying for an associate degree and transfer to a four-year institution with junior class standing. A partial listing of areas of study whose prerequisites and/or lower division requirements may be met, in part or in full, at Cleveland Community College follows:

| BUSINESS | MATHEMATICS |
| :--- | :--- |
| Accounting | Mathematics |
| Business Administration | Computer Science |
| Business Education | Statistics |
| Computer Science | MEDICAL RELATED |
| EDUCATION (Teaching) | Dentistry |
| Elementary | Medicine |
| Secondary | Medical Technology |
| Industrial Arts | Nursing |
| Middle Grades | Optometry |
| Physical Education | Occupational Therapy |
| Recreation | Physical Therapy |
| Health | Pharmacy |
| Special Education | Veterinary Medicine |
|  |  |
| ENGINEERING | NATURAL SCIENCE |
| Aerospace | Agriculture |
| Construction | Biology |
| Industrial | Biochemistry |
| Chemical | Chemistry |
| Civil | Conservation and Ecology |
| Electrical | Forestry |
| Electronics | Microbiology |
| Environmental | Physical Science |
| Mechanical | Physics |
| Nuclear | Textiles |
| ENGLISH | SOCIAL STUDIES |
| English | Economics |
| Journalism | History |
| HUMANITIES | Law |
| Art | Political Science |
| Liberal Arts | Psychology |
| Religion | Social Work |
| Philosophy | Sociology |
|  |  |

## DEVELOPMENTAL COURSES

Developmental courses may be required for degree-seeking students and other students. See admission requirements.

Developmental courses provide instruction in the basic skills so that the student will be successful in regular, collegiate-level courses. These courses earn credit hours for the semester in which they are taken but do not count toward graduation. Grades for developmental courses are not computed with other courses except that they must be passed with a grade of "C" or higher before students can enroll in higher level English, reading, and mathematics courses.

|  |  |  | Class | Lab | Credit |
| :--- | :--- | :--- | :---: | :---: | :---: |
| ENG | 080 | Writing Foundations | 3 | 2 | 4 |
| ENG | 090 | Composition Strategies | 3 | 0 | 3 |
| ENG | $090 A$ | Composition Strategies Lab | 0 | 2 | 1 |
| MAT | 060 | Essential Mathematics | 3 | 2 | 4 |
| MAT | 070 | Introductory Algebra | 3 | 2 | 4 |
| MAT | 080 | Intermediate Algebra | 3 | 2 | 4 |
| RED | 080 | Intro to College Reading | 3 | 2 | 4 |
| RED | 090 | Improved College Reading | 3 | 2 | 4 |
| CIS | 070 | Fundamentals of Computing | 0 | 2 | 1 |

## COLLEGE TRANSFER PROGRAMS

A large number of students plan their programs for transfer to four-year colleges or universities. Students enroll in what is usually referred to as the transfer curriculum which offers courses that parallel those offered during the first two years at a four-year institution. Most credits earned in this curriculum may be transferred to colleges and universities as the first and second years of a baccalaureate degree program.

Cleveland Community College's transfer program includes many courses designed to prepare students for upper division study in such fields as business, education, engineering, dentistry, law, and medicine. A specially designed general transfer sequence of courses (Associate in Arts or Associate in Science) is also available for students who have not yet decided upon a major but who intend to transfer their credits to a four-year institution.

Students who plan to transfer to a four-year college or university are advised to give careful attention to the following:

1. The transferability of courses taken at Cleveland Community College is determined solely by the institution to which the student transfers. Curricula and courses have been developed to facilitate transfer of credits. However, some academic departments in four-year institutions have specific requirements which warrant special attention.
2. Students are responsible for meeting the entrance requirements of the institution to which they plan to transfer. Students should work with their faculty advisors to ensure that the courses meet the requirements of the fouryear program that they wish to enter.
3. Completion time for college transfer studies should be no longer than four semesters.
4. Because of schedules and personal situations, night students may need longer periods than two years to complete their studies.

Students enrolled in the college transfer program will earn the Associate in Arts or Associate in Science degree after completing the prescribed hours of study.

Upon completion of liberal arts programs, the student should:

1. Write and speak with clarity and precision, in keeping with the rules of standard English.
2. Read and interpret literature critically and analytically.
3. Write critically and analytically in response to literary themes and ideas.
4. Understand the relationship between the history of western civilization and one's culture.
5. Understand the meaning of the "multicultural" approach to history.
6. Understand sociological principles and concepts.
7. Understand one's culture, the cultures of others, and their influences on individual and group behavior.
8. Understand major psychological theories and their effects on individual and group behavior.
9. Understand mathematical and scientific principles and concepts.
10. Use logical reasoning to solve mathematical and scientific problems.
11. Understand, appreciate, and enjoy physical activity and its role in enhancing the quality of one's life.


# COLLEGE TRANSFER PROGRAMS 

## ASSOCIATE IN ARTS DEGREE

Students seeking a degree must earn a grade of "C" or higher on any of the following courses presented for graduation: ENG 111: Expository Writing, ENG 112: Argument-Based Research, ENG 113: Literature-Based Research, or ENG 114: Professional Research and Reporting; COM 231: Public Speaking; CIS 110: Introduction to Computers (or another approved computer course); and MAT 161: College Algebra (or another approved mathematics course). Please see Requirements for Graduation as stated in the Academic Regulations section of the Academic Bulletin \& Student Handbook.

Students are encouraged to complete the two-year degree at Cleveland Community College before transferring to the four-year college. In all instances, college transfer students should complete the General Education Core before transferring, as recommended by the State University System of North Carolina.


|  |  |  |  |  | Hours |
| :--- | :--- | :--- | :---: | :---: | :---: |
|  |  | Class | Lab | Credit |  |
| ENG | 261 | World Literature I | 3 | 0 | 3 |
| ENG | 262 | World Literature II | 3 | 0 | 3 |
| Select | one course from the following: |  |  |  |  |
| ART | 111 | Art Appreciation | 3 | 0 | 3 |
| ART | 114 | Art History Survey I | 3 | 0 | 3 |
| ART | 115 | Art History Survey II | 3 | 0 | 3 |
| DRA | 111 | Theatre Appreciation | 3 | 0 | 3 |
| MUS | 110 | Music Appreciation | 3 | 0 | 3 |

Select one course from the following. The College recommends that students who select Spanish should also enroll for an appropriate Spanish lab course.

| HUM | 120 | Cultural Studies | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| HUM | 122 | Southern Culture | 3 | 0 | 3 |
| HUM | 211 | Humanities I | 3 | 0 | 3 |
| PHI | 210 | History of Philosophy | 3 | 0 | 3 |
| PHI | 240 | Introduction to Ethics | 3 | 0 | 3 |
| REL | 110 | World Religions | 3 | 0 | 3 |
| REL | 111 | Eastern Religions | 3 | 0 | 3 |
| REL | 112 | Western Religions | 3 | 0 | 3 |
| REL | 211 | Intro to Old Testament | 3 | 0 | 3 |
| REL | 212 | Intro to New Testament | 3 | 0 | 3 |
| SPA | 111 | Elementary Spanish I | 3 | 0 | 3 |
| SPA | 181 | Spanish Lab I | 0 | 2 | 1 |
| SPA | 112 | Elementary Spanish II | 3 | 0 | 3 |
| SPA | 182 | Spanish Lab II | 0 | 2 | 1 |
| SPA | 211 | Intermediate Spanish I | 3 | 0 | 3 |
| SPA | 281 | Spanish Lab III | 0 | 2 | 1 |
| SPA | 212 | Intermediate Spanish II | 3 | 0 | 3 |
| SPA | 282 | Spanish Lab IV | 0 | 2 | 1 |

C. Social Sciences (12 SHC)

Four courses from three discipline areas are required. One course must be a history course.
Select at least one course from the following:
HIS 111 World Civilizations I 3
$\begin{array}{lllll}\text { HIS } 112 & \text { World Civilizations II } & 3 & 0 & 3\end{array}$
$\begin{array}{lllll}\text { HIS } 131 & \text { American History I } & 3 & 0 & 3\end{array}$
HIS 132 American History II 3
Select two/three courses from the following:
PSY 150 General Psychology 3
SOC 210 Introduction to Sociology 3
GEO 111 World Regional Geography 3
POL 120 American Government 3
ECO 251 Microeconomics 3
ECO 252 Macroeconomics 303

II. Select 20-21 hours from the following (It is recommended that one course be a physical education course).

Courses counted as core courses may not be counted again as elective hours. ACC 120; ACC 121*; ART 111; ART 114; ART 115; ART 116; ART 121; ART 122; ART 130; ART 131; ART 132; ART 140; ART 171; ART 240; ART 241; ART 271; ASL 111/181; ASL 112/182; ASL 211/281; ASL 212/282; BIO 111; BIO 112; BIO 120; BIO 155; BIO 165; BIO 166; CHM 131/131A; CHM 132; CHM 151; CHM 152; CIS 110; COM 231; DRA 111; ECO 251; ECO 252; ENG 112; ENG 113; ENG 114; ENG 125; ENG 231; ENG 232; ENG 233; ENG 241; ENG 242; ENG 261; ENG 262; ENG 272; HEA 110; HEA 111; HIS 111; HIS 112; HIS 131; HIS 132; HIS 228; HIS 229; HUM 120; HUM 122; HUM 170; HUM 211; MAT 140/140A; MAT 141; MAT 142; MAT 151/151A; MAT 161; MAT 162; MAT 172/172A; MAT 175; MAT 271; MAT 272; MAT 273; MUS 110; PED 110; PED 113; PED 115; PED 117; PED 122; PED 123; PED 125; PED 128; PED 129; PED 130; PED 131; PED 170; PED 171; PHI 210; PHI 240; PHY 151; PHY 152; POL 120; POL 220; PSY 150; PSY 239; PSY 241; PSY 243; PSY 281; REL 110; REL 111; REL 112; REL 211; REL 212; SOC 210; SOC 213; SOC 220; SOC 225; SPA 111/181; SPA 112/182; SPA 211/281; SPA 212/282

## TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 64-65

Students must meet the receiving university's foreign language and physical education requirement, if applicable, before or after transfer to the four-year institution.

## PRE-ART EDUCATION (AA)

Students seeking a degree must earn a grade of " $C$ " or higher on any of the following courses presented for graduation: ENG 111: Expository Writing, ENG 112: Argument-Based Research, ENG 113: Literature-Based Research or ENG 114: Professional Research and Reporting; COM 231: Public Speaking; CIS 110: Introduction to Computers (or another approved computer course); and MAT 161: College Algebra (or another approved mathematics course). Please see Requirements for Graduation as stated in the Academic Regulations section of the Academic Bulletin \& Student Handbook.

Students are encouraged to complete the two-year degree at Cleveland Community College before transferring to the four-year college. In all instances, college transfer students should complete the General Education Core before transferring, as recommended by the State University System of North Carolina.


TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 65

Admission to teacher licensure programs requires satisfactory scores on PRAXIS I and II.

## PRE-BUSINESS ADMINISTRATION (AA)

Students seeking a degree must earn a grade of " $C$ " or higher on any of the following courses presented for graduation: ENG 111: Expository Writing, ENG 112: Argument-Based Research, ENG 113: Literature-Based Research, or ENG 114: Professional Research and Reporting; COM 231: Public Speaking; CIS 110: Introduction to Computers (or another approved computer course); and MAT 161, College Algebra (or another approved mathematics course). Please see Requirements for Graduation as stated in the Academic Regulations section of the Academic Bulletin \& Student Handbook.

Students are encouraged to complete the two-year degree at Cleveland Community College before transferring to the four-year college. In all instances, college transfer students should complete the General Education Core before transferring, as recommended by the State University System of North Carolina.


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|  |  |  |  |  |  |
| :--- | :--- | :--- | :---: | :---: | :---: |
|  |  | Class | Lab | Credit |  |
| REL | 110 | World Religions | 3 | 0 | 3 |
| REL | 111 | Eastern Religions | 3 | 0 | 3 |
| REL | 112 | Western Religions | 3 | 0 | 3 |
| REL | 211 | Introduction to Old Testament | 3 | 0 | 3 |
| REL | 212 | Introduction to New Testament | 3 | 0 | 3 |
| Select one course from the following: |  |  |  |  |  |
| ENG | 231 | American Literature I | 3 | 0 | 3 |
| ENG | 232 | American Literature II | 3 | 0 | 3 |
| ENG | 241 | British Literature I | 3 | 0 | 3 |
| ENG | 242 | British Literature II | 3 | 0 | 3 |
| ENG | 261 | World Literature I | 3 | 0 | 3 |
| ENG | 262 | World Literature II | 3 | 0 | 3 |

C. Social/Behavioral Sciences (12 SHC)

At least one course must be a history course:

| HIS | 111 | World Civilizations I | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| HIS | 112 | World Civilizations II | 3 | 0 | 3 |

The following courses are recommended:
$\begin{array}{llllll}\text { SOC } & 210 & \text { Introduction to Sociology } & 3 & 0 & 3\end{array}$
POL 120 American Government $\quad 3 \quad 0$
PSY 150 General Psychology 3
D. Natural Sciences (8 SHC)

Select two courses from the following:

| BIO | 111 | General Biology I | 3 | 3 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| BIO | 112 | General Biology II | 3 | 3 | 4 |
| CHM | 131 | Introduction to Chemistry and | 3 | 0 | 3 |
| CHM | 131A | Introduction to Chemistry Lab | 0 | 3 | 1 |
| CHM | 151 | General Chemistry I | 3 | 3 | 4 |
| CHM | 152 | General Chemistry II | 3 | 3 | 4 |
| PHY | 151 | College Physics I | 3 | 2 | 4 |
| PHY | 152 | College Physics II | 3 | 2 | 4 |

E. Mathematics (6-8 SHC)

One of the following courses are required:
$\begin{array}{lllll}\text { MAT } 161 & \text { College Algebra } & 3 & 0 & 3\end{array}$
$\begin{array}{llllll}\text { MAT } & 171 & \text { Precalculus Algebra and } & 3 & 0 & 3\end{array}$
MAT 171A Precalculus Algebra Lab $\quad 0 \quad 2 \quad 1$
MAT 271 Calculus I 3
$84 \cdot$ College Transfer Programs

|  |  | Class | Lab | Credit |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| II. | Other Required Hours (20-21 SHC) |  |  |  |  |
| ACC | 120 | Prin of Accounting I | 3 | 2 | 4 |
| ACC | 121 | Prin of Accounting II | 3 | 2 | 4 |
| CIS | 110 | Introduction to Computers | 2 | 2 | 3 |
| ECO | 251 | Prin of Microeconomics | 3 | 0 | 3 |
| ECO | 252 | Prin of Macroeconomics | 3 | 0 | 3 |
| MAT | 151 | Statistics I | 3 | 0 | 3 |
| MAT | 151A | Statistics Lab | 0 | 2 | 1 |

## TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 65

Students must meet the receiving university's foreign language and physical education requirement, if applicable, before or after transfer to the four-year institution.

## PRE-BUSINESS EDUCATION AND MARKETING EDUCATION (AA)

Students seeking a degree must earn a grade of "C" or higher on any of the following courses presented for graduation: ENG 111: Expository Writing, ENG 112: Argument-Based Research, ENG 113: Literature-Based Research, or ENG 114: Professional Research and Reporting; COM 231: Public Speaking; CIS 110: Introduction to Computers (or another approved computer course); and MAT 161: College Algebra (or another approved mathematics course). Please see Requirements for Graduation as stated in the Academic Regulations section of the Academic Bulletin \& Student Handbook.

Students are encouraged to complete the two-year degree at Cleveland Community College before transferring to the four-year college. In all instances, college transfer students should complete the General Education Core before transferring, as recommended by the State University System of North Carolina.


Select three to four hours from the following. The College recommends that students who select Spanish should also enroll for an appropriate Spanish lab course.

|  |  |  | Class | Lab | Credit |
| :--- | :--- | :--- | :---: | :---: | :---: |
| ART | 114 | Art History Survey I | 3 | 0 | 3 |
| ART | 115 | Art History Survey II | 3 | 0 | 3 |
| HUM | 120 | Cultural Studies | 3 | 0 | 3 |
| HUM | 122 | Southern Culture | 3 | 0 | 3 |
| HUM | 211 | Humanities I | 3 | 0 | 3 |
| PHI | 210 | History of Philosophy | 3 | 0 | 3 |
| PHI | 240 | Introduction to Ethics | 3 | 0 | 3 |
| REL | 110 | World Religions | 3 | 0 | 3 |
| REL | 111 | Eastern Religions | 3 | 0 | 3 |
| REL | 112 | Western Religions | 3 | 0 | 3 |
| REL | 211 | Intro to Old Testament | 3 | 0 | 3 |
| REL | 212 | Intro to New Testament | 3 | 0 | 3 |
| SPA | 111 | Elementary Spanish I | 3 | 0 | 3 |
| SPA | 181 | Spanish Lab I | 0 | 2 | 1 |
| SPA | 112 | Elementary Spanish II | 3 | 0 | 3 |
| SPA | 182 | Spanish Lab II | 0 | 2 | 1 |
| SPA | 211 | Intermediate Spanish I | 3 | 0 | 3 |
| SPA | 281 | Spanish Lab III | 0 | 2 | 1 |
| SPA | 212 | Intermediate Spanish II | 3 | 0 | 3 |
| SPA | 282 | Spanish Lab IV | 0 | 2 | 1 |
| Select | one | of the following courses: |  |  |  |
| ENG | 231 | American Literature I | 3 | 0 | 3 |
| ENG | 232 | American Literature II | 3 | 0 | 3 |
| ENG | 233 | Major American Writers | 3 | 0 | 3 |
| ENG | 241 | British Literature I | 3 | 0 | 3 |
| ENG | 242 | British Literature II | 3 | 0 | 3 |
| ENG | 261 | World Literature I | 3 | 0 | 3 |
| ENG | 262 | World Literature II | 3 | 0 | 3 |

C. Social/Behavioral Sciences (12 SHC)

At least one course must be a history course.

HIS 111 World Civilizations I $\quad 3$|  | 0 | 3 |
| :--- | :--- | :--- | :--- |

| HIS 112 | World Civilizations II | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- |

The following course is required:
ECO 251 Principles of Microeconomics $\quad 3 \quad 0 \quad 3$
The following courses are recommended:
PSY 150 General Psychology $\quad 3 \quad 0 \quad 3$
$\begin{array}{lllll}\text { SOC } 210 & \text { Intro to Sociology } & 3 & 0 & 3\end{array}$


TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 65
Students must meet the receiving university's foreign language and physical education requirement, if applicable, before or after transfer to the four-year institution.

Admission to teacher licensure programs requires satisfactory scores on PRAXIS I and II.

## PRE-COLLEGE TRANSFER NURSING (AA)

Students seeking a degree must earn a grade of " $C$ " or higher on any of the following courses presented for graduation: ENG 111: Expository Writing, ENG 112: Argument-Based Research, ENG 113: Literature-Based Research, or ENG 114: Professional Research and Reporting; COM 231, Public Speaking; CIS 110, Introduction to Computers (or another approved computer course); and MAT 161, College Algebra (or another approved mathematics course). Please see Requirements for Graduation as stated in the Academic Regulations section of the Academic Bulletin \& Student Handbook.

Students are encouraged to complete the two-year degree at Cleveland Community College before transferring to the four-year college. In all instances, college transfer students should complete the General Education Core before transferring, as recommended by the State University System of North Carolina.


| REL | 112 | Western Religions | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| REL | 110 | World Religions | 3 | 0 | 3 |
| REL | 211 | Intro to Old Testament | 3 | 0 | 3 |
| REL | 212 | Intro to New Testament | 3 | 0 | 3 |
| SPA | 111 | Elementary Spanish I | 3 | 0 | 3 |
| SPA | 181 | Spanish Lab I | 0 | 2 | 1 |
| SPA | 112 | Elementary Spanish II | 3 | 0 | 3 |
| SPA | 182 | Spanish Lab II | 0 | 2 | 1 |
| SPA | 211 | Intermediate Spanish I | 3 | 0 | 3 |
| SPA | 281 | Spanish Lab III | 0 | 2 | 1 |
| SPA | 212 | Intermediate Spanish II | 3 | 0 | 3 |
| SPA | 282 | Spanish Lab IV | 0 | 2 | 1 |
| Select | one of | the following courses: |  |  |  |
| ENG | 231 | American Literature I | 3 | 0 | 3 |
| ENG | 232 | American Literature II | 3 | 0 | 3 |
| ENG | 233 | Major American Writers | 3 | 0 | 3 |
| ENG | 241 | British Literature I | 3 | 0 | 3 |
| ENG | 242 | British Literature II | 3 | 0 | 3 |
| ENG | 261 | World Literature I | 3 | 0 | 3 |
| ENG | 262 | World Literature II | 3 | 0 | 3 |

C. Social/Behavioral Sciences (12 SHC)

PSY 150 General Psychology $\quad 3 \quad 0 \quad 3$
PSY 241 Developmental Psychology 3
SOC 210 Intro to Sociology 3
Select one of the following history courses:
HIS 111 World Civilizations I 3
$\begin{array}{lllll}\text { HIS } 112 & \text { World Civilizations II } & 3 & 0 & 3\end{array}$
D. Natural Sciences (8 SHC)

CHM 151 General Chemistry I $\quad 3 \quad 3$
CHM 152 General Chemistry II $\begin{array}{llll} & 3 & 3 & 4\end{array}$
E. Mathematics (7 SHC)
$\begin{array}{llllll}\text { MAT } & 161 & \text { College Algebra (or higher) } & 3 & 0 & 3\end{array}$
$\begin{array}{llllll}\text { MAT } 151 & \text { Statistics I and } & 3 & 0 & 3\end{array}$
MAT 151A Statistics Lab 002
$90 \cdot$ College Transfer Programs

|  |  |  |  |  | Hours |
| :--- | :--- | :--- | :--- | :--- | :--- |
| II. | Other Required Hours (20-21 SHC) | Lab | Credit |  |  |
| BIO | 165 | Anatomy and Physiology I |  |  |  |
| BIO | 166 | Anatomy and Physiology II | 3 | 3 | 4 |
| BIO | 175 | General Microbiology | 2 | 2 | 4 |
| CIS | 110 | Intro to Computers | 2 | 2 | 3 |
| PSY | 281 | Abnormal Psychology | 3 | 0 | 3 |
| SOC | 213 | Sociology of the Family | 3 | 0 | 3 |

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 64-65
Students must meet the receiving university's foreign language and physical education requirement, if applicable, before or after transfer to the four-year institution.

## PRE-ELEMENTARY EDUCATION, MIDDLE GRADES EDUCATION, AND SPECIAL EDUCATION (AA)

Students seeking a degree must earn a grade of "C" or higher on any of the following courses presented for graduation: ENG 111: Expository Writing, ENG 112: Argument-Based Research or ENG 113: Literature-Based Research; COM 231: Public Speaking; CIS 110: Introduction to Computers (or another approved computer course); and MAT 161 (or another approved mathematics course). Please see Requirements for Graduation as stated in the Academic Regulations section of the Academic Bulletin \& Student Handbook.

Students are encouraged to complete the two-year degree at Cleveland Community College before transferring to the four-year college. In all instances, college transfer students should complete the General Education Core before transferring, as recommended by the State University System of North Carolina.


|  |  |  | Hours |  |  |
| :--- | :--- | :--- | :---: | :---: | :---: |
|  |  | Class | Lab | Credit |  |
| HUM | 211 | Humanities I | 3 | 0 | 3 |
| PHI | 210 | History of Philosophy | 3 | 0 | 3 |
| PHI | 240 | Intro to Ethics | 3 | 0 | 3 |
| REL | 110 | World Religions | 3 | 0 | 3 |
| REL | 111 | Eastern Religions | 3 | 0 | 3 |
| REL | 110 | Western Religions | 3 | 0 | 3 |
| REL | 211 | Intro to Old Testament | 3 | 0 | 3 |
| REL | 212 | Intro to New Testament | 3 | 0 | 3 |
| SPA | 111 | Elementary Spanish I | 3 | 0 | 3 |
| SPA | 181 | Spanish Lab I | 0 | 2 | 1 |
| SPA | 112 | Elementary Spanish II | 3 | 0 | 3 |
| SPA | 182 | Spanish Lab II | 0 | 2 | 1 |
| SPA | 211 | Intermediate Spanish I | 3 | 0 | 3 |
| SPA | 281 | Spanish Lab III | 0 | 2 | 1 |
| SPA | 212 | Intermediate Spanish II | 3 | 0 | 3 |
| SPA | 282 | Spanish Lab IV | 0 | 2 | 1 |

C. Social/Behavioral Sciences (12 SHC)

At lease one course must be a history course. Select from the following:
HIS 111 World Civilizations I 3
$\begin{array}{lllll}\text { HIS } 112 & \text { World Civilizations II } & 3 & 0 & 3\end{array}$
The following course is required:
PSY 150 General Psychology 3003
Select one of the following courses:
SOC 210 Introduction to Sociology 3
SOC 225 Social Diversity 3
Select one additional course from the following:

| POL | 120 | American Government | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| SOC | 213 | Sociology of the Family | 3 | 0 | 3 |
| SOC | 220 | Social Problems | 3 | 0 | 3 |
| PSY | 239 | Psychology of Personality | 3 | 0 | 3 |
| PSY | 241 | Developmental Psychology | 3 | 0 | 3 |
| PSY | 281 | Abnormal Psychology | 3 | 0 | 3 |
| ECO | 151 | Principles of Microeconomics | 3 | 0 | 3 |
| ECO | 252 | Principles of Macroeconomics | 3 | 0 | 3 |

D. Natural Sciences (8 SHC)

BIO 111 General Biology 3
Select one of the following courses:
CHM 131 Introduction to Chemistry and $\quad 3 \quad 0$
CHM 131A Introduction to Chemistry Lab $0 \quad 3 \quad 1$
CHM 151 General Chemistry I $\begin{array}{llll} & 3 & 3 & 4\end{array}$
$\begin{array}{lllll}\text { PHY } 151 \text { College Physics I } & 3 & 2 & 4\end{array}$

|  |  | Hours |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  | Class | Lab | Credit |  |
| D. Mathematics and Computer Science (6-7 SHC) |  |  |  |  |
| CIS 110 Introduction to Computers | 2 | 2 | 3 |  |
| Select one of the following: |  |  |  |  |
| MAT $140 \quad$ Survey of Mathematics and | 3 | 0 | 3 |  |
| MAT 140 A Survey of Mathematics Lab | 0 | 2 | 1 |  |
| MAT 161 | College Algebra (or higher) | 3 | 0 | 3 |

III. Other Required Hours (20-21 SHC)

* At certain UNC institutions, EDU 116 may fulfill a major requirement; at a majority of institutions it will transfer only as a free elective.
* It is recommended that within the 20 semester hours of "Other Required Hours," pre-education students in Elementary Education, Middle Grades Education, and Special Education select courses that will help meet the mandated academic (second major) concentration. These courses should be selected in conjunction with the requirements at each university, since available academic (second major) concentrations and their specific requirements differ on each campus. In order to be consistent with NC licensure areas, Middle Grades Education students should select courses from up to two (2) of the following areas: Social Sciences, English, Mathematics, Sciences. Typically offered academic concentrations are biology, English, history, mathematics, and psychology. The following recommended courses in these concentrations may be taken as general education or as "Other Required Hours."

Recommended Courses for Typical Academic Concentrations
Biology (up to 12 SHC from the following):
BIO 111 and BIO 112, BIO 120; CHM 151, CHM 152.

English (up to 6 SHC from the following):
ENG 231, ENG 232, ENG 241, ENG 242, ENG 261, ENG 262
History (6 SHC from the following should be taken as general education): HIS 111 and HIS 112 or HIS 131 and HIS 132.

Mathematics (up to 12 SHC from the following):
MAT 151/151A, MAT 172/172A, MAT 175, MAT 271, MAT 272

Psychology: Select from:
PSY 150, PSY 237, PSY 241, PSY 243, PSY 239, PSY 281

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Physical Education
Select one course based on university requirements:
PED 110; PED 113; PED 115; PED 117; PED 121; PED 122; PED 123;
PED 125; PED 128; PED 129; PED 130; PED 131; PED 137; PED145;
PED 143; PED 170; PED 171.

Remaining elective hours may be selected from any approved college transfer courses.

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 65
Students must meet receiving university's foreign language and physical education requirement, if applicable, before or after transfer to the four-year institution.

Grade point average requirements vary and admission is competitive across the several programs in Elementary Education, Middle Grades Education, and Special Education. Minimum statewide requirements are:

1. Minimum 2.5 grade point average on a 4.0 scale.
2. Satisfactory passing scores as established by the State Board of Education on PRAXIS I \& II, PPST-Reading; PPST-Writing; PPST-Math

## PRE-ENGLISH (AA)

Students seeking a degree must earn a grade of " $C$ " or higher on any of the following courses presented for graduation: ENG 111: Expository Writing and ENG 113: Literature-Based Research; COM 231: Public Speaking; CIS 110: Introduction to Computers (or another approved computer course); and MAT 161: College Algebra (or another approved mathematics course). Please see Requirements for Graduation as stated in the Academic Regulations section of the Academic Bulletin \& Student Handbook.


Select one course from the following. The College recommends that students who select Spanish should also enroll for an appropriate Spanish lab course listed under "Other Required Hours."

| ART | 115 | Art History Survey II | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| HUM | 120 | Cultural Studies | 3 | 0 | 3 |
| HUM | 122 | Southern Culture | 3 | 0 | 3 |
| HUM | 211 | Humanities I | 3 | 0 | 3 |
| PHI | 210 | History of Philosophy | 3 | 0 | 3 |
| PHI | 240 | Intro to Ethics | 3 | 0 | 3 |
| REL | 110 | World Religions | 3 | 0 | 3 |
| REL | 211 | Intro to Old Testament | 3 | 0 | 3 |
| REL | 212 | Intro to New Testament | 3 | 0 | 3 |
| REL | 111 | Eastern Religions | 3 | 0 | 3 |
| REL | 112 | Western Religions | 3 | 0 | 3 |
| SPA | 111 | Elementary Spanish I | 3 | 0 | 3 |
| SPA | 181 | Spanish Lab I | 0 | 2 | 1 |


| SPA | 112 | Elementary Spanish II | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| SPA | 182 | Spanish Lab II | 0 | 2 | 1 |
| SPA | 211 | Intermediate Spanish I | 3 | 0 | 3 |
| SPA | 281 | Spanish Lab III | 0 | 2 | 1 |
| SPA | 212 | Intermediate Spanish II | 3 | 0 | 3 |
| SPa | 282 | Spanish Lab IV | 0 | 2 | 1 |
| Select one course from the following: |  |  |  |  |  |
| ENG | 231 | American Literature I | 3 | 0 | 3 |
| ENG | 232 | American Literature II | 3 | 0 | 3 |
| ENG | 241 | British Literature I | 3 | 0 | 3 |
| ENG | 242 | British Literature II | 3 | 0 | 3 |
| ENG | 261 | World Literature I | 3 | 0 | 3 |
| ENG | 262 | World Literature II | 3 | 0 | 3 |

C. Social/Behavioral Sciences (12 SHC)

| HIS | 111 | World Civilizations I | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| HIS | 112 | World Civilizations II | 3 | 0 | 3 |
| PSY | 150 | General Psychology | 3 | 0 | 3 |

Select one of the following courses:
POL 120 American Government 3
SOC 210 Introduction to Sociology $\quad 3 \quad 0$
$\begin{array}{llllll}\text { PSY } 241 & \text { Developmental Psychology } & 3 & 0 & 3\end{array}$
D. Natural Sciences (8 SHC)

Select two courses from the following:

| BIO | 111 | General Biology I | 3 | 3 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| BIO | 112 | General Biology II | 3 | 3 | 4 |
| CHM | 131 | Introduction to Chemistry and | 3 | 0 | 3 |
| CHM | 131A | Introduction to Chemistry Lab | 0 | 3 | 1 |
| CHM | 151 | General Chemistry I | 3 | 3 | 4 |
| CHM | 152 | General Chemistry II | 3 | 3 | 4 |
| PHY | 151 | College Physics I | 3 | 2 | 4 |
| PHY | 152 | College Physics II | 3 | 2 | 4 |

E. Mathematics and Computer Science (6 SHC)

MAT 161 College Algebra(or higher level math) 3 0 3
Select one of the following courses:
$\begin{array}{llllll}\text { CIS } & 110 & \text { Introduction to Computers } & 2 & 2 & 3\end{array}$
$\begin{array}{llllll}\text { MAT } & 151 & \text { Statistics } & 3 & 0 & 3\end{array}$
MAT 151A Statistics Lab $\quad 0 \quad 2 \quad 1$

$\overline{\text { Class Lab }}$| Hours |
| :--- |
| Credit |

IV. Other Required Hours (20 hours) Select one of the following courses:

| ENG | 231 | American Literature I | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| ENG | 232 | American Literature II | 3 | 0 | 3 |
| ENG | 241 | British Literature | 3 | 0 | 3 |
| ENG | 242 | British Literature | 3 | 0 | 3 |
| ENG | 261 | World Literature I | 3 | 0 | 3 |
| ENG | 262 | World Literature I | 3 | 0 | 3 |

17 additional hours of approved college transfer courses are required.
One of the following is recommended:
HIS 131 American History I 3
HIS 132 American History II 3
Literature Elective 3
An intermediate level foreign language sequence is recommended:

| SPA | 211 | Intermediate Spanish I | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| SPA | 281 | Spanish Lab III | 0 | 2 | 1 |
| SPA | 212 | Intermediate Spanish II | 3 | 0 | 3 |
| SPA | 282 | Spanish Lab IV | 0 | 2 | 1 |

Select remaining hours of the following (or other approved college transfer courses):
HUM 120; HUM 122; HUM 211; PHI 210; PHI 240; PSY 241; PSY 281; REL 211; REL 212; SOC 213; SOC 220; SOC 225; PED 110; PED 113; PED 115; PED 117; PED 121; PED 122; PED 123; PED 125; PED 128; PED 129; PED 130; PED 131; PED 137; PED 143; PED 145; PED 170; PED 171

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 65

Students must meet the receiving university's foreign language and physical education requirement, if applicable, before or after transfer to the four-year institution.

## PRE-ENGLISH EDUCATION (AA)

Students seeking a degree must earn a grade of "C" or higher on any of the following courses presented for graduation: ENG 111: Expository Writing and ENG 112: Argument-Based Research or ENG 113: Literature-Based Research; COM 231: Public Speaking; CIS 110: Introduction to Computers (or another approved computer course); and MAT 161: College Algebra (or another approved mathematics course). Please see Requirements for Graduation as stated in the Academic Regulations section of the Academic Bulletin \& Student Handbook.

Students are encouraged to complete the two-year degree at Cleveland Community College before transferring to the four-year college. In all instances, college transfer students should complete the General Education Core before transferring, as recommended by the State University System of North Carolina.




Select remaining hours to meet graduation requirements from the following:
PED 110; PED 113; PED 115; PED 117; PED 121; PED 122; PED 123; PED 125; PED 128; PED 129; PED 130; PED 131; PED 137; PED 143; PED 145; PED 170; PED 171

## TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 65

Students must meet the receiving university's foreign language and physical education requirement, if applicable, before or after transfer to the four-year institution. Grade point average requirements vary and admission is competitive across the several programs in English Education. Admission to teacher licensure programs requires satisfactory scores on PRAXIS I and II.

## PRE-HEALTH EDUCATION (AA)

Students seeking a degree must earn a grade of "C" or higher on any of the following courses presented for graduation: ENG 111: Expository Writing; ENG 112: Argument-Based Research, ENG 113: Literature-Based Research, or ENG 114: Professional Research and Reporting; COM 231, Public Speaking; CIS 110, Introduction to Computers (or another approved computer course); and MAT 161, College Algebra (or another approved mathematics course). Please see Requirements for Graduation as stated in the Academic Regulations section of the Academic Bulletin \& Student Handbook.

Students are encouraged to complete the two-year degree at Cleveland Community College before transferring to the four-year college. In all instances, college transfer students should complete the General Education Core before transferring, as recommended by the State University System of North Carolina.
$\overline{\text { Class Lab }} \overline{\text { Credit }}$
I. General Education Core (44 Semester Hours Credit)

Highly Recommended:
ACA 115 Success and Study Skills $0 \quad 2$
A. English Composition (6 SHC)

Two courses in English composition are required.
ENG 111 Expository Writing 3003
Select one of the following courses:
ENG 112 Argument-Based Research $\quad 3 \quad 0$
ENG 113 Literature-Based Research $\quad 3 \quad 0 \quad 3$
ENG 114 Professional Research and Reporting 3
B. Humanities/Fine Arts (12 SHC)

COM 231 Public Speaking 3
Select one of the following courses:

| ART | 111 | Art Appreciation | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| ART | 114 | Art History Survey | 3 | 0 | 3 |
| MUS | 110 | Music Appreciation | 3 | 0 | 3 |
| DRA | 111 | Theatre Appreciation | 3 | 0 | 3 |

Select one course from the following. The College recommends that students who select Spanish should also enroll for an appropriate Spanish lab course.

| HUM | 120 | Cultural Studies | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| HUM | 122 | Southern Culture | 3 | 0 | 3 |
| HUM | 211 | Humanities I | 3 | 0 | 3 |
| PHI | 210 | History of Philosophy | 3 | 0 | 3 |
| PHI | 240 | Introduction to Ethics | 3 | 0 | 3 |


|  |  |  |  |  |  |
| :--- | :--- | :--- | :---: | :---: | :---: |
|  |  | Class | Lab | Credit |  |
| REL | 211 | Intro to Old Testament | 3 | 0 | 3 |
| REL | 212 | Intro to New Testament | 3 | 0 | 3 |
| REL | 110 | World Religions | 3 | 0 | 3 |
| REL | 221 | Religion in America | 3 | 0 | 3 |
| REL | 111 | Eastern Religions | 3 | 0 | 3 |
| REL | 112 | Western Religions | 3 | 0 | 3 |
| SPA | 111 | Elementary Spanish I | 3 | 0 | 3 |
| SPA | 181 | Spanish Lab I | 0 | 2 | 1 |
| SPA | 112 | Elementary Spanish II | 3 | 0 | 3 |
| SPA | 182 | Spanish Lab II | 0 | 2 | 1 |
| ENG | 231 | American Literature I | 3 | 0 | 3 |
| ENG | 232 | American Literature II | 3 | 0 | 3 |
| ENG | 241 | British Literature I | 3 | 0 | 3 |
| ENG | 242 | British Literature II | 3 | 0 | 3 |
| ENG | 261 | World Literature I | 3 | 0 | 3 |
| ENG | 262 | World Literature II | 3 | 0 | 3 |

C. Social/Behavioral Sciences (12 SHC)

PSY 150 General Psychology 3

Select three courses from the following.
(At least one course must be HIS 111 or HIS 112.)
$\begin{array}{lllll}\text { HIS } 111 & \text { World Civilizations I } & 3 & 0 & 3\end{array}$
$\begin{array}{lllll}\text { HIS } 112 & \text { World Civilizations II } & 3 & 0 & 3\end{array}$
POL 120 American Government 3
SOC 210 Intro to Sociology 3
$\begin{array}{llllll}\text { SOC } & 213 & \text { Sociology of the Family } & 3 & 0 & 3\end{array}$
SOC 220 Social Problems $\quad 3 \quad 0 \quad 3$
SOC 225 Social Diversity 3
$\begin{array}{llllll}\text { PSY } & 239 & \text { Psychology of Personality } & 3 & 0 & 3\end{array}$
PSY 241 Developmental Psychology 3
$\begin{array}{lllll}\text { PSY } 281 & \text { Abnormal Psychology } & 3 & 0 & 3\end{array}$
D. Natural Sciences (8 SHC)

Select one of the following sequences:

| BIO | 111 | General Biology I | 3 | 3 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| BIO | 112 | General Biology II or | 3 | 3 | 4 |
| CHM | 151 | General Chemistry I | 3 | 3 | 4 |
| CHM | 152 | General Chemistry II | 3 | 3 | 4 |


$\overline{\text { Class }} \underset{\text { Lab }}{ }$| Credit |
| :--- |

E. Mathematics (6 SHC)

MAT 161 College Algebra (or higher level math) 3 0 0
CIS 110 Introduction to Computers 2
III. Other Required Hours (20 SHC)

| HEA | 110 | Personal Health/Wellness | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| HEA | 112 | First Aid and CPR | 1 | 2 | 2 |
| HEA | 120 | Community Health | 3 | 0 | 3 |
| BIO | 165 | Anatomy and Physiology I | 3 | 3 | 4 |
| BIO | 166 | Anatomy and Physiology II | 3 | 3 | 4 |
| MAT | 151 | Statistics I | 3 | 0 | 3 |
| MAT | 151A | Statistics Lab I | 0 | 2 | 1 |

One additional hour of approved college transfer course work is required to total 64 SHC:
PED 110; PED 113; PED 115; PED 117; PED 121; PED 122; PED 123; PED 125; PED 126; PED 128; PED 130; PED 131; PED 137; PED 143; PED 145; PED 170; PED 171

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 64-65

Students must meet the receiving university's foreign language and physical education requirement, if applicable, before or after transfer to the four-year institution.

Grade point average requirements vary and admissiion is competitive across the several programs in Health Education. Admission to teacher licensure programs requires satisfactory scores on PRAXIS I and II.

## PRE-HISTORY (AA)

Students seeking a degree must earn a grade of "C" or higher on any of the following courses presented for graduation: ENG 111: Expository Writing, ENG 112: Argument-Based Research, ENG 113: Literature-Based Research, or ENG 114: Professional Research; COM 231, Public Speaking; CIS 110, Introduction to Computers (or another approved computer course); and MAT 161, College Algebra (or another approved mathematics course). Please see Requirements for Graduation as stated in the Academic Regulations section of the Academic Bulletin \& Student Handbook.

Students are encouraged to complete the two-year degree at Cleveland Community College before transferring to the four-year college. In all instances, college transfer students should complete the General Education Core before transferring, as recommended by the State University System of North Carolina.


|  |  |  |  | Hours |  |
| :--- | :--- | :--- | :---: | :---: | :---: |
|  |  | Class | Lab | Credit |  |
| REL | 111 | Eastern Religions | 3 | 0 | 3 |
| REL | 112 | Western Religions | 3 | 0 | 3 |
| Select one of the following courses: |  |  |  |  |  |
| ENG | 233 | Major American Writers | 3 | 0 | 3 |
| ENG | 261 | World Literature I | 3 | 0 | 3 |
| ENG | 262 | World Literature II | 3 | 0 | 3 |

C. Social/Behavioral Sciences (12 SHC)
$\begin{array}{llllll}\text { HIS } & 111 & \text { World Civilizations I } & 3 & 0 & 3\end{array}$
$\begin{array}{lllll}\text { HIS } 112 & \text { World Civilizations II } & 3 & 0 & 3\end{array}$
PSY 150 General Psychology $\quad 3 \quad 0 \quad 3$
$\begin{array}{lllll}\text { SOC } & 210 & \text { Introduction to Sociology } & 3 & 0\end{array}$
D. Natural Sciences (8 SHC)

Select two courses from the following:

| BIO | 111 | General Biology I | 3 | 3 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| BIO | 112 | General Biology II | 3 | 3 | 4 |
| CHM | 131 | Introduction to Chemistry and | 3 | 0 | 3 |
| CHM | 131A | Introduction to Chemistry Lab | 0 | 3 | 1 |
| CHM | 151 | Chemistry I | 3 | 3 | 4 |
| CHM | 152 | Chemistry II | 3 | 3 | 4 |
| PHY | 151 | Physics I | 3 | 2 | 4 |
| PHY | 152 | Physics II | 3 | 2 | 4 |

E. Mathematics and Computer Science (6 SHC)

MAT 161 College Algebra (or higher level math) 3 0 3
Select one of the following courses
$\begin{array}{llllll}\text { CIS } & 110 & \text { Intro to Computers } & 2 & 2 & 3\end{array}$
$\begin{array}{llllll}\text { MAT } & 151 & \text { Statistics and } & 3 & 0 & 3\end{array}$
MAT 151A Statistics Lab 002
II. Other Required Hours (20 SHC)

| HIS | 131 | American History I | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| HIS | 132 | American History II | 3 | 0 | 3 |
| ENG | 131 | American Literature I | 3 | 0 | 3 |
| ENG | 241 | British Literature I | 3 | 0 | 3 |
| ENG | 242 | British Literature II | 3 | 0 | 3 |
| SOC | 220 | Social Problems | 3 | 0 | 3 |

Students intending to major in a history program at a UNC institution are advised to take no more than 12 hours in history at the community college level.

Select 2 courses from the following physical education courses:
PED 110; PED 113; PED 115; PED 117; PED 121; PED 122; PED 123; PED 125; PED 128; PED 129; PED 130; PED 131; PED 137; PED 143; PED 170; PED 171

## TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 65

Students must meet the receiving university's foreign language and physical education requirement, if applicable, before or after transfer to the four-year institution.


## PRE-PHYSICAL EDUCATION (AA)

Students seeking a degree must earn a grade of " $C$ " or higher on any of the following courses presented for graduation: ENG 111, Expository Writing; ENG 112, Argument-Based Research or ENG 113, Literature-Based Research; COM 231, Public Speaking; CIS 110, Introduction to Computers (or another approved computer course); and MAT 140, Survey of Mathematics (or another approved mathematics course). Please see Requirements for Graduation as stated in the Academic Regulations section of the Academic Bulletin \& Student Handbook.

Students are encouraged to complete the two-year degree at Cleveland Community College before transferring to the four-year college. In all instances, college transfer students should complete the General Education Core before transferring, as recommended by the State University System of North Carolina.


|  |  |  |
| :---: | :---: | :---: |
| Class | Hours |  |
|  | Lab | Credit |
| 3 | 0 | 3 |
| 3 | 0 | 3 |
| 3 | 0 | 3 |

Select three hours from the following. The College recommends that students who select Spanish should also enroll for an appropriate Spanish lab course.
SPA 111 Elementary Spanish I $\quad 3 \quad 0$

SPA 181 Spanish Lab I $0 \begin{array}{lll}1\end{array}$
SPA 112 Elementary Spanish II $\begin{array}{lllll} & 3 & 0 & 3\end{array}$
SPA 182 Spanish Lab II $\begin{array}{llll} & 0 & 2 & 1\end{array}$
$\begin{array}{llllll}\text { SPA } 211 & \text { Intermediate Spanish I } & 3 & 0 & 3\end{array}$
SPA 281 Spanish Lab III $\begin{array}{llll} & 0 & 2 & 1\end{array}$
SPA 212 Intermediate Spanish II 3
SPA 282 Spanish Lab IV $0 \quad 2$
Select one of the following courses:

| ENG | 231 | American Literature I | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| ENG | 232 | American Literature II | 3 | 0 | 3 |

ENG 241 British Literature I $\quad 3 \quad 0$
ENG 242 British Literature II 3
ENG 251 Western World Literature I 3
ENG 252 Western World Literature II 3
ENG 261 World Literature I 3
ENG 262 World Literature II 3
C. Social Sciences

Select four of the following courses:
(one course must be PSY 150 and one course must be HIS 111 or HIS 112)
$\begin{array}{lllll}\text { PSY } & 150 & \text { General Psychology } & 3 & 0\end{array}$
HIS 111 World Civilization I 3
$\begin{array}{llllll}\text { HIS } & 112 & \text { World Civilization II } & 3 & 0 & 3\end{array}$
SOC 210 Intro to Sociology 3
$\begin{array}{llllll}\text { SOC } & 213 & \text { Sociology of the Family } & 3 & 0 & 3\end{array}$
$\begin{array}{lllll}\text { SOC } 220 & \text { Social Problems } & 3 & 0 & 3\end{array}$
D. Natural Sciences
$\begin{array}{lllll}\text { BIO } 111 & \text { General Biology I } & 3 & 3 & 4\end{array}$
BIO 112 General Biology II 3
E. Mathematics and Computer Science

| MAT | 161 | College Algebra | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| CIS | 110 | Introduction to Computers | 2 | 2 | 3 |


III. Select three hours of the following physical education courses or another approved college transfer course.
PED 110; PED 111; PED 112; PED 113; PED 114; PED 115; PED 116; PED 117; PED 118; PED 119; PED 122; PED 123; PED 125; PED 126; PED 128; PED 129; PED 130; PED 131; PED 170; PED 171

## TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 64

Students must meet the receiving university's foreign language and physical education requirement, if applicable, before or after transfer to the four-year institution.

## PRE-POLITICAL SCIENCE (AA)

Students seeking a degree must earn a grade of "C" or higher on any of the following courses presented for graduation: ENG 111: Expository Writing, ENG 112: Argument-Based Research, ENG 113: Literature-Based Research, or ENG 114: Professional Research and Reporting; COM 231: Public Speaking; CIS 110: Introduction to Computers (or another approved computer course); and MAT 161: College Algebra (or another approved mathematics course). Please see Requirements for Graduation as stated in the Academic Regulations section of the Academic Bulletin \& Student Handbook.

Students are encouraged to complete the two-year degree at Cleveland Community College before transferring to the four-year college. In all instances, college transfer students should complete the General Education Core before transferring, as recommended by the State University System of North Carolina.


|  |  | Class | Lab | Credit |  |
| :--- | :--- | :--- | :---: | :---: | :---: |
| SPA | 112 | Elementary Spanish II | 3 | 0 | 3 |
| SPA | 182 | Spanish Lab II | 0 | 2 | 1 |
| Other choices: |  |  |  |  |  |
| HUM | 120 | Cultural Studies | 3 | 0 | 3 |
| HUM | 122 | Southern Culture | 3 | 0 | 3 |
| HUM | 211 | Humanities I | 3 | 0 | 3 |
| PHI | 210 | History of Philosophy | 3 | 0 | 3 |
| PHI | 240 | Introduction to Ethics | 3 | 0 | 3 |
| SPA | 211 | Intermediate Spanish I | 3 | 0 | 3 |
| SPA | 281 | Spanish Lab III | 0 | 2 | 1 |
| SPA | 212 | Intermediate Spanish II | 3 | 0 | 3 |
| SPA | 282 | Spanish Lab IV | 0 | 2 | 1 |
| REL | 110 | World Religions | 3 | 0 | 3 |
| REL | 211 | Intro to Old Testament | 3 | 0 | 3 |
| REL | 212 | Intro to New Testament | 3 | 0 | 3 |
| REL | 111 | Eastern Religions | 3 | 0 | 3 |
| REL | 112 | Western Religions | 3 | 0 | 3 |
| Select | one | of the following courses: |  |  |  |
| ENG | 231 | American Literature I | 3 | 0 | 3 |
| ENG | 232 | American Literature II | 3 | 0 | 3 |
| ENG | 241 | British Literature I | 3 | 0 | 3 |
| ENG | 242 | British Literature II | 3 | 0 | 3 |
| ENG | 261 | World Literature I | 3 | 0 | 3 |
| ENG | 262 | World Literature II | 3 | 0 | 3 |

C. Social/Behavioral Sciences (12 SHC)
$\begin{array}{lllll}\text { HIS } 111 & \text { World Civilizations I } & 3 & 0 & 3\end{array}$
PSY 150 General Psychology 3
$\begin{array}{llllll}\text { Select two courses from the following: } \\ \text { HIS } 112 & \text { World Civilizations II } & 3 & 0 & 3\end{array}$
SOC 210 Introduction to Sociology 3
$\begin{array}{lllll}\text { SOC } 220 & \text { Social Problems } & 3 & 0 & 3\end{array}$
$\begin{array}{llllll}\text { SOC } & 225 & \text { Social Diversity } & 3 & 0 & 3\end{array}$
D. Natural Sciences (8 SHC)

Select two courses from the following:

| BIO | 111 | General Biology I | 3 | 3 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| BIO | 112 | General Biology II | 3 | 3 | 4 |
| CHM | 131 | Introduction to Chemistry and | 3 | 0 | 3 |
| CHM | 131 A | Introduction to Chemistry Lab | 0 | 3 | 1 |
| CHM | 151 | General Chemistry I | 3 | 3 | 4 |
| CHM | 152 | General Chemistry II | 3 | 3 | 4 |


|  |  |  |  |  | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Class | Lab | Credit |  |
| PHY | 151 | College Physics I | 3 | 2 | 4 |
| PHY | 152 | College Physics II | 3 | 2 | 4 |

E. Mathematics and Computer Science (6 SHC)

MAT 161 College Algebra (or higher level math) 3 0 0
CIS 110 Introduction to Computers 2
II. Other Required Courses (20 hours)
ECO 251 Principles of Microeconomics $\quad 3 \quad 0 \quad 3$

ECO 252 Principles of Macroeconomics 3
POL 120 American Government 3003
Select one of the following courses:
HIS 131 American History I 3
HIS 132 American History II 3
POL 220 International Relations 3

Select other needed hours for graduation from the following physical education courses or other college transfer courses:
SPA 211/281; SPA 212/282; PED 110; PED 113; PED 115; PED 117; PED 121; PED 122; PED 123; PED 125; PED 126; PED 128; PED 129; PED 130; PED 131; PED 137; PED 132; PED 145; PED 170; PED 171

## PRE-PSYCHOLOGY (AA)

Students seeking a degree must earn a grade of "C" or higher on any of the following courses presented for graduation: ENG 111: Expository Writing, ENG 112: Argument-Based Research, ENG 113: Literature-Based Research or ENG 114: Professional Research and Reporting; COM 231: Public Speaking; CIS 110: Introduction to Computers (or another approved computer course); and MAT 161: College Algebra(or another approved mathematics course). Please see Requirements for Graduation as stated in the Academic Regulations section of the Academic Bulletin \& Student Handbook.

Students are encouraged to complete the two-year degree at Cleveland Community College before transferring to the four-year college. In all instances, college transfer students should complete the General Education Core before transferring, as recommended by the State University System of North Carolina.


| REL | 221 | Religion in America |
| :--- | :--- | :--- |
| REL | 211 | Intro to Old Testament |

Class Hours

> CreditREL 212 Intro to New Testament
303

| REL | 111 | Eastern Religions | 3 | 0 |
| :--- | :--- | :--- | :--- | :--- |
| 3 |  |  |  |  |

REL 112 Western Religions $\quad 3 \quad 0 \quad 3$

| SPA 111 | Elementary Spanish I | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- |


| SPA | 181 | Spanish Lab I | 0 | 2 |
| :--- | :--- | :--- | :--- | :--- |

SPA 112 Elementary Spanish II 3

| SPA 182 | Spanish Lab II | 0 | 2 | 1 |
| :--- | :--- | :--- | :--- | :--- | :--- |


| SPA 211 | Intermediate Spanish I | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- |

SPA 281 Spanish Lab III 002
Select one of the following courses:

| ENG | 231 | American Literature I | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| ENG | 232 | American Literature II | 3 | 0 | 3 |
| ENG | 233 | Major American Writers | 3 | 0 | 3 |
| ENG | 241 | British Literature I | 3 | 0 | 3 |
| ENG | 242 | British Literature II | 3 | 0 | 3 |
| ENG | 261 | World Literature I | 3 | 0 | 3 |
| ENG | 262 | World Literature II | 3 | 0 | 3 |

C. Social Sciences (12 SHC)

| PSY | 150 | General Psychology | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| SOC | 210 | Introduction to Sociology | 3 | 0 | 3 |

One sequence in history:
$\begin{array}{lllll}\text { HIS } & 111 & \text { World Civilizations I } & 3 & 0 \\ 3\end{array}$
$\begin{array}{lllll}\text { HIS } & 112 & \text { World Civilizations II } & 3 & 0\end{array}$ or
HIS 131 American History I $\quad 3 \quad 0$
$\begin{array}{lllll}\text { HIS } & 132 & \text { American History II } & 3 & 0\end{array}$
D. Natural Sciences (8 SHC)

| BIO 111 | General Biology I | 3 | 3 | 4 |
| :--- | :--- | :--- | :--- | :--- |

Select one course from the following:

| BIO | 112 | General Biology II | 3 | 3 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| CHM | 131 | Introduction to Chemistry | 3 | 0 | 3 |
| CHM | 131 A | Chemistry Lab | 0 | 2 | 1 |
| CHM | 151 | General Chemistry I | 3 | 2 | 4 |
| PHY | 151 | College Physics I | 3 | 2 | 4 |



## PRE-SOCIAL SCIENCE: SECONDARY EDUCATION (AA)

Students seeking a degree must earn a grade of "C" or higher on any of the following courses presented for graduation: ENG 111, Expository Writing; ENG 112, Argument-Based Research or ENG 113, Literature-Based Research; COM 231, Public Speaking; CIS 110, Introduction to Computers (or another approved computer course); and MAT 140, Survey of Mathematics (or another approved mathematics course). Please see Requirements for Graduation as stated in the Academic Regulations section of the Academic Bulletin \& Student Handbook.

Students are encouraged to complete the two-year degree at Cleveland Community College before transferring to the four-year college. In all instances, college transfer students should complete the General Education Core before transferring, as recommended by the State University System of North Carolina.


|  |  |  | Hours |  |  |
| :--- | :--- | :--- | :---: | :---: | :---: |
| REL | 212 | Intro to New Testament | 3 | 0 | Cab | Credit

The College recommends that students who select Spanish should also enroll for an appropriate Spanish lab course.
Select one of the following courses:

| ENG | 231 | American Literature I | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| ENG | 232 | American Literature II | 3 | 0 | 3 |
| ENG | 241 | British Literature I | 3 | 0 | 3 |
| ENG | 242 | British Literature II | 3 | 0 | 3 |
| ENG | 261 | World Literature I | 3 | 0 | 3 |
| ENG | 262 | World Literature II | 3 | 0 | 3 |

C. Social/Behavioral Sciences (12 SHC)

| HIS | 111 | World Civilizations I | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| HIS | 112 | World Civilizations II | 3 | 0 | 3 |
| POL | 120 | American Government | 3 | 0 | 3 |
| SOC | 210 | Intro to Sociology | 3 | 0 | 3 |

D. Natural Sciences (8 SHC)

Select two courses from the following:

| BIO | 111 | General Biology I | 3 | 3 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| BIO | 112 | General Biology II | 3 | 3 | 4 |
| CHM | 131 | Introduction to Chemistry and | 3 | 0 | 3 |
| CHM | 131 A | Introduction to Chemistry Lab | 0 | 3 | 1 |
| CHM | 151 | General Chemistry I | 3 | 3 | 4 |
| CHM | 152 | General Chemistry II | 3 | 3 | 4 |
| PHY | 151 | College Physics I | 3 | 3 | 4 |
| PHY | 152 | College Physics II | 3 | 3 | 4 |



Additional five (5) hours of approved college transfer and physical education courses may be selected to meet the required 65 hours for graduation.

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 65

Students must meet the receiving university's foreign language and physical education requirement, if applicable, before or after transfer to the four-year institution.

## ASSOCIATE IN SCIENCE DEGREE

Students seeking a degree must earn a grade of "C" or higher on any of the following courses presented for graduation: ENG 111: Expository Writing, ENG 112: Argument-Based Research, ENG 113: Literature-Based Research, or ENG 114: Professional Research and Reporting; COM 231: Public Speaking; CIS 110: Introduction to Computers (or another approved computer course); and MAT 171 and 171A: Precalculus Algebra and Lab(or another approved mathematics course). Please see Requirements for Graduation as stated in the Academic Regulations section of the Academic Bulletin \& Student Handbook.

Students are encouraged to complete the two-year degree at Cleveland Community College before transferring to the four-year college. In all instances, college transfer students should complete the General Education Core before transferring, as recommended by the State University System of North Carolina.


|  |  | Hours |  |  |  |
| :--- | :--- | :--- | :---: | :---: | :---: |
|  |  | Class | Lab | Credit |  |
| PHI | 210 | History of Philosophy | 3 | 0 | 3 |
| PHI | 240 | Introduction to Ethics | 3 | 0 | 3 |
| REL | 211 | Intro to Old Testament | 3 | 0 | 3 |
| REL | 212 | Intro to New Testament | 3 | 0 | 3 |
| REL | 110 | World Religions | 3 | 0 | 3 |
| REL | 221 | Religion in America | 3 | 0 | 3 |
| REL | 111 | Eastern Religions | 3 | 0 | 3 |
| REL | 112 | Western Religions | 3 | 0 | 3 |
| SPA | 111 | Elementary Spanish I | 3 | 0 | 3 |
| SPA | 181 | Spanish Lab I | 0 | 2 | 1 |
| SPA | 112 | Elementary Spanish II | 3 | 0 | 3 |
| SPA | 182 | Spanish Lab II | 0 | 2 | 1 |
| SPA | 211 | Intermediate Spanish I | 3 | 0 | 3 |
| SPA | 281 | Spanish Lab III | 0 | 2 | 1 |
| SPA | 212 | Intermediate Spanish II | 3 | 0 | 3 |
| SPA | 282 | Spanish Lab IV | 0 | 2 | 1 |
| Select | one | course from the following: |  |  |  |
| ENG | 231 | American Literature I | 3 | 0 | 3 |
| ENG | 232 | American Literature II | 3 | 0 | 3 |
| ENG | 233 | Major American Writers | 3 | 0 | 3 |
| ENG | 241 | British Literature I | 3 | 0 | 3 |
| ENG | 242 | British Literature II | 3 | 0 | 3 |
| ENG | 261 | World Literature I | 3 | 0 | 3 |
| ENG | 262 | World Literature II | 3 | 0 | 3 |

C. Social/Behavioral Sciences (12 SHC)

Select four courses from three disciplines.
Select two courses from the following:
$\begin{array}{lllll}\text { HIS } 111 & \text { World Civilizations I } & 3 & 0 & 3\end{array}$
$\begin{array}{lllll}\text { HIS } 112 & \text { World Civilizations II } & 3 & 0 & 3\end{array}$
HIS 131 American History I 3
HIS 132 American History II 3
Select two courses from the following:
POL 120 American Government 3
PSY 150 General Psychology 3
$\begin{array}{lllll}\text { SOC } 210 & \text { Intro to Sociology } & 3 & 0 & 3\end{array}$
D. Natural Sciences (8 SHC)

Select one of the following sequences:

| BIO | 111 | General Biology I | 3 | 3 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| BIO | 112 | General Biology II | 3 | 3 | 4 |
| CHM | 151 | General Chemistry I | 3 | 3 | 4 |
| CHM | 152 | General Chemistry II | 3 | 3 | 4 |


|  |  |  |  |  | Hours |
| :--- | :---: | :--- | :---: | :---: | :---: |
|  |  | Class | Lab | Credit |  |
| PHY | 151 | College Physics I | 3 | 2 | 4 |
| PHY | 152 | College Physics II | 3 | 2 | 4 |

E. Mathematics and Computer Science (7 SHC)
$\begin{array}{llllll}\text { MAT } & 171 & \text { Precalculus Algebra (or higher level) } & 3 & 0 & 3\end{array}$
MAT 171A Precalculus Algebra Lab $0 \quad 2$
Choose one of the following:
CIS 110 Intro to Computers 2
$\begin{array}{llllll}\text { MAT } & 151 & \text { Statistics and } & 3 & 0 & 3\end{array}$
MAT 151A Statistics Lab $0 \quad 2$
IV. Other Required Hours (20-21 SHC)

A two-course sequence in General Biology, General Chemistry or General Physics is required.

| BIO | 111 | General Biology I | 3 | 3 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| BIO | 112 | General Biology II | 3 | 3 | 4 |
| CHM | 151 | General Chemistry I | 3 | 3 | 4 |
| CHM | 152 | General Chemistry II | 3 | 3 | 4 |
| PHY | 151 | College Physics I | 3 | 2 | 4 |
| PHY | 152 | College Physics II | 3 | 2 | 4 |
| MAT | 140 | Survey of Mathematics | 3 | 0 | 3 |
| MAT | $140 A$ | Survey of Mathematics Lab | 0 | 2 | 1 |
| MAT | 141 | Math I for Teachers/K-9 | 3 | 0 | 3 |
| MAT | 142 | Math II for Teachers/K-9 | 3 | 0 | 3 |
| MAT | 151 | Statistics I | 3 | 0 | 3 |
| MAT | 151 A | Statistics I Lab | 0 | 2 | 1 |
| MAT | 162 | College Trigonometry | 3 | 0 | 3 |
| MAT | 172 | Precalculus Trigonometry | 3 | 0 | 3 |
| MAT | $172 A$ | Precalculus Trigonometry Lab | 0 | 2 | 1 |
| MAT | 175 | Precalculus | 4 | 0 | 4 |
| MAT | 271 | Calculus I | 3 | 2 | 4 |
| MAT | 272 | Calculus II | 3 | 2 | 4 |

III. Other Electives

Select 5 hours from the following courses, one of which should be a physical education course.

Courses counted as core courses may not be counted again as elective hours. ACC 120; ACC 121; ART 111; ART 113; ART 114; ART 115; ART 116; ART 121; ART 122; ART 130; ART 131; ART 140; ART 171; ART 132; ART 240; ART 241; ART 271; ART 288; BIO 120; BUS 110; CHM 131/131A; CHM 151; CHM 152; DRA 111; ECO 251; ECO 252; ENG 131; ENG 231; ENG 232; ENG 233; ENG 241; ENG 242; ENG 261; ENG 262; ENG 272; GEO 111; HEA 110; HEA 111; HEA 120; HIS 111; HIS 112; HIS 131; HIS 132; HIS 228; HIS 229; HUM 120; HUM 122; HUM 170; HUM 211; MAT 140/140A; MAT 151/151A; MAT 162; MAT 172/172A; MAT 175; MAT 271; MAT 272; MUS 110; PED 110; PED 113; PED 115; PED 117; PED 121; PED 122; PED 125; PED 128; PED 129; PED 130; PED 131; PED 137; PED 143; PED 145; PED 170; PED 171; PHI 210; PHI 240; PHY 151; PHY 152; POL 120; POL 220; PSY 150; PSY 239; PSY 241; PSY 243; PSY 281; SOC 210; SOC 213; SOC 220; SOC 225; SPA 111/181; SPA 112/182; SPA 211/281; SPA 212/282

## TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 65

Students must meet the receiving university's foreign language and physical education requirement, if applicable, before or after transfer to the four-year institution.

## PRE-BIOLOGY AND BIOLOGY EDUCATION (AS)

Students seeking a degree must earn a grade of "C" or higher on any of the following courses presented for graduation: ENG 111: Expository Writing, ENG 112: Argument-Based Research, ENG 113: Literature-Based Research or ENG 114: Professional Research and Reporting; COM 231: Public Speaking; CIS 110: Introduction to Computers (or another approved computer course); and MAT 171/171A Precalculus Algebra and Lab (or another approved mathematics course). Please see Requirements for Graduation as stated in the Academic Regulations section of the Academic Bulletin \& Student Handbook.

Students are encouraged to complete the two-year degree at Cleveland Community College before transferring to the four-year college. In all instances, college transfer students should complete the General Education Core before transferring, as recommended by the State University System of North Carolina.


Select one course from the following. The College recommends that students who select Spanish should also enroll for an appropriate Spanish lab course.

| HUM | 120 | Cultural Studies | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| HUM | 122 | Southern Culture | 3 | 0 | 3 |
| HUM | 211 | Humanities I | 3 | 0 | 3 |


|  |  |  | Hours |  |  |
| :--- | :--- | :--- | :---: | :---: | :---: |
|  |  |  | Class | Lab | Credit |
| PHI | 210 | History of Philosophy | 3 | 0 | 3 |
| PHI | 240 | Introduction to Ethics | 3 | 0 | 3 |
| REL | 110 | World Religions | 3 | 0 | 3 |
| REL | 221 | Religion in America | 3 | 0 | 3 |
| REL | 111 | Eastern Religions | 3 | 0 | 3 |
| REL | 112 | Western Religions | 3 | 0 | 3 |
| REL | 211 | Intro to Old Testament | 3 | 0 | 3 |
| REL | 212 | Intro to New Testament | 3 | 0 | 3 |
| SPA | 111 | Elementary Spanish I | 3 | 0 | 3 |
| SPA | 181 | Spanish Lab I | 0 | 2 | 1 |
| SPA | 112 | Elementary Spanish II | 3 | 0 | 3 |
| SPA | 182 | Spanish Lab II | 0 | 2 | 1 |
| Select | one | course from the following: |  |  |  |
| ENG | 231 | American Literature I | 3 | 0 | 3 |
| ENG | 232 | American Literature II | 3 | 0 | 3 |
| ENG | 233 | Major American Writers | 3 | 0 | 3 |
| ENG | 241 | British Literature I | 3 | 0 | 3 |
| ENG | 242 | British Literature II | 3 | 0 | 3 |
| ENG | 261 | World Literature I | 3 | 0 | 3 |
| ENG | 262 | World Literature II | 3 | 0 | 3 |

C. Social/Behavioral Sciences (12 SHC)

Select four courses from the following:
Select at least one course from the following:

| HIS | 111 | World Civilizations I | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| HIS | 112 | World Civilizations II | 3 | 0 | 3 |

The following course is required:
PSY 150 General Psychology 3003
Select 2-3 courses from the following:

| POL | 120 | American Government | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| PSY | 150 | General Psychology | 3 | 0 | 3 |
| SOC | 210 | Intro to Sociology | 3 | 0 | 3 |
| SOC | 213 | Sociology of the Family | 3 | 0 | 3 |
| SOC | 220 | Social Problems | 3 | 0 | 3 |
| SOC | 225 | Social Diversity | 3 | 0 | 3 |
| PSY | 239 | Psychology of Personality | 3 | 0 | 3 |
| PSY | 241 | Developmental Psychology | 3 | 0 | 3 |
| PSY | 281 | Abnormal Psychology | 3 | 0 | 3 |

D. Natural Sciences (8 SHC)

CHM 151 General Chemistry I $\quad 3 \quad 3$
CHM 152 General Chemistry II $\begin{array}{llll} & 3 & 3 & 4\end{array}$


TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 65

Students must meet the receiving university's foreign language and physical education requirement, if applicable, before or after transfer to the four-year institution.

## PRE-ENGINEERING (AS)

Students seeking a degree must earn a grade of " $C$ " or higher on any of the following courses presented for graduation: ENG 111: Expository Writing, ENG 112: Argument-Based Research, ENG 113: Literature-Based Research or ENG 114: Professional Research and Reporting; COM 231: Public Speaking; CIS 110: Introduction to Computers (or another approved computer course); and MAT 161: College Algebra (or another approved mathematics course). Please see Requirements for Graduation as stated in the Academic Regulations section of the Academic Bulletin \& Student Handbook.

Students are encouraged to complete the two-year degree at Cleveland Community College before transferring to the four-year college. In all instances, college transfer students should complete the General Education Core before transferring, as recommended by the State University System of North Carolina.
$\overline{\text { Class Lab }} \overline{\text { Credit }}$
I. General Education Core (44 Semester Hours Credit)

Highly Recommended:
$\begin{array}{llllll}\text { ACA } & 115 & \text { Success and Study Skills } & 0 & 2 & 1\end{array}$
A. English Composition (6 SHC)

Two courses in English composition are required:
ENG 111 Expository Writing 3003
Select one of the following:

| ENG | 113 | Literature-Based Research | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| ENG | 114 | Professional Research and Reporting | 3 | 0 | 3 |

B. Humanities/Fine Arts (12 SHC)

COM 231 Public Speaking 3003
Select one of the following courses:
ART 111 Art Appreciation 3
$\begin{array}{lllll}\text { DRA } 111 & \text { Theatre Appreciation } & 3 & 0 & 3\end{array}$
MUS 110 Music Appreciation 3

Select one course from the following. The College recommends that students who select Spanish should also enroll for an appropriate Spanish lab course.

| HUM | 120 | Cultural Studies | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| HUM | 122 | Southern Culture | 3 | 0 | 3 |
| HUM | 211 | Humanities I | 3 | 0 | 3 |
| PHI | 210 | History of Philosophy | 3 | 0 | 3 |
| PHI | 240 | Introduction to Ethics | 3 | 0 | 3 |
| SPA | 111 | Elementary Spanish I | 3 | 0 | 3 |

SPA 181 Spanish Lab I
SPA 112 Elementary Spanish II
SPA 182 Spanish Lab II
REL 110 World Religions
REL 221 Religion in America
REL 211 Intro to Old Testament
REL 212 Intro to New Testament
REL 111 Eastern Religions
REL 112 Western Religions
Select one of the following courses:
ENG 231 American Literature I
ENG 232 American Literature II
ENG 233 Major American Writers
ENG 241 British Literature I
ENG 242 British Literature II
ENG 261 World Literature I
ENG 262 World Literature II
B. Social/Behavioral Sciences (12 SHC)

HIS 111 World Civilizations I
HIS 112 World Civilizations II
PSY 150 General Psychology
Select one additional course:
$\begin{array}{llllll}\text { ECO } & 251 & \text { Principles of Microeconomics } & 3 & 0 & 3\end{array}$
$\begin{array}{llllll}\text { ECO } 252 & \text { Principles of Macroeconomics } & 3 & 0 & 3\end{array}$
C. Natural Sciences (8 SHC)
$\begin{array}{lllll}\text { PHY } 251 & \text { General Physics I } & 3 & 3 & 4\end{array}$
PHY 252 General Physics II
33
4
D. Mathematics (8 SHC)

MAT 271 Calculus I
MAT 272 Calculus II
$\begin{array}{lll}0 & 2 & 1\end{array}$
$3 \quad 0 \quad 3$
$\begin{array}{lll}0 & 2 & 1\end{array}$
303
303
$\begin{array}{lll}3 & 0 & 3\end{array}$
303
303
303

303
300
303
303
303
303
303

03
303
303
$3 \quad 2$
4
32
4

$\overline{\text { Class Lab }}$|  |
| :--- |
| Credit |



## TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 65

Students must meet the receiving university's foreign language and physical education requirement, if applicable, before or after transfer to the four-year institution.


# TECHNICAL AND GENERAL PROGRAMS 

## ASSOCIATE IN GENERAL EDUCATION DEGREE

Students seeking a degree must earn a grade of " $C$ " or higher on any of the following courses presented for graduation: ENG 111, Expository Writing; ENG 112, Argument-Based Research or ENG 113, Literature-Based Research; COM 231, Public Speaking; CIS 110, Introduction to Computers (or another approved computer course); and MAT 140, Survey of Mathematics (or another approved mathematics course). Please see Requirements for Graduation as stated in the Academic Regulations section of the Academic Bulletin \& Student Handbook.


|  |  | Hours |  |  |  |
| :--- | :--- | :--- | :---: | :---: | :---: |
|  |  | Class | Lab | Credit |  |
| SPA | 111 | Elementary Spanish I | 3 | 0 | 3 |
| SPA | 181 | Spanish Lab I | 0 | 2 | 1 |
| SPA | 112 | Elementary Spanish II | 3 | 0 | 3 |
| SPA | 182 | Spanish Lab II | 0 | 2 | 1 |
| SPA | 211 | Intermediate Spanish I | 3 | 0 | 3 |
| SPA | 281 | Spanish Lab III | 0 | 2 | 1 |
| SPA | 212 | Intermediate Spanish II | 3 | 0 | 3 |
| SPA | 282 | Spanish Lab IV | 0 | 2 | 1 |

C. Social Sciences

Select four courses from the following:

| ECO | 251 | Principles of Microeconomics | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| ECO | 252 | Principles of Macroeconomics | 3 | 0 | 3 |
| HIS | 111 | World Civilizations I | 3 | 0 | 3 |
| HIS | 112 | World Civilizations II | 3 | 0 | 3 |
| HIS | 131 | American History I | 3 | 0 | 3 |
| HIS | 132 | American History II | 3 | 0 | 3 |
| PSY | 150 | General Psychology | 3 | 0 | 3 |
| SOC | 210 | Introduction to Sociology | 3 | 0 | 3 |
| GEO | 111 | World Regional Geography | 3 | 0 | 3 |
| POL | 120 | American Government | 3 | 0 | 3 |
| PSY | 239 | Psychology of Personality | 3 | 0 | 3 |
| PSY | 241 | Developmental Psychology | 3 | 0 | 3 |
| PSY | 243 | Child Psychology | 3 | 0 | 3 |
| SOC | 210 | Introduction to Sociology | 3 | 0 | 3 |
| SOC | 220 | Social Problems | 3 | 0 | 3 |
| SOC | 225 | Social Diversity | 3 | 0 | 3 |

II. Natural Sciences/Mathematics

Select one mathematics course and one science course from the following:

| BIO | 111 | General Biology I | 3 | 3 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| BIO | 112 | General Biology II | 3 | 3 | 4 |
| CHM | 151 | General Chemistry I | 3 | 3 | 4 |
| CHM | 152 | General Chemistry II | 3 | 3 | 4 |
| PHY | 151 | College Physics I | 3 | 2 | 4 |
| PHY | 152 | College Physics II | 3 | 2 | 4 |
| GEL | 111 | Introductory Geology | 3 | 2 | 4 |
| GEL | 120 | Physical Geology | 3 | 2 | 4 |
| MAT | 140 | Survey of Mathematics | 3 | 0 | 3 |
| MAT | 140 A | Survey of Mathematics Lab | 0 | 2 | 1 |
| MAT | 141 | Math I for Teachers/K-9 | 3 | 0 | 3 |
| MAT | 142 | Math II for Teachers/K-9 | 3 | 0 | 3 |


| MAT | 151 | Statistics I |
| :--- | :--- | :--- |
| MAT | 151 A | Statistics I Lab |
| MAT | 161 | College Algebra |
| MAT | 162 | College Trigonometry |
| MAT | 171 | Precalculus Algebra |
| MAT | 171 A | Precalculus Algebra Lab |
| MAT | 172 | Precalculus Trigonometry |
| MAT | 172 A | Precalculus Trigonometry Lab |
| MAT | 175 | Precalculus |
| MAT | 271 | Calculus I |
| MAT | 272 | Calculus II |


|  |  |  |
| :---: | :---: | :---: |
| Class | Lab | Credit |
| 3 | 0 | 3 |
| 0 | 2 | 1 |
| 3 | 0 | 3 |
| 3 | 0 | 3 |
| 3 | 0 | 3 |
| 0 | 2 | 1 |
| 3 | 0 | 3 |
| 0 | 2 | 1 |
| 4 | 0 | 4 |
| 3 | 2 | 4 |
| 3 | 2 | 4 |

III. Other Required Hours
$\begin{array}{llllll}\text { CIS } & 110 & \text { Introduction to Computers } & 2 & 2 & 3\end{array}$
IV. Select two of the following physical education courses:

PED 110; PED 111; PED 112; PED 113; PED 114; PED 115; PED 116; PED 117; PED 118; PED 119; PED 122; PED 123; PED 125; PED 126; PED 128; PED 129; PED 130; PED 131; PED 141; PED 142; PED 143; PED 144; PED 145; PED 146; PED 147; PED 148; PED 150; PED 151; PED 170; PED 171; PED 172; PED 174; PED 240; PED 250; PED 251; PED 252; PED 254; PED 255; PED 256
V. Select 20 hours from the following:

Courses counted as core courses may not be counted again as elective hours. ACC 120; ACC 121*; ART 111; ART 114; ART 115; ART 116; ART 121; ART 122; ART 130; ART 131; ART 132; ART 140; ART 171; ART 240; ART 241; ART 271; ASL 111/181; ASL 112/182; ASL 211/281; ASL 212/282; BIO 111; BIO 112; BIO 120; BIO 155; BIO 165; BIO 166; CHM 131/131A; CHM 132; CHM 151; CHM 152; CIS 110; COM 231; DRA 111; ECO 251; ECO 252; ENG 112; ENG 113; ENG 114; ENG 125; ENG 231; ENG 232; ENG 233; ENG 241; ENG 242; ENG 261; ENG 262; ENG 272; HEA 110; HEA 111; HIS 111; HIS 112; HIS 131; HIS 132; HIS 228; HIS 229; HUM 120; HUM 122; HUM 170; HUM 211; MAT 140/140A; MAT 141; MAT 142; MAT 151/151A; MAT 161; MAT 162; MAT 172/172A; MAT 175; MAT 271; MAT 272; MAT 273; MUS 110; PED 110; PED 113; PED 115; PED 117; PED 122; PED 123; PED 125; PED 128; PED 129; PED 130; PED 131; PED 170; PED 171; PHI 210; PHI 240; PHY 151; PHY 152; POL 120; POL 220; PSY 150; PSY 239; PSY 241; PSY 243; PSY 281; REL 110; REL 111; REL 112; REL 211; REL 212; SOC 210; SOC 213; SOC 220; SOC 225; SPA 111/181; SPA 112/182; SPA 211/281; SPA 212/282

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN ACCOUNTING (AAS)

The Accounting curriculum is designed to provide students with the knowledge and the skills necessary for employment and growth in the accounting profession. Using the "language of business," accountants assemble and analyze, process, and communicate essential information about financial operations.

In addition to course work in accounting principles, theories, and practice, students will study business law, finance, management, and economics. Related skills are developed through the study of communications, computer applications, financial analysis, critical thinking skills, and ethics.

Graduates should qualify for entry-level accounting positions in many types of organizations including accounting firms, small businesses, manufacturing firms, banks, hospitals, school systems, and governmental agencies. With work experience and additional education, an individual may advance in the accounting profession.

Students seeking a degree must earn a grade of "C" or higher on any of the following courses presented for graduation:

ENG 111, Expository Writing; ENG 112, Argument-Based Research or ENG 113, Literature-Based Research or ENG 114, Professional Research \& Reporting; COM 231, Public Speaking; CIS 110, Introduction to Computers (or another approved computer course) and MAT 140, Survey of Mathematics (or another approved mathematics course). Please see Requirements for Graduation as stated in the Academic Regulations section of the Academic Bulletin and Student Handbook.

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN ACCOUNTING (AAS)

Course and Hour Requirements

| Major Courses |  | Credit | General Education Courses |  | Credit |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Hours |  |  | Hours |
| ACC | 120 | 4 | ACA | 115 | 1 |
| ACC | 121 | 4 |  |  |  |
| ACC | 220 | 4 | Comm | ications: |  |
| BUS | 110 | 3 | ENG | 111 | 3 |
| ACC | 226 | 3 | ENG | 114 | 3 |
| BUS | 115 | 3 | COM | 231 | 3 |
| ACC | 129 | 3 |  |  |  |
| ECO | 251 | 3 | Huma | es/Fine Arts Elective | e: Selec |
| ACC | 269 | 3 | ART | 111 | 3 |
| BUS | 121 | 3 | ENG | 231 | 3 |
| BUS | 225 | 3 | ENG | 232 | 3 |
| ECO | 252 | 3 | ENG | 233 | 3 |
| ACC | 130 | 3 | ENG | 241 | 3 |
| ACC | 150 | 2 | ENG | 242 | 3 |
| CIS | 120 | 3 | HUM | 122 | 3 |
| ACC | 140 | 2 | HUM | 170 | 3 |
| CIS | 110 | 3 | HUM | 211 | 3 |
|  |  |  | HUM | 115 | 3 |
| Total | Major Hours: | : 52 | MUS | 110 | 3 |
|  |  |  | PHI | 210 | 3 |
|  |  |  | PHI | 240 | 3 |
|  |  |  | REL | 211 | 3 |
|  |  |  | REL | 212 | 3 |
|  |  |  | REL | 221 | 3 |
|  |  |  | Social/Behavioral Science: Select on |  |  |
|  |  |  | PSY | 150 | 3 |
|  |  |  | Natur | Science/Mathematics |  |
|  |  |  | MAT | 161 | 3 |
|  |  |  | Total | neral Education Hour | urs: 19 |

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN ACCOUNTING (AAS)

| Suggested Sequence of Courses |  |  |  | Hours Lab | Credit |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Class |  |  |
| FIRST YEAR |  |  |  |  |  |
| FALL SEMESTER |  |  |  |  |  |
| ACC | 120 | Principles of Financial Accounting | 3 | 2 | 4 |
| CIS | 110 | Introduction to Computers | 2 | 2 | 3 |
| MAT | 161 | College Algebra | 3 | 0 | 3 |
| BUS | 121 | Business Math | 2 | 2 | 3 |
| ENG | 111 | Expository Writing | 3 | 0 | 3 |
| ACA | 115 | Success and Study Skills | 0 | 2 | 1 |
|  |  |  | 13 | 8 | 17 |
| SPRING SEMESTER |  |  |  |  |  |
| ENG | 114 | Professional Research \& Reporting | 3 | 0 | 3 |
| BUS | 110 | Introduction to Business | 3 | 0 | 3 |
| ACC | 129 | Individual Income Taxes | 2 | 2 | 3 |
| ACC | 121 | Principles of Managerial Accounting | 3 | 2 | 4 |
| CIS | 120 | Spreadsheet I | 2 | 2 | 3 |
| BUS | 225 | Business Finance | 2 | 2 | 3 |
|  |  |  | 15 | 8 | 19 |
| SECOND YEAR |  |  |  |  |  |
| FALL SEMESTER |  |  |  |  |  |
| ACC | 220 | Intermediate Accounting I | 3 | 2 | 4 |
| ACC | 226 | Advanced Managerial Accounting | 3 | 0 | 3 |
| ECO | 251 | Principles of Microeconomics | 3 | 0 | 3 |
| COM | 231 | Public Speaking | 3 | 0 | 3 |
| ACC | 130 | Business Income Taxes | 2 | 2 | 3 |
| PSY | 150 | General Psychology | 3 | 0 | 3 |
|  |  |  | 17 | 4 | 19 |
| SPRING SEMESTER |  |  |  |  |  |
| ACC | 140 | Payroll Accounting | 1 | 2 | 2 |
| ECO | 252 | Principles of Macroeconomics | 3 | 0 | 3 |
| ACC | 269 | Auditing and Assurance Services | 3 | 0 | 3 |
| BUS | 115 | Business Law I | 3 | 0 | 3 |
| ACC | 150 | Accounting Software Applications | 1 | 2 | 2 |
|  |  | Humanities Elective | 3 | 0 | 3 |
|  |  |  | 14 | 4 | 16 |

# ASSOCIATE IN APPLIED SCIENCE DEGREE IN ASSOCIATE DEGREE NURSING (AAS) (REGISTERED NURSING) 

The Associate Degree Nursing (non-integrated) curriculum provides individuals with the knowledge and skills necessary to provide nursing care to clients and groups of clients in a variety of settings throughout the lifespan.

Courses will include content related to the nurse's role as a provider of nursing care, as a manager of care, as a member of the discipline of nursing, and as a member of the interdisciplinary team.

Graduates of this program are eligible to apply to take the National Council Licensure Examination (NCLEX-R) which is required for practice as a Registered Nurse. Employment opportunities include hospitals, long-term care facilities, clinics, physicians' offices, industries, and community agencies.

## ADMISSIONS AND PROGRAM REQUIREMENTS

Nursing courses required to meet graduation requirements in this program are offered during daytime hours.

Graduates of this program will be awarded the Associate in Applied Science Degree in Nursing.

## ADMISSION PROCESS - First (Year) Level

All materials must be sent to the Admissions Office of the respective college.
The following requirements must be met before applicants will be considered for admission to the ADN program:

1. Complete application.
2. Provide official high school transcript or GED scores.
3. Submit an official transcript(s) from all colleges attended. Each transcript must reflect a 2.0 cumulative grade point average on courses accepted for transfer credit.
4. Submit three (3) references (not relatives or close friends; examples: teachers, employers, guidance counselors). References that are not more than two years old at the time of the general admission requirement deadline will be acceptable. (Applicants must use forms provided.)
5. Complete placement tests which will be administered at the College. Applicants will be informed of the time and place for the tests. The placement tests consist of reading, English/writing skills, numerical skills and algebra (4 tests).
6. Complete all developmental courses required as a result of placement test results with a grade of " C " or higher.
7. Prerequisite courses: Applicants are required to have completed courses in algebra, chemistry, and biology in high school (complete high school unit) or
college with a grade of " C " or higher. If applicants have not taken these courses, they must complete them in college with a grade of " C " or higher before consideration for admission. Algebra may be required from placement scores, even if a high school or college algebra courses was successful, with a grade of "C." Prerequisite courses are not accepted from the Adult High School Diploma Program unless the student is a graduate of the program.
The student is responsible for making sure that these requirements have been met and that all materials have been received by the Admissions Office. Admission requirements currently in effect must be completed.

Completion of these requirements will not guarantee admission to the program.

## SELECTION PROCESS

1. All seven general admission requirements must be met.
2. If notified by the Admissions Office, eligible applicants report for the PSBNursing Aptitude Examination-RN. The health form will be provided with the letter of notification for the PSB-RN examination. There is a fee for the aptitude test.
3. If indicated, an interview will be scheduled with an admissions counselor and the nursing director/faculty.
4. Final selection for admission is based on a review of the candidate's academic record, test results, interview responses and favorable results from physical and emotional examinations. Examination forms are provided by the College. Written notification of acceptance will be sent by the Admissions Office and the ADN Director.

All students accepted into the Associate Degree Nursing program are required to have health and malpractice insurance.

All students must provide proof of cardiopulmonary resuscitation (CPR) certification on the first day of class, fall semester.

All students will be charged a program fee of $\$ 58.00$ each Fall and Spring semester.

Required Courses: Students may take general/related (non-nursing) courses before acceptance into the nursing program. Completion of these courses will help prepare but not guarantee admission into the program.

Persons completing the ADN program are eligible to take the National Council Licensure Examination (NCLEX-RN) which is required to practice as a registered nurse.

Enrollment in the Associate Degree Nursing program is limited. Applicants are advised to apply early.

All applications must be updated annually. If one has applied previously, he or she must initiate the process again, including PSB-Nursing Aptitude Exam retesting.

If there are any questions, contact the Admissions Office at the respective college.

## ADMISSION REQUIREMENTS - Second (Year) Level

All materials must be sent to the Admissions Office of the respective college.
The following requirements must be met before applicants will be considered for admission to the ADN program.

1. Complete application.
2. Provide official high school transcript or GED scores.
3. Submit an official transcript(s) from all colleges attended. Each transcript must reflect a 2.0 cumulative grade point average on courses accepted for transfer credit.
4. Complete placement tests which will be administered at the college. Applicants will be informed of the time and place for the tests. The placement tests consist of reading, English/writing skills, numerical skills and algebra ( 4 tests). Placement tests are required now.
5. Satisfactorily complete all developmental courses required as a result of placement tests with a grade of " C " or higher.
6. Prerequisite courses: Applicants are required to have complete courses in algebra, chemistry, and biology in high school (complete high school unit) or college with a grade of " C " or higher. If applicants have not taken classes, they must complete them in college with a grade of " C " or higher before consideration for admission. Algebra may be required from placement test scores, even if a high school or college algebra course was successful with a grade of "C."
*Advance placement students who have completed non-college anatomy and physiology in a practical nurse program, with a grade of " C " or above, will be exempt from a prerequisite biology course.
7. Submit official copy of college, practical nursing or other nursing program transcripts. (Course syllabi may be required.)
8. Submit evidence of current unrestricted license as a practical nurse in the state of North Carolina. The unrestricted license must also be current at the time of acceptance into the program.
9. Submit (3) three references (not relatives or close friends), one of which must be a work reference if applicable (for example: teachers, employers, counselors). References that are not more than two years old at the time of the general admission requirement deadline will be acceptable. (Applicants must use forms provided.)
10. First year non-nursing courses (general/related) and Anatomy and Physiology II must be in progress if series is not completed.

The student is responsible for making sure that these requirements have been met and that all materials have been received by the Admissions Office. Admission requirements currently in effect must be completed.

Completion of these requirements will not guarantee admission to the program.

## SELECTION PROCESS AND REQUIREMENTS

1. The above criteria must be met to be eligible to take the challenge exam.
2. Report for the challenge exam when notified by the Admissions Office. A fee is charged for the exam.
3. If the student is eligible, the Admissions Office will notify students to report for the PSB-Nursing School Aptitude Examination RN A fee is charged for the aptitude exam.
4. If indicated, an interview will be scheduled with an admissions counselor and the nursing director/faculty.
5. If the student is eligible, applicants will be notified of when and where to register for the nursing transition course (NUR 189). Health forms will be provided with notification to register for NUR 189.
6. LPN's must complete the nursing role transition course NUR 189 with a grade of " C " or above prior to summer admission. Anatomy and Physiology II may be taken with NUR 189.
7. Before summer admission, applicants must complete the following first year non-nursing courses with a grade of " C " or above.

| ACA 115 | BIO 155 |
| :--- | :--- |
| BIO 165 | ENG 113 |
| BIO 166 | HUM 211 |
| BIO 175 | PSY 150 |
| ENG 111 | PSY 241 |

8. Final selection for admission is based on a review of the candidate's academic record, test results, interview responses, and favorable results from the physical and emotional examinations. NUR 189 must also be completed with a grade of " C " or higher. Written notifications of acceptance will be sent by the Admissions Office and the ADN Director.

## APPLICATION DECISION PROCESS FOR FIRSTAND SECOND-YEAR APPLICANTS

Prospective nursing candidates residing in the three-service area counties of North Carolina should apply to their respective colleges. Other applicants may apply to the college of their convenience. Priority will be given to service area applicants first, then other North Carolina residents, and then out-of-state residents.

Applications will be accepted as openings occur with priority on the basis of the highest cumulative average on the nursing aptitude exam, the nursing challenge exam, and the interview.

Should openings develop for which no qualified service area applicants are available, priority will be given on the basis of highest scores to qualified applicants from the service areas of the other consortium colleges.*
*Any duplication of scores and completion dates will be resolved on the basis of highest average on prerequisite courses.

Any person completing the admissions requirements and not accepted to the fall or summer class may reapply for admission and request PSB-Nursing School Aptitude Exam-RN retesting the following year. The more recent test score will be used for admission consideration.

Persons reapplying will be considered on the basis of the above criteria. Applications must be updated annually.

## INTRA-CONSORTIUM TRANSFER/REENTRY POLICY

1. All requests for reentry into the nursing program must be approved by the Admissions Office and the Nursing Director prior to implementation.
2. Only one reentry for course failure will be considered between consortium member colleges or from other nursing programs.
3. Students must remain with the college of entry during the program regardless of residence.

## STUDENTS DESIRING ADMITTANCE AND TRANSFER OF CREDITS FROM SCHOOLS OUTSIDE THE CONSORTIUM

Students will comply with the following:

1. Completion of the admission requirements as stated in the Admission Policy - Admission for First Year Students, or Advanced Placement Students.
2. Written notification of intent to transfer (by the student) to the ADN Director and Admissions Office of the desired college.
3. Submission of transcripts from former nursing program(s) and other postsecondary work for which the student requests transfer credit.
4. Transcripts are evaluated by the designated individual at the institution and the ADN Director to determine course eligibility for transfer credit into the nursing curriculum.
5. Completion of Challenge Exams is required if nursing courses submitted for transfer credit are more than two years old as evidenced by the date of completion of the course(s). See Foothills Nursing Consortium Student Handbook for requirements.
6. Individual consideration will be determined by the circumstances, admission decision process policies, and space availability.

## PROGRAM GOALS:

Upon completion of the program, graduates will be able to:

1. Utilize the nursing process when caring for individuals.
2. Perform technical skills and practice current technology at a safe level.
3. Function in the role of provider of care, manager of care, and member within the discipline of nursing.
4. Function within a variety of health care settings where there is recourse to supervision from a more experienced, better prepared person (nurse) and where procedures and protocols are established.
5. Be accountable and practice within the ethical and legal framework of nursing.
6. Apply principles of the biological, physical, social and behavioral sciences in performing independent, dependent and interdependent nursing functions.
7. Manage nursing care for patients with common, well-defined health problems.
Students seeking a degree must earn a grade of "C" or higher on any of the following courses presented for graduation:

ENG 111, Expository Writing; ENG 112, Argument-Based Research or ENG 113, Literature-Based Research; COM 231, Public Speaking and CIS 110, Introduction to Computers (or another approved computer course). Please see Requirements for Graduation as stated in the Academic Regulations section of the Academic Bulletin and Student Handbook.

# FOOTHILLS NURSING CONSORTIUM CURRICULUM PLAN ASSOCIATE IN APPLIED SCIENCE DEGREE IN ASSOCIATE DEGREE NUSING (AAS), REGISTERED NURSING (TO59) 

Cleveland Community College Course and Hour Requirements

| Major Courses |  | Credit | General Education Courses |  | Credit |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Hours |  |  | Hours |
| NUR | 115 | 5 | ACA | 115 | 1 |
| NUR | 125 | 8 |  |  |  |
| NUR | 135 | 9 | Comm | ications: |  |
| NUR | 185 | 5 | ENG | 111 | 3 |
| NUR | 235 | 10 | ENG | 113 | 3 |
| NUR | 117 | 2 |  |  |  |
| NUR | 133 | 3 | Huma | es/Fine Arts Elective | : Choos |
| NUR | 233 | 2 | ART | 111 | 3 |
| NUR | 244 | 2 | ENG | 231 | 3 |
| BIO | 155 or | 3 | ENG | 241 | 3 |
| NUR | 189 | 2 | HUM | 122 | 3 |
| (LPN's only) |  |  | HUM | 170 | 3 |
|  |  |  | HUM | 211 | 3 |
| Total Major Hour |  | : 48-49 | MUS | 110 | 3 |
|  |  |  | PHI | 210 | 3 |
|  |  |  | PHI | 240 | 3 |
|  |  |  | REL | 211 | 3 |
|  |  |  | REL | 212 | 3 |
|  |  |  | REL | 221 | 3 |
|  |  |  | Social/Behavioral Sciences |  |  |
|  |  |  | PSY | 150 | 3 |
|  |  |  | PSY | 241 | 3 |
|  |  |  | Natur | cience/Mathematic |  |
|  |  |  | BIO | 165 | 4 |
|  |  |  | BIO | 166 | 4 |
|  |  |  | BIO | 175 | 3 |

# FOOTHILLS NURSING CONSORTIUM CURRICULUM PLAN <br> ASSOCIATE IN APPLIED SCIENCE DEGREE IN ASSOCIATE DEGREE NURSING (AAS), REGISTERED NURSING 

Suggested Sequence of Courses


## ASSOCIATE IN APPLIED SCIENCE DEGREE IN BROADCASTING AND PRODUCTION TECHNOLOGY (AAS)

Students enrolled in the Broadcasting and Production Technology curriculum will develop professional skills in radio, television, audio, video, and applications.

Training will emphasize speech, script writing, production planning, editing, and post production. Students will also study the development of the broadcasting industry, sales, ethics, law, marketing, and management. Hands-on training and teamwork approaches are essential to the instructional process.

Upon successful completion, students are prepared to enter broadcasting, production, and related industries in a variety of occupations.

Students seeking a degree must earn a grade of "C" or higher on any of the following courses presented for graduation:

ENG 111, Expository Writing; ENG 112, Argument-Based Research ENG 113, Literature-Based Research or ENG 114, Professional Research \& Reporting; COM 231, Public Speaking; CIS 110, Introduction to Computers (or another approved computer course) and MAT 140, Survey of Mathematics (or another approved mathematics course). Please see Requirements for Graduation as stated in the Academic Regulations section of the Academic Bulletin and Student Handbook.

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN BROADCASTING AND PRODUCTION TECHNOLOGY (AAS)

Course and Hour Requirements

| Major Courses | Credit <br> Hours |  |
| :--- | :---: | :---: |
| BPT | 110 | 3 |
| BPT | 111 | 3 |
| BPT | 112 | 4 |
| BPT | 113 | 3 |
| BPT | 140 | 2 |
| BPT | 231 | 4 |
| BPT | 255 | 3 |
| BPT | 232 | 4 |
| BPT | 250 | 3 |
| BPT | 241 | 4 |
| BPT | 121 | 3 |
| BPT | 131 | 4 |
| BPT | 115 | 3 |
| CIS | 110 | 3 |
| COE | 111 | 1 |
| COE | 121 | 1 |
| BPT | 196 | 1 |

[^2]| General Education Courses |  | Credit |
| :---: | :---: | :---: |
|  |  | Hours |
| ACA | 115 | 1 |
| Communications: |  |  |
| ENG | 111 | 3 |
| COM | 231 | 3 |
| Choose one course from the following: |  |  |
| ENG | 112 | 3 |
| ENG | 113 | 3 |
| ENG | 114 | 3 |
| Humanities/Fine Arts Elective: Select one |  |  |
| ART | 111 | 3 |
| ENG | 231 | 3 |
| ENG | 232 | 3 |
| ENG | 241 | 3 |
| ENG | 242 | 3 |
| HUM | 122 | 3 |
| HUM | 170 | 3 |
| HUM | 211 | 3 |
| MUS | 110 | 3 |
| PHI | 210 | 3 |
| PHI | 240 | 3 |
| REL | 211 | 3 |
| REL | 212 | 3 |
| REL | 221 | 3 |
| Social/Behavioral Science: |  |  |
| PSY | 150 | 3 |
| Natural Science/Mathematics |  |  |
| MAT | 161 or | 3 |
| MAT | 140/140A | 4 |

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN BROADCASTING AND PRODUCTION TECHNOLOGY (AAS)

| Suggested Sequence of Courses |  |  |  | Hours | Credit |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Class | Lab |  |
| FIRST YEAR |  |  |  |  |  |
| FALL SEMESTER |  |  |  |  |  |
| BPT | 110 | Intro to Broadcasting | 3 | 0 | 3 |
| BPT | 111 | Broadcast Law \& Ethics | 3 | 0 | 3 |
| BPT | 140 | Intro to TV Systems | 2 | 0 | 2 |
| BPT | 231 | Video/TV Production I | 2 | 6 | 4 |
| ACA | 115 | Success and Study Skills | 0 | 2 | 1 |
| ENG | 111 | Expository Writing | 3 | 0 | 3 |
|  |  | Humanities/Fine Arts Elective | 3 | 0 | 3 |
|  |  |  | 16 | 8 | 19 |
| SPRING SEMESTER |  |  |  |  |  |
| BPT | 112 | Broadcast Writing | 3 | 2 | 4 |
| BPT | 113 | Broadcast Sales | 3 | 0 | 3 |
| BPT | 232 | Video/TV Production II | 2 | 6 | 4 |
| COM | 231 | Public Speaking | 3 | 0 | 3 |
| MAT | 161 | College Algebra or | 3 | 0 | 3 |
| MAT | 140 | Survey of Mathematics | 3 | 0 | 3 |
| MAT | 140A | Survey of Mathematics Lab | 0 | 2 | 1 |
|  |  |  | 14 | 8-10 | 17-18 |
| SUMMER TERM |  |  |  |  |  |
| CIS | 110 | Introduction to Computers | 2 | 2 | 3 |
| ENG | 112 | Argument-Based Research or | 3 | 0 | 3 |
| ENG | 113 | Literature-Based Research or | 3 | 0 | 3 |
| ENG | 114 | Prof Research and Reporting | 3 | 0 | 3 |
| COE | 111 | Co-op Work Experience I | 0 | 10 | 1 |
|  |  |  | 5 | 12 | 7 |
| SECOND YEAR |  |  |  |  |  |
| FALL SEMESTER |  |  |  |  |  |
| BPT | 255 | Computer-Based Production | 2 | 3 | 3 |
| BPT | 241 | Broadcast Journalism I | 3 | 2 | 4 |
| BPT | 121 | Broadcast Speech | 2 | 3 | 3 |
| BPT | 131 | Audio/Radio Production I | 2 | 6 | 4 |
| PSY | 150 | General Psychology | 3 | 0 | 3 |
|  |  |  | 12 | 14 | 17 |
| SPRING SEMESTER |  |  |  |  |  |
| BPT | 115 | Public Relations | 3 | 0 | 3 |
| BPT | 250 | Institutional Video | 2 | 3 | 3 |
| COE | 121 | Co-op Work Experience I | 0 | 10 | 1 |
| BPT | 196 | Seminar in Contemporary |  |  |  |
|  |  | Broadcasting \& Issues | 1 | 0 | 1 |
|  |  |  | 6 | 13 | 8 |

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN BUSINESS ADMINISTRATION (AAS)

The Business Administration curriculum is designed to introduce students to the various aspects of the free enterprise system. Students will be provided with a fundamental knowledge of business functions, processes, and an understanding of business organizations in today's global economy.

Course work includes business concepts such as accounting, business law, economics, management, and marketing. Skills related to the application of these concepts are developed through the study of computer applications, communication, team building, and decision making.

Through these skills, students will have a sound business education base for lifelong learning. Graduates are prepared for employment opportunities in government agencies, financial institutions, and large to small business or industry.

Students seeking a degree must earn a grade of "C" or higher on any of the following courses presented for graduation:

ENG 111, Expository Writing; ENG 112, Argument-Based Research ENG 113, Literature-Based Research ENG 114, Professional Research \& Reporting; COM 231, Public Speaking; CIS 110, Introduction to Computers (or another approved computer course) and MAT 140, Survey of Mathematics (or another approved mathematics course). Please see Requirements for Graduation as stated in the Academic Regulations section of the Academic Bulletin and Student Handbook.

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN BUSINESS ADMINISTRATION (AAS)

Course and Hour Requirements

| Major Courses |  | Credit | General Education Courses |  | Credit |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Hours |  |  | Hours |
| ACC | 120 | 4 | ACA | 115 | 1 |
| BUS | 115 | 3 |  |  |  |
| BUS | 116 | 3 | Comm | unications: |  |
| BUS | 137 | 3 | ENG | 111 | 3 |
| MKT | 120 | 3 | COM | 231 | 3 |
| ECO | 251 | 3 | Choo | one course from the | e following: |
| ECO | 252 | 3 | ENG | 112 | 3 |
| BUS | 110 | 3 | ENG | 113 | 3 |
| BUS | 225 | 3 | ENG | 114 | 3 |
| Select one course: |  |  | Humanities/Fine Arts Elective: Select one |  |  |
| CIS | 110 | 3 | ART | 111 | 3 |
| OST | 137 | 2 | ENG | 231 | 3 |
|  |  |  | ENG | 232 | 3 |
| Select at least 9 elective hours: |  |  | ENG | 233 | 3 |
| Business Courses |  |  | ENG | 241 | 3 |
| BUS | 260 | 3 | ENG | 242 | 3 |
| BUS | 153 | 3 | HUM | 122 | 3 |
| BUS | 253 | 3 | HUM | 170 | 3 |
| BUS | 280 | 4 | HUM | 211 | 3 |
| BUS | 240 | 3 | MUS | 110 | 3 |
|  |  |  | PHI | 210 | 3 |
| Select 10-12 elective hours: |  |  | REL | 211 | 3 |
| Related Business Courses |  |  | REL | 212 | 3 |
| ACC | 121 | 4 | REL | 221 | 3 |
| CIS | 120 | 3 | SPA | 111/181 | 4 |
| CIS | 169 | 2 |  |  |  |
| CIS | 164 | 3 | Socia | Behavioral Science: | Select one |
| OST | 286 | 3 | PSY | 150 | 3 |
|  |  |  | SOC | 210 | 3 |
| Total Major Hours: 49-52 |  |  |  |  |  |
|  |  |  | Natur | Science/Mathematics | s: Select one |
|  |  |  | MAT | 161 | 3 |
|  |  |  | MAT | 140/140A | 4 |

# ASSOCIATE IN APPLIED SCIENCE DEGREE IN BUSINESS ADMINISTRATION (AAS) 

| Suggested Sequence of Courses |  |  |  | Hours | Credit |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
|  |  |  | Class | Lab |  |
| FIRST YEAR |  |  |  |  |  |
| FALL SEMESTER |  |  |  |  |  |
| BUS | 110 | Introduction to Business | 3 | 0 | 3 |
| BUS | 115 | Business Law I | 3 | 0 | 3 |
| COM | 231 | Public Speaking | 3 | 0 | 3 |
| ENG | 111 | Expository Writing | 3 | 0 | 3 |
| ACA | 115 | Success and Study Skills | 0 | 2 | 1 |
|  |  | Elective-Business Related |  |  | 3 |
|  |  |  |  |  | 16 |
| SPRING SEMESTER |  |  |  |  |  |
| ENG | 112 or | r Argument-Based Research or | 3 | 0 | 3 |
| ENG | 113 or | Literature-Based Research or | 3 | 0 | 3 |
| ENG | 114 | Prof Research \& Reporting | 3 | 0 | 3 |
| BUS | 116 | Business Law II | 3 | 0 | 3 |
| MKT | 120 | Principles of Marketing | 3 | 0 | 3 |
| CIS | 110 | Introduction to Computers or | 3 | 0 | 3 |
| OST | 137 | Office Software Applications | 1 | 2 | 2 |
| PSY | 150 or | r General Psychology or | 3 | 0 | 3 |
| SOC | 210 | Intro to Sociology | 3 | 0 | 3 |
| MAT | 161 or | College Algebra or | 3 | 0 | 3 |
| MAT | 140 | Survey of Mathematics and | 3 | 0 | 3 |
| MAT | 140A | Survey of Mathematics Lab | 0 | 2 | 1 |
|  |  |  |  |  | 17-19 |
| SECOND YEAR |  |  |  |  |  |
| FALL SEMESTER |  |  |  |  |  |
| ACC | 120 | Principles of Financial Accounting | 3 | 2 | 4 |
| BUS | 137 | Principles of Management | 3 | 0 | 3 |
| ECO | 251 | Principles of Microeconomics | 3 | 0 | 3 |
| BUS | 260 | Business Communications or | 3 | 0 | 3 |
| BUS | 240 | Business Ethics | 3 | 0 | 3 |
|  |  | Business Elective |  |  | 3-4 |
|  |  | Business Related Elective |  |  | 3-4 |
|  |  |  |  |  | 19-21 |
| SPRING SEMESTER |  |  |  |  |  |
| ECO | 252 | Principles of Macroeconomics | 3 | 0 | 3 |
| BUS | 225 | Business Finance | 2 | 2 | 3 |
|  |  | Business Elective |  |  |  |
|  |  | Business Related Elective |  |  | 4 |
|  |  | Humanities/Fine Arts Elective | 3 | 0 | 3 |
|  |  |  |  |  | 16 |

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN BUSINESS ADMINISTRATION/ ELECTRONIC COMMERCE (AAS)

Electronic Commerce is a concentration under the title of Business Administration. This curriculum is designed to prepare individuals for a career in the Internet economy.

Course work includes topics related to electronic business Internet strategy in business, basic business principles in the world of E-Commerce. Students will be able to demonstrate the ability to identify and analyze such functional issues as planning, technical systems, marketing, security, finance, law, design, implementation, assessment and policy issues at an entry level.

Graduates from this program will have a sound business educational base for lifelong learning. Graduates are prepared for employment opportunities in government agencies, financial institutions, and small to medium size business or industry.

Students seeking a degree must earn a grade of "C" or higher on any of the following courses prepared for graduation:

ENG 111, Expository Writing; ENG 112, Argument-Based Research or ENG 113, Literature-Based Research or ENG 114, Professional Research \& Reporting; COM 231, Public Speaking; CIS 110, Introduction to Computers (or another approved computer course); and MAT 140, Survey of Mathematics (or another approved mathematics course). Please see Requirements for Graduation as stated in the Academic Regulations section of the Academic Bulletin \& Student Handbook.

Note: ACA 115, Success and Study Skills, should be completed as early as possible.

# ASSOCIATE IN APPLIED SCIENCE DEGREE IN BUSINESS ADMINISTRATION/ ELECTRONIC COMMERCE (AAS) 

Course and Hour Requirements

| Major | Courses | Credit Hours | General Education Courses |  | Credit Hours |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ACC | 120 | 4 | ACA | 115 | 1 |
| BUS | 115 | 3 |  |  |  |
| BUS | 137 | 3 | Communications: |  |  |
| MKT | 120 | 3 | ENG | 111 | 3 |
| ECO | 251 or | 3 | COM | 231 | 3 |
| ECO | 252 | 3 | ENG | 114 | 3 |
| CIS | 172 | 3 |  |  |  |
| BUS | 280 | 4 |  |  |  |
| ECM | 210 | 3 | Humanities/Fine Arts Elective: Select one |  |  |
| OST | 286 | 3 | ART | 111 | 3 |
| ECM | 220 | 3 | ENG | 231 | 3 |
| ECM | 230 | 3 | ENG | 232 | 3 |
| ECM | 168 | 3 | ENG | 233 | 3 |
| CIS | 110 | 3 | ENG | 241 | 3 |
| ITN | 110 | 3 | ENG | 242 | 3 |
| ITN | 120 | 3 | HUM | 122 | 3 |
| ITN | 140 | 3 | HUM | 170 | 3 |
|  |  |  | MUS | 110 | 3 |
| Total Major Hours: |  | : 50 | PHI | 210 | 3 |
|  |  |  | PHI | 240 | 3 |
|  |  |  | REL | 211 | 3 |
|  |  |  | REL | 221 | 3 |


| Social/Behavioral |  |  |
| :--- | :---: | :---: |
| Science: | Select one |  |
| PSY | 150 | 3 |
| SOC | 210 | 3 |

Natural Science/Mathematics: Select one
MAT 1613
MAT 140 and MAT 140A

Total General Education Hours: 19-20

# ASSOCIATE IN APPLIED SCIENCE DEGREE IN BUSINESS ADMINISTRATION/ ELECTRONIC COMMERCE (AAS) 



SECOND YEAR
FALL SEMESTER

| ACC | 120 | Principles of Financial Accounting | 3 | 2 | 4 |
| :--- | :--- | :--- | :---: | :---: | :---: |
| BUS | 280 | REAL Small Business | 4 | 0 | 4 |
| ECM | 210 | Introduction to E-Commerce | 2 | 2 | 3 |
| MAT | 161 or College Algebra or | 3 | 0 | 3 |  |
| MAT | 140 | Survey of Mathematics and | 3 | 0 | 3 |
| MAT | $140 A$ | Survey of Mathematics Lab | 0 | 2 | 1 |
|  |  |  | 12 | $4-6$ | $14-15$ |

SPRING SEMESTER
$\begin{array}{lllllll}\text { ECM } 220 & \text { E-Commerce Planning \& Implementation } & 2 & 2 & 3\end{array}$
ECM 230 Capstone Project 2
$\begin{array}{lllll}\text { OST } 286 & \text { Professional Development } & 3 & 0 & 3\end{array}$
PSY 150 or General Psychology or $\quad 3 \quad 0 \quad 3$
SOC 210 Intro to Sociology
Humanities Elective

| 3 | 0 | 3 |
| :---: | :---: | :---: |
| 3 | 0 | 3 |
| 13 | 4 | 15 |

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN BUSINESS ADMINISTRATION MARKETING AND RETAILING (AAS)

Marketing and Retailing, a concentration under the curriculum title of Business Administration, is designed to provide students with fundamental skills in marketing and retailing.

Course work includes: marketing, retailing, merchandising, selling, advertising, computer technology, and management.

Graduates should qualify for marketing positions within manufacturing, retailing, and service organizations.

Students seeking a degree must earn a grade of "C" or higher on any of the following courses presented for graduation:

ENG 111, Expository Writing; ENG 112, Argument-Based Research or ENG 113, Literature-Based Research or ENG 114, Professional Research \& Reporting; COM 231, Public Speaking; CIS 110, Introduction to Computers (or another approved computer course); and MAT 140, Survey of Mathematics (or another approved mathematics course). Please see Requirements for Graduation as stated in the Academic Regulations section of the Academic Bulletin \& Student Handbook.

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN BUSINESS ADMINISTRATION MARKETING AND RETAILING (AAS)

Course and Hour Requirements

| Major Courses |  | Credit | General Education Courses |  | Credit |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Hours |  |  | Hours |
| ACC | 120 | 4 | ACA | 115 | 1 |
| BUS | 115 | 3 | Communications: |  |  |
| BUS | 137 | 3 | ENG | 111 | 3 |
| MKT | 120 | 3 | COM | 231 | 3 |
| ECO | 251 | 3 | Select one of the following courses: |  |  |
| MKT | 122 | 3 | ENG | 112 | 3 |
| MKT | 123 | 3 | ENG | 113 | 3 |
| MKT | 220 | 3 | ENG | 114 | 3 |
| MKT | 225 | 3 |  |  |  |
| CIS | 120 | 3 | Humanities/Fine Arts Elective |  | : Select one |
| BUS | 280 | 4 | ART | 111 | 3 |
| OST | 286 | 3 | ENG | 231 | 3 |
| Select one: |  |  | ENG | 232 | 3 |
| CIS | 110 | 3 | ENG | 233 | 3 |
| OST | 137 | 2 | ENG | 241 | 3 |
| Select one: |  |  | ENG | 242 | 3 |
| MKT | 226 | 3 | HUM | 122 | 3 |
| MKT | 227 | 3 | HUM | 170 | 3 |
| Select at least 6 hours from the following technical elective courses: |  |  | HUM | 211 | 3 |
|  |  |  | MUS | 110 | 3 |
| BUS | 260 | 3 | PHI | 210 | 3 |
| BUS | 240 | 3 | PHI | 240 | 3 |
| BUS | 110 | 4 | REL | 211 | 3 |
| BUS | 121 | 3 | REL | 212 | 3 |
| CIS | 169 | 2 | REL | 221 | 3 |
| ECO | 252 | 3 | SPA | 111/181 | 4 |
| MKT | 125 | 3 |  |  |  |
|  |  |  | Social/Behavioral Science: Select one |  |  |
| Total | Major Hour | s: 49-50 | PSY | 150 | 3 |
|  |  |  | SOC | 210 | 3 |
|  |  |  | Natural Science/Mathematics: Select one |  |  |
|  |  |  | MAT | 161 or | 3 |
|  |  |  | MAT | 140 and | 3 |
|  |  |  | MAT | 140A | 1 |
|  |  |  | Total General Education Hours: 19-21 |  |  |
|  |  | TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 68-71 |  |  |  |

# ASSOCIATE IN APPLIED SCIENCE DEGREE IN BUSINESS ADMINISTRATION MARKETING AND RETAILING (AAS) 

| Suggested Sequence of Courses |  |  |  | Hours Lab | Credit |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Class |  |  |
| FIRST YEAR |  |  |  |  |  |
| FALL SEMESTER |  |  |  |  |  |
| MKT | 120 | Principles of Marketing | 3 | 0 | 3 |
| BUS | 115 | Business Law I | 3 | 0 | 3 |
| MKT | 123 | Fundamentals of Selling | 3 | 0 | 3 |
| ENG | 111 | Expository Writing | 3 | 0 | 3 |
| ACA | 115 | Success and Study Skills | 0 | 2 | 1 |
|  |  | Humanities/Fine Arts Electives |  |  | 3-4 |
|  |  |  |  |  | 16-17 |
| SPRING SEMESTER |  |  |  |  |  |
| BUS | 137 | Principles of Management | 3 | 0 | 3 |
| MKT | 122 | Visual Merchandising | 3 | 0 | 3 |
| ENG | 112 or | r Argument-Based Research or | 3 | 0 | 3 |
| ENG | 113 or | Literature-Based Research or | 3 | 0 | 3 |
| ENG | 114 | Prof Research \& Reporting | 3 | 0 | 3 |
| CIS | 110 or | Introduction to Computers or | 2 | 2 | 3 |
| OST | 137 | Office Software App. | 1 | 2 | 2 |
| COM | 231 | Public Speaking | 3 | 0 | 3 |
|  |  | Technical Elective | 3 | 0 | 3 |
|  |  |  |  |  | 17-18 |
| SECOND YEAR |  |  |  |  |  |
| FALL SEMESTER |  |  |  |  |  |
| MKT | 226 or | r Retail Applications or | 3 | 0 | 3 |
| MKT | 227 | Marketing Applications | 3 | 0 | 3 |
| ACC | 120 | Principles of Financial Accounting | 3 | 2 | 4 |
| MKT | 220 | Advertising and Sales Promotion | 3 | 0 | 3 |
| ECO | 251 | Principles of Microeconomics | 3 | 0 | 3 |
| MAT | 161 or | College Algebra or | 3 | 0 | 3 |
| MAT | 140 | Survey of Mathematics and | 3 | 0 | 3 |
| MAT | 140A | Survey of Mathematics Lab | 0 | 2 | 1 |
|  |  |  |  |  | 16-17 |
| SPRING SEMESTER |  |  |  |  |  |
| MKT | 225 | Marketing Research | 3 | 0 | 3 |
| OST | 286 | Professional Development | 3 | 0 | 3 |
| BUS | 280 | REAL Small Business | 4 | 0 | 4 |
| CIS | 120 | Spreadsheet I | 2 | 2 | 3 |
|  |  | Social Behavioral Science | 3 | 0 | 3 |
|  |  | Technical Elective |  |  | 3 |
|  |  |  |  |  | 19 |

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN COMMUNITY SPANISH INTERPRETER (AAS)

The Spanish Interpreter Education curriculum prepares individuals to work as entry-level Spanish Interpreters who will provide communication access in interview and interactive settings. In addition, this curriculum provides in-service training for working interpreters who want to upgrade their skills.

Course work includes the acquisition of Spanish: grammar, structure, and sociolinguistic properties, cognitive processes associated with interpretation between Spanish and English; the structure and character of the Spanish community; and acquisition of consecutive and the simultaneous interpreting skills.

Entry-level jobs for para-professional interpreters are available in educational systems or a variety of community settings. Individuals may choose from part-time, full-time, or self-employment/free-lance positions, or apply language skills to other human services related areas.

Students seeking a degree must earn a grade of "C" or higher on any of the following courses presented for graduation:

ENG 111, Expository Writing; ENG 112, Argument-Based Research or ENG 113, Literature-Based Research or ENG 114, Professional Research \& Reporting; COM 231, Public Speaking; CIS 110, Introduction to Computers (or another approved computer course); and MAT 140, Survey of Mathematics (or another approved mathematics course). Please see Requirements for Graduation as stated in the Academic Regulations section of the Academic Bulletin \& Student Handbook.

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN COMMUNITY SPANISH INTERPRETER (AAS)

Course and Hour Requirements

| Major Courses | Credit <br> Hours |  |
| :--- | :---: | :---: |
| SPA | 111 | 3 |
| SPA | 181 | 1 |
| SPA | 120 | 3 |
| SPA | 112 | 3 |
| SPA | 182 | 1 |
| SPA | 215 | 3 |
| SPA | 211 | 3 |
| SPA | 281 | 1 |
| SPA | 212 | 3 |
| SPA | 282 | 1 |
| SPA | 141 | 3 |
| SPA | 221 | 3 |
| SPA | 231 | 3 |
| SPA | 161 | 3 |
| SPI | 213 | 3 |
| SPI | 114 | 3 |
| SPI | 214 | 3 |
| SPI | 113 | 3 |
| COE | 112 | 2 |
| COE | 115 | 1 |
| CIS | 110 | 3 |

[^3]| General Education Courses |  | Credit |
| :---: | :---: | :---: |
|  |  | Hours |
| ACA | 115 | 1 |
| Communications: |  |  |
| ENG | 111 | 3 |
| COM | 231 | 3 |
| Choose one course from the following: |  |  |
| ENG | 112 | 3 |
| ENG | 113 | 3 |
| ENG | 114 | 3 |
| Humanities/Fine Arts Elective: Select one |  |  |
| ART | 111 | 3 |
| ENG | 231 | 3 |
| ENG | 232 | 3 |
| ENG | 233 | 3 |
| ENG | 241 | 3 |
| ENG | 242 | 3 |
| HUM | 122 | 3 |
| HUM | 170 | 3 |
| MUS | 110 | 3 |
| PHI | 210 | 3 |
| PHI | 240 | 3 |
| REL | 211 | 3 |
| REL | 221 | 3 |
| Social/Behavioral Science: |  |  |
| PSY | 150 | 3 |
| Natural Science/Mathematics |  |  |
| MAT | or | 3 |
| MAT | and MAT 140A | 4 |

Total General Education Hours: 19-20

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN COMMUNITY SPANISH INTERPRETER (AAS)




## ASSOCIATE IN APPLIED SCIENCE DEGREE IN COMPUTER PROGRAMMING (AAS)

The Computer Programming curriculum prepares individuals for employment as computer programmers and related positions through study and application of computer concepts, logic, programming procedures, languages, generators, operating systems, networking, data management, and business operations.

Students will solve business computer problems through programming techniques and procedures, using appropriate languages and software. The primary emphasis of the curriculum is hands-on training in programming and related computer areas that provide the ability to adapt as systems evolve.

Graduates should qualify for employment in business, industry, and government organizations as programmers, programmer trainees, programmer/analysis personnel, software developers, computer operators, systems technicians, database specialists, computer specialists, software specialists, or information systems managers.

Students seeking a degree must earn a grade of "C" or higher on the following courses presented for graduation:

ENG 111, Expository Writing; ENG 112, Argument-Based Research or ENG 113, Literature-Based Research or ENG 114, Professinoal Research \& Reporting; COM 231, Public Speaking; CIS 110, Introduction to Computers (or another approved computer course); and MAT 140, Survey of Mathematics (or another approved mathematics course). Please see Requirements for Graduation as stated in the Academic Regulations section of the Academic Bulletin \& Student Handbook.

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN COMPUTER PROGRAMMING (AAS)

Course and Hour Requirements

| Major Courses |  | Credit | General Education Courses |  | Credit |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Hours |  |  | Hours |
| CIS | 110 | 3 | ACA | 115 | 1 |
| CIS | 115 | 3 |  |  |  |
| CIS | 120 | 3 | Comm | ications: |  |
| CIS | 130 | 3 | ENG | 111 | 3 |
| CIS | 152 | 3 | COM | 231 | 3 |
| CIS | 153 | 3 |  |  |  |
| NET | 110 | 3 | Choos | one course from th | following: |
| CSC | 285 | 3 | ENG | 112 | 3 |
| CSC | 139 | 3 | ENG | 114 | 3 |
| CSC | 141 | 3 |  |  |  |
| CSC | 148 | 3 | Huma | es/Fine Arts Electiv | : Select one |
|  |  |  | ART | 111 | 3 |
| Choose 6 hours of |  |  | ENG | 231 | 3 |
| advanced programming |  |  | ENG | 232 | 3 |
| electives: |  |  | ENG | 233 | 3 |
| CSC | 239 | 3 | ENG | 241 | 3 |
| CSC | 241 | 3 | ENG | 242 | 3 |
| CSC | 248 | 3 | HUM | 122 | 3 |
|  |  |  | HUM | 170 | 3 |
| Choose 9 hours |  | of general electives: | HUM | 211 | 3 |
| CIS | 145 | 3 | MUS | 110 | 3 |
| CIS | 169 | 3 | PHI | 210 | 3 |
| CIS | 172 | 3 | PHI | 240 | 3 |
| CIS | 215 | 3 | REL | 211 | 3 |
| CIS | 217 | 3 | REL | 212 | 3 |
| OST | 286 | 3 | REL | 221 | 3 |

Choose 6 hours of major electives: Social/Behavioral Science: Select one
CSC 160 3

ITN 160 3
ITN 170 3
Total Major Hours: 54

PSY 150
SOC 21033

Natural Science/Mathematics
MAT 1613

Total General Education Hours: 19

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN COMPUTER PROGRAMMING (AAS)

| Suggested Sequence of Courses |  |  |  | Hours | Credit |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
|  |  |  | Class | Lab |  |
| FIRST YEAR Credt |  |  |  |  |  |
| FALL SEMESTER |  |  |  |  |  |
| CIS | 110 | Introduction to Computers | 2 | 2 | 3 |
| ENG | 111 | Expository Writing | 3 | 0 | 3 |
| ACA | 115 | Success and Study Skills | 0 | 2 | 1 |
| NET | 110 | Data Communications/Networking | 2 | 2 | 3 |
| PSY | 150 | or General Psychology or | 3 | 0 | 3 |
| SOC | 210 | Introduction to Sociology | 3 | 0 | 3 |
|  |  |  | 10 | 6 | 13 |
| SPRING SEMESTER |  |  |  |  |  |
| ENG | 112 | r Argument-Based Research or | 3 | 0 | 3 |
| ENG | 114 | Prof Research \& Reporting | 3 | 0 | 3 |
| CIS | 120 | Spreadsheet I | 2 | 2 | 3 |
| CIS | 152 | Database Concepts \& Apps | 2 | 2 | 3 |
| CIS | 115 | Intro to Prog \& Logic | 2 | 2 | 3 |
| CIS | 130 | Survey of Operating Systems | 2 | 3 | 3 |
|  |  |  | 11 | 9 | 15 |
| SUMMER TERM |  |  |  |  |  |
| CIS | 153 | Database Applications | 2 | 2 | 3 |
| MAT | 161 | College Algebra | 3 | 0 | 3 |
| COM | 231 | Public Speaking | 3 | 0 | 3 |
| CSC | 139 | Visual Basic Programming | 2 | 3 | 3 |
|  |  | Humanities/Fine Arts Elective | 3 | 0 | 3 |
|  |  |  | 13 | 5 | 15 |
|  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  | Programming Elective | 2 | 3 | 3 |
|  |  | Programming Elective | 2 | 3 | 3 |
|  |  | Advanced Program Elective | 2 | 3 | 3 |
|  |  | General Elective | 2 | 2 | 3 |
|  |  | Major Elective | 2 | 2 | 3 |
|  |  |  | 10 | 13 | 15 |
| SPRING SEMESTER |  |  |  |  |  |
| CSC | 285 | Programming Project | 2 | 2 | 3 |
|  |  | Advanced Programming Elective | 2 | 3 | 3 |
|  |  | Major Elective | 2 | 2 | 3 |
|  |  | General Elective | 2 | 2 | 3 |
|  |  | General Elective | 2 | 2 | 3 |
|  |  |  | 10 | 11 | 15 |

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN CRIMINAL JUSTICE TECHNOLOGY (AAS)

The Criminal Justice Technology curriculum is designed to provide knowledge of criminal justice systems and operations. Study will focus on local, state, and federal law enforcement, judicial processes, corrections, and security services. The criminal justice system's role within society will be explored.

Emphasis is on criminal justice systems, criminology, juvenile justice, criminal and constitutional law, investigative principles, ethics, and community relations. Additional study may include issues and concepts of government, counseling, communications, computers, and technology.

Employment opportunities exist in a variety of local, state, and federal law enforcement, corrections, and security fields. Examples include police officer, deputy sheriff, county detention officer, state trooper, intensive probation/parole surveillance officer, correctional officer, and loss prevention specialist.

Students seeking a degree must earn a grade of "C" or higher on any of the following courses presented for graduation:

ENG 111, Expository Writing; ENG 112, Argument-Based Research or ENG 113, Literature-Based Research or ENG 114, Professional Research \& Reporting; COM 231, Public Speaking; CIS 110, Introduction to Computers (or another approved computer course); and MAT 140, Survey of Mathematics (or another approved mathematics course). Please see Requirements for Graduation as stated in the Academic Regulations section of the Academic Bulletin \& Student Handbook.


## ASSOCIATE IN APPLIED SCIENCE DEGREE IN CRIMINAL JUSTICE TECHNOLOGY (AAS)

| Suggested Sequence of Courses |  |  |  | Hours | Credit |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
|  |  |  | Class | Lab |  |
| FIRST YEAR |  |  |  |  |  |
| FALL SEMESTER |  |  |  |  |  |
| CJC | 111 | Intro to Criminal Justice | 3 | 0 | 3 |
| CJC | 112 | Criminology | 3 | 0 | 3 |
| CJC | 121 | Law Enforcement Operations | 3 | 0 | 3 |
| ENG | 111 | Expository Writing | 3 | 0 | 3 |
| SOC | 210 | Intro to Sociology | 3 | 0 | 3 |
| ACA | 115 | Success and Study Skills | 0 | 2 | 1 |
|  |  | Social/Behavioral Science Elective | 3 | 0 | 3 |
|  |  |  | 18 | 2 | 19 |
| SPRING SEMESTER |  |  |  |  |  |
| CJC | 113 | Juvenile Justice | 3 | 0 | 3 |
| CJC | 131 | Criminal Law | 3 | 0 | 3 |
| CJC | 132 | Court Procedure and Evidence | 3 | 0 | 3 |
| PSY | 150 | General Psychology | 3 | 0 | 3 |
| MAT | 140 | Survey of Mathematics | 3 | 0 | 3 |
| MAT | 140A | Survey of Mathematics Lab | 0 | 2 | 1 |
| MAT | 161 | College Algebra | 3 | 0 | 3 |
| SOC | 213 | Sociology of the Family | 3 | 0 | 3 |
| ENG | 112 or | Argument-Based Research or | 3 | 0 | 3 |
| ENG | 113 or | Literature-Based Research or | 3 | 0 | 3 |
| ENG | 114 | Prof Research \& Reporting | 3 | 0 | 3 |
|  |  |  | 21 | 0 | 21-22 |
| SECOND YEAR |  |  |  |  |  |
| FALL SEMESTER |  |  |  |  |  |
| CJC | 212 | Ethics \& Community Relations | 3 | 0 | 3 |
| CJC | 221 | Investigative Principles | 3 | 2 | 4 |
| CJC | 141 | Corrections | 3 | 0 | 3 |
| CIS | 110 | Intro to Computers | 2 | 2 | 3 |
|  |  | Humanities/Fine Arts Elective | 3 | 0 | 3 |
|  |  |  | 14 | 4 | 16 |
| SPRING SEMESTER |  |  |  |  |  |
| CJC | 231 | Constitutional Law | 3 | 0 | 3 |
| COM | 231 | Public Speaking | 3 | 0 | 3 |
|  |  | Computer Elective |  |  | 3 |
|  |  | Choose 9 additional hours from |  |  | 9 |
|  |  | selection under "Major Courses" |  |  | 18 |

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN EARLY CHILDHOOD ASSOCIATE (AAS)

The Early Childhood Associate curriculum prepares individuals to work with children from infancy through middle childhood in diverse learning environments. Students will combine learned theories with practice in actual settings with young children under the supervision of qualified teachers.

Course work includes child growth and development; physical/nutritional needs of children; care and guidance of children; and communication skills with parents and children. Students will learn to foster the cognitive/language, physical/motor, social/emotional and creative development of young children.

Graduates are prepared to plan and implement developmentally appropriate programs in early childhood settings. Employment opportunities include child development and child care programs, preschools, public and private schools, recreational centers, Head Start Programs, and school age programs.

Students seeking a degree must earn a grade of "C" or higher on any of the following courses presented for graduation:

ENG 111, Expository Writing; ENG 112, Argument-Based Research or ENG 113, Literature-Based Research or ENG 114, Professional Research \& Reporting; COM 231, Public Speaking; CIS 110, Introduction to Computers (or another approved computer course); and MAT 140, Survey of Mathematics (or another approved mathematics course). Please see Requirements for Graduation as stated in the Academic Regulations section of the Academic Bulletin \& Student Handbook.

# ASSOCIATE IN APPLIED SCIENCE DEGREE IN EARLY CHILDHOOD ASSOCIATE PROFESSIONAL BUSINESS AND MANAGEMENT OPTION (AAS) 

Course and Hour Requirements

| Major Courses |  | Credit | General Education Courses |  | Credit |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Hours |  |  | Hours |
| COE | 111 | 1 | ACA | 115 | 1 |
| EDU | 131 | 3 |  |  |  |
| EDU | 146 | 3 | Comm | unications: |  |
| EDU | 221 | 3 | ENG | 111 | 3 |
| EDU | 119 | 4 | COM | 231 | 3 |
| EDU | 144 | 3 | Sele | ne of the following coun | urses: |
| EDU | 145 | 3 | ENG | 112 | 3 |
| EDU | 151 | 3 | ENG | 113 | 3 |
| EDU | 153 | 3 | ENG | 114 | 3 |
| EDU | 251 | 3 |  |  |  |
| EDU | 259 | 3 | Huma | ities/Fine Arts Elective | e: Select one |
| EDU | 261 | 2 | ART | 111 | 3 |
| CIS | 110 | 3 | ENG | 231 | 3 |
| HEA | 111 | 2 | ENG | 232 | 3 |
| COE | 115 | 1 | ENG | 233 | 3 |
|  |  |  | ENG | 241 | 3 |
| Choose 2-3 hours of major electives: |  |  | ENG | 242 | 3 |
| ASL 11 | 11/181 | 4 | HUM | 122 | 3 |
| ASL 112/182 |  | 4 | HUM | 170 | 3 |
| EDU | 282 | 3 | HUM | 211 | 3 |
| EDU | 275 | 2 | MUS | 110 | 3 |
| EDU | 185 | 3 | PHI | 210 | 3 |
| EDU | 234 | 3 | PHI | 240 | 3 |
| EDU | 235 | 2 | REL | 211 | 3 |
| EDU | 262 | 3 | REL | 212 | 3 |
| Prof. Bus. and Management Option |  |  | REL | 221 | 3 |
| BUS | 137 or | 3 |  |  |  |
| BUS | 280 | 4 | Socia | Behavioral Science: |  |
| BUS | 110 | 3 | SOC | 210 | 3 |
| ACC | 120 | 4 |  |  |  |
|  |  |  | Natur | Science/Mathematics | : Select one |
| Total M | Major Hour | s: 52-54 | MAT | 161 or | 3 |
|  |  |  | MAT | 140 and | 3 |
|  |  |  | MAT | 140A | 1 |
|  | TO | CREDIT HOURS | Total REQU | eneral Education Hou RED FOR GRADUATIO | $\begin{aligned} & \text { urs: } 19-20 \\ & \text { ON: } 71-74 \end{aligned}$ |

# ASSOCIATE IN APPLIED SCIENCE DEGREE IN EARLY CHILDHOOD ASSOCIATE PROFESSIONAL BUSINESS AND MANAGEMENT OPTION (AAS) 

Suggested Sequence of Courses


## ASSOCIATE IN APPLIED SCIENCE DEGREE IN EARLY CHILDHOOD ASSOCIATE PROFESSIONAL FUNDAMENTALS OPTION (AAS)

Course and Hour Requirements

| Major Courses |  | Credit | General Education Courses |  | Credit |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Hours |  |  | Hours |
| COE | 111 | 1 | ACA | 115 | 1 |
| EDU | 131 | 3 |  |  |  |
| EDU | 146 | 3 | Comm | ications: |  |
| EDU | 221 | 3 | ENG | 111 | 3 |
| EDU | 144 | 3 | COM | 231 | 3 |
| EDU | 145 | 3 | Selec | ne of the following | ourses: |
| EDU | 151 | 3 | ENG | 112 | 3 |
| EDU | 251 | 3 | ENG | 113 | 3 |
| EDU | 259 | 3 | ENG | 114 | 3 |
| EDU | 261 | 2 |  |  |  |
| CIS | 110 | 3 | Huma | es/Fine Arts Elective | : Select one |
| HEA | 111 | 2 | ART | 111 | 3 |
| EDU | 153 | 3 | ENG | 231 | 3 |
| COE | 115 | 1 | ENG | 232 | 3 |
| EDU | 119 | 4 | ENG | 233 | 3 |
| Choose 2-3 hours of major electives: |  |  | ENG | 241 | 3 |
|  |  |  | ENG | 242 | 3 |
| ASL | 111/181 | 4 | HUM | 122 | 3 |
| ASL | 112/182 | 4 | HUM | 170 | 3 |
| EDU | 275 | 2 | HUM | 211 | 3 |
| EDU | 282 | 3 | MUS | 110 | 3 |
| EDU | 185 | 3 | PHI | 210 | 3 |
| EDU | 234 | 3 | PHI | 240 | 3 |
| EDU | 235 | 2 | REL | 211 | 3 |
| EDU | 262 | 3 | REL | 212 | 3 |
|  |  |  | REL | 221 | 3 |
| Prof. Fundamentals Option |  |  |  |  |  |
| PSY | 243 | 3 | Social/Behavioral Science: |  |  |
| PSY | 150 | 3 | SOC | 210 | 3 |
| SOC | 213 | 3 |  |  |  |
|  |  |  | Natur | Science/Mathematic |  |
| Total | Major Hours | : 51-52 | MAT | 161 or | 3 |
|  |  |  | MAT | 140 and | 3 |
|  |  |  | MAT | 140A | 1 |

Total General Education Hours: 19-20

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN EARLY CHILDHOOD ASSOCIATE PROFESSIONAL FUNDAMENTALS OPTION (AAS)

| Suggested Sequence of Courses |  |  |  | Hours Lab | Credit |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Class |  |  |
| FIRST YEAR |  |  |  |  |  |
| FALL SEMESTER |  |  |  |  |  |
| ENG | 111 | Expository Writing | 3 | 0 | 3 |
| EDU | 119 | Early Childhood Education | 4 | 0 | 4 |
| EDU | 144 | Child Development I | 3 | 0 | 3 |
| PSY | 150 | General Psychology | 3 | 0 | 3 |
| EDU | 153 | Health, Safety, Nutrition | 3 | 0 | 3 |
| EDU | 151 | Creative Activities | 3 | 0 | 3 |
|  |  |  | 19 | 0 | 19 |
| SPRING SEMESTER |  |  |  |  |  |
| ACA | 115 | Success and Study Skills | 0 | 2 |  |
| EDU | 145 | Child Development II | 3 | 0 | 3 |
| EDU | 146 | Child Guidance | 3 | 0 | 3 |
| PSY | 243 | Child Psychology | 3 | 0 | 3 |
| ENG | 112 or | Argument-Based Research or | 3 | 0 | 3 |
| ENG | 113 or | Literature-Based Research or | 3 | 0 | 3 |
| ENG | 114 | Prof Research \& Reporting | 3 | 0 | 3 |
| MAT | 161 | College Algebra or | 3 | 0 | 3 |
| MAT | 140 | Survey of Math and | 3 | 0 | 3 |
| MAT | 140A | Survey of Math Lab | 0 | 2 | 1 |
|  |  |  | 15 | 2-4 | 16-17 |
| SECOND YEAR |  |  |  |  |  |
| FALL SEMESTER |  |  |  |  |  |
| EDU | 131 | Child, Family, Community | 3 | 0 | 3 |
| EDU | 221 | Children with Special Needs | 3 | 0 | 3 |
| EDU | 251 | Exploration Activities | 3 | 0 | 3 |
| CIS | 110 | Intro to Computers | 2 | 2 | 3 |
| EDU | 261 | Early Childhood Admin I | 2 | 0 | 2 |
| SOC | 210 | Intro to Sociology | 3 | 0 | 3 |
|  |  |  | 16 | 2 | 17 |
| SPRING SEMESTER |  |  |  |  |  |
| EDU | 259 | Curriculum Planning | 3 | 0 | 3 |
| COE | 111 | Co-op Work Experience I | 0 | 10 | 1 |
| COE | 115 | Work Experience I | 1 | 0 | 1 |
| COM | 231 | Public Speaking | 3 | 0 | 3 |
| HEA | 111 | First Aid and Safety | 1 | 2 | 2 |
| SOC | 213 | Sociology of the Family | 3 | 0 | 3 |
|  |  | Humanities/Fine Arts Elective | 3 | 0 | 3 |
|  |  | Major Elective | 3 | 0 | 3 |
|  |  |  | 17 | 12 | 19 |

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN EARLY CHILDHOOD/SPECIAL EDUCATION (AAS)

Special Education is a concentration under the curriculum title of Early Childhood Associate. This curriculum prepares individuals to work with children from infancy through middle childhood in diverse learning environments. Students will combine learned theories with practice in actual settings with young children under the supervision of qualified teachers.

Course work includes childhood growth and development, physical/nutritional needs of children, care and guidance of children, and communication skills with parents and children. Students will foster the cognitive/language, physical/motor, social/emotional, and creative development of young children.

Graduates are prepared to plan and implement developmentally appropriate programs in early childhood settings. Employment opportunities include child development and child care programs, preschools, public and private schools, recreational centers, Head Start Programs, and school-age programs.

Students seeking a degree must earn a grade of "C" or higher on any of the following courses presented for graduation:

ENG 111, Expository Writing; ENG 112, Argument-Based Research or ENG
113, Literature-Based Research or ENG 114, Professional Research \& Reporting; COM 231, Public Speaking; CIS 110, Introduction to Computers (or another approved computer course); and MAT 140, Survey of Mathematics (or another approved mathematics course). Please see Requirements for Graduation as stated in the Academic Regulations section of the Academic Bulletin \& Student Handbook.

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN EARLY CHILDHOOD ASSOCIATE SPECIAL EDUCATION (AAS)

Course and Hour Requirements

| Major Courses |  | Credit | General Education Courses |  | Credit |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Hours |  |  | Hours |
| COE | 111 | 1 | ACA | 115 | 1 |
| EDU | 131 | 3 |  |  |  |
| EDU | 146 | 3 | Comm | ications: |  |
| EDU | 221 | 3 | ENG | 111 | 3 |
| EDU | 119 | 4 | COM | 231 | 3 |
| EDU | 144 | 3 | Selec | ne of the following | urses: |
| EDU | 145 | 3 | ENG | 112 | 3 |
| EDU | 147 | 3 | ENG | 113 | 3 |
| EDU | 148 | 5 | ENG | 114 | 3 |
| EDU | 247 | 3 |  |  |  |
| EDU | 248 | 3 | Huma | es/Fine Arts Electiv | e: Select one |
| COE | 115 | 1 | ART | 111 | 3 |
| SOC | 210 | 3 | ENG | 231 | 3 |
| CIS | 110 | 3 | ENG | 232 | 3 |
| EDU | 151 | 3 | ENG | 233 | 3 |
| EDU | 153 | 3 | ENG | 241 | 3 |
|  |  |  | ENG | 242 | 3 |
| Choose 2-3 Major Elective hours: |  |  | HUM | 211 | 3 |
| ASL | 111 | 3 | MUS | 110 | 3 |
| ASL | 181 | 1 | PHI | 210 | 3 |
| EDU | 185 | 3 | PHI | 240 | 3 |
| EDU | 234 | 3 | REL | 211 | 3 |
| EDU | 235 | 2 | REL | 221 | 3 |
| EDU | 262 | 3 | REL | 212 | 3 |
| EDU | 275 | 2 | SPA | 111 | 3 |
| EDU | 282 | 3 | SPA | 181 | 1 |
| EDU | 261 | 3 |  |  |  |
| EDU | 251 | 3 | Socia | ehavioral Science: |  |
| EDU | 259 | 3 | PSY | 150 | 3 |
| Total Major Hours: 49-50 |  |  | Natural Science/Mathematics: |  |  |
|  |  |  | MAT | 140 and | 3 |
|  |  |  | MAT | 140A or | 1 |
|  |  |  | MAT | 161 | 3 |

Total General Education Hours: 19-20

# ASSOCIATE IN APPLIED SCIENCE DEGREE IN EARLY CHILDHOOD ASSOCIATE SPECIAL EDUCATION (AAS) 

## Suggested Sequence of Courses



## SECOND YEAR <br> FALL SEMESTER

| EDU | 131 | Children, Family, and Community | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| EDU | 148 | Learning Disabilities | 4 | 2 | 5 |
| EDU | 151 | Creative Activities | 3 | 0 | 3 |
| PSY | 150 | General Psychology | 3 | 0 | 3 |
| COM | 231 | Public Speaking | 3 | 0 | 3 |
|  |  |  | 16 | 2 | 17 |

## SPRING SEMESTER

| COE | 111 | Co-op Work Experience I | 0 | 10 | 1 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| COE | 115 | Work Experience I | 1 | 0 | 1 |
| EDU | 248 | *Mental Retardation | 2 | 2 | 3 |
| EDU | 147 | Behavior Disorders | 3 | 0 | 3 |
| MAT | 140 | Survey of Math and | 3 | 0 | 3 |
| MAT | 140A | Survey of Math Lab or | 0 | 2 | 1 |
| MAT | 161 | College Algebra | 3 | 0 | 3 |
|  |  | Humanities/Fine Arts Elective | 3 | 0 | 3 |
|  |  | Major Elective | 2-3 | 0 | 2-3 |
|  |  |  | 14-15 | 14 | 16-18 |

*Prerequisite Required

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN EARLY CHILDHOOD/TEACHER ASSOCIATE (AAS)

Teacher Associate is a concentration under the curriculum title of Early Childhood Associate. This curriculum prepares individuals to work with children from infancy through middle childhood in diverse learning environments. Students will combine learned theories with practice in actual settings with young children under the supervision of qualified teachers.

Course work includes childhood growth and development, physical/nutritional needs of children, care and guidance of children, and communication skills with parents and children. Students will foster the cognitive/language, physical/motor, social/emotional, and creative development of young children.

Graduates are prepared to plan and implement developmentally appropriate programs in early childhood settings. Employment opportunities include child development and child care programs, preschools, public and private schools, recreational centers, Head Start Programs, and school-age programs.

Students seeking a degree must earn a grade of "C" or higher on any of the following courses presented for graduation:

ENG 111, Expository Writing; ENG 112, Argument-Based Research or ENG 113, Literature-Based Research or ENG 114, Professional Research \& Reporting; COM 231, Public Speaking; CIS 110, Introduction to Computers (or another approved computer course); and MAT 140, Survey of Mathematics (or another approved mathematics course). Please see Requirements for Graduation as stated in the Academic Regulations section of the Academic Bulletin \& Student Handbook.

# ASSOCIATE IN APPLIED SCIENCE DEGREE IN EARLY CHILDHOOD ASSOCIATE TEACHER ASSOCIATE (AAS) 

Course and Hour Requirements

| Major Courses |  | Credit | General Education Courses |  | Credit |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Hours |  |  | Hours |
| COE | 111 | 1 | ACA | 115 | 1 |
| EDU | 131 | 3 |  |  |  |
| EDU | 146 | 3 | Comm | ications: |  |
| EDU | 221 | 3 | ENG | 111 | 3 |
| CIS | 110 | 3 | COM | 231 | 3 |
| SOC | 210 | 3 | Selec | e of the following | ourses |
| EDU | 119 | 4 | ENG | 112 | 3 |
| HEA | 111 or | 2 | ENG | 113 | 3 |
| HEA | 120 | 3 | ENG | 114 | 3 |
| EDU | 144 | 3 |  |  |  |
| EDU | 145 | 3 | Huma | es/Fine Arts Electiv | : Select |
| COE | 115 | 1 | ART | 111 | 3 |
| COE | 121 | 1 | ENG | 231 | 3 |
| EDU | 118 | 3 | ENG | 232 | 3 |
| EDU | 186 | 3 | ENG | 233 | 3 |
| EDU | 235 | 2 | ENG | 241 | 3 |
| EDU | 275 | 2 | ENG | 242 | 3 |
| EDU | 285 | 1 | HUM | 122 | 3 |
|  |  |  | HUM | 170 | 3 |
| Select at least 2 hours |  |  | MUS | 110 | 3 |
| from the following: |  |  | PHI | 210 | 3 |
| Curriculum Major hours |  |  | PHI | 240 | 3 |
| EDU | 188 | 2 | REL | 111 | 3 |
| EDU | 234 | 3 | REL | 112 | 3 |
| EDU | 235 | 2 | REL | 211 | 3 |
| EDU | 259 | 3 | REL | 212 | 3 |
| EDU | 275 | 2 | REL | 221 | 3 |


|  |  |
| :---: | :---: |

Select at least 6 hours
from the following:
Teaching Methods Major hours
EDU 1513

EDU 1853
EDU 2513
EDU 2823
ASL 111/181 4
MAT $161 \quad 3$

Total Major Hours: 49-50

General Education Courses Credit Hours
Social/Behavioral Sciences:
Select One:
PSY 150
3
PSY 241
PSY 243
SOC 213
SOC 220
SOC 225

3
3
3
3
3

Natural Science/Mathematics:
MAT $140 / 140 \mathrm{~A}$ or 4
MAT 161 3
Total General Education Hours: 19-20

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 69-70


# ASSOCIATE IN APPLIED SCIENCE DEGREE IN EARLY CHILDHOOD ASSOCIATE TEACHER ASSOCIATE (AAS) 

Suggested Sequence of Courses

| Suggested Sequence of Courses |  |  |  | Hours |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
|  |  |  | Class | Lab | Credit |
| FIRST YEAR |  |  |  |  |  |
| FALL SEMESTER |  |  |  |  |  |
| EDU | 119 | Early Childhood Education or | 3 | 2 | 4 |
| EDU | 144 | Child Development I | 3 | 0 | 3 |
| ENG | 111 | Expository Writing | 3 | 0 | 3 |
| ACA | 115 | Success and Study Skills | 0 | 2 | 1 |
| EDU | 118 | Teacher Associate Principles \& Practices | 3 | 0 | 3 |
|  |  | Major Teaching Methods Elective | 3 | 0 | 3-4 |
|  |  |  | 15 | 4 | 17-18 |
| SPRING SEMESTER |  |  |  |  |  |
| ENG | 112 | Argument-Based Research or | 3 | 0 | 3 |
| ENG | 113 | Literature-Based Research or | 3 | 0 | 3 |
| ENG | 114 | Professional Research \& Reporting | 3 | 0 | 3 |
| EDU | 145 | Child Development II | 3 | 0 | 3 |
| EDU | 146 | Child Guidance | 3 | 0 | 3 |
| COE | 111 | Co-op Work Experience I | 0 | 10 | 1 |
| COE | 115 | Work Experience I | 1 | 0 | 1 |
| SOC | 210 | Introduction to Sociology | 3 | 0 | 3 |
| MAT | 140 | Survey of Mathematics and | 3 | 0 | 3 |
| MAT | 140A | Survey of Mathematics Lab or | 0 | 2 | 1 |
| MAT | 161 | College Algebra | 3 | 0 | 3 |
|  |  |  | 16 | 12 | 17-18 |
| SECOND YEAR |  |  |  |  |  |
| FALL SEMESTER |  |  |  |  |  |
| EDU | 131 | Child, Family, and Community | 3 | 0 | 3 |
| EDU | 221 | Children with Special Needs | 3 | 0 | 3 |
| EDU | 186 | Reading and Writing Methods | 3 | 0 | 3 |
| CIS | 110 | Introduction to Computers | 2 | 2 | 3 |
|  |  | Humanities/Fine Arts Elective | 3 | 0 | 3 |
|  |  | Major Curriculum Elective | 2 | 0 | 2-3 |
|  |  |  | 16 | 2 | 17-18 |
| SPRING SEMESTER |  |  |  |  |  |
| COM | 231 | Public Speaking | 3 | 0 | 3 |
| HEA | 111 | First Aid and Safety or | 1 | 2 | 2 |
| HEA | 120 | Community Health | 3 | 0 | 3 |
| EDU | 235 | School Age Development and Program | 2 | 10 | 1 |
| COE | 121 | Co-op Work Experience II | 0 | 10 | 1 |
| EDU | 285 | Internship Experience-School Age | 1 | 0 | 1 |
| EDU | 275 | Effective Teach Training | 2 | 0 | 2 |
|  |  | Social/Behavioral Science | 3 | 0 | 3 |
|  |  | Major Teaching Methods Elective | 3 | 0 | 3-4 |
|  |  |  | 15-17 | 20-22 | 16-18 |

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN ELECTRICAL/ELECTRONICS TECHNOLOGY (AAS)

The Electrical/Electronics Technology curriculum is designed to provide training for persons interested in the installation and maintenance of electrical/electronic systems found in residential, commercial and industrial facilities.

Training, most of which is hands-on, will include such topics as AC/DC theory, basic wiring practices, digital electronics, programmable logic controllers, industrial motor controls, the National Electric Code and other subjects as needs require.

Graduates should qualify for a variety of jobs in the electrical/electronic field as an on-the-job trainee or apprentice, assisting in the layout, installation and maintenance of electrical/electronic systems.

Students seeking a degree must earn a grade of "C" or higher on any of the following courses presented for graduation:

ENG 111, Expository Writing; ENG 112, Argument-Based Research or ENG 113, Literature-Based Research or ENG 114, Professional Research \& Reporting; COM 231, Public Speaking; CIS 110, Introduction to Computers (or another approved computer courses); and MAT 140, Survey of Mathematics (or another approved mathematics course). Please see Requirements for Graduation as stated in the Academic Regulations section of the Academic Bulletin \& Student Handbook.

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN ELECTRICAL/ELECTRONICS TECHNOLOGY (AAS)

Course and Hour Requirements


## ASSOCIATE IN APPLIED SCIENCE DEGREE IN ELECTRICAL/ELECTRONICS TECHNOLOGY (AAS)

| Suggested Sequence of Courses |  |  |  | Hours Lab |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Class |  | Credit |
| FIRST YEAR |  |  |  |  |  |
| FALL SEMESTER |  |  |  |  |  |
| ACA | 115 | Success and Study Skills | 0 | 2 | 1 |
| ELC | 112 | DC/AC Electricity | 3 | 6 | 5 |
| ELC | 113 | Basic Wiring I | 2 | 6 | 4 |
| ELN | 133 | Digital Electronics | 3 | 3 | 4 |
|  |  |  | 8 | 17 | 14 |
| SPRING SEMESTER |  |  |  |  |  |
| ELC | 114 | Basic Wiring II | 2 | 6 | 4 |
| ELC | 115 | Industrial Wiring | 2 | 6 | 4 |
| ELC | 117 | Motors and Controls | 2 | 6 | 4 |
| ELN | 131 | Electronic Devices | 3 | 3 | 4 |
|  |  |  | 9 | 21 | 16 |
| SUMMER TERM |  |  |  |  |  |
| ELC | 128 | Introduction to PLC | 2 | 3 | 3 |
| ELC | 118 | National Electric Code | 1 | 2 | 2 |
| ELC | 119 | National Electric Code Calculations | 1 | 2 | 2 |
|  |  |  | 4 | 7 | 7 |

SECOND YEAR
FALL SEMESTER

| ELN | 232 | Intro to Microprocessors | 3 | 3 | 4 |
| :--- | :--- | :--- | :---: | :---: | :---: |
| ENG | 111 | Expository Writing | 3 | 0 | 3 |
| MAT | 161 | College Algebra | 3 | 0 | 3 |
|  |  | Technical Elective |  |  | $2-3$ |
|  |  |  |  |  | $12-13$ |

SPRING SEMESTER

| ELN | 229 | Industrial Electronics | 2 | 4 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| COM | 231 | Public Speaking | 3 | 0 | 3 |
| CIS | 110 | Introduction to Computers | 2 | 2 | 3 |
| ENG | 112 or Argument-Based Research or | 3 | 0 | 3 |  |
| ENG | 113 or Literature-Based Research or | 3 | 0 | 3 |  |
| ENG | $114 \quad$ Prof Research \& Reporting | 3 | 0 | 3 |  |
|  |  |  | 10 | 6 | 13 |

SUMMER TERM
ELN 150 CAD for Electronics
PSY 150 or General Psychology or

| 1 | 3 | 2 |
| :--- | :--- | :--- |
| 3 | 0 | 3 |
| 3 | 0 | 3 |
| 3 | 0 | 3 |
| 7 | 3 | 8 |

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN ELECTRONICS ENGINEERING TECHNOLOGY (AAS)

The Electronic Engineering Technology curriculum prepares individuals to become technicians who design, build, install, test, troubleshoot, repair, and modify developmental and production electronic components, equipment, and systems such as industrial/computer controls, manufacturing systems, communication systems, and power electronic systems.

A broad-based core of courses, including basic electricity, solid-state fundamentals, digital concepts, and microprocessors, ensures that the student will develop the skills necessary to perform entry-level tasks. Emphasis is placed on developing the student's ability to analyze and troubleshoot electronic systems.

Graduates should qualify for employment as engineering assistants or electronic technicians with job titles such as electronics engineering technician, field service technician, maintenance technician, electronic tester, electronic systems integrator, bench technician, and production control technician.

Students seeking a degree must earn a grade of "C" or higher on any of the following courses presented for graduation:

ENG 111, Expository Writing; ENG 112, Argument-Based Research or ENG 113, Literature-Based Research or ENG 114, Professional Research \& Reporting; COM 231, Public Speaking; CIS 110, Introduction to Computers (or another approved computer course); and MAT 140, Survey of Mathematics (or another approved mathematics course). Please see Requirements for Graduation as stated in the Academic Regulations sections of the Academic Bulletin \& Student Handbook.

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN ELECTRONICS ENGINEERING TECHNOLOGY (AAS)

Course and Hour Requirements

| Major Courses |  | Credit | General Education Courses |  | Credit |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Hours |  |  | Hours |
| ELC | 131 | 5 | ACA | 115 | 1 |
| ELC | 131A | 1 | Communications: |  |  |
| ELN | 132 | 4 | ENG | 111 | 3 |
| ELN | 133 | 4 | COM | 231 | 3 |
| ELN | 232 | 4 |  |  |  |
| ELN | 231 | 3 | Humanities/Fine Arts Electives |  | s: Select one |
| ELN | 233 | 4 | ENG | 231 | 3 |
| ELC | 128 | 3 | ENG | 232 | 3 |
| ELN | 135 | 3 | ENG | 233 | 3 |
| EGR | 285 | 2 | HUM | 120 | 3 |
| ELN | 131 | 4 | HUM | 122 | 3 |
| MAT | 162 | 3 | HUM | 170 | 3 |
| PHY | 131 | 4 | HUM | 211 | 3 |
| PCI | 162 | 3 | MUS | 110 | 3 |
|  |  |  | PHI | 210 | 3 |
| Drafting Elective |  | Select one: | PHI | 240 | 3 |
| ELN | 150 | 2 | SPA | 111/181 | 4 |
| DFT | 119 | 2 | REL | 211 | 3 |
|  |  |  | REL | 212 | 3 |
| Computer Elective: Select one: |  |  | REL | 221 | 3 |
| CIS | 110 | 3 | ART | 111 | 3 |
| CIS | 113 | 1 |  |  |  |
|  |  |  | Socia | havioral Science: | Select one |
| Technical Elective: |  |  | ECO | 251 | 3 |
| Select at least 3 hours: |  |  | ECO | 252 | 3 |
| CIS | 215 | 3 | HIS | 111 | 3 |
| HYD | 110 | 3 | HIS | 112 | 3 |
| ISC | 112 | 2 | HIS | 131 | 3 |
| ISC | 128 | 2 | HIS | 132 | 3 |
| ISC | 132 | 3 | POL | 120 | 3 |
| COE | 112 | 2 | PSY | 150 | 3 |
| ELC | 113 | 4 | SOC | 210 | 3 |
| ELC | 228 | 4 |  |  |  |
| ISC | 255 | 3 | Natural Science/Mathematics |  |  |
|  |  |  | MAT | 161 | 3 |
| Total Major Hours: 53-55 |  |  |  |  |  |
|  |  |  | Total | neral Education Hour | urs: 16 |

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN ELECTRONICS ENGINEERING TECHNOLOGY (AAS)

Suggested Sequence of Courses


## ASSOCIATE IN APPLIED SCIENCE DEGREE IN FIRE PROTECTION TECHNOLOGY (AAS)

The Fire Protection Technology curriculum is designed to provide individuals with technical and professional knowledge to make decisions regarding fire protection for both public and private sectors. It also provides a sound foundation for continuous higher learning in fire protection, administration, and management.

Course work includes classroom and laboratory experiences to introduce the student to various aspects of fire protection. Students will learn technical and administrative skills such as hydraulics, hazardous materials, arson investigation, fire protection safety, fire suppression management, law, and codes.

Graduates qualify for employment or advancement in governmental agencies, industrial firms, insurance rating organizations, educational organizations, and municipal fire departments. Employed persons should have opportunities for skilled and supervisory level positions within their current organizations.

Students seeking a degree must earn a grade of "C" or higher on any of the following courses presented for graduation:

ENG 111, Expository Writing; ENG 112, Argument-Based Research or ENG 114, Professional Research \& Reporting; COM 231, Public Speaking; CIS 110, Introduction to Computers (or another approved computer course); and MAT 140, Survey of Mathematics (or another approved mathematics course). Please see Requirements for Graduation as stated in the Academic Regulations section of the Academic Bulletin \& Student Handbook.


## ASSOCIATE IN APPLIED SCIENCE DEGREE IN FIRE PROTECTION TECHNOLOGY (AAS)

Course and Hour Requirements

| Major Courses |  | Credit | General Education Courses |  | Credit |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Hours |  |  | Hours |
| FIP | 120 | 2 | ACA | 115 | 1 |
| FIP | 124 | 3 |  |  |  |
| FIP | 128 | 3 | Comm | ications: |  |
| FIP | 230 | 5 | ENG | 111 | 3 |
| FIP | 220 | 3 | COM | 231 | 3 |
| FIP | 132 | 3 |  |  |  |
| FIP | 248 | 3 | ENG | 112 or | 3 |
| FIP | 152 | 2 | ENG | 114 | 3 |
| FIP | 136 | 3 |  |  |  |
| FIP | 276 | 3 | Huma | es/Fine Arts Electiv | : Select one |
| FIP | 232 | 3 | ART | 111 | 3 |
| FIP | 144 | 3 | ENG | 231 | 3 |
| CIS | 110 | 3 | ENG | 232 | 3 |
| POL | 120 | 3 | ENG | 233 | 3 |
|  |  |  | ENG | 241 | 3 |
| Choose 7 hours major electives: |  |  | ENG | 242 | 3 |
| FIP | 164 | 2 | HUM | 122 | 3 |
| FIP | 221 | 3 | HUM | 170 | 3 |
| FIP | 231 | 5 | MUS | 110 | 3 |
| FIP | 256 | 2 | PHI | 210 | 3 |
| FIP | 260 | 3 | PHI | 240 | 3 |
| FIP | 236 | 2 | REL | 211 | 3 |
| COE | 111 | 1 | REL | 221 | 3 |
| FIP | 228 | 2 |  |  |  |
| FIP | 228 | 2 | Socia | ehavioral Science: |  |
| FIP | 180 | 3 | PSY | 150 | 3 |
| FIP | 184 | 3 |  |  |  |
| FIP | 188 | 4 | Natur | Science/Mathematic |  |
| FIP | 240 | 2 | MAT | and MAT 140A | 4 |
| FIP | 140 | 2 | CHM | and CHM 131A | 4 |
| Total Major Hours: 49 |  |  | Total General Education Hours: 24 |  |  |

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN FIRE PROTECTION TECHNOLOGY (AAS)

| Suggested Sequence of Courses |  |  |  | Hours Lab | Credit |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Class |  |  |
| FIRST YEAR |  |  |  |  |  |
| FALL SEMESTER |  |  |  |  |  |
| FIP | 120 | Introduction to Fire Protection | 2 | 0 | 2 |
| FIP | 124 | Fire Prevention and Public Education | 3 | 0 | 3 |
| FIP | 248 | Fire Service Personnel Administration | 3 | 0 | 3 |
| FIP | 144 | Sprinklers and Auto Alarms | 2 | 2 | 3 |
| ENG | 111 | Expository Writing | 3 | 0 | 3 |
| ACA | 115 | Success and Study Skills | 0 | 2 | 1 |
|  |  |  | 13 | 4 | 15 |
| SPRING SEMESTER |  |  |  |  |  |
| ENG | 112 or | Argument-Based Research or | 3 | 0 | 3 |
| ENG | 114 | Prof Research \& Reporting | 3 | 0 | 3 |
| FIP | 128 | Fire Detection and Investigation | 3 | 0 | 3 |
| FIP | 132 | Building Construction | 5 | 0 | 5 |
| FIP | 230 | Chemistry of Hazardous Materials I | 2 | 2 | 3 |
| CIS | 110 | Introduction to Computers | 2 | 2 | 3 |
|  |  |  | 15 | 4 | 17 |
| SUMMER TERM |  |  |  |  |  |
| PSY | 150 | General Psychology | 3 | 0 | 3 |
|  |  | Humanities Elective | 3 | 0 | 3 |
|  |  | Major Elective |  |  | 3 |
|  |  |  |  |  | 9 |
| SECOND YEAR |  |  |  |  |  |
| FALL SEMESTER |  |  |  |  |  |
| FIP | 136 | Inspection and Codes | 3 | 0 | 3 |
| FIP | 152 | Fire Protection Law | 2 | 0 | 2 |
| FIP | 232 | Hydraulics and Water Distribution | 2 | 2 | 3 |
| CHM | 131 | Introduction to Chemistry and | 3 | 0 | 3 |
| CHM | 131A | Introduction to Chemistry Lab | 0 | 3 | 1 |
|  |  | Major Elective |  |  | 4 |
|  |  |  |  |  | 16 |
| SPRING SEMESTER |  |  |  |  |  |
| FIP | 220 | Firefighting Strategies | 3 | 0 | 3 |
| FIP | 276 | Managing Fire Services | 3 | 0 | 3 |
| MAT | 140 | Survey of Mathematics | 3 | 0 | 3 |
| MAT | 140A | Survey of Mathematics Lab | 0 | 2 | 1 |
| COM | 231 | Public Speaking | 3 | 0 | 3 |
| POL | 120 | American Government | 3 | 0 | 3 |
|  |  |  | 15 | 2 | 16 |

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN GENERAL OCCUPATIONAL TECHNOLOGY (AAS)

The General Occupational Technology Associate degree is designed to allow students and business and industry to prescribe a course of study to meet specific needs not addressed in other curriculum offerings. Due to the flexibility of this program offering, students pursuing this degree should do so under the guidance of an academic dean working with an assigned advisor.

The following restrictions apply to the student pursuing the General Occupational Technology Associate degree:

1. Each student pursuing this degree must earn a minimum of 21 semester hours toward this degree. (These hours cannot be transferred from other earned degrees or other colleges.)
2. Students pursuing this degree should declare their intentions by designing a course of study along with their advisor that would meet their specific goals.
3. The students' declaration of intentions should demonstrate how course content will meet their specific goals.

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN GENERAL OCCUPATIONAL TECHNOLOGY (AAS)

## Course and Hour Requirements

|  |  |  |  | Hours |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Class | Lab | Credit |
| I. General Education Core |  |  |  |  |  |
| ACA | 115 | Success and Study Skills | 0 | 2 | 1 |
| A. Composition |  |  |  |  |  |
| ENG | 111 | Expository Writing | 3 | 0 | 3 |
| Select one of the following courses: |  |  |  |  |  |
| ENG | 112 | Argument-Based Literature | 3 | 0 | 3 |
| ENG | 113 | Literature-Based Research | 3 | 0 | 3 |
| ENG | 114 | Prof Research \& Reporting | 3 | 0 | 3 |
| B. Humanities/Fine Arts |  |  |  |  |  |
| COM | 231 | Public Speaking | 3 | 0 | 3 |
| Select one of the following courses: |  |  |  |  |  |
| ART | 111 | Art Appreciation | 3 | 0 | 3 |
| DRA | 111 | Theatre Appreciation | 3 | 0 | 3 |
| MUS | 110 | Music Appreciation | 3 | 0 | 3 |
| C. Social Sciences: Select one course |  |  |  |  |  |
| HIS | 111 | World Civilizations I | 3 | 0 | 3 |
| HIS | 112 | World Civilizations II | 3 | 0 | 3 |
| HIS | 131 | American History I | 3 | 0 | 3 |
| HIS | 132 | American History II | 3 | 0 | 3 |
| PSY | 150 | General Psychology | 3 | 0 | 3 |
| POL | 120 | American Government | 3 | 0 | 3 |
| POL | 220 | International Relations | 3 | 0 | 3 |
| D. Natural Sciences/Mathematics |  |  |  |  |  |
| CIS | 110 | Introduction to Computers | 2 | 2 | 3 |
| MAT | 140 | Survey of Mathematics | 3 | 0 | 3 |
| MAT | 140A | Survey of Mathematics Lab | 0 | 2 | 1 |
| II. Select 45 hours from any approved courses in the Associate in Applied Science degree. |  |  |  |  |  |

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN INDUSTRIAL MANAGEMENT TECHNOLOGY (AAS)

The Industrial Management Technology curriculum is designed to equip students with the knowledge, skills, and abilities to function effectively with staff employees, front-line leadership, and mid-level management positions in organizations. The program emphasizes team building, TQM, SPC, motivation, continuous improvement, systems, and leadership.

Course work includes the integrated study of quality and productivity improvement, production operations, management, financial analysis, problem solving, and management of resources-human, physical, and informational. Course work incorporates a broad understanding of computer applications to analyze and solve problems.

Graduates should qualify for entry level positions such as front-line supervisors, engineering assistants, production planners, inventory supervisors, or as a quality control technicians. With additional training and experience, graduates could become plant management or production managers.

Students seeking a degree must earn a grade of "C" or higher on the following courses presented for graduation:

ENG 111, Expository Writing; ENG 112, Argument-Based Research; ENG 113, Literature-Based Research or ENG 114, Professional Research \& Reporting; COM 231, Public Speaking; CIS 110, Introduction to Computers (or another approved computer course); and MAT 140, Survey of Mathematics (or another approved mathematics course). Please see Requirements for Graduation as stated in the Academic Regulations section of the Academic Bulletin \& Student Handbook.

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN INDUSTRIAL MANAGEMENT TECHNOLOGY (AAS)

Course and Hour Requirements

| Major Courses |  | Credit | General Education Courses |  | Credit |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Hours |  |  | Hours |
| ISC | 112 | 2 | ACA | 115 | 1 |
| ISC | 132 | 3 |  |  |  |
| ISC | 133 | 2 | Communications: |  |  |
| ISC | 135 | 3 | ENG | 111 | 3 |
| ISC | 136 | 3 | ENG | 112 or | 3 |
| ISC | 233 | 3 | ENG | 114 | 3 |
| ISC | 128 | 2 |  |  |  |
| MEC | 111 | 3 | COM | 231 | 3 |
| ISC | 110 | 1 |  |  |  |
| OMT | 150 | 3 | Huma | ies/Fine Arts Electiv | e: Sele |
| OMT | 155 | 3 | ART | 111 | 3 |
| ISC | 221 | 3 | ENG | 231 | 3 |
| ISC | 170 | 3 | ENG | 232 | 3 |
| CIS | 110 | 3 | ENG | 233 | 3 |
| CIS | 120 | 3 | ENG | 241 | 3 |
| CIS | 152 | 3 | ENG | 242 | 3 |
| ISC | 235 | 3 | HUM | 122 | 3 |
| BUS | 115 | 3 | HUM | 170 | 3 |
|  |  |  | HUM | 211 | 3 |
| Total M | Major Hours: |  | MUS | 110 | 3 |
|  |  |  | PHI | 210 | 3 |
|  |  |  | PHI | 240 | 3 |
|  |  |  | REL | 211 | 3 |
|  |  |  | REL | 212 | 3 |
|  |  |  | REL | 221 | 3 |
|  |  |  | Social/Behavioral Science: Select on |  |  |
|  |  |  | PSY | 150 | 3 |
|  |  |  | SOC | 210 | 3 |
|  |  |  | Natural Science/Mathematics |  |  |
|  |  |  | MAT | 161 or | 3 |
|  |  |  | MAT | 140 and | 3 |
|  |  |  | MAT | 140A | 1 |
|  |  |  | Total | neral Education Hou | rs: 19 |
|  | TOTA | L CRE | REQU | ED FOR GRADUATIO | ON: 68 |

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN INDUSTRIAL MANAGEMENT TECHNOLOGY (AAS)

Suggested Sequence of Courses


SECOND YEAR
FALL SEMESTER

| ISC | 170 | Problem Solving Skills | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| COM | 231 | Public Speaking | 3 | 0 | 3 |
| ISC | 221 | Statistical Quality Control | 3 | 0 | 3 |
| ISC | 136 | Productivity Analysis I | 2 | 3 | 3 |
| CIS | 152 | Database Concepts \& Applications | 2 | 2 | 3 |
|  |  |  | 13 | 5 | 15 |

SPRING SEMESTER

| ISC | 233 | Industrial Organization \& Mgmt | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| ISC | 235 | Management Problems | 3 | 0 | 3 |
| OMT | 155 | Meeting and Presentation Skills | 3 | 0 | 3 |
| BUS | 115 | Business Law I | 3 | 0 | 3 |
| PSY | 150 or General Psychology or | 3 | 0 | 3 |  |
| SOC | 210 | Intro to Sociology | 3 | 0 | 3 |
|  | Humanities/Fine Arts Elective |  |  |  | 3 |
|  |  | 18 | 0 | 3 |  |

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN INFORMATION SYSTEMS (AAS)

The Information Systems curriculum is designed to prepare graduates for employment with organizations that use computers to process, manage, and communicate information. This is a flexible program, designed to meet community information systems needs.

Course work includes computer systems terminology and operations, logic, operating systems, database, data communications/networking, and related business topics. Studies will provide experience for students to implement, support, and customize industry-standard information systems.

Graduates qualify for a wide variety of computer-related, entry-level positions that provide opportunities for advancement with increasing experience and ongoing training. Duties may include systems maintenance and troubleshooting, support and training, and business applications design and implementation.

Students seeking a degree must earn a grade of "C" or higher on any of the following courses presented for graduation:

ENG 111, Expository Writing; ENG 112, Argument-Based Research or ENG 114, Professional Research \& Reporting; COM 231, Public Speaking; CIS 110, Introduction to Computers (or another approved computer course); and MAT 140, Survey of Mathematics (or another approved mathematics course). Please see Requirements for Graduation as stated in the Academic Regulations section of the Academic Bulletin \& Student Handbook.

# ASSOCIATE IN APPLIED SCIENCE DEGREE IN INFORMATION SYSTEMS (AAS) 

Course and Hour Requirements

| Major Courses |  | Credit | General Education Courses |  | Credit Hours |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Hours |  |  |  |
| CIS | 110 | 3 | General Education |  |  |
| CIS | 115 | 3 | ACA | 115 | 1 |
| CIS | 130 | 3 |  |  |  |
| CIS | 152 | 3 | Communications: |  |  |
| NET | 110 | 3 | ENG | 111 | 3 |
| ACC | 120 | 4 | COM | 231 | 3 |
| CIS | 120 | 3 |  |  |  |
| CIS | 164 | 3 | Select one of the following: |  |  |
| CIS | 215 | 3 | ENG | 112 | 3 |
| CIS | 217 | 3 | ENG | 114 | 3 |
| OST | 286 | 3 |  |  |  |
| Select 17-20 hours from the |  |  | Humanities/Fine Arts Elective: Select one |  |  |
| following Major Electives: |  |  | ART | 111 | 3 |
| Information Systems (0-15 hours) |  |  | ENG | 231 | 3 |
| CIS | 145 | 3 | ENG | 232 | 3 |
| CIS | 153 | 3 | ENG | 233 | 3 |
| CIS | 169 | 2 | ENG | 241 | 3 |
| CIS | 172 | 3 | ENG | 242 | 3 |
| CIS | 216 | 2 | HUM | 122 | 3 |
| CIS | 225 | 2 | HUM | 170 | 3 |
| Networking (0-3 hours) |  |  | HUM | 211 | 3 |
| NET | 120 | 3 | MUS | 110 | 3 |
| NET | 145 | 3 | PHI | 210 | 3 |
| NET | 220 | 3 | PHI | 240 | 3 |
| Programming (0-3 hours) |  |  | REL | 211 | 3 |
| CSC | 139 | 3 | REL | 212 | 3 |
| CSC | 141 | 3 | REL | 221 | 3 |
| CSC | 148 | 3 |  |  |  |
| CSC | 160 | 3 | Socia | havioral Science: | Select one |
| General (0-4 hours) |  |  | PSY | 150 | 3 |
| ART | 171 | 3 | SOC | 210 | 3 |
| ART | 271 | 3 |  |  |  |
| BUS | 280 | 4 | Natu | Science/Mathematic |  |
| COE | 111 | 1 | MAT | 161 | 3 |
| COE | 122 | 2 |  |  |  |
|  |  |  | Total General Education Hours: 19 |  |  |
| Total Major Hours: 51-54 |  |  |  |  |  |
|  | TOTAL | CREDIT HOURS R | QUIR | FOR GRADUATION | : 70-73 |

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN INFORMATION SYSTEMS (AAS)

Suggested Sequence of Courses


## ASSOCIATE IN APPLIED SCIENCE DEGREE IN INFORMATION SYSTEMS-NETWORK ADMINISTRATION AND SUPPORT (AAS)

Network Administration and Support is a concentration under the curriculum title of Information Systems. This curriculum prepares students to install and support networks and develop strong analytical skills and extensive computer knowledge.

Course work includes extensive hands-on experience with networks. Classes cover media types, topologies, and protocols with installation and support of hardware and software, troubleshooting network and computer problems, and administrative responsibilities.

Graduates should qualify for positions such as: LAN/PC administrator, microcomputer support specialist, network control operator, communications technician/analyst, network/computer consultant, and information systems specialist. Graduates should be prepared to sit for certification exams, which can result in industry-recognized credentials.

Students seeking a degree must earn a grade of "C" or higher on any of the following courses presented for graduation:

ENG 111, Expository Writing; ENG 112, Argument-Based Research or ENG 114, Professional Research \& Reporting; COM 231, Public Speaking; CIS 110, Introduction to Computers (or another approved computer course); and MAT 140, Survey of Mathematics (or another approved mathematics course). Please see Requirements for Graduation as stated in the Academic Regulations section of the Academic Bulletin \& Student Handbook.

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN INFORMATION SYSTEMS-NETWORK ADMINISTRATION AND SUPPORT (AAS)

Course and Hour Requirements

| Major Courses | Credit <br> Hours |  |
| :--- | :---: | :---: |
| CIS | 115 | 3 |
| CIS | 130 | 3 |
| CIS | 152 | 3 |
| CIS | 110 | 3 |
| NET | 110 | 3 |
| ACC | 120 | 4 |
| CIS | 173 | 3 |
| CIS | 174 | 3 |
| CIS | 175 | 3 |
| CIS | 274 | 3 |
| CIS | 275 | 3 |
| CIS | 282 | 3 |
| CIS | 287 | 3 |
| NET | 125 | 3 |
| NET | 145 | 3 |
| CSC | 139 | 3 |
|  |  |  |
| Total Major Hours: | 49 |  |


| General Education Courses |  | Credit |
| :---: | :---: | :---: |
|  |  | Hours |
| ACA | 115 | 1 |
| Communications: |  |  |
| ENG | 111 | 3 |
| COM | 231 | 3 |
| Select one: |  |  |
| ENG | 112 or | 3 |
| ENG | 114 | 3 |
| Humanities/Fine Arts Elective: Select one |  |  |
| ART | 111 | 3 |
| ENG | 231 | 3 |
| ENG | 232 | 3 |
| ENG | 233 | 3 |
| ENG | 241 | 3 |
| ENG | 242 | 3 |
| HUM | 122 | 3 |
| HUM | 170 | 3 |
| MUS | 110 | 3 |
| PHI | 210 | 3 |
| PHI | 240 | 3 |
| REL | 211 | 3 |
| REL | 221 | 3 |
| Social/Behavioral Science: Select on |  |  |
| PSY | 150 | 3 |
| SOC | 210 | 3 |
| Natural Science/Mathematics |  |  |
| MAT | 161 | 3 |

# ASSOCIATE IN APPLIED SCIENCE DEGREE IN INFORMATION SYSTEMS-NETWORK ADMINISTRATION AND SUPPORT (AAS) 

| Suggested Sequence of Courses |  |  |  | Hours | Credit |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
|  |  |  | Class | Lab |  |
| FIRST YEAR |  |  |  |  |  |
| FALL SEMESTER |  |  |  |  |  |
| NET | 110 | Data Communications/Networking | 2 | 2 | 3 |
| ACA | 115 | Success and Study Skills | 0 | 2 | 1 |
| ENG | 111 | Expository Writing | 3 | 0 | 3 |
| CIS | 110 | Introduction to Computers | 2 | 2 | 3 |
| CIS | 152 | Database Concepts | 2 | 2 | 3 |
| CIS | 115 | Intro to Programming/Logic | 2 | 2 | 3 |
|  |  |  | 11 | 10 | 16 |
| SPRING SEMESTER |  |  |  |  |  |
| ENG | 112 | Argument-Based Research or | 3 | 0 | 3 |
| ENG | 114 | Prof Research \& Reporting | 3 | 0 | 3 |
| CIS | 130 | Survey of Operating Systems | 2 | 3 | 3 |
| ACC | 120 | Principles of Accounting I | 3 | 2 | 4 |
| CIS | 173 | Network Theory | 2 | 2 | 3 |
| NET | 125 | Routing and Switching I | 1 | 4 | 3 |
| CIS | 174 | Network System Manager I | 2 | 2 | 3 |
|  |  |  | 13 | 13 | 19 |
| SUMMER TERM |  |  |  |  |  |
| MAT | 161 | College Algebra | 3 | 0 | 3 |
| NET | 145 | Introduction to Linux | 2 | 2 | 3 |
| CIS | 175 | Network Management I | 2 | 2 | 3 |
|  |  |  | 7 | 4 | 9 |

SECOND YEAR
FALL SEMESTER

| CSC | 139 | Visual Basic Programming | 2 | 3 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| CIS | 274 | Network System Management II | 2 | 2 | 3 |
| CIS | 275 | Network Management II | 2 | 2 | 3 |
| COM | 231 | Public Speaking | 3 | 0 | 3 |
|  |  | Humanities/Fine Arts Elective | 3 | 0 | 3 |
|  |  | 12 | 7 | 15 |  |
| SPRING SEMESTER |  |  |  |  |  |
| CIS | 287 | Network Support |  |  |  |
| CIS | 282 | Network Technology | 2 | 2 | 3 |
| PSY | 150 or General Psychology or | 3 | 0 | 3 |  |
| SOC | 210 | Introduction to Sociology | 3 | 0 | 3 |
|  |  |  | 3 | 0 | 3 |

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN INTERNET TECHNOLOGIES (AAS)

Internet Technologies will train students to become professional webmasters, with great opportunities in an exciting and challenging field. Internet Technologies has all the courses necessary to create and deploy Internet technologies in the areas of Internet-related computer programming, Web page design, and Internet administration. The new program has a large number of elective courses in the major, allowing the student to gain background in Internet technologies such as graphics/multimedia, databases, or additional programming languages (Java, Visual BASIC, Visual C++).

Graduates with this two year Associate in Applied Science degree will find careers as corporate webmasters, Internet and intranet administrators, Internet applications specialists, Internet programmers, and Internet technicians. Opportunities abound in all areas of Internet technologies, which have experienced such tremendous growth in this decade. Government institutions and companies have great need for the skills taught in this curriculum. This field also offers excellent prospects for those who wish to become independent contractors or consultants.

Students seeking a degree must earn a grade of "C" or higher on any of the following courses presented for graduation:

ENG 111, Expository Writing; ENG 112, Argument-Based Research or ENG 114, Professional Research \& Reporting; COM 231, Public Speaking; CIS 110, Introduction to Computers (or another approved computer course); and MAT 140, Survey of Mathematics (or another approved mathematics course). Please see Requirements for Graduation as stated in the Academic Regulations section of the Academic Bulletin \& Student Handbook.

# ASSOCIATE IN APPLIED SCIENCE DEGREE IN INTERNET TECHNOLOGIES (AAS) 

Course and Hour Requirements

| Major Courses |  | Credit | General Education Courses |  | Credit Hours |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Hours |  |  |  |
| CIS | 110 | 3 | ACA | 115 | 1 |
| CIS | 115 | 3 |  |  |  |
| CIS | 172 | 3 | Communications: |  |  |
| NET | 110 | 3 | ENG | 111 | 3 |
| CSC | 160 | 3 | COM | 230 | 3 |
| ITN | 140 | 3 |  |  |  |
| ITN | 150 | 3 | Select one: |  |  |
| ITN | 260 | 3 | ENG | 112 | 3 |
| ITN | 285 | 3 | ENG | 114 | 3 |
| ITN | 289 | 3 |  |  |  |


|  |  |  | Humanities/Fine Arts Elective: Select one |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Select 21 hours from the following |  |  | ART | 111 | 3 |
| Major Electives: |  |  | ENG | 231 | 3 |
| Web Programming: |  |  | ENG | 232 | 3 |
| ITN | 130 | 3 | ENG | 233 | 3 |
| CSC | 139 | 3 | ENG | 241 | 3 |
| CSC | 239 | 3 | ENG | 242 | 3 |
| CSC | 148 | 3 | HUM | 122 | 3 |
| CSC | 248 | 3 | HUM | 170 | 3 |
| ITN | 170 | 3 | HUM | 211 | 3 |
| ITN | 180 | 3 | MUS | 110 | 3 |
| ITN | 230 | 3 | PHI | 210 | 3 |
| ITN | 270 | 3 | PHI | 240 | 3 |
| ITN | 280 | 3 | REL | 211 | 3 |
|  |  |  | REL | 212 | 3 |
| Design and Management: |  |  |  |  |  |
| ITN | 110 | 3 | Social/Behavioral Science: Select one |  |  |
| ITN | 120 | 3 | PSY | 150 | 3 |
| ITN | 130 | 3 | SOC | 210 | 3 |
| ITN | 160 | 3 |  |  |  |
| ITN | 210 | 3 | Natural Science/Mathematics: |  |  |
| ITN | 220 | 3 | MAT | 161 | 3 |
| ITN | 230 | 3 |  |  |  |
| ITN | 240 | 3 | Total | eral | urs: 19 |
| ITN | 250 | 3 |  |  |  |

[^4]
## ASSOCIATE IN APPLIED SCIENCE DEGREE IN INTERNET TECHNOLOGIES (AAS)

| Suggested Sequence of Courses |  |  |  | Hours <br> Lab | Credit |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Class |  |  |
| FIRST YEAR |  |  |  |  |  |
| FALL SEMESTER |  |  |  |  |  |
| CIS | 110 | Introduction to Computers | 2 | 2 | 3 |
| ACA | 115 | Success and Study Skills | 0 | 2 | 1 |
| ENG | 111 | Expository Writing | 3 | 0 | 3 |
| CIS | 115 | Intro to Programming/Logic | 2 | 2 | 3 |
| CIS | 172 | Introduction to Internet | 2 | 3 | 3 |
|  |  | Humanities/Fine Arts Selection | 3 | 0 | 3 |
|  |  |  | 12 | 9 | 16 |
| SPRING SEMESTER |  |  |  |  |  |
| ENG | 112 | Argument-Based Research or | 3 | 0 | 3 |
| ENG | 114 | Prof Research \& Reporting | 3 | 0 | 3 |
| COM | 231 | Public Speaking | 3 | 0 | 3 |
| CSC | 160 | Intro to Internet Programming | 2 | 3 | 3 |
| NET | 110 | Data Communications/Networking | 2 | 3 | 3 |
| MAT | 161 | College Algebra | 3 | 0 | 3 |
| PSY | 150 | r General Psychology or | 3 | 0 | 3 |
| SOC | 210 | Introduction to Sociology | 3 | 0 | 3 |
|  |  |  | 16 | 6 | 18 |
| SUMMER TERM |  |  |  |  |  |
| ITN | 140 | Web Development Tools | 2 | 2 | 3 |
|  |  | Major Elective | 2 | 2 | 3 |
|  |  | Major Elective | 2 | 2 | 3 |
|  |  |  | 6 | 6 | 9 |
| SECOND YEAR |  |  |  |  |  |
| FALL SEMESTER |  |  |  |  |  |
|  | 150 | Internet Protocols | 2 | 2 | 3 |
|  |  | Major Elective | 2 | 2 | 3 |
|  |  | Major Elective | 2 | 2 | 3 |
|  |  | Major Elective | 2 | 2 | 3 |
|  |  | Major Elective | 2 | 2 | 3 |
|  |  |  | 10 | 10 | 15 |
| SPRING SEMESTER |  |  |  |  |  |
| ITN | 260 | Introduction to E-Commerce | 2 | 2 | 3 |
|  |  | Major Elective |  |  | 3 |
|  |  | Major Elective |  |  | 3 |
|  |  | Major Elective |  |  | 3 |
|  |  |  |  |  | 12 |

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN MECHANICAL DRAFTING TECHNOLOGY (AAS)

The Mechanical Drafting Technology curriculum prepares technicians to produce drawings of mechanical parts, components of mechanical systems, and mechanisms. CAD (Computer Assisted Drafting) and the importance of technically correct drawings and designs based on current standards are emphasized.

Course work includes mechanical drafting, CAD, and proper drawing documentation. Concepts such as machine shop processes, basic materials, and physical sciences as they relate to the design processes are also included. The use of proper dimensioning and tolerance techniques is stressed.

Graduates qualify for employment in mechanical areas such as manufacturing, fabrication, research and development, and service industries.

Students seeking a degree must earn a grade of "C" or higher on any of the following courses presented for graduation:

ENG 111, Expository Writing; ENG 112, Argument-Based Research or ENG 113, Literature-Based Research or ENG 114, Professional Research \& Reporting; COM 231, Public Speaking; CIS 110, Introduction to Computers (or another approved computer course); and MAT 140, Survey of Mathematics (or another approved mathematics course). Please see Requirements for Graduation as stated in the Academic Regulations section of the Academic Bulletin \& Student Handbook.

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN MECHANICAL DRAFTING TECHNOLOGY (AAS)

Course and Hour Requirements


## ASSOCIATE IN APPLIED SCIENCE DEGREE IN MECHANICAL DRAFTING TECHNOLOGY (AAS)

| Suggested Sequence of Courses |  |  |  | Hours | Credit |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
|  |  |  | Class | Lab |  |
| FIRST YEAR |  |  |  |  |  |
| FALL SEMESTER |  |  |  |  |  |
| DFT | 111 | Technical Drafting I | 1 | 3 | 2 |
| DFT | 151 | CAD I | 2 | 3 | 3 |
| CIS | 110 | Introduction to Computers | 2 | 3 | 3 |
| ACA | 115 | Success and Study Skills | 0 | 2 | 1 |
| ENG | 111 | Expository Writing | 3 | 0 | 3 |
| MAT | 161 | College Algebra | 3 | 0 | 3 |
|  |  |  | 11 | 11 | 15 |
| SPRING SEMESTER |  |  |  |  |  |
| DFT | 112 | Technical Drafting II | 1 | 3 | 2 |
| DFT | 152 | CAD II | 2 | 3 | 3 |
| MAT | 162 | College Trigonometry | 3 | 0 | 3 |
| ENG | 112 | r Argument-Based Research or | 3 | 0 | 3 |
| ENG | 113 | Literature-Based Research or | 3 | 0 | 3 |
| ENG | 114 | Prof Research and Reporting | 3 | 0 | 3 |
|  |  | Technical Elective |  |  | 3 |
|  |  |  |  |  | 14 |
| SUMMER TERM |  |  |  |  |  |
| DFT | 153 | CAD III | 2 | 3 | 3 |
| DFT | 121 | Intro GD \& T | 1 | 2 | 2 |
| MEC | 110 | Intro to CAD/CAM | 1 | 2 | 2 |
|  |  |  | 4 | 7 | 7 |
| SECOND YEAR |  |  |  |  |  |
| FALL SEMESTER |  |  |  |  |  |
| MEC | 161 | Manufacturing Processes I | 3 | 0 | 3 |
| DDF | 252 | Solid Models/Ren | 3 | 2 | 4 |
| HYD | 110 | Hydraulics and Pneumatics | 2 | 3 | 3 |
| CIS | 120 | Spreadsheets I | 2 | 2 | 3 |
|  |  | Technical Elective |  |  | 2 |
|  |  | Arts/Humanities Elective |  |  | 3 |
|  |  |  |  |  | 18 |
| SPRING SEMESTER |  |  |  |  |  |
| DFT | 218 | Industrial Systems Sch | 1 | 2 | 2 |
| DFT | 231 | Jig \& Fixture Design | 1 | 2 | 2 |
| COM | 231 | Public Speaking | 3 | 0 | 3 |
| ISC | 255 | Engineering Economy | 2 | 2 | 3 |
|  |  | Social/Behavioral Science Elective | 3 | 0 | 3 |
|  |  | Technical Elective |  |  | 2 |
|  |  |  |  |  | 15 |
| SUMMER TERM |  |  |  |  |  |
| DDF | 221 | Design Dft Project | 0 | 4 | 2 |

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN MEDICAL OFFICE ADMINISTRATION (AAS)

This curriculum prepares individuals for employment in medical and other healthcare related offices.

Course work will include medical terminology; information systems; office management; medical coding, billing, and insurance; legal and ethical issues; and formatting and processing. Students will learn administrative and support functions and develop skills applicable in medical environments.

Employment opportunities are available in medical and dental offices, hospitals, insurance companies, laboratories, medical supply companies, and other healthcare related organizations.

Students seeking a degree must earn a grade of "C" or higher on any of the following courses presented for graduation:

ENG 111, Expository Writing; ENG 112, Argument-Based Research or ENG 113, Literature-Based Research or ENG 114, Professional Research \& Reporting; COM 231, Public Speaking; CIS 110, Introduction to Computers (or another approved computer course); and MAT 140, Survey of Mathematics (or another approved mathematics course). Please see Requirements for Graduation as stated in the Academic Regulations section of the Academic Bulletin \& Student Handbook.

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN MEDICAL OFFICE ADMINISTRATION (AAS)

Course and Hour Requirements

| Major Courses |  | Credit | General Education Courses |  | Credit |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Hours |  |  | Hours |
| OST | 131 | 2 | ACA | 115 | 1 |
| OST | 134 | 3 | Communications: |  |  |
| OST | 136 | 2 | COM | 231 | 3 |
| OST | 164 | 3 | ENG | 111 | 3 |
| OST | 132 | 2 | Select one of the following courses: |  |  |
| OST | 286 | 3 | ENG | 112 or | 3 |
| OST | 148 | 3 | ENG | 113 or | 3 |
| OST | 241 | 2 | ENG | 114 | 3 |
| OST | 243 | 3 |  |  |  |
| OST | 149 | 3 | Humanities/Fine Arts Elective: Select one |  |  |
| MED | 121 | 3 | ART | 111 | 3 |
| MED | 122 | 3 | ENG | 231 | 3 |
| OST | 135 | 4 | ENG | 232 | 3 |
| BUS | 121 | 3 | ENG | 233 | 3 |
| OST | 184 | 2 | ENG | 241 | 3 |
| OST | 242 | 2 | ENG | 242 | 3 |
| ACC | 120 | 4 | HUM | 122 | 3 |
|  |  |  | HUM | 170 | 3 |
| Select one: |  |  | HUM | 211 | 3 |
| CIS | 110 | 3 | mus | 110 | 3 |
| OST | 137 | 2 | PHI | 210 | 3 |
|  |  |  | PHI | 240 | 3 |
| Select 2-3 hours Major Elective: |  |  | REL | 211 | 3 |
| COE | 111 | 1 | REL | 212 | 3 |
| COE | 112 | 2 | REL | 221 | 3 |
| COE | 121 | 1 |  |  |  |
| COE | 122 | 2 | Social/Behavioral Science Elective:Select one |  |  |
| CIS | 120 | 3 | PSY | 150 | 3 |
| OST | 233 | 3 | SOC | 210 | 3 |
| OST | 236 | 3 | SOC | 213 | 3 |
| OST | 181 | 3 | SOC | 225 | 3 |
| OST | 289 | 3 |  |  |  |
|  |  |  | Natural Science/Mathematics |  |  |
| Total | Major Hours | s: 51-53 | MAT | 161 or | 3 |
|  |  |  | MAT | 140 and | 3 |
|  |  |  | MAT | 140A | 1 |
|  |  |  | Total General Education Hours: 19-20 |  |  |
|  | TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 70-73 |  |  |  |  |

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN MEDICAL OFFICE ADMINISTRATION (AAS)

| Suggested Sequence of Courses |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Hours |  |
|  |  |  | Class | Lab | Credit |
| FIRST YEAR |  |  |  |  |  |
| FALL SEMESTER |  |  |  |  |  |
| ACA | 115 | Success and Study Skills | 0 | 2 | 1 |
| ENG | 111 | Expository Writing | 3 | 0 | 3 |
| OST | 131 | Keyboarding | 1 | 2 | 2 |
| BUS | 121 | Business Mathematics | 2 | 2 | 3 |
| MED | 121 | Medical Terminology I | 3 | 0 | 3 |
| OST | 184 | Records Management | 1 | 2 | 2 |
| OST | 164 | Text Editing Applications | 3 | 0 | 3 |
|  |  |  | 13 | 8 | 17 |
| SPRING SEMESTER |  |  |  |  |  |
| OST | 132 | Keyboard Skill Building | 1 | 2 | 2 |
| OST | 134 | Text Entry and Formatting | 2 | 2 | 3 |
| MED | 122 | Medical Terminology II | 3 | 0 | 3 |
| ENG | 112 or | Argument-Based Research or | 3 | 0 | 3 |
| ENG | 113 or | Literature-Based Research or | 3 | 0 | 3 |
| ENG | 114 | Prof Research \& Reporting | 3 | 0 | 3 |
| CIS | 110 | Introduction to Computers or | 2 | 2 | 3 |
| OST | 137 | Office Systems Applications | 1 | 2 | 2 |
| MAT | 161 o | r College Algebra or | 3 | 0 | 3 |
| MAT | 140 | Survey of Mathematics and | 3 | 0 | 3 |
| MAT | 140A | Survey of Mathematics Lab | 0 | 2 | 1 |
|  |  | Social/Behavioral Science Elective | 3 | 0 | 3 |
|  |  |  | 16-17 | 6-8 | 19-21 |
| SECOND YEAR |  |  |  |  |  |
| FALL SEMESTER |  |  |  |  |  |
| OST | 135 | Advanced Text Entry \& Format | 3 | 2 | 4 |
| ACC | 120 | Principles of Financial Accounting | 3 | 2 | 4 |
| COM | 231 | Public Speaking | 3 | 0 | 3 |
| OST | 241 | Medical Office Transcription I | 1 | 2 | 2 |
| OST | 136 | Word Processing | 1 | 2 | 2 |
| OST | 148 | Medical Coding, Billing, \& Insurance | 3 | 0 | 3 |
|  |  |  | 14 | 8 | 18 |
| SPRING SEMESTER |  |  |  |  |  |
| OST | 242 | Medical Office Transcription II | 1 | 2 | 2 |
| OST | 286 | Professional Development | 3 | 0 | 3 |
| OST | 243 | Medical Office Simulation | 2 | 2 | 3 |
| OST | 149 | Medical Legal Issues | 3 | 0 | 3 |
|  |  | Major Elective |  |  | 2-3 |
|  |  | Humanities/Fine Arts Elective | 3 | 0 | 3 |
|  |  |  | 12 | 4 | 16-17 |

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN NETWORKING TECHNOLOGY (AAS)

The Networking Technology curriculum prepares individuals for employment supporting local- and wide-area networks. Students will learn how to use technologies to provide for data, voice, image, and video communications in business, industry, and education.

Course work includes design, installation, configuration, and management of local- and wide-area network hardware and software. Emphasis is placed on developing proficiency in the use of network management software and the use of hardware such as bridges and routers.

Graduates may find employment in entry-level jobs as local area network managers, network operators, network analysts, and network technicians. Graduates may also be qualified to take certification examinations for various network products, depending on the local program.

Students seeking a degree must earn a grade of "C" or higher on any of the following courses presented for graduation:

ENG 111, Expository Writing; ENG 112, Argument-Based Research or ENG 114, Professional Research \& Reporting; COM 231, Public Speaking; CIS 110, Introduction to Computers (or another approved computer course); and MAT140, Survey of Mathematics (or another approved mathematics course). Please see Requirements for Graduation as stated in the Academic Regulations sections of the Academic Bulletin \& Student Handbook.

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN NETWORKING TECHNOLOGY (AAS)

Course and Hour Requirements


# ASSOCIATE IN APPLIED SCIENCE DEGREE IN NETWORKING TECHNOLOGY (AAS) 

| Suggested Sequence of Courses |  |  |  | Hours Lab | Credit |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Class |  |  |
| FIRST YEAR |  |  |  |  |  |
| FALL SEMESTER |  |  |  |  |  |
| NET | 110 | Data Communications/Networking | 2 | 2 | 3 |
| ACA | 115 | Success and Study Skills | 0 | 2 | 1 |
| ENG | 111 | Expository Writing | 3 | 0 | 3 |
| CIS | 115 | Introduction to Programming \& Logic | 2 | 2 | 3 |
| CIS | 152 | Database Concepts | 2 | 2 | 3 |
| CIS | 215 | Hardware Installation/Maintenance | 2 | 3 | 3 |
|  |  |  | 11 | 11 | 16 |
| SPRING SEMESTER |  |  |  |  |  |
| ENG | 112 | Argument-Based Research or | 3 | 0 | 3 |
| ENG | 114 | Prof Research \& Reporting | 3 | 0 | 3 |
| COM | 231 | Public Speaking | 3 | 0 | 3 |
| NET | 120 | Network Installation/Administration I | 2 | 2 | 3 |
| NET | 125 | Routing and Switching I | 1 | 4 | 3 |
| CIS | 145 | Operating Systems-Single | 2 | 2 | 3 |
|  |  | Programming Elective | 2 | 3 | 3 |
|  |  |  | 13 | 11 | 18 |
| SUMMER TERM |  |  |  |  |  |
| MAT | 161 | College Algebra | 3 | 0 | 3 |
| NET | 145 | Introduction to Linux | 2 | 2 | 3 |
| NET | 220 | Network Installation/Administration II | 2 | 3 | 3 |
|  |  |  | 7 | 5 | 9 |

## SECOND YEAR <br> FALL SEMESTER

| NET | 250 | Advanced Networks I | 2 | 2 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| NET | 260 | Internet Development \& Support | 3 | 0 | 3 |
| NET | 240 | Network Design | 3 | 0 | 3 |
|  |  | Network Elective | 2 | 2 | 3 |
|  |  | Humanities/Fine Arts Elective | 3 | 0 | 3 |
|  |  | 13 | 4 | 15 |  |
| SPRING SEMESTER |  |  |  |  |  |
| NET | 280 | Networking Project |  |  |  |
| NET | 251 | Advanced Networks II | 1 | 4 | 3 |
| NET | $230 \quad$ Wide Area Networking | 2 | 2 | 3 |  |
| PSY | 150 or General Psychology or | 2 | 2 | 3 |  |
| SOC | 210 | Introduction to Sociology | 3 | 0 | 3 |
|  |  |  | 3 | 0 | 3 |

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN OFFICE SYSTEMS TECHNOLOGY (AAS)

The Office Systems Technology curriculum prepares individuals for positions in administrative support careers. It equips office professionals to respond to the demands of a dynamic computerized workplace.

Students will complete courses designed to develop proficiency in the use of integrated software, oral and written communication, analysis and coordination of office duties and systems, and other support topics. Emphasis is placed on nontechnical as well as technical skills.

Graduates qualify for employment in a variety of positions in business, government, and industry. Job classifications range from entry-level to supervisor to middle management.

Students seeking a degree must earn a grade of "C" or higher on the following courses presented for graduation:

ENG 111, Expository Writing; ENG 112, Argument-Based Research or ENG 113, Literature-Based Research or ENG 114, Professional Research \& Reporting; COM 231, Public Speaking; CIS 110, Introduction to Computers (or another approved computer course); and MAT 140, Survey of Mathematics (or another approved mathematics course). Please see Requirements for Graduation as stated in the Academic Regulations section of the Academic Bulletin and Student Handbook.

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN OFFICE SYSTEMS TECHNOLOGY (AAS)

Course and Hour Requirements


## ASSOCIATE IN APPLIED SCIENCE DEGREE IN OFFICE SYSTEMS TECHNOLOGY (AAS)

Suggested Sequence of Courses


## ASSOCIATE IN APPLIED SCIENCE DEGREE IN OFFICE SYSTEMS TECHNOLOGY/LEGAL (AAS)

Legal is a concentration under the curriculum title of Office Systems Technology. This curriculum prepares individuals for entry-level positions in legal or governmentrelated offices and provides professional development for the currently employed.

Course work includes terminology, operational procedures, preparation and transcription of documents, computer software, and court-related functions as they relate to the legal office profession. Emphasis is placed on the development of accuracy, organizational skills, discretion, and professionalism.

Graduates should qualify for employment in corporate legal departments; private practices, including real estate and estate planning; and city, state, and federal government offices. With appropriate work experience, graduates may apply for certification as a Professional Legal Secretary (PLS).

Students seeking a degree must earn a grade of "C" or higher on the following courses presented for graduation:

ENG 111, Expository Writing; ENG 112, Argument-Based Research or ENG 113, Literature-Based Research or ENG 114, Professional Research \& Reporting; COM 231, Public Speaking; CIS 110, Introduction to Computers (or another approved computer course); and MAT 140, Survey of Mathematics (or another approved mathematics course). Please see Requirements for Graduation as stated in the Academic Regulations section of the Academic Bulleting \& Student Handbook.

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN OFFICE SYSTEMS TECHNOLOGY/LEGAL (AAS)

Course and Hour Requirements

| Major Courses |  | Credit | General Education Courses |  | Credit |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Hours |  |  | Hours |
| OST | 131 | 2 | ACA | 115 | 1 |
| OST | 164 | 3 |  |  |  |
| OST | 155 | 3 | Comm | ications: |  |
| BUS | 115 | 3 | ENG | 111 | 3 |
| OST | 184 | 2 | COM | 231 | 3 |
| OST | 134 | 3 | ENG | 114 | 3 |
| ACC | 120 | 4 |  |  |  |
| BUS | 116 | 3 | Huma | ies/Fine Arts Electiv | : Select one |
| OST | 181 | 3 | ART | 111 | 3 |
| OST | 286 | 3 | ENG | 231 | 3 |
| OST | 136 | 2 | ENG | 232 | 3 |
| OST | 251 | 3 | ENG | 233 | 3 |
| OST | 132 | 2 | ENG | 241 | 3 |
| BUS | 121 | 3 | ENG | 242 | 3 |
| OST | 156 | 3 | HUM | 122 | 3 |
| OST | 252 | 3 | HUM | 170 | 3 |
| OST | 159 | 2 | MUS | 110 | 3 |
|  |  |  | PHI | 210 | 3 |
| Select one: |  |  | PHI | 240 | 3 |
| CIS | 110 | 3 | REL | 211 | 3 |
| OST | 137 | 2 | REL | 212 | 3 |
|  |  |  | REL | 221 | 3 |

Select 2-3 hours Major Electives:

| COE | 111 | 1 |
| :--- | :--- | :--- |
| COE | 112 | 2 |
| COE | 121 | 1 |
| COE | 122 | 2 |
| OST | 233 | 3 |
| OST | 236 | 3 |
| CIS | 120 | 3 |
| OST | 289 | 3 |
| OST | 122 | 2 |

Total Major Hours: 51-53

| Social/Behavioral Science Elective: Select one |  |  |
| :--- | :--- | :--- |
| PSY | 150 | 3 |
| SOC | 210 | 3 |
| SOC | 213 | 3 |
| SOC | 225 | 3 |
|  |  |  |
| Natural | Science/Mathematics: | Select one |
| MAT | $140 / 140$ A | 4 |
| MAT | 161 | 3 |

Total General Education Hours: 19-20

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN OFFICE SYSTEMS TECHNOLOGY/LEGAL (AAS)

| Suggested Sequence of Courses |  |  |  | Hours | Credit |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
|  |  |  | Class | Lab |  |
| FIRST YEAR |  |  |  |  |  |
| FALL SEMESTER |  |  |  |  |  |
| OST | 131 | Keyboarding | 1 | 2 | 2 |
| BUS | 121 | Business Math | 2 | 2 | 3 |
| OST | 184 | Records Management | 1 | 2 | 2 |
| ACA | 115 | Success and Study Skills | 0 | 2 | 1 |
| OST | 164 | Text Editing Applications | 3 | 0 | 3 |
| OST | 155 | Legal Terminology | 3 | 0 | 3 |
| BUS | 115 | Business Law I | 3 | 0 | 3 |
|  |  |  | 13 | 8 | 17 |
| SPRING SEMESTER |  |  |  |  |  |
| OST | 134 | Text Entry \& Formatting | 2 | 2 | 3 |
| ENG | 111 | Expository Writing | 3 | 0 | 3 |
| CIS | 110 | Introduction to Computers or | 2 | 2 | 3 |
| OST | 137 | Office Software Applications | 1 | 2 | 2 |
| MAT | 140 | Survey of Mathematics | 3 | 0 | 3 |
| MAT | 140A | Survey of Mathematics Lab | 0 | 2 |  |
| MAT | 161 | College Algebra | 3 | 0 | 3 |
| BUS | 116 | Business Law II | 3 | 0 | 3 |
| OST | 132 | Keyboard Skill Building | 1 | 2 | 2 |
|  |  | Humanities/Fine Arts Elective | 3 | 0 | 3 |
|  |  |  | 16-17 | 8-10 | 19-21 |

## SECOND YEAR

FALL SEMESTER

| OST | 181 | Introduction to Office Systems | 2 | 2 | 3 |
| :--- | :--- | :--- | :--- | :---: | :---: |
| OST | 286 | Professional Development | 3 | 0 | 3 |
| OST | 136 | Word Processing | 1 | 2 | 2 |
| OST | 251 | Legal Document Formatting | 2 | 2 | 3 |
| ENG | 112 | Argument-Based Research or | 3 | 0 | 3 |
| ENG | 113 | Literature-Based Research or | 3 | 0 | 3 |
| ENG | 114 | Prof Research and Report | 3 | 0 | 3 |
| ACC | 120 | Principles of Financial Accounting | 3 | 2 | 4 |
|  |  | 14 | 8 | 18 |  |
| SPRING SEMESTER |  |  |  |  |  |
| OST | 156 | Legal Office Procedures | 2 | 2 | 3 |
| OST | 252 | Legal Transcription I | 2 | 2 | 3 |
| COM | 231 | Public Speaking | 3 | 0 | 3 |
| BUS | 159 | Legal Business Ethics | 2 | 0 | 2 |
|  |  | Social/Behavioral Science Elective | 3 | 0 | 3 |
|  |  | Major Elective |  |  | $2-3$ |
|  |  |  | $16-17$ |  |  |

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN RADIOGRAPHY (AAS)

The Radiography curriculum prepares the graduate to be a radiographer, a skilled health care professional who uses radiation to produce images of the human body.

Course work includes clinical rotations to area health care facilities, radiographic exposure, image processing, radiographic procedures, physics, pathology, patient care and management, radiation protection, quality assurance, anatomy and physiology, and radiobiology.

Graduates of accredited programs are eligible to apply to take the American Registry of Radiologic Technologists' national examination for certification and registration as medical radiographers. Graduates may be employed in hospitals, clinics, physicians' offices, medical laboratories, government agencies, and industry.

Students seeking a degree must earn a grade of "C" or higher on each of the following courses presented for graduation:

ENG 111, Expository Writing; COM 231, Public Speaking; CIS 110, Introduction to Computers (or another approved computer course); and MAT 161, College Algebra (or another approved mathematics course).
Please see Requirements for Graduation as stated in the Academic
Regulations section of the Academic Bulletin \& Student Handbook.

## ADMISSION AND PROGRAM REQUIREMENTS

Radiography courses required to meet graduation requirements in this program are offered during daytime hours.

Graduates of this program will be awarded the Associate in Applied Science degree in Radiography.

## ADMISSION PROCESS

All materials must be sent to the Admissions Office of the College by the deadline date. The following requirements must be met before applicants will be considered for admission to the Radiography program.

1. Complete application.
2. Provide official high school transcript or GED scores.
3. Submit an official transcript (s) from all colleges attended. Each transcript must reflect a 2.0 cumulative grade point average on courses accepted for transfer credit.
4. Submit three (3) references (not relatives or close friends), for example: teachers, employers, guidance counselors. References that are not more than two years old at the time of the general admission requirement deadline will be acceptable. (Applicants must use forms provided.)
5. Complete placement tests which will be administered at the College. Applicants will be informed of the time and place for the tests. The placement tests consist of reading, English/writing skills, numerical skills
and algebra (4 tests).
6. Complete all developmental courses with a grade of " C " or higher required as a result of placement tests.
7. Complete ACA 115 (Success and Study Skills) with a grade of "C" or higher.

The student is responsible for making sure that these requirements have been met and that all materials have been received by the Admissions Office. Admission requirements currently in effect must be completed.

Completion of these requirements will not guarantee admission to the program.

## SELECTION PROCESS

1. All seven general admission requirements must be met.
2. If notified by the Admissions Office, eligible applicants report for the PSB Aptitude Examination. The health form will be provided with the letter of notification for the PSB examination. There is a fee for the Aptitude test.
3. If indicated, an interview will be scheduled with an admissions counselor and the Radiography Program Director.
4. Final selection for admission is based on a review of the candidate's academic record, test results, interview responses and favorable results of physical and emotional examinations. Examination forms are provided by the College. Written notification of conditional acceptance will be sent by the Admissions Office.
5. Notification of final acceptance will be sent by the Admissions Office after successful completion of all orientation requirements. (Orientation requirements include clinical site visitations; successful completion of task form; and signing off on Radiography Student Handbook after review of procedures and policies.)

All students accepted into the Radiography program are required to have accident and malpractice insurance.

All students must provide proof of cardiopulmonary resuscitation (CPR) certification on the first day of class, fall semester.

Required Courses: Students may take general/related (non-Radiography) courses before acceptance into the program. Completion of these courses will help prepare but not guarantee admission into the program.

Persons admitted to the Radiography program are eligible to take the American Registry of Radiologic Technology (ARRT) Examination.

Enrollment in the Radiography program is limited. Applicants are advised to apply early.

All applications for admission must be updated annually. If one has applied previously, he or she must initiate the process again, including the PSB Aptitude Exam retesting.

If there are any questions, contact the Admissions Office at Cleveland Community College.

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN RADIOGRAPHY (AAS)

Course and Hour Requirements

| Major Courses |  | Credit | General Education Courses |  | Credit |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Hours |  |  | Hours |
| RAD | 110 | 3 | Communications: |  |  |
| RAD | 111 | 4 | ENG | 111 | 3 |
| RAD | 112 | 4 | COM | 231 | 3 |
| RAD | 121 | 3 |  |  |  |
| RAD | 122 | 2 | Hum | es/Fine Arts Electiv | : Sele |
| RAD | 131 | 2 | ART | 111 | 3 |
| RAD | 151 | 2 | ENG | 231 | 3 |
| RAD | 161 | 5 | ENG | 232 | 3 |
| RAD | 171 | 4 | ENG | 233 | 3 |
| RAD | 211 | 3 | ENG | 241 | 3 |
| RAD | 231 | 2 | ENG | 242 | 3 |
| RAD | 241 | 2 | HUM | 122 | 3 |
| RAD | 245 | 3 | HUM | 170 | 3 |
| RAD | 251 | 7 | HUM | 211 | 3 |
| RAD | 261 | 7 | MUS | 110 | 3 |
|  |  |  | PHI | 210 | 3 |
| Choose from the following: |  |  | PHI | 240 | 3 |
| BIO | 163 | 5 | REL | 211 | 3 |
| *BIO | 166 | 4 | REL | 212 | 3 |
|  |  |  | REL | 221 | 3 |
| *BIO <br> BIO | 165 is a prerequisite to |  |  |  |  |
|  | 166. |  | Socia | havioral Science Elect | ive: Sele |
|  |  |  | SOC | 210 | 3 |
| Total | Major Hours | : 57-58 | PSY | 150 | 3 |
|  |  |  | Natural Science/Mathematics |  |  |
|  |  |  | MAT | $161$ | 3 |
|  |  |  | Total | neral Education Hour | rs: 15 |
|  |  |  | Othe | quired Courses |  |
|  |  |  | CIS | 110 | 3 |
|  |  |  | Total | er Required Hours: | 3 |

# ASSOCIATE IN APPLIED SCIENCE DEGREE IN RADIOGRAPHY (AAS) 

| Suggested Sequence of Courses |  |  |  | Hours | Credit |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
|  |  |  | Class | Lab |  |
| FIRST YEAR |  |  |  |  |  |
| FALL SEMESTER |  |  |  |  |  |
| RAD | 110 | Radiography Intro \& Patient Care | 2 | 3 | 3 |
| RAD | 111 | Radiographic Procedures I | 3 | 3 | 4 |
| RAD | 151 | Radiographic Clinical Education I | 0 | 6 | 2 |
| BIO | 163 | Basic Anatomy and Physiology or | 4 | 2 | 5 |
| *BIO | 166 | Anatomy and Physiology II | 3 | 3 | 4 |
| ENG | 111 | Expository Writing | 3 | 0 | 3 |
|  |  |  | 12 | 14 | 16-17 |
| SPRING SEMESTER |  |  |  |  |  |
| RAD | 112 | Radiographic Procedures II | 3 | 3 | 4 |
| RAD | 121 | Radiographic Imaging I | 2 | 3 | 3 |
| RAD | 161 | Radiographic Clinical Education II | 0 | 15 | 5 |
| CIS | 110 | Intro to Computers | 2 | 2 | 3 |
| COM | 231 | Public Speaking | 3 | 0 | 3 |
|  |  |  | 10 | 23 | 18 |
| SUMMER TERM |  |  |  |  |  |
| RAD | 122 | Radiographic Imaging II | 1 | 3 | 2 |
| RAD | 131 | Radiographic Physics I | 1 | 3 | 2 |
| RAD | 171 | Radiographic Clinical Education III | 0 | 12 | 4 |
| MAT | 161 | College Algebra | 3 | 0 | 3 |
|  |  |  | 5 | 18 | 11 |
| SECOND YEAR |  |  |  |  |  |
| FALL SEMESTER |  |  |  |  |  |
| RAD | 251 | Radiographic Clinical Education IV | 0 | 21 | 7 |
| RAD | 211 | Radiographic Procedures III | 2 | 3 | 3 |
| RAD | 231 | Radiographic Physics II | 1 | 3 | 2 |
| RAD | 241 | Radiographic Protection | 2 | 0 | 2 |
|  |  | Social/Behavioral Science Elective | 3 | 0 | 3 |
|  |  |  | 8 | 27 | 17 |
| SPRING SEMESTER |  |  |  |  |  |
| RAD | 245 | Radiographic Analysis | 2 | 3 | 3 |
| RAD | 261 | Radiographic Clinical Education V | 0 | 21 | 7 |
|  |  | Humanities/Fine Art Elective | 3 | 0 | 3 |
|  |  |  | 5 | 24 | 13 |

# ONE-YEAR DIPLOMA PROGRAMS 

## DIPLOMA <br> AIR CONDITIONING, HEATING AND REFRIGERATION TECHNOLOGY

The Air Conditioning, Heating, and Refrigeration Technology curriculum provides the basic knowledge to develop skills necessary to work with residential and light commercial systems.

Topics include mechanical refrigeration, heating and cooling theory, electricity, controls, and safety. The diploma program covers air conditioning, furnaces, heat pumps, tools and instruments. In addition, the program covers residential building codes, residential system sizing, and advanced comfort systems.

Diploma graduates may be able to assist in the start up, preventive maintenance, service, repair, and/or installation or residential and light commercial systems. Diploma graduates should be able to demonstrate an understanding of system selection and balance and advanced systems.

## DIPLOMA <br> AIR CONDITIONING, HEATING AND REFRIGERATION TECHNOLOGY

 Course and Hour Requirements\(\left.$$
\begin{array}{lcll}\text { Major Courses } & \begin{array}{l}\text { Credit } \\
\text { Hours }\end{array} & \text { General Education Courses } & \begin{array}{c}\text { Credit } \\
\text { Hours }\end{array}
$$ <br>

AHR \& 110 \& 5 \& Communications:\end{array}\right]\)| AHR | 112 |
| :--- | :--- |

## DIPLOMA <br> AIR CONDITIONING, HEATING AND REFRIGERATION TECHNOLOGY

## Suggested Sequence of Courses <br> Day Sequence



## DIPLOMA <br> AIR CONDITIONING, HEATING AND REFRIGERATION TECHNOLOGY

## Suggested Sequence of Courses Night Sequence



## DIPLOMA AUTO BODY REPAIR

The Auto Body Repair curriculum provides training in the use of equipment and materials of the auto body repair trade. The student studies the construction of the automobile body and techniques of auto body repairing, rebuilding, and refinishing.

Course work includes auto body fundamentals, industry, overview, and safety. Students will perform hands-on repairs in the areas of non-structural repairs, MIG welding, plastics and adhesives, refinishing, and other related areas.

Graduates of the curriculum qualify for entry-level employment opportunities in the automotive body and refinishing industry. Graduates may find employment with franchised independent garages, or they may become self-employed.

## DIPLOMA <br> AUTO BODY REPAIR

## Course and Hour Requirements

| Major Courses | Credit <br> Hours | General Education Courses |  |  |
| :--- | :---: | :--- | :--- | :--- | | Credit |
| :---: |
| Hours |

[^5]TOTAL SEMESTER HOURS: 40-42

## DIPLOMA AUTO BODY REPAIR

## Suggested Sequence of Courses <br> Day Sequence



## DIPLOMA <br> AUTO BODY REPAIR

## Suggested Sequence of Course <br> Night Sequence



SUMMER TERM

| AUB | 114 | Special Finishes | 1 | 2 | 2 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| AUB | 162 | Autobody Estimating | 1 | 2 | 2 |
|  |  | 2 | 4 | 4 |  |

## SECOND YEAR

FALL SEMESTER

| AUB | 131 | Structural Damage I | 2 | 4 | 4 |
| :--- | :--- | :--- | :---: | :---: | :---: |
| AUB | 134 | Autobody MIG Welding | 1 | 4 | 3 |
| MAT | 101 | Applied Mathematics | 2 | 2 | 3 |
|  |  |  | 5 | 10 | 10 |

SPRING SEMESTER
AUB 132 Structural Damage II

| 2 | 6 | 4 |
| :--- | :--- | :--- |
| 3 | 0 | 3 |
| 5 | 6 | 7 |

## SUMMER TERM

$\begin{array}{llllll}\text { AUB } 136 \text { Plastics and Adhesives } & 1 & 4 & 3\end{array}$

## DIPLOMA BROADCASTING AND PRODUCTION TECHNOLOGY

Students enrolled in the Broadcasting and Production Technology curriculum will develop professional skills in radio, television, audio, video, and related applications.

Training will emphasize speech, script writing, production planning, editing, and post production. Students will also study the development of the broadcasting industry, sales, ethics, law, marketing, and management. Hands-on training and teamwork approaches are essential to the instructional process.

Upon successful completion, students are prepared to enter broadcasting, production, and related industries in a variety of occupations.

## DIPLOMA BROADCASTING AND PRODUCTION TECHNOLOGY

## Course and Hour Requirements

| Major Courses |  | Credit | General Education Courses |  | Credit Hours |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Hours |  |  |  |
| BPT | 110 | 3 | Communications: |  |  |
| BPT | 111 | 3 | ENG | 111 | 3 |
| BPT | 140 | 2 |  |  |  |
| BPT | 231 | 4 | Mathe | atics: |  |
| BPT | 255 | 3 | MAT | 140 | 3 |
| BPT | 112 | 4 | MAT | 140A | 1 |
| BPT | 113 | 3 |  |  |  |
| BPT | 232 | 4 | Total General Education Hours: 7 |  |  |
| BPT | 250 | 3 |  |  |  |  |
| BPT | 131 | 4 |  |  |  |  |
| Total Major Hours: 33 |  |  | TOTAL SEMESTER HOURS: 40 |  |  |

# DIPLOMA <br> BROADCASTING AND PRODUCTION TECHNOLOGY 

| Suggested Sequence of Courses |  |  |  | Hours Lab | Credit |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
|  |  |  | Class |  |  |
| FALL SEMESTER |  |  |  |  |  |
| BPT | 110 | Intro to Broadcasting | 3 | 0 | 3 |
| BPT | 111 | Broadcast Law and Ethics | 3 | 0 | 3 |
| BPT | 140 | Intro to TV Systems | 2 | 0 | 2 |
| ENG | 111 | Expository Writing | 3 | 0 | 3 |
| BPT | 231 | Video/TV Production I | 2 | 6 | 4 |
| BPT | 255 | Computer-Based Production | 2 | 3 | 3 |
|  |  |  | 15 | 9 | 18 |
| SPRING SEMESTER |  |  |  |  |  |
| BPT | 112 | Broadcast Writing | 3 | 2 | 4 |
| BPT | 113 | Broadcast Sales | 3 | 0 | 3 |
| BPT | 232 | Video/TV Production II | 2 | 6 | 4 |
| BPT | 250 | Institutional Video | 2 | 3 | 3 |
| MAT | 140 | Survey of Mathematics and | 3 | 0 | 3 |
| MAT | 140A | Survey of Mathematics Lab | 0 | 2 | 1 |
|  |  |  | 13 | 13 | 18 |
| SUMMER TERM |  |  |  |  |  |
| BPT | 131 | Audio/Radio Production I | 2 | 6 | 4 |
|  |  | TOTAL CREDIT HOURS RE | OR GR | DUATIO | : 40 |

## DIPLOMA <br> BUSINESS ADMINISTRATION-MARKETING AND RETAILING

Marketing and Retailing is a concentration under the curriculum title of Business Administration. This curriculum is designed to provide students with fundamental skills in marketing and retailing.

Course work includes: marketing, retailing, merchandising, selling, advertising, computer technology, and management.

Graduates should qualify for marketing positions within manufacturing, retailing, and service organizations.

## DIPLOMA <br> BUSINESS ADMINISTRATION-MARKETING AND RETAILING

Course and Hour Requirements

| Major Courses | Credit <br> Hours | General Education Courses | Credit <br> Hours |  |  |
| :--- | :---: | :---: | :--- | :---: | :---: |
| ACC | 120 | 4 | ACA | 115 | 1 |
| BUS | 115 | 3 |  |  |  |
| BUS | 137 | 3 | Communications: |  |  |
| MKT | 120 | 3 | ENG | 111 | 3 |
| MKT | 122 | 3 | Mathematics: |  |  |
| MKT | 226 | 3 | MAT | 140 |  |
| MKT | 125 | 3 | MAT | 140 A | 3 |
| MKT | 225 | 3 |  |  | 1 |

Select one:

ECO 251 3
ECO 2523
Total Major Hours: 28

Total General Education Hours: 8

Other Required Courses: CIS 1103
OST 2863

TOTAL SEMESTER HOURS:
42

## DIPLOMA <br> BUSINESS ADMINISTRATION-MARKETING AND RETAILING



TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 42

## DIPLOMA <br> CARPENTRY (Comprehensive Education Project)

The Carpentry curriculum is designed to train students to construct residential structures using standard building materials and hand power tools. Carpentry skills and a general knowledge of residential construction will also be taught.

Course work includes footings and foundations, framing, interior and exterior trim, cabinetry, blueprint reading, residential planning and estimating, and other related topics. Students will develop skills through hands-on participation.

Graduates should qualify for employment in the residential building construction field as rough carpenters, framing carpenters, roofers, maintenance carpenters, and other related job titles.

## DIPLOMA <br> CARPENTRY (Comprehensive Education Project)

Course and Hour Requirements

| Major | Courses | Credit Hours | Gene | Educatic | Credit Hours |
| :---: | :---: | :---: | :---: | :---: | :---: |
| BPR | 130 | 2 | Comm | icatio |  |
| CAR | 110 | 2 | ENG | 101 | 3 |
| CAR | 111 | 8 |  |  |  |
| CAR | 112 | 8 | Mathe | tics: |  |
| CAR | 113 | 6 | MAT | 101 | 3 |
| CAR | 115 | 3 |  |  |  |
| CAR | 114 | 3 | Total General Education Hours: 6 |  |  |
| CST | 115 | 2 |  |  |  |
| Total Major Hours: 34 |  |  | TOTAL SEMESTER HOURS: 40 |  |  |

# DIPLOMA <br> CARPENTRY <br> (Comprehensive Education Project) 

## Suggested Sequence of Courses <br> Day Sequence



## DIPLOMA COSMETOLOGY

The Cosmetology curriculum is designed to provide competency-based knowledge, scientific/artistic principles, and hands-on fundamentals associated with the cosmetology industry. The curriculum provides a simulated salon environment which enables students to develop manipulative skills.

Course work includes instruction in all phases of professional imaging, hair design, chemical processes, skin care, nail care, multi-cultural practices, business/computer principles, product knowledge, and other selected topics.

Graduates should qualify to sit for the North Carolina State Board of Cosmetic Arts examination. Upon successfully passing the State Board exam, graduates will be issued a license. Employment is available in beauty salons and as skin/nail specialists, platform artists, and related businesses.

## DIPLOMA COSMETOLOGY

Course and Hour Requirements

| Major Courses |  | Credit | General Education Courses |  | Credit Hours |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Hours |  |  |  |
| cos | 111 | 4 | ACA | 115 | 1 |
| cos | 112 | 8 |  |  |  |
| COS | 113 | 4 | Comm | icatio |  |
| COS | 114 | 8 | ENG | 101 | 3 |
| COS | 115 | 4 |  |  |  |
| COS | 116 | 4 | Math | tics: |  |
| COS | 117 | 2 | MAT | 101 | 3 |
| COS | 118 | 7 |  |  |  |
| COS | 240 | 2 | Total | eral | urs: 7 |
| Total Major Hours: 43 |  |  |  |  |  |
|  |  |  | TOTA | EMES |  |

## DIPLOMA <br> COSMETOLOGY

## Suggested Sequence of Courses

|  | Hours |  |
| :---: | :---: | :---: |
| Class | Lab | Credit |
|  |  |  |
| 4 | 0 | 4 |
| 0 | 24 | 8 |
| 1 | 3 | 2 |
| 0 | 2 | 1 |
| 3 | 0 | 3 |
| 8 | 29 | 18 |

## SPRING SEMESTER

| COS | 113 | Cosmetology Concepts II | 4 | 0 | 4 |
| :--- | :--- | :--- | :---: | :---: | :---: |
| COS | 114 | Salon II | 0 | 24 | 8 |
| MAT | 101 | Applied Mathematics I | 2 | 2 | 3 |
|  |  |  | 6 | 26 | 15 |

## SUMMER TERM

| COS | 115 | Cosmetology Concepts III | 4 | 0 | 4 |
| :--- | :--- | :--- | :---: | :---: | :---: |
| COS | 116 | Salon III | 0 | 12 | 4 |
| COS | 117 | Cosmetology Concepts IV | 2 | 0 | 2 |
| COS | 118 | Salon IV | 0 | 21 | 7 |
|  |  |  | 6 | 33 | 17 |

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 50

[^6]
## DIPLOMA CRIMINAL JUSTICE TECHNOLOGY

The Criminal Justice Technology curriculum is designed to provide knowledge of criminal justice systems and operations. Study will focus on local, state, and federal law enforcement, judicial processes, corrections, and security services. The criminal justice system's role within society will be explored.

Emphasis is on criminal justice systems, criminology, juvenile justice, criminal and constitutional concepts of government, counseling, communications, computers, and technology.

Employment opportunities exist in a variety of local, state, and federal law enforcement, corrections, and security fields. Examples include police officer, deputy sheriff, county detention officer, state trooper, intensive probation/parole surveillance officer, correctional officer, and loss prevention specialist.

## DIPLOMA <br> CRIMINAL JUSTICE TECHNOLOGY

Course and Hour Requirements

| Major Courses | Credit <br> Hours | General Education Courses |  | Credit <br> Hours |
| :--- | :---: | :---: | :--- | :--- |
| CJC | 111 | 3 | Communications: |  |
| CJC | 112 | 3 | ENG | 111 |

Choose one of the following electives:
CJC 1223
CJC 214
CJC 2153
Total Major Hours: 30 TOTAL SEMESTER HOURS: 42

## DIPLOMA <br> CRIMINAL JUSTICE TECHNOLOGY

Suggested Sequence of Courses


TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 42

## DIPLOMA EARLY CHILDHOOD

The Early Childhood Associate curriculum prepares individuals to work with children from infancy through middle childhood in diverse learning environments. Students will combine learned theories with practice in actual settings with young children under the supervision of qualified teachers.

Course work includes child growth and development; physical/nutritional needs of children; care and guidance of children; and communication skills with parents and children. Students will foster the cognitive/language, physical/motor, social/emotional and creative development of young children.

Graduates are prepared to plan and implement developmentally appropriate programs in early childhood settings. Employment opportunities include child development and child care programs, preschools, public and private schools, recreational centers, Head Start Programs, and school age programs.

## DIPLOMA EARLY CHILDHOOD

Course and Hour Requirements

| Major Courses |  | Credit | General Education Courses |  | Credit Hours |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Hours |  |  |  |
| COE | 111 | 1 | ACA | 115 | 1 |
| COE | 115 | 1 |  |  |  |
| EDU | 119 | 4 | Com | ications: |  |
| EDU | 131 | 3 | ENG | 111 | 3 |
| EDU | 144 | 3 |  |  |  |
| EDU | 145 | 3 | Math | atics: |  |
| EDU | 146 | 3 | MAT | 140 | 3 |
| EDU | 221 | 3 | MAT | 140A | 1 |
| Choose 3-5 additional |  |  | Social/Behavioral Sciences Elective: |  |  |
| EDU elective hours |  |  | Choo | SY or SOC | 3 |
| Total Major Hours: 24-26 |  |  | Total General Education Hours: 11 |  |  |
|  |  |  | TOTA | EMESTER HOURS: | 35-37 |

## DIPLOMA <br> EARLY CHILDHOOD

Suggested Sequence of Courses


## DIPLOMA <br> ELECTRICAL/ELECTRONICS TECHNOLOGY

The Electrical/Electronics Technology curriculum is designed to provide training for persons interested in the installation and maintenance of electrical/electronic systems found in residential, commercial and industrial facilities.

Training, most of which is hands-on will include such topics such as AC/DC theory, basic wiring practices, digital electronics, programmable logic controllers, industrial motor controls, the National Electric Code, and other subjects as local needs require.

Graduates qualify for a variety of jobs in the electrical/electronics field as an on-the-job trainee or apprentice, assisting in the layout, installation, and maintenance of electrical/electronic systems.

## DIPLOMA ELECTRICAL/ELECTRONICS TECHNOLOGY

## Course and Hour Requirements

| Major Courses |  | Credit | General Education Courses |  | Credit <br> Hours |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Hours |  |  |  |
|  |  |  | Communications: |  |  |
| ELC | 112 | 5 | ENG | 101 or | 3 |
| ELC | 113 | 4 | ENG | 111 | 3 |
| ELC | 117 | 4 |  |  |  |
| ELC | 114 | 4 | Mathe | tics: Ch |  |
| ELC | 128 | 3 | MAT | 101 or | 3 |
| ELC | 118 | 2 | MAT | 161 | 3 |
| ELC | 119 | 2 |  |  |  |

Choose 8 hours from the following electives:
ELN 131 4
ELC 115 4
ELN 133 4
HYD 110 3
DFT 1192
ELN 2294
Total Major Hours: 32
TOTAL SEMESTER HOURS: 38

# DIPLOMA <br> ELECTRICAL/ELECTRONICS TECHNOLOGY 

## Suggested Sequence of Courses <br> Day Sequence



## DIPLOMA <br> ELECTRICAL/ELECTRONICS TECHNOLOGY

## Suggested Sequence of Courses Night Sequence



## SPRING SEMESTER

ELC 113 Basic Wiring I
Elective

| 2 | 6 | 4 |
| :--- | :--- | :--- |
| 3 | 3 | 4 |
| 5 | 9 | 8 |

## SUMMER TERM

$\begin{array}{llllll}\text { ELC } & 114 & \text { Basic Wiring II } & 2 & 6 & 4\end{array}$

SECOND YEAR
FALL SEMESTER
ELC 117 Motors and Controls


SPRING SEMESTER

| ELC | 119 | NEC Calculations | 1 | 2 | 2 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| ENG | 101 | Applied Communications I or | 3 | 0 | 3 |
| ENG | 111 | Expository Writing | 3 | 0 | 3 |
|  |  | Elective | 2 | 6 | 4 |
|  |  | 6 | 8 | 9 |  |

SUMMER TERM
$\begin{array}{llllll}\text { ELC } & 128 & \text { Introduction to PLC } & 2 & 3 & 3\end{array}$

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 38

## DIPLOMA <br> ELECTRONICS ENGINEERING TECHNOLOGY

The Electronics Engineering Technology curriculum prepares individuals to become technicians who design, build, install, test, troubleshoot, repair, and modify developmental and production electronic components, equipment, and systems such as industrial/computer controls, manufacturing systems, communications systems, and power electronic systems.

A broad-based core of courses, including basic electricity, solid-state fundamentals, digital concepts, and microprocessors, ensures the student will develop the skills necessary to perform entry-level tasks. Emphasis is placed on developing the student's ability to analyze and troubleshoot electronic systems.

Graduates should qualify for employment as engineering assistants or electronic technicians with job titles such as electronics engineering technician, field service technician, maintenance technician, electronic tester, electronic systems integrator, bench technician, and production control technician.

## DIPLOMA <br> ELECTRONICS ENGINEERING TECHNOLOGY

## Course and Hour Requirements

| Major C | Ourses | Credit Hours | General Education Courses | Credit Hours |
| :---: | :---: | :---: | :---: | :---: |
| ELC | 131 | 5 | Communications: |  |
| ELC | 131A | 1 | ENG 111 | 3 |
| ELN | 133 | 4 |  |  |
| ELN | 131 | 4 |  |  |
| ELN | 132 | 4 |  |  |
| ELN | 231 | 3 | Mathematics: |  |
| ELC | 128 | 3 | MAT 161 | 3 |
| Choose one drafting elective: |  |  |  |  |
| ELC | 150 | 2 |  |  |
| DFT | 119 | 2 |  |  |
| Choose one computer elective: |  |  | Total General Education Hours:6 |  |
| CIS | 110 | 3 |  |  |
| CIS | 113 | 1 | Other Required Courses: |  |
|  |  |  | ACA 115 | 1 |

Choose at least 3 hours from the following technical electives:
CIS 215 3
HYD 110 3
ISC 112 2
ISC $128 \quad 2$
ISC 132 3
COE $112 \quad 2$
ELC 113 4
ISC 255 3

Total Major Hours: 30-32

## DIPLOMA <br> ELECTRONICS ENGINEERING TECHNOLOGY



## DIPLOMA <br> FACILITY MAINTENANCE TECHNOLOGY <br> (Proposed Fall 2003)

This curriculum prepares individuals to repair and maintain electrical and mechanical systems and physical structures of commercial and industrial institutions. Emphasis is on multi-disciplined systems maintenance, troubleshooting, and problem resolution.

Course work includes carpentry, interior and exterior finishes, plumbing, electrical, air conditioning, heating, welding, machining, blueprint reading, building codes, and OSHA regulations, as well as computer applications.

Graduates should qualify for positions as general building mechanics or maintenance technician.

## DIPLOMA FACILITY MAINTENANCE TECHNOLOGY

Course and Hour Requirements

| Major Courses | Credit <br> Hours | General Education Courses | Credit <br> Hours |  |
| :---: | :---: | :---: | :--- | :---: | :---: |
| AHR | 112 | 4 | Communications: |  |
| AHR | 133 | 2 | ENG 101 | 3 |
| BPR | 130 | 2 |  |  |
| ELC | 113 | 4 | Mathematics: | 3 |
| MNT | 110 | 2 | MAT 101 |  |
| PLU | 130 | 6 |  |  |
| CAR | 111 | 8 | Total General Education Hours: 6 |  |

Choose 10 elective hours from the following Prefixes:
AHR
BPR
CAR
CIS
DFT
ELC
MEC
PLU
WLD

## DIPLOMA <br> FACILITY MAINTENANCE TECHNOLOGY (Proposed Fall 2003)

Suggested Sequence of Courses


## DIPLOMA INDUSTRIAL SYSTEMS TECHNOLOGY

The Industrial Systems Technology curriculum is designed to prepare or upgrade individuals to service, maintain, repair, or install equipment for a wide range of industries. Instruction includes theory and skill training needed for inspecting, testing, troubleshooting, and diagnosing industrial equipment and physical facilities.

Students will learn technical skills in blueprint reading, electricity, hydraulics/pneumatics, machining, welding, and various maintenance procedures. Practical application in these industrial systems will be emphasized and additional advanced course work may be offered.

Upon completion of any of the various levels of this curriculum, graduates should gain the necessary practical skills and related information to qualify for employment or advancement in the various areas of industrial maintenance technology.

## DIPLOMA INDUSTRIAL SYSTEMS TECHNOLOGY

## Course and Hour Requirements

| Hours <br> Hours |  |  | General Education Courses C |  |
| :---: | :---: | :---: | :---: | :---: |
| HYD | 110 | 3 | Communications: |  |
| MNT | 110 | 2 | ENG | 101 |
| WLD | 112 | 2 |  |  |
| Choose | e one of | he following: | Mathematics: |  |
| BPR | 111 | 3 | MAT | 101 |
| BPR | 130 | 2 |  |  |
| Choose one of the following: |  |  | Total General Education Hours: 6 |  |
| MAC | 111 | 6 |  |  |
| MEC | 111 | 3 |  |  |
| Choose | e one of | he following: | Other | quire |
| ELC | 111 | 3 | DFT | 119 |
| ELC | 131 | 5 |  |  |
| Choose one of the following: |  |  |  |  |
| ISC | 110 | 1 |  |  |
| ISC | 112 | 2 |  |  |
| *Choose 14-17 major elective hours from the following courses: |  |  |  |  |
| AHR | 110 | 5 | MAC | 113 |
| AHR | 112 | 4 | ISC | 128 |
| AHR | 114 | 4 | ISC | 132 |
| AHR | 151 | 2 | ISC | 170 |
| BPR | 121 | 2 | PLU | 110A |
| DFT | 111 | 3 | PLU | 120A |
| ELC | 113 | 4 | PLU | 140 |
| ELC | 114 | 4 | WLD | 110 |
| ELC | 117 | 4 | WLD | 115 |
| ELC | 128 | 2 | WLD | 141 |

MAC 112 6

Total Major Hours: 30-40
TOTAL SEMESTER HOURS: 38-48

## DIPLOMA INDUSTRIAL SYSTEMS TECHNOLOGY

## Suggested Sequence of Courses <br> Day Sequence


*The Electives must be chosen from the listing on the previous page.

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 38-48

## DIPLOMA <br> INDUSTRIAL SYSTEMS TECHNOLOGY

Suggested Sequence of Courses
Night Sequence

|  |  | Class | Hours | Lab | Credit |
| :--- | :--- | :--- | :--- | :--- | :--- |
| FIRST YEAR |  |  |  |  |  |
| FALL SEMESTER |  |  |  |  |  |
| BPR | 111 | Blueprint Reading or | 1 | 2 | 2 |
| BPR | 130 | Blueprint Reading/Construction | 1 | 2 | 2 |
| ELC | 111 | Introduction to Electricity or | 2 | 2 | 3 |
| ELC | 131 | DC/AC Circuit Analysis | 4 | 3 | 5 |

SPRING SEMESTER

| ISC | 110 | Workplace Safety or | 1 | 0 | 1 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| ISC | 112 | Industrial Safety | 2 | 0 | 2 |
|  |  | *Elective |  |  |  |

SUMMER TERM
*Elective
*Elective

SECOND YEAR
FALL SEMESTER

| ENG | 101 | Applied Communications I | 3 | 0 | 3 |
| :--- | :--- | :--- | :---: | :---: | :---: |
| MAT | 101 | Applied Mathematics I | 2 | 2 | 3 |
| MAC | 111 | Machining Technology I or | 2 | 12 | 6 |
| MEC | 111 | Machine Processes I | 2 | 3 | 3 |
| HYD | 110 | Hydraulics/Pneumatics I | 2 | 3 | 3 |

SPRING SEMESTER

| MNT | 110 | Intro to Maintenance Procedures | 1 | 3 | 2 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| WLD | 112 | Basic Welding Procedures | 1 | 3 | 2 |
|  |  |  | 2 | 6 | 4 |

## SUMMER TERM

DFT 119 Basic CAD 102 *Elective
*The Electives must be chosen from the listing on the previous page.

## DIPLOMA <br> MACHINING TECHNOLOGY

The Machining Technology curriculum is designed to develop skills in the theory and safe use of hand tools, power machinery, computerized equipment and sophisticated precision inspection instruments.

Students will learn to interpret blueprints, set up manual and CNC machines, perform basic and advanced machining operations, and make decisions to ensure work quality is maintained.

Employment opportunities for machining technicians exist in manufacturing industries, public institutions, governmental agencies and in a wide range of specialty machining job shops.

## DIPLOMA MACHINING TECHNOLOGY

## Course and Hour Requirements

| Major Courses |  | Credit | General Education Courses Credit |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Hours |  |  |  |
| MAC | 111 | 6 | Communications: |  |  |
| MAC | 112 | 6 | Choose one course: |  |  |
| MAC | 113 | 6 | ENG | 101 | 3 |
| MAC | 122 | 2 | ENG | 111 | 3 |
| MAC | 124 | 2 |  |  |  |
| BPR | 111 | 2 | Mathe | tics: |  |
| WLD | 112 | 2 | Choos | one c |  |
| BPR | 121 | 2 | MAT | 101 | 3 |
|  |  |  | MAT | 161 | 3 |
| Choose 2-3 hours from |  |  |  |  |  |
| the following: |  |  | Total General Education Hours:6 |  |  |
| MEC | 110 | 2 |  |  |  |
| DFT | 119 | 2 |  |  |  |
| DFT | 151 | 3 |  |  |  |
| DFT | 121 | 2 |  |  |  |
| Total Major Hours: 30-31 |  |  | TOTAL SEMESTER HOURS: 36-37 |  |  |

## DIPLOMA <br> MACHINING TECHNOLOGY

## Suggested Sequence of Courses <br> Day Sequence



# DIPLOMA MACHINING TECHNOLOGY 

## Suggested Sequence of Course <br> Night Sequence



SPRING SEMESTER

| MAC | $111 B$ | Machining Technology I | 1 | 6 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| BPR | 121 | Blueprint Reading: Mech | 1 | 2 | 2 |
| ENG | 101 | Applied Communications I or | 3 | 0 | 3 |
| ENG | 111 | Expository Writing | 3 | 0 | 3 |
|  |  | 5 | 8 | 8 |  |
| SUMMER TERM |  |  |  |  |  |
| MAC | $112 A$ | Machining Technology II | 1 | 6 | 3 |

SECOND YEAR
FALL SEMESTER

| MAC | $112 B$ | Machining Technology II | 1 | 6 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| MAC | 122 | CNC Turning | 1 | 3 | 2 |
|  |  | 2 | 9 | 5 |  |

SPRING SEMESTER
$\begin{array}{llllll}\text { MAC 113A Machining Technology III } & 1 & 6 & 3\end{array}$
WLD 112 Basic Welding Processes
MAC 124 CNC Milling
SUMMER TERM

| MEC | 110 | Intro to CAD/CAM or | 1 | 2 | 2 |
| :--- | :--- | :--- | :---: | :---: | :---: |
| DFT | 119 | Basic CAD or | 1 | 2 | 2 |
| DFT | 151 | CAD I or | 2 | 3 | 3 |
| DFT | 121 | Intro to GD \& T | 1 | 2 | 2 |
| MAC | $113 B$ | Machining Technology III | 1 | 6 | 3 |
|  |  |  | $1-2$ | $8-9$ | $5-6$ |

## DIPLOMA <br> MECHANICAL DRAFTING TECHNOLOGY

The Mechanical Drafting Technology curriculum prepares technicians to produce drawings of mechanical parts, components of mechanical systems, and mechanisms. CAD (Computer Assisted Drafting) and the importance of technically correct drawings and designs based on current standards are emphasized.

Course work includes mechanical drafting, CAD, and proper drawing documentation. Concepts such as machine shop processes, basic materials, and physical sciences as they relate to the design process are also included. The use of proper dimensioning and tolerance techniques is stressed.

Graduates qualify for employment in mechanical areas such as manufacturing, fabrication, research and development, and service industries.

## DIPLOMA <br> MECHANICAL DRAFTING TECHNOLOGY

Course and Hour Requirements
$\left.\begin{array}{lllll}\text { Major Courses } & \begin{array}{l}\text { Credit } \\ \text { Hours }\end{array} & \begin{array}{l}\text { General Education Courses }\end{array} & \begin{array}{l}\text { Credit } \\ \text { Hours }\end{array} \\ \text { DFT } & 111 & 2 & \text { Communications: }\end{array}\right]$

Select 5 hours from the following technical electives:
DFT 1152
DFT 161 2
DFT 2112
ISC $112 \quad 2$
ISC 221 3
Total Major Hours: 31
TOTAL SEMESTER HOURS: 37

## DIPLOMA <br> MECHANICAL DRAFTING TECHNOLOGY

Suggested Sequence of Courses
Day Sequence


SPRING SEMESTER

| DFT | 112 | Technical Drafting II | 1 | 3 | 2 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| DFT | 152 | CAD II | 2 | 3 | 3 |
| ISC | 255 | Engineering Economy | 2 | 2 | 3 |
| MAT | 101 | Applied Mathematics I or | 2 | 2 | 3 |
| MAT | 161 | College Algebra | 3 | 0 | 3 |
|  |  | Technical Elective |  |  | 3 |

## SUMMER TERM

DFT 153 CAD III
DFT 121 Intro to DG and T 1
MEC 110 Introduction to CAD/CAM

| 1 | 2 | 2 |
| :--- | :--- | :--- |
| 4 | 7 | 7 |

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 37

# DIPLOMA <br> MECHANICAL DRAFTING TECHNOLOGY 

Suggested Sequence of Courses
Night Sequence

|  |  | Class | Hours <br> Lab | Credit |  |
| :--- | :--- | :--- | :---: | :---: | :---: |
| FIRST YEAR |  |  |  |  |  |
| FALL SEMESTER |  |  |  |  |  |
| DFT | 111 | Technical Drafting I | 2 | 3 | 2 |
| DFT | 151 | CAD I | 2 | 3 | 3 |
| MAT | 101 | Applied Mathematics I or | 2 | 2 | 3 |
| MAT | 161 | College Algebra | 3 | 0 | 3 |
|  |  | $5-6$ | $6-8$ | 8 |  |

## SPRING SEMESTER

DFT 152 CAD II
DFT 112 Technical Drafting II $1 \begin{array}{llll} & 1 & 3 & 2\end{array}$
ENG 101 Applied Communications I or $\quad 3 \quad 0$
ENG 111 Expository Writing

| 3 | 0 | 3 |
| :--- | :--- | :--- |
| 6 | 6 | 8 |

SUMMER TERM
DFT 153 CAD III $\quad 2 \quad 3$
SECOND YEAR
FALL SEMESTER
MEC 161 Manufacturing Processes I
CIS 110 Introduction to Computers

| 3 | 0 | 3 |
| :--- | :--- | :--- |
| 2 | 2 | 3 |
| 5 | 2 | 6 |

## SPRING SEMESTER

| ISC 255 | Engineering Economy | 2 | 2 | 3 |
| :--- | :--- | :--- | :--- | :--- |
|  | Technical Elective |  |  | 3 |
|  | Technical Elective |  | 2 |  |
|  |  |  | 8 |  |

SUMMER TERM
DFT 121 Intro to GD \& T


## DIPLOMA MEDICAL TRANSCRIPTION (PROPOSED SPRING 2004)

The Medical Transcription curriculum prepares individuals to become medical language specialists who interpret and transcribe dictation by physicians and other healthcare professionals in order to document patient care and facilitate delivery of healthcare services.

Students will gain extensive knowledge of medical terminology, pharmacology, human diseases, diagnostic, studies, surgical procedures, and laboratory procedures. In addition to word processing skill and knowledge of voice processing equipment, students must master English grammar, spelling, and proofreading.

Graduates should qualify for employment in hospitals, medical clinics, doctors' offices, private transcription businesses, research facilities, insurance companies, and publishing companies. After acquiring work experience, individuals can apply to the American Association for Medical Transcription to become Certified Medical Transcriptionists.

## DIPLOMA <br> MEDICAL TRANSCRIPTION

## Course and Hour Requirements

| Major Courses |  | Credit | General Education Courses Credit $\begin{array}{r}\text { Hours }\end{array}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Hours |  |  |  |
| OST | 131 | 2 | Communications: |  |  |
| OST | 164 | 3 | ACA | 115 | 1 |
| MED | 121 | 3 | ENG | 111 | 3 |
| OST | 135 | 4 | ENG | 112 or | 3 |
| OST | 132 | 2 | ENG | 113 or | 3 |
| OST | 134 | 3 | ENG | 114 | 3 |
| MED | 122 | 3 |  |  |  |
| OST | 149 | 3 | Total | neral Ed | rs: 7 |
| OST | 201 | 4 |  |  |  |
| OST | 202 | 4 |  |  |  |
| OST | 136 | 2 |  |  |  |
| OST | 243 | 3 |  |  |  |
| OST | 148 | 3 |  |  |  |
| OST | 137 | 2 |  |  |  |
| Total Major Hours: 41 |  |  | TOTAL SEMESTER HOURS: 48 |  |  |

## DIPLOMA <br> MEDICAL TRANSCRIPTION (PROPOSED SPRING 2004)

| Suggested Sequence of Courses |  |  |  | Hours Lab | Credit |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Class |  |  |
| FIRST YEAR |  |  |  |  |  |
| FALL SEMESTER |  |  |  |  |  |
| ACA | 115 | Success and Study Skills | 0 | 2 | 1 |
| ENG | 111 | Expository Writing | 3 | 0 | 3 |
| OST | 131 | Keyboarding | 1 | 2 | 2 |
| OST | 164 | Text Editing Applications | 3 | 0 | 3 |
| MED | 121 | Medical Terminology I | 3 | 0 | 3 |
| MED | 149 | Medical Legal Issues | 3 | 0 | 3 |
|  |  |  | 13 | 4 | 15 |
| SPRING SEMESTER |  |  |  |  |  |
| OST | 132 | Keyboard Skill Building | 1 | 2 | 2 |
| OST | 134 | Text Entry \& Formatting | 2 | 2 | 3 |
| OST | 137 | Office Software Applications | 1 | 2 | 2 |
| MED | 122 | Medical Terminology II | 3 | 0 | 3 |
| OST | 201 | Medical Transcription I | 3 | 2 | 4 |
| ENG | 112 | Argument-Based Research or | 3 | 0 | 3 |
| ENG | 113 | Literature-Based Research or | 3 | 0 | 3 |
| ENG | 114 | Prof Research \& Reporting | 3 | 0 | 3 |
|  |  |  | 13 | 8 | 17 |
| SUMMER SEMESTER |  |  |  |  |  |
| OST | 202 | Medical Transcription II | 3 | 2 | 4 |
| OST | 136 | Word Processing | 1 | 2 | 2 |
| OST | 243 | Medical Office Simulation | 2 | 2 | 3 |
| OST | 148 | Medical Coding, Billing, \& Insurance | 3 | 0 | 3 |
| OST | 135 | Advanced Text Entry | 2 | 3 | 4 |
|  |  |  | 11 | 9 | 16 |

## DIPLOMA OFFICE SYSTEMS TECHNOLOGY

The Office Systems Technology curriculum prepares individuals for positions in administrative support careers. It equips office professionals to respond to the demands of a dynamic computerized workplace.

Students will complete courses designed to develop proficiency in the use of integrated software, oral and written communication, analysis and coordination of office duties and systems, and other support topics. Emphasis is placed on nontechnical as well as technical skills.

Graduates should qualify for employment in a variety of positions in business, government, and industry. Job classifications range from entry-level to supervisor to middle management.

## DIPLOMA OFFICE SYSTEMS TECHNOLOGY

Course and Hour Requirements

| Major Courses |  | Credit | General Education Courses |  | Credit Hours |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Hours |  |  |  |
| OST | 134 | 3 | ACA | 115 | 1 |
| OST | 136 | 2 |  |  |  |
| OST | 164 | 3 | Communications: |  |  |
| ACC | 120 | 4 | ENG | 111 | 3 |
| OST | 131 | 2 |  |  |  |
| OST | 135 | 4 | Mathematics: |  |  |
| OST | 289 | 3 | CIS | 110 or | 3 |
| OST | 223 | 2 | OST | 137 | 2 |
| OST | 184 | 2 |  |  |  |
| OST | 286 | 3 | Total General Education Hours: 6-7 |  |  |
| OST | 122 | 2 |  |  |  |  |  |
| BUS | 121 | 3 |  |  |  |  |  |

Choose 3 hours from the following:
CIS 164 3
OST 233 3
OST 2363
Total Major Hours: 36
TOTAL SEMESTER HOURS: 42-43

## DIPLOMA <br> OFFICE SYSTEMS TECHNOLOGY

## Suggested Sequence of Courses



## DIPLOMA <br> PLUMBING <br> (Comprehensive Education Project)

The Plumbing curriculum is designed to give individuals the opportunity to acquire basic skills to assist with the installation and repairs of plumbing systems in residential and small buildings.

Course work includes sketching diagrams and interpretation of blueprints and practices in plumbing assembly. Students will gain knowledge of State Codes and requirements.

Graduates qualify for employment at parts supply houses, maintenance companies, and plumbing contractors to assist with various plumbing applications.

## DIPLOMA <br> PLUMBING <br> (Comprehensive Education Project)

Course and Hour Requirements

| Major Courses | Credit <br> Hours | General Education Courses |  | Credit <br> Hours |
| :--- | :---: | :---: | :--- | :---: |
| BPR | 130 | 2 | Communications: |  |
| PLU | 110 | 9 | ENG 101 | 3 |
| PLU | 120 | 9 |  |  |
| PLU | 130 | 6 | Mathematics: | 3 |
| PLU | 140 | 2 | MAT 101 |  |
| PLU | 150 | 2 |  |  |
| WLD | 112 | 2 | Total General Education Hours: 6 |  |

Total Major Hours: 32
TOTAL SEMESTER HOURS: 38

# DIPLOMA <br> PLUMBING <br> (Comprehensive Education Project) 

## Suggested Sequence of Courses <br> Day Sequence



TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 38

## DIPLOMA <br> PRACTICAL NURSING

The Practical Nursing curriculum prepares individuals with the knowledge and skills to provide nursing care to children and adults.

Students will participate in assessment, planning, implementing, and evaluating nursing care.

Graduates are eligible to apply to take the National Council Licensure Examination (NCLEX-PN) which is required for practice as a Licensed Practical Nurse. Opportunities for employment include hospitals, rehabilitation/long term care/home health facilities, clinics, and physicians' offices.

Students seeking a diploma must earn a grade of "C" or higher on each of the following courses presented for graduation:

ENG 111, Expository Writing; COM 231, Public Speaking; CIS 110, Introduction to Computers (or another approved computer course); and MAT 161, College Algebra (or another approved mathematics course).
Please see Requirements for Graduation as stated in the Academic
Regulations section of the Academic Bulletin \& Student Handbook.

## ADMISSION AND PROGRAM REQUIREMENTS

Nursing courses required to meet graduation requirements in this program are offered during daytime hours.

Graduates of this program will be awarded the Diploma in Practical Nursing.

## ADMISSION PROCESS

All materials must be sent to the Admissions Office.
The following requirements must be met before applicants will be considered for admission to the PN program.

1. Complete application.
2. Provide official high school transcript or GED scores.
3. Submit an official transcript(s) from all colleges attended. Each transcript must reflect a 2.0 cumulative grade point average on courses accepted for transfer credit. Science courses which are more than five years old will not be transferred.
4. Submit three (3) references (not relatives or close friends, for example: teachers, employers, guidance counselors). References that are not more than two years old at the time of the general admission requirement deadline will be acceptable. (Applicants must use forms provided.)
5. Complete ASSET placement tests which will be administered at the College. Applicants will be informed of the time and place for the tests. The placements consist of reading, English/writing skills, numerical skills
and algebra (4 tests).
6. Complete all developmental courses with a grade of " $C$ " or higher required as a result of placement tests.
The student is responsible for making sure that these requirements have been met and that all materials have been received by the Admissions Office. Admission requirements currently in effect must be completed.

Completion of these requirements will not guarantee admission to the program.

## SELECTION PROCESS

1. All six general admission requirements must be met.
2. If notified by the Admissions Office, eligible applicants report for the PSB Aptitude Examination. The health form will be provided with the letter of notification for the PSB Examination. There is a fee for the Aptitude Examination.
3. If indicated, an interview will be scheduled with an admissions counselor and the Department Head/faculty.
4. Final selection for admission is based on a review of the candidate's academic record, test results, interview responses and favorable results of physical and emotional examinations. Examination forms are provided by the College. Written notification of acceptance will be sent by the Admissions Office.
All students accepted into the Practical Nursing program are required to have accident and malpractice insurance.

All students must provide proof of cardiopulmonary resuscitation (CPR) certification on the first day of class, fall semester.

Required Courses: Students may take general/related (non-nursing) courses before acceptance into the nursing program. Completion of these courses will help prepare but not guarantee admission into the program.

Persons admitted to the PN program are eligible to take the National Council Licensure Examination (NCLEX-PN) which is required to practice as a Licensed Practical Nurse.

Enrollment in the Practical Nursing program is limited. Applicants are advised to apply early.

All applications for admission must be updated annually. If one has applied previously, he or she must initiate the process again, including PSB-Aptitude Exam retesting.

If there are any questions, contact the Admissions Office at Cleveland Community College.

# DIPLOMA PRACTICAL NURSING 

Course and Hour Requirements

| Major Courses |  | Credit | General Education Courses |  | Credit Hours |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Hours |  |  |  |
| NUR | 101 | 11 | Communications: |  |  |
| NUR | 102 | 12 | ENG | 111 | 3 |
| NUR | 103 | 10 |  |  |  |
| NUR | 191 | 1 | Natural Sciences: |  |  |
|  |  |  | BIO | 155 | 3 |
| Total Major Hours: 34 |  |  |  |  |  |
|  |  |  | Select one additional course: |  |  |
|  |  |  | BIO | 163 or | 5 |
|  |  |  | *BIO | 166 | 4 |
|  |  |  | Social | havioral Science: | Select one |
|  |  |  | PSY | 110 or | 3 |
|  |  |  | **PSY | 241 | 3 |
|  |  |  | Total | eral Education Hour | urs: 13-14 |
|  |  |  | TOTAL | EMESTER HOURS: | 47-48 |

*BIO 165 is prerequisite to BIO 166
**PSY 150 is prerequisite to PSY 241

## DIPLOMA <br> PRACTICAL NURSING

## Suggested Sequence of Courses <br> Day Sequence

$\overline{\text { Class Lab/Clin Credit }}$

## FALL SEMESTER

| NUR | 101 | Practical Nursing I | 7 | 6 | 6 | 11 |
| :--- | :--- | :--- | :---: | :---: | :---: | :---: |
| ENG | 111 | Expository Writing | 3 | 0 | 0 | 3 |
| BIO | 163 | Basic Anatomy \& Physiology or | 4 | 2 | 0 | 5 |
| *BIO | 166 | Anatomy and Physiology II | 3 | 3 | 0 | 4 |
|  |  |  | $13-14$ | $8-9$ | 6 | $18-19$ |

## SPRING SEMESTER

| NUR | 102 | Practical Nursing II | 8 | 0 | 12 | 12 |
| :--- | :--- | :--- | :---: | :---: | :---: | :---: |
| NUR | 191 | Selected Topics in Pharmacology | 0 | 3 | 0 | 1 |
| BIO | 155 | Nutrition | 3 | 0 | 0 | 3 |
|  |  |  | 11 | 3 | 12 | 16 |


| SUMMER TERM |  |  |  |  |  |  |
| :--- | :---: | :--- | :--- | :--- | :---: | :---: |
| NUR | 103 | Practical Nursing III | 6 | 0 | 12 | 10 |
| PSY | 110 | Lifespan Development or | 3 | 0 | 0 | 3 |
| $* *$ PSY | 241 | Developmental Psychology | 3 | 0 | 0 | 3 |
|  |  | 9 | 0 | 12 | 13 |  |

## DIPLOMA <br> WELDING TECHNOLOGY

The Welding Technology curriculum provides students with a sound understanding of the science, technology, and applications essential for successful employment in the welding and metal industry.

Instruction includes consumable and non-consumable electrode welding and cutting processes. Courses in math, blueprint reading, metallurgy, welding inspection, and destructive and non-destructive testing provide the student with industry-standard skills developed through classroom training and practical application.

Successful graduates of the Welding Technology curriculum may be employed as entry level technicians in welding and metal working industries. Career opportunities also exist in construction, manufacturing, fabrication, sales, quality control, supervision, and welding-related self-employment.

## DIPLOMA <br> WELDING TECHNOLOGY

Course and Hour Requirements

| Major Courses |  | Credit | General Education Courses C |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Hours |  |  |  |
| WLD | 110 | 2 | Communications: |  |  |
| WLD | 115 | 5 | ENG | 101 | 3 |
| WLD | 121 | 4 |  |  |  |
| WLD | 131 | 4 | Math | tics: |  |
| WLD | 141 | 3 | MAT | 101 | 3 |
| WLD | 132 | 3 |  |  |  |
| WLD | 122 | 3 | Total | neral |  |
| WLD | 215 | 4 |  |  |  |
| BPR | 111 | 2 | Other | quire |  |
|  |  |  | BPR | 121 | 2 |
| Choose one: |  |  |  |  |  |
| DFT | 119 | 2 |  |  |  |
| WLD | 111 | 2 |  |  |  |
| Total Major Hours: 32 |  |  | TOTA | EMES | 40 |

## DIPLOMA <br> WELDING TECHNOLOGY

## Suggested Sequence of Courses <br> Day Sequence

|  |  | Class | Lab | Credit |  |
| :--- | :--- | :--- | :---: | :---: | :---: |
| FALL |  |  |  |  |  |
| WLD | 110 | Cutting Processes |  |  |  |
| WLD | 121 | GMAW (MIG) FCA w/Plate | 2 | 6 | 2 |
| WLD | 115 | SMAW (Stick) Plate | 2 | 9 | 5 |
| MAT | 101 | Applied Mathematics I | 2 | 2 | 3 |
| BPR | 111 | Blueprint Reading | 1 | 2 | 2 |


| SPRING SEMESTER |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| WLD | 215 | SMAW (Stick) Pipe | 1 | 9 | 4 |
| WLD | 122 | GMAW (MIG) Plate/Pipe | 1 | 6 | 3 |
| WLD | 131 A | GTAW (TIG) Plate | 1 | 3 | 2 |
| ENG | 101 | Applied Communications I | 3 | 0 | 3 |
| DFT | 119 | Basic CAD or | 1 | 2 | 2 |
| WLD | 111 | Oxy-Fuel Welding | 1 | 3 | 2 |
|  |  | 7 | $20-21$ | 14 |  |

## SUMMER TERM

| WLD | $131 B$ | GTAW (TIG) Plate | 1 | 3 | 2 |
| :--- | :--- | :--- | :---: | :---: | :---: |
| WLD | 132 | GTAW (TIG) Plate/Pipe | 1 | 6 | 3 |
| WLD | 141 | Symbols and Specifications | 2 | 2 | 3 |
| BPR | 121 | Blueprint Reading: Mech | 1 | 2 | 2 |
|  |  |  | 5 | 13 | 10 |

## DIPLOMA <br> WELDING TECHNOLOGY

## Suggested Sequence of Courses <br> Night Sequence



SPRING SEMESTER

| WLD | 215 | SMAW (Stick) Pipe | 1 | 9 | 4 |
| :--- | :---: | :--- | :---: | :---: | :---: |
| ENG | 101 | Applied Communications I | 3 | 0 | 3 |
| DFT | 119 | Basic CAD or | 1 | 2 | 2 |
| WLD | 111 | Oxy-Fuel Welding | 1 | 3 | 2 |
|  |  |  | 5 | $11-12$ | 9 |


| $l$ |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| SUMMER TERM |  |  |  |  |
| WLD | 131 A | GTAW (TIG) Plate | 1 | 3 |
| WLD | 132 | GTAW (TIG) Plate/Pipe | 1 | 6 |
|  |  |  | 2 | 9 |
|  |  |  |  |  |

SECOND YEAR
FALL SEMESTER

| WLD | 115 | SMAW (Stick) Plate | 2 | 9 | 5 |
| :--- | :--- | :--- | :---: | :---: | :---: |
| MAT | 101 | Applied Mathematics I | 2 | 2 | 3 |
| BPR | 111 | Blueprint Reading | 1 | 2 | 2 |
|  |  |  | 5 | 13 | 10 |


| SPRING SEMESTER |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :---: | :---: |
| WLD | 122 | GMAW (MIG) Plate/Pipe |  |  |  |  |
| WLD | $131 B$ | GTAW (TIG) Plate | 1 | 6 |  |  |
|  |  | 1 | 3 | 2 |  |  |
|  |  | 2 | 9 | 5 |  |  |

SUMMER TERM

| WLD | 141 | Symbols and Specifications | 2 | 2 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| BPR | 121 | Blueprint Reading: Mech | 1 | 2 | 2 |
|  |  |  | 3 | 4 | 5 |



## CURRICULUM CERTIFICATE PROGRAMS



## CERTIFICATE <br> ADVANCED LEADERSHIP

Advanced Leadership is a certificate option in the Industrial Management Technology curriculum. The courses included in this certificate will enhance the skills of current supervisors with modern management and leadership training.

All certificate courses are creditable toward the diploma or Associate degree that the College is approved to offer.

## CERTIFICATE ADVANCED LEADERSHIP

## Course and Hour Requirements

## Required Courses

Choose 12 hours from the following: Credit Hours
ISC 128 Industrial Leadership 2
ISC 132 Manufacturing Quality Control 3
ISC 221 Statistical Quality Control 3
ISC 233 Industrial Organization and Management 3
ISC 235 Management Problems 3
OMT 150 Operation Management Behavioral Sciences 3

## CERTIFICATE PROGRAMS AIR CONDITIONING, HEATING, AND REFRIGERATION TECHNOLOGY

These certificate programs offer students recognition for partial completion of the Air Conditioning, Heating and Refrigeration program and refrigerant certificate courses. These programs offer excellent inservice training options for employers and employees.

All certificate courses are creditable toward the diploma or Associate degree that the College is approved to offer.

## COMMERCIAL REFRIGERATION

Course and Hour Requirements
Required Courses ..... Credit
Hours
AHR 110 Introduction to Refrigeration ..... 5
AHR 111 HVAC Electricity ..... 3
AHR 130 HVAC Controls ..... 3
AHR 133 HVAC Servicing ..... 4
TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: ..... 15
HVAC SYSTEM DESIGN
Course and Hour Requirements
Required Courses ..... Credit
Hours
MAT 101 Applied Mathematics I ..... 3
AHR 113 Comfort Cooling ..... 4
AHR 151 HVAC Duct Systems I ..... 2
AHR 211 Residential System Design ..... 3
AHR 210 Residential Building Code ..... 2
TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: ..... 14
HEATING SYSTEMS
Course and Hour Requirements
Required Courses ..... Credit
Hours
AHR 110 Introduction to Refrigeration ..... 5
AHR 114 Heat Pump Technology ..... 4
AHR 112 Heating Technology ..... 4
AHR 133 HVAC Servicing ..... 4

## CERTIFICATE <br> AUTOBODY REPAIR

The Autobody certificate offers a broad range of basic courses for partial completion of the Autobody program and also serves as an excellent vehicle for inservice training.

All certificate courses are creditable toward the diploma or Associate degree that the College is approved to offer.

## CERTIFICATE <br> AUTOBODY REPAIR

Course and Hour Requirements
Required Courses Credit
AUB 111 Painting and Refinishing I 4
AUB 121 Non-Structural Damage I 3
AUB 131 Structural Damage I 4
AUB 134 Autobody MIG Welding 3
AUB 122 Non-Structural Damage II 4

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 18

## CERTIFICATE BASIC CHILD CARE

The certificate in basic child care is designed to provide experience working with preschool children. The certificate also allows the child care worker to upgrade skills or educational level. The Cleveland Community College Certificate will be awarded upon successful completion of the program. All courses may be applied toward the Early Childhood diploma or Associate degree.

## CERTIFICATE BASIC CHILD CARE

## Course and Hour Requirements

Required Courses ..... Credit
Hours
EDU 111 Early Childhood Credential I ..... 2
EDU 112 orEarly Childhood Credential II or ..... 2
EDU 113 Family Childhood Credential ..... 2
EDU 153 Health, Safety, and Nutrition ..... 3
EDU 151 Creative Activities ..... 3
Choose one:
PSY 150 General Psychology ..... 3
SOC 210 Introduction to Sociology ..... 3
PSY 243 Child Psychology ..... 3
SOC 213 Sociology of the Family ..... 3
TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: ..... 13

## CERTIFICATE BASIC ELECTRONICS

Basic Electronics is a certificate option in the Electronics Engineering Technology program and provides introductory knowledge of electronic principles, applications, component testing and selection, and the use of basic test equipment. This option is for those who do not necessarily need a background in digital electronics or for those who are already proficient in that area.

All certificate courses are creditable toward the diploma or Associate degree that the College is approved to offer.

## CERTIFICATE BASIC ELECTRONICS

Course and Hour Requirements
Required Courses ..... Credit
Hours
ELC 131 DC/AC Circuit Analysis ..... 5
ELC 131A DC/AC Circuit Analysis Lab ..... 1
ELN 131 Electronic Devices ..... 4
ELN 132 Linear IC Applications ..... 4
TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: ..... 14

## CERTIFICATE <br> BASIC LAW ENFORCEMENT TRAINING

Basic Law Enforcement Training (BLET) is designed to teach students essential skills required for entry-level employment as law enforcement officers with state, county, or municipal governments, or with private enterprise.

This program utilizes State-commission-mandated topics and methods of instruction. General subjects include, but are not limited to, criminal, juvenile, civil, traffic, and alcoholic beverage laws; investigative, patrol, custody, and court procedures; emergency responses; and ethics and community relations.

Successful graduates receive a curriculum certificate and are qualified to take certification examinations mandated by the North Carolina Criminal Justice Education and Training Standards Commission and/or the North Carolina Sheriffs' Education and Training Standards Commission.

## CERTIFICATE <br> BASIC LAW ENFORCEMENT TRAINING

## Course and Hour Requirements

Required Courses ..... Credit
Hours
CJC 100 Basic Law Enforcement Training ..... 18
TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: ..... 18

## CERTIFICATE BROADCASTING AND PRODUCTION

The Broadcasting and Production certificate provides basic introductory courses for the broadcast industry. This certificate is a "fast track" to equipment use and technical theory.

All certificate courses are creditable toward the diploma or Associate degree that the College is approved to offer.

## CERTIFICATE BROADCASTING AND PRODUCTION

Course and Hour Requirements
Required Courses ..... Credit
Hours
BPT 112 Broadcast Writing ..... 4
BPT 231 Video/TV Production I ..... 4
BPT 232 Video/TV Production II ..... 4
BPT 235 TV Production I ..... 2
BPT 255 Computer-Based Production ..... 3

## CERTIFICATE BUSINESS ADMINISTRATION

The Business Administration certificate is designed to give the student the basic skills needed to gain employment in the business industry. The courses taken in this certificate program count as credit toward the Business Administration degree program. Course credit earned more than five years prior to entering will not apply toward the certificate in Business Administration. These classes are offered to day and night students.

## CERTIFICATE BUSINESS ADMINISTRATION

## Course and Hour Requirements

Required Courses ..... Credit
BUS 110 Introduction to Business ..... 3Hours
BUS 115 Business Law I ..... 3
ECO 251 Principles of Microeconomics
BUS 121 Business Mathematics ..... 3
MKT 120 Principles of Marketing ..... 3
BUS 137 Principles of Management ..... 3
TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: ..... 18

## CERTIFICATE BUSINESS ADMINISTRATION MARKETING AND RETAILING

The Business Administration - Marketing and Retailing certificate focuses on the business aspects for marketing and retailing. Topics include accounting, marketing, visual merchandising and buying.

All certificate courses are creditable toward the Associate degree or diploma programs that the College is approved to offer.

## CERTIFICATE BUSINESS ADMINISTRATION MARKETING AND RETAILING

## Course and Hour Requirements

Required Courses ..... CreditACC 120 Accounting I4
MKT 120 Introduction to Marketing ..... 3
MKT 122 Visual Merchandising ..... 3
MKT 125 Buying and Merchandising ..... 3
OST 286 Professional Development ..... 3
TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: ..... 16

## CERTIFICATE BUSINESS PRESENTATION

The Business Presentation certificate is designed for individuals desiring skills in the design, creation, and production of presentations in the business environment. Proper use of various software, font type, data acquisition, and presentation mediums will be the focus of the study.

Technology changes at a rapid pace. For this reason, all students who wish to earn the Business Presentation certificate must apply for and be accepted into the current certificate program. Upon acceptance, any previously earned, comparable college-level computer course work will be evaluated for transfer credit. Evaluation will compare previous course content to current technology requirements. Therefore, credit will not automatically be extended course for course.

## CERTIFICATE BUSINESS PRESENTATION

Course and Hour Requirements
Required Courses ..... Credit
Hours
CIS 110 Introduction to Computers ..... 3
CIS 120 Spreadsheet I ..... 3
CIS 130 Survey of Operating Systems ..... 3
CIS 169 Business Presentations ..... 2
CIS 172 Intro to the Internet ..... 3
CIS 164 DTP Layout and Design ..... 3
TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: ..... 17

## CERTIFICATE CARPENTRY

The Carpentry program trains students to construct and make repairs to residential structures using standard building materials and hand and power tools. This program is designed to teach carpentry skills and a general knowledge of residential construction. Instruction also includes the study of mathematics, blueprint reading, building codes and energy efficient construction.

All certificate courses are creditable toward the diploma or Associate degree that the College is approved to offer.

## CERTIFICATE CARPENTRY

## Course and Hour Requirements

Required Courses ..... Credit
Hours
CAR 111A Carpentry I ..... 4
CAR 112A Carpentry II ..... 4
CAR 113A Carpentry III ..... 4

## CERTIFICATE <br> CHILD CARE ADMINISTRATION

The Child Care Administration Certificate program prepares graduates for positions in child care settings. Successful completers of all courses in the program will receive the College's Early Childhood Certificate. All courses taken for the certificate or licensure may be transferred into the two-year Associate of Applied Science degree.

## CERTIFICATE CHILD CARE ADMINISTRATION

Course and Hour Requirements
Required Courses ..... CreditHours
EDU 111 Early Childhood Credential I ..... 2
EDU 112 Early Childhood Credential II or ..... 2
EDU 113 Family Childhood Credential ..... 2
EDU 261 Early Childhood Administration I ..... 2
EDU 262 Early Childhood Administration II ..... 3
EDU 144 Child Development I ..... 3
Choose one:
BUS 137 Principles of Management ..... 3
BUS 110 Introduction to Business ..... 3
Choose one:
PSY or SOC ..... 3

## CERTIFICATE <br> COSMETOLOGY

The Cosmetology certificate is designed to provide competency-based knowledge, scientific/artists principles, and hands-on fundamentals associated with the cosmetology industry. All courses taken in the certificate program will be applicable to the diploma program.

## CERTIFICATE COSMETOLOGY

## Course and Hour Requirements

Required Courses Credit
Hours
COS 111 Cosmetology Concepts I ..... 4
COS 112 Salon I ..... 8
COS 113 Cosmetology Concepts II ..... 4
COS 114 Salon II ..... 8
COS 115 Cosmetology Concepts III ..... 4
COS 116 Salon III ..... 4
COS 140 Contemporary Design ..... 2
TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: ..... 34
The Cosmetology certificate requires 1200 contact hours.

## CERTIFICATE COSMETOLOGY INSTRUCTOR

The Cosmetology Instructor curriculum provides a course of study for learning the skills needed to teach the theory and practice of cosmetology as required by the North Carolina Board of Cosmetic Arts.

Course work includes requirements for becoming an instructor, introduction to teaching theory, methods and aids, practice teaching, and development of evaluation instruments.

Graduates of the program may be employed as cosmetology instructors in public or private education and business.

Applicants must hold a valid Cosmetologist Certificate from the State Board of Cosmetic Arts.

When Cosmetology students leave the laboratory, they must clock out. To earn hours in Cosmetology, students must be physically present in the laboratory.

## CERTIFICATE COSMETOLOGY INSTRUCTOR

## Course and Hour Requirements

| Required Courses | Credit |  |
| :--- | :--- | :---: |
|  |  | Hours |
| COS 271 | Instructor Concepts I | 5 |
| COS 272 | Instructor Practicum I | 7 |
| COS 273 | Instructor Concepts II | 5 |
| COS 274 | Instructor Practicum II | 7 |

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 24

The Cosmetology certificate requires 1200 contact hours.

| Recommended Semester Schedule |  |  |  | Hours <br> Lab | Credit |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Class |  |  |
| First Year: Fall, Spring, or Summer Choose one: |  |  |  |  |  |
|  |  |  |  |  |  |
| COS | 271 | Instructor Concepts I and | 5 | 0 | 5 |
| cos | 272 | Instructor Practicum I | 0 | 21 | 7 |
| cos | 273 | Instructor Concepts II and | 5 | 0 | 5 |
| cos | 274 | Instructor Practicum II | 0 | 21 | 7 |

## CERTIFICATE <br> CRIME SCENE INVESTIGATOR

This certificate program will allow arson investigators and police officers the opportunity to increase their knowledge and skills in gathering of evidence and testimony.

All certificate courses are creditable toward the Associate degree that the College is approved to offer.

This certificate is designed for the professional law enforcement officer who:

1. Has completed the BLET training
2. Is currently employed as a law enforcement officer

## CERTIFICATE CRIME SCENE INVESTIGATOR

Course and Hour Requirements
Required Courses ..... Credit
Hours
CJC 132 Court Procedure and Evidence ..... 3
CJC 221 Investigative Principles ..... 4
CJC 222 Criminalistics ..... 3
CJC 114 Investigative Photography ..... 2
CJC 120 Interviews/Interrogation ..... 2
TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: ..... 14

## CERTIFICATE CRIMINAL JUSTICE

The Criminal Justice Certificate program is designed to provide knowledge of criminal justice systems and operations. Study will focus on juvenile justice, law enforcement operations, corrections, and ethics and community relations. All certificate courses are creditable toward the diploma or Associate degree that the College is approved to offer.

## CERTIFICATE <br> CRIMINAL JUSTICE

Course and Hour Requirements
Required Courses ..... Credit
Hours
CJC 113 Juvenile Justice ..... 3
CJC 112 Criminology ..... 3
CJC 213 Substance Abuse ..... 3
CJC 211 Counseling ..... 3
CJC 212 Ethics and Community Relations ..... 3
Choose one:
CJC 132 Court Procedure and Evidence ..... 3
CJC 214 Victimology ..... 3
CJC 122 Community Policing ..... 3

## CERTIFICATE <br> DATABASE MANAGEMENT

The Database Management certificate is designed for individuals desiring skills in using the computer to control, manage, and maximize information available through database application. Data acquisition, data manipulation, and reporting will be inclusive in this course of study.

Technology changes at a rapid pace. For this reason, all students who wish to earn the Database Management certificate must apply for and be accepted into the current certificate program. Upon acceptance, any previously earned, comparable college-level computer course work will be evaluated for transfer credit. The evaluation will compare previous course content to current technology requirements. Therefore, credit will not automatically be extended course for course.

## CERTIFICATE DATABASE MANAGEMENT

Course and Hour Requirements
Required Courses ..... Credit
Hours
CIS 110 Introduction to Computers ..... 3
CIS 115 Introduction to Programming and Logic ..... 3
CIS 130 Survey of Operating Systems ..... 3
CIS 152 Database Concepts and Applications ..... 3
CIS 153 Database Applications ..... 3
CIS 172 Introduction to the Internet ..... 3
TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: ..... 18

## CERTIFICATE DIGITAL ELECTRONICS

Digital Electronics is a certificate option in the Electronic Engineering Technology program which focuses primarily on digital electronic circuits related to computerized devices and controls. The certificate option is suited for the student whose primary interest is in digital electronics or for the student who has basic electronic experience and needs to upgrade in the digital and computer area.

All certificate courses are creditable toward the diploma or Associate degree that the College is approved to offer.

## CERTIFICATE DIGITAL ELECTRONICS

## Course and Hour Requirements

Required Courses ..... Credit
Hours
ELN 133 Digital Electronics ..... 4
ELN 232 Introduction to Microprocessors ..... 4
ELN 233 Microprocessor Systems ..... 4

## CERTIFICATE ELECTRICAL

The Electrical certificate offers a direct path to basic courses in theory, residential wiring, motor controls, and programmable logic controls.

All certificate courses are creditable toward the diploma or Associate degree that the College is approved to offer.

## CERTIFICATE <br> ELECTRICAL

## Course and Hour Requirements

Required Courses Credit
ELC 112 DC/AC ElectricityHours
ELC 113 Basic Wiring I ..... 4
ELC 114 Basic Wiring II ..... 4
ELC 117 Motors and Controls ..... 4

## CERTIFICATE FIRE SCIENCE TECHNOLOGY

The Fire Science Technology certificate program is designed to provide knowledge of the fire service and its infrastructure. This program will focus on developing a sound foundation and understanding of the history of the fire service, public education, fire service building construction, introduction to wildland firefighting, fire sprinklers and auto alarms and fire protection law. All certificate course are creditable toward the Associate degree (AAS) Fire Protection Technology.

This certificate will not meet any of the requirements for State Certification as a firefighter.

## CERTIFICATE FIRE SCIENCE TECHNOLOGY

Course and Hour Requirements
Required Courses ..... Credit
Hours
FIP 120 Introduction to Fire Protection ..... 2
FIP 124 Fire Prevention \& Public Education ..... 3
FIP 132 Building Construction ..... 3
FIP 144 Sprinklers and Auto Alarms ..... 3
FIP 152 Fire Protection Law ..... 2
FIP 188 Introduction to Wildland Firefighting ..... 4
TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: ..... 17

## CERTIFICATE <br> INDUSTRIAL ELECTRONICS

Industrial Electronics is a certificate option in the Electronics Engineering Technology program which focuses on control of industrial processes. Topics in the certificate program include basic motor control circuits, electromechanical and solid state relays, PLC applications and programming, open and closed loop control systems and documentation of control circuits.

All certificate courses are creditable toward diploma and degrees that the College is approved to offer.

## CERTIFICATE INDUSTRIAL ELECTRONICS

Course and Hour Requirements
Required Courses Credit
Hours
ELN 231 Industrial Controls ..... 3
PCI 162 Instrumentation Controls ..... 4
ELC 128 Introduction to PLC ..... 3
Choose one of the following courses:
ELN 131 Electronic Devices ..... 4
ELN 133 Digital Electronics ..... 4
TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: ..... 14

## CERTIFICATE INDUSTRIAL FIRE SAFETY SPECIALIST

This certificate program will provide industrial and municipal firefighters and brigade members the technical information to inspect plant facilities and make recommendations. Plant Emergency Organization operations and other safeguards will be covered.

All certificate courses are creditable toward the Associate degree that the College is approved to offer.

## CERTIFICATE INDUSTRIAL FIRE SAFETY SPECIALIST

Course and Hour Requirements
Required Courses ..... Credit
FIP 120 Introduction to Fire Protection Hazards ..... 2Hours
FIP 124 Fire Prevention and Public Education ..... 3
FIP 136 Inspection and Codes ..... 3
FIP 140 Industrial Fire Protection ..... 2
FIP 144 Sprinklers and Auto Alarms ..... 3
FIP 164 OSHA Standards ..... 2
COE 122 Co-op Work Experience II ..... 2
TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: ..... 17

## CERTIFICATE INFANT AND TODDLER

The Infant and Toddler certificate prepares individuals to work with children from infancy through toddler in diverse learning environments.

All certificate courses are creditable toward the Associate degree that the College is approved to offer.

## CERTIFICATE INFANT AND TODDLER

## Course and Hour Requirements

Required Courses Credit
Hours
EDU 111 Early Childhood Credential I ..... 2
EDU 112 Early Childhood Credential II ..... 2
EDU 144 Child Development I ..... 3
EDU 146 Child Guidance ..... 3
EDU 234 Infants, Toddlers \& Twos ..... 3
TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: ..... 13

## CERTIFICATE INTERNET ADMINISTRATION*

The Internet Administration certificate is designed for individuals desiring skills in the administration of the Internet. This course of study will provide individuals with both network administration and Internet administration skills.

Technology changes at a rapid pace. For this reason, all students who wish to earn the Internet Administration certificate must apply for and be accepted into the current certificate program. Upon acceptance, any previously earned, comparable college-level computer course work will be evaluated for transfer credit. Evaluation will compare previous course content to current technology requirements. Therefore, credit will not automatically be extended course for course.

## CERTIFICATE INTERNET ADMINISTRATION*

## Course and Hour Requirements

Required Courses ..... Credit
Hours
NET 250 Advanced Networks I ..... 3
NET 251 Advanced Networks II ..... 3
NET 260 Internet Development and Support ..... 3
One additional Networking course ..... 3
TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: ..... 12
*Completion of the Network Administration Certificate is required before astudent is eligible to work toward the Internet Administration Certificate.

## CERTIFICATE <br> MACHINING TECHNOLOGY

These certificates offer students recognition for partial completion of the Machining Technology program. This offers excellent inservice training options for employers and employees.

All certificate course are creditable toward the diploma or Associate degree that the College is approved to offer.

## CERTIFICATE MACHINING TECHNOLOGY

Course and Hour Requirements
Required Courses ..... CreditHours
MAC 111 Machining Technology I ..... 6
MAC 112 Machining Technology II ..... 6
BPR 111 Blueprint Reading ..... 2

## CERTIFICATE COMPUTER NUMERICAL CONTROL

Course and Hour Requirements

## Required Courses

Credit
Hours
6
MAC 113 Machining Technology III
MAC 122 CNC Turning 2

MAC 124 CNC Milling 2
MEC 110 Introduction to CAD/CAM

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 12


## CERTIFICATE MECHANICAL DRAFTING

The Mechanical Drafting certificate offers students the basics of mechanical drafting and computer-aided design.

All certificate course are creditable toward the diploma or Associate degree that the College is approved to offer.

## CERTIFICATE <br> MECHANICAL DRAFTING

## Course and Hour Requirements

Required Courses Credit
Hours
DFT 111 Technical Drafting I ..... 2
DFT 112 Technical Drafting II ..... 2
DFT 151 CAD I ..... 3
DFT 152 CAD II ..... 3
DFT 153 CAD III ..... 3

## CERTIFICATE MEDICAL OFFICE ADMINISTRATION <br> Basic Certificate

The courses taken in this certificate may be applied toward the Medical Office Administration program.

CERTIFICATE<br>MEDICAL OFFICE ADMINISTRATION<br>Basic Certificate<br>Course and Hour Requirements

Required Courses Credit
Hours
ACA 115 Success and Study Skills ..... 1
OST 131 Keyboarding ..... 2
OST 134 Text Entry and Formatting ..... 3
MED 121 Medical Terminology I ..... 3
MED 122 Medical Terminology II ..... 3
OST 164 Text Editing Applications ..... 3
OST 184 Records Management ..... 2
TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: ..... 17

## CERTIFICATE <br> MEDICAL OFFICE ADMINISTRATION <br> Intermediate Certificate

This intermediate certificate program is designed to be taken after a student has finished the Basic certificate.

All courses taken in the certificate program may be applied toward the Medical Office Administration Associate Degree.

## CERTIFICATE <br> MEDICAL OFFICE ADMINISTRATION <br> Intermediate Certificate

Course and Hour Requirements
Required Courses ..... Credit
Hours
OST 135 Advanced Text Entry and Formatting ..... 4
OST 148 Medical Coding, Billing and Insurance ..... 3
OST 243 Medical Office Simulation ..... 3
OST 241 Medical Office Transcription I ..... 2
OST 149 Medical Legal Issues ..... 3
OST 136 Word Processing ..... 2
TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: ..... 17

## CERTIFICATE NETWORK ADMINISTRATION

The Network Administration certificate is designed for individuals desiring local area network administration skills. Basic network concepts, administration of networks, and fundamental network applications will be studied in this program.

Technology changes at a rapid pace. For this reason, all students who wish to earn the Network Administration certificate must apply for and be accepted into the current certificate program. Upon acceptance, any previously earned, comparable college-level computer course work will be evaluated for transfer credit. The evaluation will compare previous course content to current technology requirements. Therefore, credit will not automatically be extended course for course.

## CERTIFICATE NETWORK ADMINISTRAITON

## Course and Hour Requirements

Required Courses ..... Credit
CIS 110 Introduction to Computers ..... 3Hours
CIS 130 Survey of Operating Systems ..... 3
NET 110 Data Communication/Networking ..... 3
NET 120 Network Installation/Administration I ..... 3
NET 220 Network Installation/Administration II ..... 3
TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: ..... 15

## CERTIFICATE <br> NURSING ASSISTANT

(Proposed Fall 2003)

The Nursing Assistant curriculum prepares individuals to work under the supervision of licensed health care professionals in performing nursing care and services for persons of all ages.

Course work emphasizes growth and development throughout the life span, personal care, vital signs, communication, nutrition, medical asepsis, therapeutic activities, accident and fire safety, household environment and equipment management; family resources and services; and employment skills.

Graduates of this curriculum may be eligible to be listed on the registry as a Nursing Assistant I and Nursing Assistant II. They may be employed in home health agencies, hospitals, clinics, nursing homes, extended care facilities, and doctors' offices.

## CERTIFICATE NURSING ASSISTANT

 (Proposed Fall 2003)Course and Hour Requirements
Required Courses ..... Credit
Hours
NAS 101 Nursing Assistant I ..... 5
NAS 102 Nursing Assistant II ..... 6
NAS 103 Home Health Care ..... 2
PSY 150 General Psychology ..... 3
TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: ..... 16

## CERTIFICATE OFFICE SYSTEMS TECHNOLOGY Basic Certificate

The courses taken in this certificate may be applied toward the Office Systems Technology Degree program.

CERTIFICATE OFFICE SYSTEMS TECHNOLOGY Basic Certificate<br>Course and Hour Requirements

Required Courses Credit
ACA 115 Success and Study Skills ..... 1Hours
OST 131 Keyboarding ..... 2
OST 134 Text Entry and Formatting
OST 184 Records Management ..... 2
OST 137 Office Software Applications ..... 2
OST 164 Text Editing Applications ..... 3
OST 286 Professional Development ..... 3
OST 136 Word Processing ..... 2
TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: ..... 18

## CERTIFICATE OFFICE SYSTEMS TECHNOLOGY Intermediate Certificate

This Intermediate certificate program is designed to be taken after a student has finished the Basic certificate.

Course taken in this certificate may be applied toward the Office Systems Technology Associate Degree program.

## CERTIFICATE OFFICE SYSTEMS TECHNOLOGY

 Intermediate CertificateCourse and Hour Requirements
Required Courses ..... Credit
Hours
OST 135 Advanced Text Entry and Formatting ..... 4
OST 223 Machine Transcription I ..... 2
CIS 120 Spreadsheet I ..... 3
OST 122 Office Computations ..... 2
Choose one of the following courses:
OST 236 Advanced Word Information Processing ..... 3
OST 289 Office Systems Management ..... 3
OST 233 Office Publications Design ..... 3
OST 181 Introduction to Office Systems ..... 3
TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: ..... 14

## CERTIFICATE <br> PHLEBOTOMY

The Phlebotomy curriculum prepares individuals to obtain blood and other specimens for the purpose of laboratory analysis.

Course work includes proper specimen collection and handling, communication skills, and maintaining patient data.

Graduates may qualify for employment in hospitals, clinics, physicians' offices, and other health care settings and may be eligible for national certification as phlebotomy technicians.

## ADMISSIONS PROCESS

Steps 1 through 4 must be completed to be considered for Fall class.

1. Must meet all College general admission requirements as stated in the Academic Bulletin and Student Handbook.
2. Must complete an official College application declaring interest in Phlebotomy as a major before July 1.
3. Must submit an official high school transcript (showing graduation) or a GED Certificate. Submit other official college transcripts, if any.
4. Must take the Asset Placement Test in English, reading and mathematics. If an applicant is unsuccessful on any section of the Placement Test, he/she should enroll in the appropriate developmental courses prior to being considered for acceptance into the program. Consult the College catalog for placement test exemption criteria.
5. If all steps in the admission process have been satisfactorily completed, the applicants will be ranked for final program acceptance according to the scores on the Asset Placement test or other exemption criteria. In the case of a tie, transcript evaluations and or interviews will be conducted and coordinated through the office of the Director of Admissions. Letters of acceptance will be mailed after July 1.
6. After acceptance into the program, the student must complete a series of Hepatitis-B shots. Also, the student will submit a satisfactory physical examination report from a physician. Forms to be used will be given to the student by the Director of Admissions. The report must include the emotional and mental status of the student. The examination must be within 12 months (one year) prior to entry into the Phlebotomy program.
7. Admission to the Phlebotomy Certificate program will be limited to twenty (20) students per year. Individuals who are not accepted must repeat the application process for admission prior to the next Fall semester.
8. Accepted Phlebotomy Certificate program students must earn a grade of " $C$ " or better in each Phlebotomy course taken to earn the certificate.
9. Accepted Phlebotomy students are required to obtain malpractice insurance. Proof of health insurance or accident insurance is also required. (Malpractice insurance and/or accident insurance may be purchased through the College business office at group rates.)

## CERTIFICATE PHLEBOTOMY

Course and Hour Requirements
Required Courses

| PBT | 100 | Phlebotomy Technology | 6 |
| :--- | :--- | :--- | :--- |
| PBT | 101 | Phlebotomy Practicum | 3 |
| PSY | 150 | General Psychology | 3 |

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 12


## CERTIFICATE PLUMBING

The Plumbing certificate program offers a "faster tract" for preparing to learn residential plumbing skills by focusing on residential venting, drains, water systems and fixture installation. Code requirements are included as a part of this study. This certificate will prepare a student for residential rough-in and finish work.

All certificate courses are creditable toward the diploma or Associate degree that the College is approved to offer.

## CERTIFICATE PLUMBING

Course and Hour Requirements
Required Courses ..... Credit
Hours
PLU 110A Modern Plumbing ..... 5
PLU 120A Plumbing Applications ..... 5
PLU 140 Introduction to Plumbing Codes ..... 2

## CERTIFICATE <br> REAL ESTATE

The Real Estate curriculum provides the prelicensing education required by the North Carolina Real Estate Commission, prepares individuals to enter the profession, and offers additional education to meet professional development needs.

Course work includes the practices and principles of real estate, emphasizing financial and legal applications, property development, and property values.

Graduates qualify for the North Carolina Real Estate Sales and Broker examinations. They should be able to enter apprenticeship training and provide real estate services to consumers in a competent manner.

The following prerequisite has been added to RLS 162 (Fundamentals of Real Estate): Satisfactory College placement test scores in reading and mathematics; or a grade of "C" or higher in RED 090 (Improved College Reading, 3-2-4), and a grade of "C" or higher in MAT 060 (Essential Mathematics, 3-2-4); or permission of the Dean of Business Technologies.

RLS 112 is required for state licensure. The College certificate, however, requires RLS 112, 113, 117 and one additional Real Estate or approved business course.

## CERTIFICATE <br> REAL ESTATE

Course and Hour Requirements
Required Courses ..... CreditHours
RLS 112 Real Estate Fundamentals ..... 5
RLS 113 Real Estate Mathematics ..... 2
RLS 117 Real Estate Brokerage ..... 4
RLS or BUS elective ..... 3
TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: ..... 14

## CERTIFICATE SCHOOL-AGE CHILDREN

The School-Age Children certificate prepares individuals to work with school-age children in diverse learning environments.

All certificate courses are creditable toward the diploma or Associate degree that the College is approved to offer.

## CERTIFICATE SCHOOL-AGE CHILDREN

## Course and Hour Requirements

Required Courses Credit
Hours
EDU 131 Child, Family, and Community ..... 3
EDU 145 Child Development II ..... 3
EDU 146 Child Guidance ..... 3
EDU 235 School-Age Development ..... 2
EDU 275 Effective Teacher Training ..... 2
ACA 115 Success and Study Skills ..... 1

## CERTIFICATE SPREADSHEET MANAGEMENT

The Spreadsheet Management certificate is designed for individuals seeking knowledge in the management of data through the use of spreadsheets. Skills acquired will be an advanced knowledge of spreadsheet software including financial data management, numeric analysis and Internet access.

Technology changes at a rapid pace. For this reason, all students who wish to earn the Spreadsheet Management certificate must apply for and be accepted into the current certificate program. Upon acceptance, any previously earned, comparable College-level computer course work will be evaluated for transfer credit. The evaluation will compare previous course content to current technology requirements. Therefore, credit will not automatically be extended course for course.

## CERTIFICATE SPREADSHEET MANAGEMENT

Course and Hour Requirements
Required Courses ..... Credit
Hours
ACC 120 Principles of Accounting I ..... 4
CIS 110 Introduction to Computers ..... 3
CIS 120 Spreadsheet I ..... 3
CIS 130 Survey of Operating Systems ..... 3
CIS 172 Introduction to the Internet ..... 3
TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: ..... 16

## CERTIFICATE TEACHER ASSOCIATE

Teacher Associate certificate prepares students to work with school-age children in diverse learning environments. Students will combine learned theories with practice under the supervision of qualified teachers. A Cleveland Community College certificate will be awarded upon completion. All courses in the certificate may be applied toward Early Childhood/Teacher Associate.

## CERTIFICATE TEACHER ASSOCIATE

Course and Hour Requirements
Required Courses ..... Credit
Hours
ACA 115 Success and Study Skills ..... 1
CIS 110 Introduction to Computers ..... 3
EDU 118 Teacher Associate Principles and Practices ..... 3
EDU 146 Child Guidance ..... 3
EDU 275 Effective Teacher Training ..... 2
Social Science Elective ..... 3
TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: ..... 15

## CERTIFICATE TECHNICAL SUPPORT

The Technical Support certificate is designed for individuals desiring knowledge and skills in configuring, installing and trouble-shooting microcomputer systems (PC), including hardware components, data communications devices, software installation, and Internet access.

Technology changes at a rapid pace. For this reason, all students who wish to earn the Technical Support certificate must apply for and be accepted into the current certificate program. Upon acceptance, any previously earned, comparable Collegelevel computer course work will be evaluated for transfer credit. The evaluation will compare previous course content with current technology requirements. Therefore, credit will not automatically be extended course for course.

## CERTIFICATE TECHNICAL SUPPORT

Course and Hour Requirements
Required Courses ..... Credit
Hours
CIS 110 Introduction to Computers ..... 3
CIS 130 Survey of Operating Systems ..... 3
CIS 172 Introduction to the Internet ..... 3
CIS 215 Hardware Installation/Maintenance ..... 3
CIS 216 Software Installation/Maintenance ..... 2
NET 110 Data Communications/Networking ..... 3
TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: ..... 17

## CERTIFICATE WELDING

The Welding Certificate recognizes achievement in cutting, plate and pipe welding for stick, TIG and MIG processes.

All certificate courses are creditable toward the diploma program that the College is approved to offer.

## CERTIFICATE WELDING

Course and Hour Requirements
Required Courses ..... Credit
Hours
WLD 110 Cutting Processes ..... 2
WLD 115B SMAW (Stick) Plate ..... 3
WLD 215 SMAW (Stick) Pipe ..... 4
WLD 132 GTAW (TIG) Plate/Pipe ..... 3
Choose one of the following courses:
WLD 121 GMAW (MIG) FCA w/Plate ..... 4
WLD 122 GMAW (MIG) Plate/Pipe ..... 3
Choose one of the following courses:
WLD 131A GTAW (TIG) Plate ..... 2
WLD 131B GTAW (TIG) Plate ..... 2

## CERTIFICATE GMAW (MIG) WELDING

This certificate program covers the gas metal arc welding process. It teaches the student procedures used in plate and pipe using GMAW.

## CERTIFICATE GMAW (MIG) WELDING

Course and Hour Requirements
Required Courses CreditHours
Fall Semester
WLD 121 GMAW (MIG) FCA w/Plate ..... 4
BPR 111 Blue Print Reading ..... 2
Spring Semester
WLD 122 GMAW (MIG) Plate/Pipe ..... 3
Summer Semester
WLD 141 Symbols \& Specifications ..... 3
TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: ..... 12


## CERTIFICATE <br> GTAW (TIG) WELDING

This certificate program covers the gas tungsten welding technique. It teaches the student procedures used in plate processes and pipe processes using GTAW procedures. This certificate also covers TIG welding.

## CERTIFICATE <br> GTAW (TIG) WELDING

## Course and Hour Requirements

Required Courses ..... Credit
Fall Semester
BPR 111 Blueprint Reading ..... 2
Spring Semester
WLD 131A GTAW (TIG) Plate ..... 2
Summer Semester
WLD 131B GTAW (TIG) Plate ..... 2
WLD 132 GTAW (TIG) Plate/Pipe ..... 3
WLD 141 Symbols and Specifications ..... 3
TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: ..... 12

## CERTIFICATE SMAW (Stick Welding)

This certificate program covers the stick welding process. It teaches the student procedures used in plate processes and pipe processes used in stick welding.

## CERTIFICATE SMAW (Stick Welding)

## Course and Hour Requirements

Required Courses ..... CreditHours
Fall Semester
WLD 115 SMAW (Stick) Plate ..... 5
BPR 111 Blueprint Reading ..... 2
Spring Semester
WLD 215 SMAW (Stick) Pipe ..... 4
Summer Semester
WLD 141 Symbols \& Specifications ..... 3
TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: ..... 14



#### Abstract

\section*{ACADEMIC RELATED}

ACA 115-Success \& Study Skills


This course provides an orientation to the resources and academic skills necessary to achieve educational objectives. Emphasis is placed on an exploration of facilities and services, study skills, library skills, self-assessment, wellness, goal-setting, and critical thinking. Upon completion, students should be able to manage their learning experiences to successfully meet educational goals. Basic computer skills will be introduced to students unfamiliar with computers.

## ACCOUNTING

ACC 120-Prin of Financial Acct 324 This course introduces business decision-making using accounting information systems. Emphasis is placed on analyzing, summarizing, reporting, and interpreting financial information. Upon completion, students should be able to prepare financial statements, understand the role of financial information in decision-making and address ethical considerations. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

ACC 121-Prin of Managerial Acct
324
This course is a continuation of accounting principles. Emphasis is placed on managerial accounting concepts for external and internal analysis, reporting and decision-making. Upon completion, students should be able to analyze and interpret transactions relating to managerial concepts including product costing systems. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement. Prerequisite: ACC 120.

ACC 129-Individual Income Taxes
223
This course introduces the relevant laws governing individual income taxation. Topics include tax law, electronic research and methodologies, and the use of technology for preparation of individual tax returns. Upon completion, students should be able to analyze basic tax scenarios, research applicable tax law, and complete various individual tax forms.

ACC 130 Business Income Taxes
223
This course introduces the relevant laws governing business and fiduciary income taxes. Topics include tax law relating to business organizations, electronic research and methodologies, and the use of technology for the preparation of business tax returns. Upon completion, students should be able to analyze basic tax scenarios, research applicable tax law, and complete various business tax forms.

ACC 149-Intro to Acc Spreadsheets
122
This course provides a working knowledge of computer spreadsheets and their use in accounting. Topics include pre-programmed problems, model-building problems, beginning-level macros, graphics, and whatif analysis enhancements of template problems. Upon completion, students should be able to use a computer spreadsheet to complete many of the tasks required in accounting. Prerequisite: ACC 120.

ACC 150-Acct Software Applications 122
This course introduces computer applications related to accounting systems. Topics include general ledger, accounts receivable, accounts payable, inventory, payroll, and correcting, adjusting, and closing entries. Upon completion, students should be able to use a computer accounting software package to solve accounting problems.
Prerequisites: ACC 120.
ACC 151-Acct Spreadsheet Appl 122 This course is designed to facilitate the use of spreadsheet technology as applied to accounting principles. Emphasis is placed on using spreadsheet software as a problem-solving and decision-making tool. Upon completion, students should be able to demonstrate an understanding of the principles involved and display an analytical problem-solving ability for the topics covered.
Prerequisite: ACC 150.
ACC 220-Intermediate Accounting I 324
This course is a continuation of the study of accounting principles with in-depth coverage of theoretical concepts and financial statements. Topics include generally accepted accounting principles and extensive analyses of financial statements. Upon completion, students should be able to demonstrate competence in the conceptual framework underlying financial accounting, including the application of financial standards. Prerequisites: ACC 121.

ACC 221-Intermediate Acct II

## 324

This course is a continuation of ACC 220. Emphasis is placed on special problems which may include leases, bonds, investments, ratio analyses, present value applications, accounting changes, and corrections. Upon completion, students should be able to demonstrate an understanding of the principles involved and display an analytical problemsolving ability for the topics covered. Prerequisites: ACC 220.

ACC 225-Cost Accounting
303
This course introduces the nature and purposes of cost accounting as an information system for planning and control. Topics include direct materials, direct labor, factory overhead, process, job order, and standard cost systems. Upon completion, students should be able to demonstrate an understanding of the principles involved and display an analytical problem-solving ability for the topics covered. Prerequisites: ACC 121.

ACC 226-Advanced Managerial Acct
303
This course is designed to develop an appreciation for the uses of cost information in the administration and control of business organizations. Emphasis is placed on how accounting data can be interpreted and used by management in planning and controlling business activities. Upon completion, students should be able to analyze and interpret cost information and present this information in a form that is usable by management.
Prerequisite: ACC 121.
ACC 269-Auditing \& Assurance Serv
303
This course introduces selected topics pertaining to the objectives, theory and practices in engagements providing auditing and other assurance services. Coverage will include planning, conducting and reporting, with emphasis on the related professional
ethics and standards. Upon completion, students should be able to demonstrate an understanding of the types of professional services, the related professional standards, and engagement methodology. Prerequisite: ACC 220.

## AIR CONDITIONING, HEATING, AND REFRIGERATION

AHR 110-Intro to Refrigeration
265 This course introduces the basic refrigeration process used in mechanical refrigeration and air conditioning systems. Topics include terminology, safety, and identification and function of components; refrigeration cycle; and tools and instrumentation used in mechanical refrigeration systems. Upon completion, students should be able to identify refrigeration systems and components, explain the refrigeration process, and use the tools and instrumentation of the trade.

## AHR 111-HVACR Electricity

223
This course introduces electricity as it applies to HVACR equipment. Emphasis is placed on power sources, interaction of electrical components, wiring of simple circuits, and the use of electrical test equipment. Upon completion, students should be able to demonstrate good wiring practices and the ability to read simple wiring diagrams.

AHR 112-Heating Technology 244 This course covers the fundamentals of heating including oil, gas, and electric heating systems. Topics include safety, tools and instrumentation, system operating characteristics, installation techniques, efficiency testing, electrical power, and control systems. Upon completion, students should be able to explain the basic oil, gas, and electrical heating systems and describe the major components of a heating system.

AHR 113-Comfort Cooling
244
This course covers the installation procedures, system operations, and maintenance of residential and light commercial comfort cooling systems. Topics include terminology, component operation, and testing and repair of equipment used to control and produce assured comfort levels. Upon completion, students should be able to use psychometrics, manufacturer specifications, and test instruments to determine proper system operation.

AHR 114-Heat Pump Technology
244
This course covers the principles of air source and water source heat pumps. Emphasis is placed on safety, modes of operation, defrost systems, refrigerant charging, and system performance. Upon completion, students should be able to understand and analyze system performance and perform routine service procedures. Prerequisites: AHR 110 or AHR 113

## AHR 115-Refrigeration Systems

132
This course introduces refrigeration systems and applications. Topics include defrost methods, safety and operational control, refrigerant piping, refrigerant recovery and charging, and leak testing. Upon completion, students should be able to assist in installing and testing refrigeration systems and perform simple repairs. Prerequisites: AHR 110.

AHR 130-HVAC Controls
223
This course covers the types of controls found in residential and commercial comfort systems. Topics include electrical and electronic controls, control schematics and diagrams, test instruments, and analysis and troubleshooting of electrical systems. Upon completion, students should be able to diagnose and repair common residential and commercial comfort system controls. Prerequisites: AHR 111 or ELC 111.

AHR 133-HVAC Servicing
264
This course covers the maintenance and servicing of HVAC equipment. Topics include testing, adjusting, maintaining, and troubleshooting HVAC equipment and record keeping. Upon completion, students should be able to adjust, maintain, and service HVAC equipment. Corequisites: AHR 112 or AHR 113.

AHR 151-HVAC Duct Systems I
132
This course introduces the techniques used to lay out and fabricate duct work commonly found in HVAC systems. Emphasis is placed on the skills required to fabricate duct work. Upon completion, students should be able to lay out and fabricate simple duct work.

AHR 210-Residential Building Code 122 This course covers the residential building codes that are applicable to the design and installation of HVAC systems. Topics include current residential codes as applied to HVAC design, service, and installation. Upon completion, students should be able to demonstrate the correct usage of residential building codes that apply to specific areas of the HVAC trade.

## AHR 211-Residential System Design

223
This course introduces the principles and concepts of conventional residential heating and cooling system design. Topics include heating and cooling load estimating, basic psychometrics, equipment selection, duct system selection, and system design. Upon completion, students should be able to design a basic residential heating and cooling system.

## ART

ART 111-Art Appreciation
303
This course introduces the origins and historical development of art. Emphasis is placed on the relationship of design principles to various art forms including but not limited to sculpture, painting, and architecture. Upon completion, students should be able to identify and analyze a variety of artistic styles, periods, and media. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

ART 114-Art History Survey I
303
This course covers the development of art forms from ancient times to the Renaissance. Emphasis is placed on content, terminology, design, and style. Upon completion, students should be able to demonstrate an historical understanding of art as a product reflective of human social development. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.
on content, terminology, design, and style. Upon completion, students should be able to demonstrate an historical understanding of art as a product reflective of human social development. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

ART 116-Survey of American Art 303 This course covers the development of American art forms from colonial times to the present. Emphasis is placed on architecture, painting, sculpture, graphics, and the decorative arts. Upon completion, students should be able to demonstrate understanding of the history of the American creative experience. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

ART 121-Design I
063
This course introduces the elements and principles of design as applied to two-dimensional art. Emphasis is placed on the structural elements, the principles of visual organization, and the theories of color mixing and interaction. Upon completion, students should be able to understand and use critical and analytical approaches as they apply to two-dimensional visual art. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

## ART 122-Design II <br> 063

This course introduces basic studio problems in three-dimensional visual design. Emphasis is placed on the structural elements and organizational principles as applied to mass and space. Upon completion, students should be able to apply threedimensional design concepts. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement. Prerequisites: ART 121.

## ART 130-Basic Drawing

042
This course introduces basic drawing techniques and is designed to increase observation skills. Emphasis is placed on the fundamentals of drawing. Upon completion, students should be able to demonstrate various methods and their application to representational imagery. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and./or elective course requirement.

ART 131-Drawing I
063
This course introduces the language of drawing and the use of various drawing materials. Emphasis is placed on drawing techniques, media, and graphic principles. Upon completion, students should be able to demonstrate competence in the use of graphic form and various drawing processes. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

## ART 132-Drawing II

063
This course continues instruction in the language of drawing and the use of various materials. Emphasis is placed on experimentation in the use of drawing techniques, media, and graphic materials. Upon completion, students should be able to demonstrate
increased competence in the expressive use of graphic form and techniques. Students will work with graphite, ink, pastel, and colored pencil. This course has been approved to satisfy the Articulation Agreement for transferability as a premajor and/or elective course requirement. Prerequisite: ART 131.

ART 140-Basic Painting
042
This course introduces the mechanics of painting. Emphasis is placed on the exploration of painting media through fundamental techniques. Upon completion, students should be able to demonstrate a basic understanding and application of painting. This course has been approved to satisfy the Articulation Agreement for transferability as a premajor and/or elective course requirement. Prerequisite: ART 131.

ART 171-Computer Art I
063
This course introduces the use of the computer as a tool for solving visual problems. Emphasis is placed on fundamentals of computer literacy and design through bit-mapped image manipulation. Upon completion, students should be able to demonstrate an understanding of paint programs, printers, and scanners to capture, manipulate, and output images. This course has been approved to satisfy the Articulation Agreement for transferability as a premajor and/or elective course requirement.

ART 240-Painting I 063
This course introduces the language of painting and the use of various painting materials. Emphasis is placed on the understanding and use of various painting techniques, media, and color principles. Upon completion, students should be able to demonstrate competence in the use of creative processes directed toward the development of expressive form. Techniques in acrylic, alkyd and oil paint are emphasized. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

ART 241-Painting II
063
This course provides a continuing investigation of the materials, processes, and techniques of painting. Emphasis is placed on the exploration of expressive content using a variety of creative processes. Upon completion, students should be able to demonstrate competence in the expanded use of form and variety. Techniques in watercolor and transparent acrylic are emphasized. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement. Prerequisites: ART 240.

ART 271-Computer Art II
063
This course includes advanced computer imaging techniques. Emphasis is placed on creative applications of digital technology. Upon completion, students should be able to demonstrate command or computer systems and applications to express their personal vision. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement. Prerequisites: ART 171.

ART 288-Studio
063
This course provides the opportunity for advanced self-determined work beyond the limits of regular studio course sequences. Emphasis is placed on
creative self-expression and in-depth exploration of techniques and materials. Upon completion, students should be able to create original projects specific media, materials, and techniques. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement. Prerequisites: Limited to those who have completed a sequence of art courses in the proposed area of study.

## AMERICAN SIGN LANGUAGE

ASL 111-Elementary ASL I
303
This course introduces the fundamental elements of American Sign Language. Emphasis is placed on the development of basic expressive and receptive skills. Upon completion, students should be able to comprehend and respond with grammatical accuracy to expressive American Sign Language.

ASL 112-Elementary ASL II
303
This course is a continuation of ASL 111 focusing on the fundamental elements of American Sign Language. Emphasis is placed on the progressive development of expressive and receptive skills. Upon completion, students should be able to comprehend and respond with increasing proficiency to expressive American Sign Language. Prerequisite: ASL 111.

ASL 181-ASL Lab I
021
This course provides an opportunity to enhance acquisition of the fundamental elements of American Sign Language. Emphasis is placed on the development of basic expressive and receptive skills through the use of supplementary learning media and materials. Upon completion, students should be able to comprehend and respond with grammatical accuracy to expressive American Sign Language.

ASL 182-ASL Lab II
021
This course provides an opportunity to enhance acquisition of the fundamental elements of American Sign Language. Emphasis is placed on the progressive development of basic expressive and receptive skills through the use of supplementary learning media and materials. Upon completion, students should be able to comprehend and respond with increasing proficiency to expressive American Sign Language. Prerequisite: ASL 181.

## AUTO BODY REPAIR

AUB 111-Painting and Refinishing I 264 This course introduces the proper procedures for using automotive refinishing equipment and materials in surface preparation and application. Topics include federal, state, and local regulations, personal safety, refinishing equipment and materials, surface preparation, masking, application techniques, and other related topics. Upon completion, students should be able to identify and use proper equipment and materials in refinishing following accepted industry standards. This is a diploma-level course.

## AUB 112-Painting \& Refinishing II

264 This course covers advanced painting techniques and technologies with an emphasis on identifying problems encountered by the refinishing technician. Topics include materials application, color matching, correction of refinishing problems, and other related
topics. Upon completion, students should be able to perform spot, panel, and overall refinishing repairs and identify and correct refinish problems. Prerequisites: AUB 111. This is a diploma-level course.

AUB 114-Special Finishes
122
This course introduces multistage finishes, custom painting, and protective coatings. Topics include base coats, advanced intermediate coats, clear coats, and other related topics. Upon completion, students should be able to identify and apply specialized finishes based on accepted industry standards. Prerequisites: AUB 111. This is a diploma-level course.

AUB 121-Non-Structural Damage I
143 This course introduces safety, tools, and the basic fundamentals of body repair. Topics include shop safety, damage analysis, tools and equipment, repair techniques, materials selection, materials usage, and other related topics. Upon completion, students should be able to identify and repair minor direct and indirect damage including removal, repairing, and replacing of body panels to accepted standards. This is a diploma-level course.

AUB 122-Non-Structural Damage II
264
This course covers safety, tools, and advanced body repair. Topics include shop safety, damage analysis, tools and equipment, advanced repair techniques, materials selection, materials usage, movable glass, and other related topics. Upon completion, students should be able to identify and repair or replace direct and indirect damage to accepted standards including movable glass and hardware. This is a diploma-level course.

AUB 131-Structural Damage I
244
This course introduces safety, equipment, structural damage repairs. Topics include shop safety, design and construction, structural analysis and measurement, equipment, structural glass, repair techniques, and other related topics. This is diplomalevel course.

AUB 132-Structural Damage II
264
This course provides an in-depth study of structural damage analysis and repairs to vehicles that have received moderate to heavy structural damage. Topics include shop safety, structural analysis and measurement, equipment, structural glass, advanced repair techniques, structural component replacement and alignment, and other related topics. Upon completion, students should be able to analyze and perform repairs according to industry standards. Prerequisites: AUB 131. This is a diploma-level course.

AUB 134-Autobody MIG Welding
143
This course covers the terms and procedures for welding the various metals found in today's autobody repair industry with an emphasis on personal/ environmental safety. Topics include safety and precautionary measures, setup/operation of MIG equipment, metal identification methods, types of welds/joints, techniques, inspection methods, and other related topics. Upon completion, students should be able to demonstrate a basic knowledge of welding operations and safety procedures according to industry standards. This is a diploma-level course.

## AUB 136-Plastics \& Adhesives

143
This course covers safety, plastic and adhesive identification, and the various repair methods of automotive plastic components. Topics include safety, identification, preparation, material selection, and the various repair procedures including refinishing. Upon completion, students should be able to identify, remove, repair, and/or replace automotive plastic components in accordance with industry standards. This is a diploma-level course.

## AUB 162-Autobody Estimating

122
This course provides a comprehensive study of autobody estimating. Topics include collision damage analysis, industry regulations, flat-rate and estimated time, and collision estimating manuals. Upon completion, students should be able to prepare and interpret a damage report. This is a diploma-level course.

BIOLOGY
BIO 111-General Biology I
334
This course introduces the principles and concepts of biology. Emphasis is placed on basic biological chemistry, cell structure and function, metabolism and energy transformation, genetics, evolution, classification, and other related topics. Upon completion, students should be able to demonstrate understanding of life at the molecular and cellular levels. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

## BIO 112-General Biology II

334
This course is a continuation of BIO 111. Emphasis is placed on organisms, biodiversity, plant and animal systems, ecology, and other related topics. Upon completion, students should be able to demonstrate comprehension of live at the organismal and ecological levels. Prerequisites: BIO 111. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

BIO 120-Introductory Botany
334
This course provides an introduction to the classification, relationships, structure, and function of plants. Topics include reproduction and development of seed and non-seed plants, levels of organization, form and function of systems, and a survey of major taxa. Upon completion, students should be able to demonstrate comprehension of plant form and function, including selected taxa of both seed and non-seed plants. Prerequisite: BIO 111. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

BIO 130-Introductory Zoology
334
This course provides an introduction to the classification, relationships, structure, and function of major animal phyla. Emphasis is placed on levels of organization, reproduction, and development, comparative systems, and a survey of selected phyla. Upon completion, students should be able to demonstrate comprehension of animal form and function including comparative systems of selected groups. Prerequisite: BIO 111. This course has been approved to satisfy the Comprehensive Articulation

Agreement general education core requirement in natural sciences/mathematics.

BIO 155-Nutrition
303
This course covers the biochemistry of foods and nutrients with consideration of the physiological effects of specialized diets for specific biological needs. Topics include cultural, religious, and economic factors that influence a person's acceptance of food as well as nutrient requirements of the various life stages. Upon completion, students should be able to identify the functions and sources of nutrients, the mechanisms of digestion, and the nutritional requirements of all age groups. Prerequisites: ENG 090, RED 090, or placement. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

BIO 163-Basic Anatomy \& Physiology 425 This course provides a basic study of the structure and function of the human body. Topics include a basic study of the body systems as well as an introduction to homeostasis, cells, tissues, nutrition, acid-base balance, and electrolytes. Upon completion, students should be able to demonstrate a basic understanding of the fundamental principles of anatomy and physiology and their interrelationships. Prerequisites: ENG 090, RED 090, or placement. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

## BIO 165-Anatomy and Physiology I

334
This course is the first of a two-course sequence which provides a comprehensive study of the anatomy and physiology of the human body. Topics include the structure, function, and interrelation of organ systems with emphasis on the process which maintain homeostasis. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and their interrelationships. Prerequisites: ENG 090, RED 090, or placement. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

BIO 166-Anatomy and Physiology II
334
This course is the second in a two-course sequence which provides a comprehensive study of the anatomy and physiology of the human body. Topics include the structure, function, and interrelationship of organ systems with emphasis on the processes which maintain homeostasis. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and the interrelationships of all body systems. Prerequisites: BIO 165. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

BIO 175-General Microbiology
223
This course covers principles of microbiology with emphasis on microorganisms and human disease. Topics include an over-view of microbiology and aspects of medical microbiology, identification and control of pathogens, disease transmission, host
resistance, and immunity. Upon completion, students should be able to demonstrate knowledge of microorganisms and the disease process as well as aseptic and sterile techniques. Prerequisites: BIO 163 or BIO 166. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

## BLUEPRINT READING

BPR 111-Blueprint Reading
122
This course introduces the basic principles of blueprint reading. Topics include the types, orthographic projections, dimensioning methods, and notes. Upon completion, students should be able to interpret basic blueprints and visualize the features of a part.

BPR 121-Blueprint Reading: Mech
122
This course covers the interpretation of intermediate blueprints. Topics include tolerancing, auxiliary views, sectional views, and assembly drawings. Upon completion, students should be able to read and interpret a mechanical working drawing. Prerequisites: BPR 111.

BPR 130-Blueprint Reading/Const
122
This course covers the interpretation of blueprints and specifications that are associated with the construction trades. Emphasis is placed on interpretation of details for foundations, floor plans, elevations, and schedules. Upon completion, students should be able to read and interpret a set of construction blueprints.

## BROADCAST PRODUCTION

BPT 110-Intro to Broadcasting 303 This course introduces the field of broadcasting and other electronic media. Emphasis is placed on the history, development, and current status of radio, television, and related industries. Upon completion, students should be able to demonstrate knowledge of regulations, organizational structure, revenue sources, historical development, and on-going operation of broadcasting and related industries.

BPT 111-Broadcast Law \& Ethics
303
This course covers judicial, legislative, and administrative policies pertinent to the ethical and legal operation of broadcast and other electronic media organizations. Emphasis is placed on legal and ethical issues including First Amendment protection, FCC regulations, copyright, and libel laws. Upon completion, students should be able to demonstrate an understanding of the historical significance and modern-day application of important broadcast laws and policies.

BPT 112-Broadcast Writing
324
This course introduces proper copy and script writing techniques and formats for radio, television, and other electronic media. Emphasis is placed on creating effective scripts for programs and promotional materials, including commercial and public radio service announcements for a specific target audience. Upon completion, students should be able to understand and write copy and scripts according to standard industry formats.
radio, television, cable, and other electronic media. Emphasis is placed on prospecting and servicing accounts, developing clients, and preparing sales presentations. Upon completion, students should be able to create a sales presentation based upon standard ratings reports, prospect for new customers, and understand account management.

BPT 115-Public Relations
303
This course introduces the art and science of analyzing trends, predicting their consequences, counseling organizations, and implementing actions to serve organizational and public interests. Emphasis is placed on identifying public needs, conducting and analyzing research, writing and communicating information, maintaining media relations, and creating an organizational crisis plan. Upon completion, students should be able to summarize public relations history, conduct research, develop press releases, create printed material, and formulate a crisis plan.

BPT 121-Broadcast Speech I
233
This course covers basic preparation and performance of on-air talents' speaking quality. Emphasis is placed on developing a pleasant and efficient voice with techniques applied to taped news, features, commercial copy, and announcing. Upon completion, students should be able to show improvement and aptitude in proper articulation, pronunciation, rate of delivery, pitch, breathing techniques, inflection, projection, and phrasing.

BPT 131-Audio/Radio Production I 264 This course covers the use of advanced audio production techniques in broadcast and/or other electronic media applications. Topics include basic audio signal processing equipment and analog and digital professional audio recording and playback equipment in the production of effective audio programming.

BPT 140-Intro to TV Systems
202
This course introduces technical systems that allow production, transmission, and reception of television and other video media. Emphasis is placed on identifying components and equipment, describing their function within the video chain, and troubleshooting problems within the signal flow. Upon completion, students should be able to demonstrate an understanding of components and equipment in the video chain and provide basic preventive maintenance on equipment.

## BPT 196-Seminar in Contemporary

 Broadcast \& Issues101
This seminar introduces today's current issues in Broadcasting. Emphasis is placed on trends and topics affecting broadcast programming and technology. Upon completion, students should be able to demonstrate the types of issues and broadcasting that affects the current media.

BPT 231-Video/TV Production I
264
This course covers the language of film/video, shot composition, set design, lighting, production planning, scripting, editing, and operation of video and television production equipment. Emphasis is placed on mastering the body of knowledge and techniques followed in producing all forms of video and television production. Upon completion, students should be able to produce basic video and television productions in a team environment.

BPT 232-Video/TV Production II
264
This course covers advanced video and television production. Emphasis is placed on field production, post-production, digital video effects, graphics, and multi-camera productions. Upon completion, students should be able to create productions that optimize the use of studio, field, and post-production equipment. Prerequisites: BPT 231.

BPT 241-Broadcast Journalism I
324
This course introduces broadcast journalism, including the gathering, writing, delivery, editing, and production of news stories and reports. Emphasis is placed on proper news writing skills, including the creation of good leads and complete stories in the production of radio voicers and reports. Upon completion, students should be able to write broadcast news scripts and produce radio news reports and newscasts.

BPT 250-Institutional Video
233
This course covers development and production of non-broadcast video productions for clients. Emphasis is placed on satisfying client objectives, including interviewing, research, site surveying, script review, photography, and post-production. Upon completion, students should be able to plan, write, shoot, and edit an institutional video designed to meet a client's objectives.

BPT 255-Computer-Based Prod.
233
This course covers digital systems used for video, audio, and multimedia production. Emphasis is placed on computer-based tools integrating digital production with analog broadcast related production. Upon completion, students should be able to understand and operate basic tools for video graphics, video capture, multimedia authoring, sound capture, and digital audio production. Prerequisites: CIS 110.

## BUSINESS

BUS 110-Introduction to Business 303 This course provides a survey of the business world. Topics include the basic principles and practices of contemporary business. Upon completion, students should be able to demonstrate an understanding of business concepts as a foundation for studying other business subjects. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

BUS 115-Business Law I 303
This course introduces the ethics and legal framework of business. Emphasis is placed on contracts, negotiable instruments, Uniform Commercial Code, and the working of the court systems. Upon completion, students should be able to apply ethical issues and laws covered to selected business decision-making situations. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

## BUS 116-Business Law II

303
This course continues the study of ethics and business law. Emphasis is placed on bailments, sales, risk-bearing, forms of business ownership, and copyrights. Upon completion, students should be able to apply ethical issues and laws covered to
selected business decision-making situations. Prerequisites: BUS 115.

BUS 121-Business Math
223
This course covers fundamental mathematical operations and their application to business problems. Topics include payroll, pricing, interest and discount, commission, taxes, and other pertinent uses of mathematics in the field of business. Upon completion, students should be able to apply mathematical concepts to business.

BUS 137-Principles of Management
303 This course is designed to be an overview of the major functions of management. Emphasis is placed on planning, organizing, controlling, directing, and communicating. Upon completion, students should be able to work as contributing members of a team utilizing these functions of management.

BUS 153-Human Resource Mgt. 303 This course introduces the functions of personnel/human resource management within an organization. Topics include equal opportunity and the legal environment, recruitment and selection, performance appraisal, employee development, compensation planning, and employee relations. Upon completion, students should be able to anticipate and resolve human resource concerns.

BUS 225-Business Finance
223
This course provides an overview of business financial management. Emphasis is placed on financial statement analysis, time value of money, management of cash flow, risk and return, and sources of financing. Upon completion, students should be able to interpret and apply the principles of financial management. Prerequisites: ACC 120.

BUS 240-Business Ethics 303
This course introduces contemporary and controversial ethical issues that face the business community. Topics include moral reasoning, moral dilemmas, law and morality, equity, justice and fairness, ethical standards, and moral development. Upon completion, students should be able to demonstrate an understanding of their moral responsibilities and obligations as members of the workforce and society.

BUS 253-Leadership \& Mgmt Skills 303
This course includes a study of the qualities, behaviors, and personal styles exhibited by leaders. Emphasis is placed on coaching, counseling, team building, and employee involvement. Upon completion, students should be able to identify and exhibit the behaviors needed for organizational effectiveness.

BUS 260-Business Communication
303
This course is designed to develop skills in writing business communications. Emphasis is placed on business reports, correspondence, and professional presentations. Upon completion, students should be able to communicate effectively in the work place. Prerequisites: ENG 111 and OST 130.

BUS 280-REAL Small Business
404
This course introduces hands-on techniques and procedures for planning and opening a small business, including the personal qualities needed for entrepreneurship. Emphasis is placed on market
research, finance, time management, and day-to-day activities of owning/operating a small business. Upon completion, students should be able to write and implement a viable business plan and seek funding.

## CARPENTRY

CAR 110-Introduction to Carpentry 202 This course introduces the student to the carpentry trade. Topics include duties of a carpenter, hand and power tools, building materials, construction methods, and safety. Upon completion, students should be able to identify hand and power tools, common building materials, and basic construction methods.

CAR 111-Carpentry I
3158
This course introduces the theory and construction methods associated with the building industry, including framing, materials, tools, and equipment. Topics include safety, hand/power tool use, site preparation, measurement and layout, footings and foundations, construction framing, and other related topics. Upon completion, students should be able to safely lay out and perform basic framing skills with supervision. This is a diploma-level course.

CAR 112-Carpentry II
3158
This course covers the advanced theory and construction methods associated with the building industry including framing and exterior finishes. Topics include safety, hand/power tool use, measurement and layout, construction framing, exterior trim and finish, and other related topics. Upon completion, students should be able to safely frame and apply exterior finishes to a residential building with supervision. This is a diploma-level course.

CAR 113-Carpentry III
396
This course covers interior trim and finishes. Topics include safety, hand/power tool use, measurement and layout, specialty framing, interior trim and finishes, cabinetry, and other related topics. Upon completion, students should be able to safely install various interior trim and finishes in a residential building with supervision. Prerequisites: CAR 111. This is a diploma-level course.

CAR 114-Residential Bldg Codes
303
This course covers building codes and the requirements of state and local construction regulations. Emphasis is placed on the minimum requirements of the North Carolina building codes related to residential structures. Upon completion, students should be able to determine if a structure is in compliance with North Carolina building codes.

CAR 115-Res Planning/Estimating 303 This course covers project planning, management, and estimating for residential or light commercial building. Topics include planning and scheduling, interpretation of working drawings and specifications, estimating practices, and other related topics. Upon completion, students should be able to perform quantity take-offs and cost estimates. Prerequisite: BPR 130.

## COMPUTER ENGINEERING TECHNOLOGY

CET 111-Computer Upgrade/Repair I
233
This course is the first of two courses covering repairing, servicing, and upgrading computers and peripherals in preparation for industry certification. Topics include safety practices, CPU/memory/bus
identification, disk subsystem, hardware/software installation/configuration, common device drivers, data recovery, system maintenance, and other related topics. Upon completion, students should be able to safely repair and/or upgrade computer systems to perform within specifications.

## CHEMISTRY

CHM 131-Introduction to Chemistry 303 This course introduces the fundamental concepts of inorganic chemistry. Topics include measurement, matter and energy, atomic and molecular structure, nuclear chemistry, stoichiometry, chemical formulas and reactions, chemical bonding, gas laws, solutions, and acids and bases. Upon completion, students should be able to demonstrate a basic understanding of chemistry as it applies to other fields. Prerequisite: MAT 070. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

CHM 131A-Intro to Chemistry Lab
031
This course is a laboratory to accompany CHM 131. Emphasis is placed on laboratory experiences that enhance materials presented in CHM 131. Upon completion, students should be able to utilize basic laboratory procedures and apply them to chemical principles presented in CHM 131. Corequisite: CHM 131. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

CHM 132- Organic and Biochemistry
334 This course provides a survey of major functional classes of compounds in organic and biochemistry. Topics include structure, properties, and reactions of the major organic and biological molecules and basic principles of metabolism. Upon completion, students should be able to demonstrate an understanding of fundamental chemical concepts needed to pursue studies in related professional fields. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics. Prerequisites: CHM 131.

CHM 151-General Chemistry I
334
This course covers fundamental principles and laws of chemistry. Topics include measurement, atomic and molecular structure, periodicity, chemical reactions, chemical bonding, stoichiometry, thermochemistry, gas laws, and solutions. Upon completion, students should be able to demonstrate an understanding of fundamental chemical laws and concepts as needed in CHM 152. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics. Prerequisites: Placement in MAT 161 or permission of instructor.

## CHM 152-General Chemistry II

334
This course provides a continuation of the study of the fundamental principles and laws of chemistry. Topics include kinetics, equilibrium, ionic and redox equations, acid-base theory, electrochemistry, thermodynamics, introduction to nuclear and organic chemistry, and complex ions. Upon completion, students should be able to demonstrate an
understanding of chemical concepts as needed to pursue further study in chemistry and related professional fields. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics. Prerequisites: CHM 151.

## INFORMATION SYSTEMS

CIS 070-Fundamentals of Computing 021 This course covers fundamental functions and operations of the computer. Topics include identification of components, overview of operating systems, and other basic computer operations. Upon completion, students should be able to operate computers, access files, print documents and perform basic applications operations.

CIS 110-Introduction to Computers
223
This course provides an introduction to computers and computing. Topics include the impact of computers on society, ethical issues, and hardware/software applications, including spreadsheets, databases, word processors, graphics, the Internet, and operating systems. Upon completion, students should be able to demonstrate an understanding of the role and function of computers and use the computer to solve problems. Prerequisite: CIS 070 or departmental permission. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

## CIS 113-Computer Basics <br> 021

This course introduces basic computer usage for non-computer majors. Emphasis is placed on developing basic personal computer skills. Upon completion, students should be able to demonstrate competence in basic computer applications sufficient to use computer-assisted instructional software.

CIS 115-Intro to Prog \& Logic
223
This course introduces computer programming and problem solving in a programming environment, including an introduction to operating systems, text editor, and a language translator. Topics include language syntax, data types, program organization, problem-solving methods, algorithm design, and logic control structures. Upon completion, students should be able to manage files with operating system commands, use top-down algorithm design, and implement algorithmic solutions in a programming language. Prerequisites: MAT 080 and CIS 110. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

CIS 120-Spreadsheet I
223
This course introduces basic spreadsheet design and development. Topics include writing formulas, using functions, enhancing spreadsheets, creating charts, and printing. Upon completion, students should be able to design and print basic spreadsheets and charts. Prerequisites: CIS 110 or OST 137.

CIS 130-Survey of Operating Sys
233
This course covers operating system concepts which are necessary for maintaining and using computer systems. Topics include disk, file, and directory structures; installation and setup; resource allocation, optimization, and configuration; system security; and
other related topics. Upon completion, students should be able to install and configure operating systems and optimize performance. Prerequisites: CIS 110.

CIS 145-Operating Sys.-Single-User
223
This course introduces operating systems concepts for single-user systems. Topics include hardware management, file and memory management, system configuration/optimization, and utilities. Upon completion, students should be able to perform operating system functions at the support level in a single-user environment. Corequisites: CIS 130.

CIS 152-Database Concepts \& Apps
223
This course introduces database design and creation using a DBMS product. Topics include database terminology, usage in industry, design theory, types of DBMS models, and creation of simple tables, queries, reports, and forms. Upon completion, students should be able to create simple database tables, queries, reports, and forms which follow acceptable design practices. Prerequisites: CIS 110 or CIS 115.

CIS 153-Database Applications
223
This course covers advanced database functions continued from CIS 152. Topics include manipulating multiple tables, advanced queries, screens and reports, linking, and command files. Upon completion, students should be able to create multiple table systems that demonstrate updates, screens, and reports representative of industry requirements. Prerequisites: CIS 152.

CIS 164-DTP Layout \& Design
223
This course introduces the fundamentals of design and page layout. Emphasis is placed on page layout organization, typography, and color. Upon completion, students should be able to create projects that visually enhance communication. Prerequisite: CIS 110.

CIS 169-Business Presentations
122
This course provides hands-on experience with a graphics presentation package. Topics include terminology, effective chart usage, design and layout, integrating, hardware components, and enhancing presentations with text and graphics. Upon completion, students should be able to design and demonstrate an effective presentation. Prerequisites: CIS 110, CIS 120.

CIS 172-Intro to the Internet
233
This course introduces the various navigational tools and services of the Internet. Topics include using Internet protocols, search engines, file compression/decompression, FTP, e-mail, listservers, and other related topics. Upon completion, students should be able to use Internet resources, retrieve/decompress files, and use e-mail, FTP, and other Internet tools. Prerequisite: CIS 110.

CIS 173-Network Theory
223
This course examines Token Ring, Ethernet, and Arcnet networks. Topics include LAN topologies and design; cable characteristics; cable, interface cards, server, and client installation; basic management techniques; linking networks; and troubleshooting LAN problems. Upon completion, students should be able to install both hardware and software for a small client/server LAN and troubleshoot common network problems.

CIS 174-Network System Manager I
223 This course covers effective network management. Topics include network file system design and security, login scripts and user menus, printing services, e-mail, and backup. Upon completion, students should be able to administer an office network system.

CIS 175-Network Management I 223 This course covers fundamental network administration and system management. Topics include accessing and configuring basic network services, managing directory services, and using network management software. Upon completion, students should be able to apply system administrator skills in developing a network management strategy.

CIS 215-Hardware Install/Maint
233
This course covers the basic hardware of a personal computer, including operations and interactions with software. Topics include component identification, the memory system, peripheral installation and configuration, preventive maintenance, and diagnostics and repair. Upon completion, students should be able to select appropriate computer equipment, upgrade and maintain existing equipment, and troubleshoot and repair nonfunctioning personal computers. Prerequisites: CIS 110 or CIS 115.

## CIS 216-Software Install/Maint

122 This course introduces the installation and troubleshooting aspects of personal computer software. Emphasis is placed on initial installation and optimization of system software, commercial programs, system configuration files, and device drivers. Upon completion, students should be able to install, upgrade, uninstall, optimize, and troubleshoot personal computer software. Prerequisites: CIS 130 Corequisite: CIS 215.

CIS 217-Computer Train \& Support
223
This course introduces computer training and support techniques. Topics include methods of adult learning, training design, delivery, and evaluation, creating documentation, and user support methods. Upon completion, students should be able to design and implement training and provide continued support for computer users. Prerequisites: Completion of 30 hours in Information Systems Programming.

CIS 225-Integrated Software 122 This course provides strategies to perform data transfer among software programs. Emphasis is placed on data interchange among word processors, spreadsheets, presentation graphics, databases, and communications products. Upon completion, students should be able to integrate data to produce documents using multiple technologies. Prerequisites: CIS 120, CIS 152, and OST 164.

CIS 245-Operating Sys.-Multi-User
233
This course includes operating systems concepts for multi-user systems. Topics include hardware management, file and memory management, system configuration/optimization, and utilities. Upon completion, students should be able to perform operating system functions in a multi-user environment. Prerequisites: CIS 145.

CIS 260-Business Graphics Apps 223
This course utilizes graphics software in a variety of business applications. Topics include terminology, design and evaluation, graphics formats and conversion, practical applications of graphics software, and integration of peripherals. Upon completion, students should be able to create and incorporate graphic designs to enhance business communications. Prerequisites: CIS 110.

CIS 274-Network System Manager II 223 This course is a continuation of CIS 174 focusing on advanced network management, configuration, and installation. Emphasis is placed on server configuration files, startup procedures, server protocol support, memory and performance concepts, and management and maintenance. Upon completion, students should be able to install and upgrade networks and servers for optimal performance. This course is a unique concentration requirement in the Network Administration and support concentration in the Information Systems program. Prerequisite: CIS 174.

CIS 275-Network Management II
223
This course is a continuation of CIS 175 focusing on advanced enterprise networks. Topics include directory service tree planning, management distribution and protection, improving network security, auditing the network, printing, networking, and system administration of an Internet node. Upon completion, students should be able to manage client services and network features and optimize network performance. This course is a unique concentration requirement in the Network Administration and support concentration in the Information Systems program. Prerequisite: CIS 175.

CIS 282-Network Technology
303
This course examines concepts of network architecture. Topics include various network types, topologies, transmission methods, media and access control, the OSI model, and the protocols which operate at each level of the model. Upon completion, students should be able to design a network based on the requirements of a company.

CIS 287-Network Support
223
This course provides experience using CD ROM and on-line research tools and hands-on experience for advanced hardware support and troubleshooting. Emphasis is placed on troubleshooting network adapter cards and cabling, network storage devices, the DOS workstation, and network printing. Upon completion, students should be able to analyze, diagnose, research, and fix network hardware problems. This course is a unique concentration requirement in the Network Administration and Support concentration in the Information Systems program. Prerequisite: CIS 274 and CIS 275.

## CRIMINAL JUSTICE

CJC 100-Basic Law Enformt Trn 83018 This course covers the skills and knowledge needed for entry-level employment as a law enforcement officer in North Carolina. Emphasis is placed on topics and areas as defined by the North Carolina Administrative Code. Upon completion, students should be able to demonstrate competence in the topics and areas required for the state comprehensive examination. This is a certificate-level course.

## 324 •Course Descriptions

CJC 111-Intro to Criminal Justice 303 This course introduces the components and processes of the criminal justice system. Topics include history, structure, functions, and philosophy of the criminal justice system and their relationship to life in our society. Upon completion, students should be able to define and describe the major system components and their interrelationships and evaluate career options. This course has been approved to satisfy the Comprehensive Articulation Agreement.

## CJC 112-Criminology

303
This course introduces deviant behavior as it relates to criminal activity. Topics include theories of crime causation; statistical analysis of criminal behavior; past, present, and future social control initiatives; and other related topics. Upon completion, students should be able to explain and discuss various theories of crime causation and societal response.

CJC 113-Juvenile Justice
303
This course covers the juvenile justice system and related juvenile issues. Topics include an overview of the juvenile justice system, treatment and prevention programs, special areas and laws unique to juveniles, and other related topics. Upon completion, students should be able to identify/discuss juvenile court structure/procedures, function and jurisdiction of juvenile agencies, processing/detention of juveniles, and case disposition.

CJC 114-Investigative Photography 122 This course covers the operation of various photographic equipment and its application to criminal justice. Topics include using various cameras, proper exposure of film, developing film/prints, and preparing photographic evidence. Upon completion, students should be able to demonstrate and explain the role of photography and proper film exposure and development techniques.

CJC 120-Interviews/Interrogations
122
This course covers basic and special techniques employed in criminal justice interviews and interrogations. Emphasis is placed on the interview/interrogation process, including interpretation of verbal and physical behavior and legal perspectives. Upon completion, students should be able to conduct interviews/interrogations in a legal, efficient, and professional manner and obtain the truth from suspects, witnesses, and victims.

CJC 121-Law Enformnt Operations
303
This course introduces fundamental law enforcement operations. Topics include the contemporary evolution of law enforcement operations and related issues. Upon completion, students should be able to explain theories, practices, and issues related to law enforcement operations. This course has been approved to satisfy the Comprehensive Articulation Agreement.

## CJC 122-Community Policing

303
This course covers the historical, philosophical, and practical dimensions of community policing. Emphasis is placed on the empowerment of police and the community to find solutions to problems by forming partnerships. Upon completion, students should be able to define community policing, describe how community policing strategies solve problems, and compare community policing to traditional policing.

CJC 131-Criminal Law
303
This course covers the history/evolution/ principles and contemporary applications of criminal law. Topics include sources of substantive law, classification of crimes, parties to crime, elements of crimes, matters of criminal responsibility, and other related topics. Upon completion, students should be able to discuss the sources of law and identify, interpret, and apply the appropriate statutes/elements.

CJC 132-Court Procedure \& Evidence 303 This course covers judicial structure/process/ procedure from incident to disposition, kinds and degrees of evidence, and the rules governing admissibility of evidence in court. Topics include consideration of state and federal courts, arrest, search and seizure laws, exclusionary and statutory rules of evidence, and other related issues. Upon completion, students should be able to identify and discuss procedures necessary to establish a lawful arrest/search, proper judicial procedures, and the admissibility of evidence.

CJC 141-Corrections
303
This course covers the history, major philosophies, components, and current practices and problems of the field of corrections. Topics include historical evolution, functions of the various components, alternatives to incarceration, treatment programs, inmate control, and other related topics. Upon completion, students should be able to explain the various components, processes, and functions of the correctional system. This course has been approved to satisfy the Comprehensive Articulation Agreement.

## CJC 151-Intro to Loss Prevention

303
This course introduces the concepts and methods related to commercial and private security systems. Topics include the historical, philosophical, and legal basis of security, with emphasis on security surveys, risk analysis, and associated functions. Upon completion, students should be able to demonstrate and understand security systems, risk management, and the laws relative to loss prevention.

CJC 191-Selected Topics in Corr.
031
A study of current, future, and controversial theories and practices in corrections. A critical look at punishment vs. rehabilitation along with philosophical concepts of incarceration. Alternatives to incarceration as well as post-incarceration programs and recidivism rates.

CJC 211-Counseling
303
This course introduces the basic elements of counseling and specific techniques applicable to the criminal justice setting. Topics include observation, listening, recording, interviewing, and problem exploration necessary to form effective helping relationships. Upon completion, students should be able to discuss and demonstrate the basic techniques of counseling.

## CJC 212-Ethics \& Comm Relations 303

This course covers ethical considerations and accepted standards applicable to criminal justice organizations and professionals. Topics include ethical systems; social change, values, and norms; cultural diversity; citizen involvement in criminal justice issues; and other related topics. Upon completion, students should be able to apply ethical considerations to the decision-making process in identifiable criminal justice situations.

CJC 213-Substance Abuse
303
This course is a study of substance abuse in our society. Topics include the history and classifications of drug abuse and the social, physical, and psychological impact of drug abuse. Upon completion, students should be able to identify various types of drugs, their effects on human behavior and society, and treatment modalities.

CJC 214-Victimology
303
This course introduces the study of victims. Emphasis is placed on roles/characteristics of victims, victim interaction with the criminal justice system and society, current victim assistance programs, and other related topics. Upon completion, students should be able to discuss and identify victims, the uniqueness of victims' roles, and current victim assistance programs.

CJC 215-Organization and Adm.
303 This course introduces the components and functions of organization and administration as it applies to the agencies of the criminal justice system. Topics include operations/functions of organizations; recruiting, training, and retention of personnel; funding and budgeting; communications; span of control and discretion; and other related topics. Upon completion, students should be able to identify and discuss the basic components and functions of a criminal justice organization and its administrative operations.

CJC 221-Investigative Principles 324 This course introduces the theories and fundamentals of the investigative process. Topics include crime scene/incident processing, information gathering techniques, collection/preservation of evidence, preparation of appropriate reports, court presentations, and other related topics. Upon completion, students should be able to identify, explain, and demonstrate the techniques of the investigative process, report preparation, and courtroom presentation.

CJC 222-Criminalistics
303
This course covers the functions of the forensic laboratory and its relationship to successful criminal investigations and prosecutions. Topics include advanced crime scene processing, investigative techniques, current forensic technologies, and other related topics. Upon completion, students should be able to identify and collect relevant evidence at simulated crime scenes and request appropriate laboratory analysis of submitted evidence.

## CJC 223-Organized Crime

This course introduces the evolution of traditional and non-traditional organized crime and its effect on society and the criminal justice system. Topics include identifying individuals and groups involved in organized crime, areas of criminal activity, legal and political responses to organized crime, and other related topics. Upon completion, students should be able to identify the groups and activities involved in organized crime and the responses of the criminal justice system.

## CJC 225-Crisis Intervention

303
This course introduces critical incident intervention and management techniques as they apply to operational criminal justice practitioners. Emphasis is placed on the victim/offender situation as well as job-related high stress, dangerous, or problem-
solving citizen contacts. Upon completion, students should be able to provide insightful analysis of emotional, violent, drug-induced, and other critical and/or stressful incidents that require field analysis and/or resolution.

## CJC 231-Constitutional Law

303
The course covers the impact of the Constitution of the United States and its amendments on the criminal justice system. Topics include the structure of the Constitution and its amendments, court decisions pertinent to contemporary criminal justice issues, and other related topics. Upon completion, students should be able to identify/discuss the basic structure of the United States Constitution and the rights/procedures as interpreted by the courts.

CJC 232-Civil Liability
303
This course covers liability issues for the criminal justice professional. Topics include civil rights violations, tort liability, employment issues, and other related topics. Upon completion, students should be able to explain civil trial procedures and discuss contemporary liability issues.

CJC 233-Correctional Law
303
This course introduces statutory/case law pertinent to correctional concepts, facilities, and related practices. Topics include examination of major legal issues encompassing incarceration, probation, parole, restitution, pardon, restoration of rights, and other related topics. Upon completion, students should be able to identify/discuss legal issues which directly affect correctional systems and personnel.

CJC 241-Community-Based Corr.
303
This course covers programs for convicted offenders that are used both as alternatives to incarceration and in post-incarceration situations. Topics include offenders, diversion, house arrest, restitution, community service, probation and parole, including both public and private participation, and other related topics. Upon completion, students should be able to identify/discuss the various programs from the perspective of the criminal justice professional, the offender, and the community.

CJC 291-Selected Topics in Criminal Justice

031
This course offers fourth seminar criminal justice students an opportunity to examine relevant and criminal issues facing our society. A seminar format is utilized to encourage the critical analysis of information.

## COOPERATIVE EDUCATION

COE 111 Co-op Work Experience I
0101 This course provides work experience with a collegeapproved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

## COE 112-Co-op Work Experience I

0202
This course provides work experience with a college approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to
evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

COE 115-Work Exp Seminar I
101
This course provides an opportunity for students to discuss cooperative work place experiences as it relates to their program of study. Students will be given an opportunity to discuss co-op assignments and work place experiences with the instructor. Topics emphasized will be developmentally appropriate practices, professionalism, child development, classroom environment, parent-teacher relationships and child guidance. Corequisite COE 111, COE 112, COE 113, or COE 114.

COE 121-Co-op Work Experience
0101 This course provides work experience with a collegeapproved employer in an area related to the student's' program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform workrelated competencies.

COE 122 Co-op Work Experience II 0202 This course provides work experience with a collegeapproved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

## COMMUNICATIONS

COM 231-Public Speaking
303
This course provides instruction and experience in preparation and delivery of speeches within a public setting and group discussion. Emphasis is placed on research, preparation, delivery, and evaluation of informative, persuasive, and special occasion public speaking. Upon completion, students should be able to prepare and deliver well-organized speeches and participate in group discussion with appropriate audiovisual support. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in speech/communication.

## COSMETOLOGY

COS 111-Cosmetology Concepts I 404 This course introduces basic cosmetology concepts. Topics include safety, first aid, sanitation, bacteriology, anatomy, diseases and disorders, hygiene, product knowledge, chemistry, ethics, manicures, and other related topics. Upon completion, students should be able to safely and competently apply cosmetology concepts in the salon setting. Corequisites: COS 112.

## COS 112-Salon I

0248
This course introduces basic salon services. Topics include scalp treatments, shampooing, rinsing, hair color, design, haircutting, permanent waving, pressing, relaxing, wigs, and other related topics. Upon completion, students should be able to safely and competently demonstrate salon services. Corequisites: COS 111.

COS 113-Cosmetology Concepts II 404 This course covers more comprehensive cosmetology concepts. Topics include safety, product knowledge, chemistry, manicuring, chemical restructuring, and hair coloring. Upon completion, students should be able to safely and competently apply these cosmetology concepts in the salon setting. Prerequisites: COS 111 and COS 112. Corequisites: COS 114.

COS 114-Salon II
0248
This course provides experience in a simulated salon setting. Topics include basic skin care, manicuring, nail application, scalp treatments, shampooing, rinsing, hair color, design, haircutting, chemical restructuring, pressing, wigs, and other related topics. Upon completion, students should be able to safely and competently demonstrate these salon services. Prerequisites: COS 112. Corequisites: COS 113.

COS 115-Cosmetology Concepts III 404 This course covers more comprehensive cosmetology concepts. Topics include safety, product knowledge, salon management, salesmanship, skin care, electricity/light therapy, wigs, thermal hair styling, lash and brow tinting, superfluous hair removal, and other related topics. Upon completion, students should be able to safely and competently apply these cosmetology concepts in the salon setting. Prerequisites: COS 113 and $\operatorname{COS} 114$. Corequisites: COS 116.

COS 116-Salon III
0124
This course provides comprehensive experience in a simulated salon setting. Emphasis is placed on intermediate-level of skin care, manicuring, scalp treatments, shampooing, hair color, design, haircutting, chemical restructuring, pressing, and other related topics. Upon completion, students should be able to safely and competently demonstrate these salon services. Prerequisites: COS 114 Corequisites: COS 115.

COS 117-Cosmetology Concepts IV 202 This course covers advanced cosmetology concepts. Topics include chemistry and hair structure, advanced cutting and design, and an overview of all cosmetology concepts in preparation of all cosmetology concepts in preparation for the licensing examination. Upon completion, students should be able to demonstrate an understanding of these cosmetology concepts and meet program completion requirements. Prerequisites: COS 115 and COS 116 Corequisites: COS 118.

COS 118-Salon IV
0217
This course provides advanced experience in a simulated salon setting. Emphasis is placed on efficient and competent delivery of all salon services in preparation for the licensing examination and employment. Upon completion, students should be able to demonstrate competence in program requirements and the areas covered on the Cosmetology Licensing Examination and meet entrylevel employment requirements. Prerequisites: COS 115 and COS 116. Corequisite: COS 117.

COS 240-Contemporary Design
132
This course covers methods and techniques for contemporary designs. Emphasis is placed on contemporary designs and other related topics. Upon completion, students should be able to demonstrate
and apply techniques associated with contemporary design. Prerequisites: COS 111 and COS 112.

COS 271-Instructor Concepts I
505
This course introduces the basic cosmetology instructional concepts. Topics include orientation, theories of education, unit planning, daily lesson planning, laboratory management, student assessment, record keeping, and other related topics. Upon completion, students should be able to identify theories of education, develop lesson plans, demonstrate supervisory techniques, and assess student performance in a classroom setting. Prerequisite: Cosmetology License and six months experience as a licensed cosmetologist. Corequisite: COS 272.

COS 272-Instructor Practicum I
0217 This course covers supervisory and instructional skills for teaching entry-level cosmetology students in a laboratory setting. Topics include demonstrations of services, supervision, and entry-level student assessment. Upon completion, students should be able to demonstrate salon services and instruct and objectively assess the entry-level student. Corequisite: COS 271.

COS 273-Instructor Concepts II
505
This course covers advanced cosmetology instructional concepts. Topics include practical demonstrations, lesson planning, lecture techniques, development and administration of assessment tools, record keeping, and other related topics. Upon completion, students should be able to develop lesson plans, demonstrate supervision techniques, assess student performance in a classroom setting, and keep accurate records. Prerequisites: COS 271 and COS 272. Corequisite: COS 274.

COS 274-Instructor Practicum II
0217
This course is designed to develop supervisory and instructional skills for teaching advanced cosmetology students in a laboratory setting. Topics include practical demonstrations, supervision, and advanced student assessment. Upon completion, students should be able to demonstrate competence in the areas covered by the Instructor Licensing Examination and meet program completion requirements. This is a certificate-level course. Prerequisites: COS 271 and COS 272. Corequisite: COS 273.

## COMPUTER SCIENCE

CSC 139-Visual BASIC Programming 233
This course introduces event-driven computer programming using the Visual BASIC programming language. Topics include input/output operations, sequence, selection, iteration, arithmetic operations, arrays, forms, sequential files, and other related topics. Upon completion, students should be able to design, code, test, and debug Visual BASIC language programs. Prerequisite: CIS 115.

## CSC 141-Visual C++ Programming 233

 This course introduces event-driven computer programming using the Visual C++ programming language. Topics include input/output operations, sequence, selection, iteration, arithmetic operations, arrays, and other related topics. Upon completion, students should be able to design, code, test, and debug Visual C++ language programs. Prerequisite: CIS 115.CSC 148-JAVA Programming
233
This course introduces computer programming using the JAVA language. Topics include selection, iteration, arithmetic and logical operators, classes, inheritance, methods, arrays, user interfaces, basic applet creation and other related topics. Upon completion, students should be able to design, code, test and debug JAVA language programs. Prerequisite: CIS 115.

CSC 160-Intro to Internet Prog
233
This course introduces client-side Internet programming using HTML and Javascript. Topics include use of frames and tables, use of meta tags, Javascript techniques for site navigation. Upon completion, students should be able to write HTML documents that incorporate programming to provide web page organization and navigation functions. Prerequisite: CIS 172.

CSC 239-Advanced Visual Basic
233
This course is a continuation of CSC 139 using Visual BASIC with structured programming principles. Emphasis is placed on advanced arrays/ tables, file management/processing techniques, data structures, sub-programs, interactive processing, sort/merge routines, and libraries. Upon completion, students should be able to design, code, test, debug, and document programming solutions. Prerequisite: CSC 139.

CSC 241-Advanced Visual C++
233
This course is a continuation of CSC 141 using Visual C++ with object-oriented programming principles. Emphasis is placed on advanced arrays, file management/processing techniques, data structures, sub-programs, interactive processing, algorithms, and libraries. Upon completion, students should be able to design, code, test, debug, and document programming solutions. Prerequisite: CSC 141.

CSC 248-Adv Internet Progr
233
This course covers advanced programming skills required to design Internet applications. Emphasis is placed on programming techniques required to support network applications. Upon completion, students should be able to design, code, debug, and document network-based programming solutions to various real-world problems using an appropriate programming language. Prerequisite: CSC 148.

## CONSTRUCTION

CST 115-Drywall Installation
132
This course introduces theory and construction methods associated with drywall installation and finish. Topics include safety, tool use, measurement and layout, and materials and procedures used to install and finish drywall products. Upon completion, students should be able to properly lay out, cut, install, and finish drywall products with supervision.

## DRAFTING

DFT 111-Technical Drafting I
132 This course introduces basic drafting skills, equipment, and applications. Topics include sketching, measurements, lettering, dimensioning, geometric construction, orthographic projections and pictorials drawings, sections, and auxiliary views. Upon completion, students should be able to understand and apply basic drawing principles and practices.

DFT 112-Technical Drafting II
132
This course provides for advanced drafting practices and procedures. Topics include detailed working drawings, hardware, fits and tolerances, assembly and sub-assembly, geometric dimensioning and tolerancing, intersections, and developments. Upon completion, students should be able to produce detailed working drawings. Prerequisites: DFT 111.

DFT 115-Architectural Drafting
122
This course introduces basic drafting practices used in residential and light commercial design. Topics include floor plans, foundations, details, electrical components, elevations, and dimensioning practice. Upon completion, students should be able to complete a set of working drawings for a simple structure.

DFT 119-Basic CAD
122
This course introduces computer-aided drafting software for specific technologies to non-drafting majors. Emphasis is placed on understanding the software command structure and drafting standards for specific technical fields. Upon completion, students should be able to create and plot basic drawings.

DFT 121-Intro to GD \& T
122
This course introduces basic geometric dimensioning and tolerancing principles. Topics include symbols, annotation, theory, and applications. Upon completion, students should be able to interpret and apply basic geometric dimensioning and tolerancing principles to drawings.

## DFT 151-CAD I

233
This course introduces CAD software as a drawing tool. Topics include drawing, editing, file management, and plotting. Upon completion, students should be able to produce and plot a CAD drawing.

## DFT 152-CAD II

233
This course is a continuation of DFT 151. Topics include advanced two-dimensional, threedimensional, and solid modeling and extended CAD applications. Upon completion, students should be able to generate and mange CAD drawings and models to produce engineering documents. Prerequisites: DFT 151.

DFT 153-CAD III
233
This course covers basic principles of threedimensional CAD wireframe and surface models. Topics include user coordinate systems, threedimensional viewpoints, three-dimensional wireframes, and surface components and viewpoints. Upon completion, students should be able to create and manipulate three-dimensional wireframe and surface models.

DFT 161-Pattern Design \& Layout
122
This course covers the layout of sheet metal and pipe fittings. Topics include the development of patterns and templates for metalworking industries. Upon completion, students should be able to develop, sketch, produce, and angle layouts. able to solve problems and produce drawings dealing
with ratios. Prerequisites: DFT 111 and MAT 161.
DFT 218-Industrial Sys Schematics 122 This course covers the reading and drawing of schematics and diagrams. Emphasis is placed on water and gas plumbing, hydraulic and pneumatic circuits, electrical circuits, and welding diagrams. Upon completion, students should be able to interpret and construct industrial schematics and diagrams.

DDF 221-Design Drafting Project
042
This course incorporates ideas from concept to final design. Topics include reverse engineering, design for manufacturability, and mock-up construction. Upon completion, students should be able to generate working drawings and models based on physical design parameters. Prerequisites: DFT 111, DFT 112, and DFT 151.

DDF 252-Solid Models \& Rendering 324 This course introduces three-dimensional solid modeling and design software. Topics include parametric design principles, design constraints, work planes, view generation, and model shading and rendering. Upon completion, students should be able to create three-dimensional solid models using parametric design, generate two-dimensional views, and render three-dimensional models. Prerequisite: DFT 153.

DFT 231-Jig \& Fixture Design
122
This course introduces the study of jigs and fixtures. Topics include different types, components, and uses of jigs and fixtures. Upon completion, students should be able to analyze, design, and complete a set of working drawings for a jig of fixture. Prerequisites: DFT 112.

## DRAMA/THEATRE

DRA 111-Theatre Appreciation
303
This course provides a study of the art, craft, and business of the theatre. Emphasis is placed on the audience's appreciation of the work of the playwright, director, actor, designer, producer, and critic. Upon completion, students should be able to demonstrate a vocabulary of theatre terms and to recognize the contributions of various theatre artists. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

DRA 124-Readers Theatre
303
This course provides a theoretical and applied introduction to the medium of reader's theatre. Emphasis is placed on the group performance considerations posed by various genres of literature. Upon completion, students should be able to adapt and present a literary script following the conventions of readers' theatre. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

DRA 128-Children's Theatre
303
This course introduces the philosophy and practice involved in producing plays for young audiences. Topics include the selection of age-appropriate scripts and the special demands placed on directors, actors, designers, and educators in meeting the needs of young audiences. Upon completion, students should be able to present and critically
discuss productions for children. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

## ELECTRONIC COMMERCE

ECM 168-Electronic Business 223
This course provides a survey of the world of electronic business. Topics include the definition of electronic business, current practices as they evolve using Internet strategy in business, and application of basic business principles to the world of ecommerce. Upon completion, students should be able to define electronic business and demonstrate an understanding of the benefits of e-commerce as a foundation for developing plans leading to electronic business implementation.

## ECM 210-Intro to E-Commerce

223
This course introduces the concepts and tools to implement electronic commerce via the Internet. Topics include application and server software selection, securing transactions, use and verification of credit cards, publishing of catalogs, and site administration. Upon completion, students should be able to set up a working e-commerce Internet web site.

ECM 220-E-Commerce Planning \&
Implementation
223
This course builds on currently accepted business practices to develop a business plan and implementation model for e-commerce. Topics include analysis and synthesis of the planning cycle, cost/benefit analysis, technical systems, marketing, security, financial support, Internet strategies, website design, customer support and feedback and assessment. Upon completion, students should be able to develop a plan for e-commerce in a small to medium size business.

ECM 230-Capstone Project
223
This course provides experience in Electronic Commerce. Emphasis is placed on the implementation of an e-commerce model for an existing business. Upon completion, students should be able to successfully develop and implement a plan for e-commerce in a small to medium size business.

## ECONOMICS

ECO 251-Prin of Microeconomics
303
This course introduces economic analysis of choices made by individuals, businesses, and industries in the market economy. Topics include the price mechanism, supply and demand, optimizing economic behavior, costs and revenue, market structures, factor markets, income distribution, market failure, and government intervention. Upon completion, students should be able to identify and evaluate consumer and business alternatives in order to efficiently achieve economic objectives. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement.

ECO 252-Prin of Macroeconomics
303
This course introduces economic analysis of aggregate employment, income, and prices. Topics include major schools of economic thought; aggregate supply and demand; economic measures, fluctuations, and growth; money and banking; stabilization techniques; and international trade.

Upon completion, students should be able to evaluate national economic components, conditions, and alternatives for achieving socioeconomic goals. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement.

## EDUCATION

EDU 113-Family/Early Child Cred
202
This course covers business/professional practices for family early childhood providers, developmentally appropriate practices, positive guidance, and methods of providing a safe and healthy environment. Topics include developmentally appropriate practices; health, safety and nutrition; and business and professionalism. Upon completion, students should be able to develop a handbook of policies, procedures, and practices for a family child care home.

EDU 116-Intro to Education
324
This course introduces the American educational system and the teaching profession. Topics include historical and philosophical foundations of education, contemporary educational trends and issues, curriculum development, and observation and participation in public school classrooms. Upon completion, students should be able to relate classroom observations to the roles of teachers and schools and the process of teacher education. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

EDU 118-Teacher Associate
Principles \& Practices
303
This course covers the teacher associate's role in the educational system. Topics include history of education, professional responsibilities and ethics, cultural diversity, communication skills, and identification of the optimal learning environment. Upon completion, students should be able to describe the supporting professional role of the teacher associate, demonstrate positive communication, and discuss educational philosophy. This course is a unique concentration requirement in the Teacher Associate concentration in the Early Childhood Associate program.

EDU 119-Early Childhood Ed
324
This course covers the foundations of the education profession, types of programs, professionalism, and planning quality programs for children. Topics include historical foundations, career options, types of programs, professionalism, observational skills, and planning developmentally appropriate schedules, environments, and activities for children. Upon completion, students should be able to demonstrate observational skills, identify appropriate schedules and environments, develop activity plans, and describe influences on the profession.

EDU 131-Child, Family, \& Commun
303
This course covers the relationships between the families, programs for children/schools, and the community. Emphasis is placed on establishing and maintaining positive collaborative relationships with families and community resources. Upon completion, students should be able to demonstrate strategies for effectively working with diverse families and identifying and utilizing community resources.

## EDU 144-Child Development I

303
This course covers the theories of child development and the developmental sequences of children from conception through the pre-school years for early childhood educators. Emphasis is placed on sequences in physical/ motor, social, emotional, cognitive, and language development and appropriate experiences for the young child. Upon completion, students should be able to identify developmental milestones, plan experiences to enhance development, and describe appropriate interaction techniques and environments for typical/atypical development.

EDU 145-Child Development II
303
This course covers theories of child development and developmental sequences of children from pre-school through middle childhood for early childhood educators. Emphasis is placed on characteristics of physical/motor, social, emotional, and cognitive/ language development and appropriate experiences for children. Upon completion, students should be able to identify developmental characteristics, plan experiences to enhance development, and describe appropriate interaction techniques and environments.

EDU 146-Child Guidance
303
This course introduces practical principles and techniques for developmentally appropriate guidance. Emphasis is placed on encouraging self-esteem and cultural awareness, effective communication skills, and direct and indirect guidance techniques and strategies. Upon completion, students should be able to demonstrate strategies which encourage positive social interactions, promote conflict resolution, and develop self-control, self-motivation, and self-esteem in children.

EDU 147-Behavior Disorders
303
This course is a comprehensive study of behavior disorders encompassing characteristics, assessments, and placement alternatives. Topics include legislation, appropriate management interventions, and placement options for children with behavior disorders. Upon completion, students should be able to identify, develop, and utilize appropriate behavior management applications. This course is a unique concentration requirement in the Special Education concentration in the Early Childhood Associate program.

EDU 148-Learning Disabilities
423
This course is a comprehensive study of the characteristics, teaching strategies, assessment tools, and placement alternatives for children with learning disabilities. Topics include characteristics, causes, assessment instruments, learning strategies, and collaborative methods for children with learning disabilities. Upon completion, students should be able to assist in identifying, assessing, and providing educational interventions for children with learning disabilities. This course is a unique concentration requirement in the Special Education concentration in the Early Childhood Associate program.

EDU 151-Creative Activities
303
This course covers creative learning environments, planning and implementing developmentally appropriate experiences, and developing appropriate teaching materials for the classroom. Emphasis is placed on creative activities for children in art, music, movement and physical skills, and dramatics. Upon completion, students should be able to select and
evaluate developmentally appropriate learning materials and activities.

EDU 153-Health, Safety, \& Nutrit
This course focuses on promoting and maintaining the health and well-being of children. Topics include health and nutritional needs, safe and healthy environments, and recognition and reporting of child abuse and neglect. Upon completion, students should be able to set up and monitor safe indoor and outdoor environments and implement a nutrition education program.

EDU 185-Cognitive \& Lang Act
303
This course covers methods of developing cognitive and language/communication skills in children. Emphasis is placed on planning the basic components of language and cognitive processes in developing curriculum activities. Upon completion, students should be able to identify, plan, select materials and equipment, and implement and evaluate developmentally appropriate curriculum activities.

EDU 186-Reading \& Writing Methods 303 This course covers concepts, resources, and methods for teaching reading and writing to schoolage children. Topics include the importance of literacy, learning styles, skills assessment, various reading and writing approaches, and instructional strategies. Upon completion, students should be able to assess, plan, implement, and evaluate developmentally appropriate reading and writing experiences. This course is a unique concentration requirement in the Teacher Associate concentration in the Early Childhood Associate program.

EDU 188-Issues in Early Child Ed 202
This course covers topics and issues in early childhood education. Emphasis is placed on current advocacy issues, emerging technology, professional growth experiences, and other related topics. Upon completion, students should be able to list, discuss, and explain current topics and issues in early childhood education.

EDU 221-Children with Sp Needs
303
This course introduces working with children with special needs. Emphasis is placed on the characteristics and assessment of children and strategies for adapting the home and classroom environment. Upon completion, students should be able to recognize atypical development, make appropriate referrals, and work collaboratively to plan, implement, and evaluate inclusion strategies. Prerequisites: EDU 144 and EDU 145.

EDU 234-Infants, Toddlers, \& Twos
303
This course covers the skills needed to effectively implement group care for infants, toddlers, and twoyear olds. Emphasis is placed on child development and developmentally appropriate practices. Upon completion, students should be able to identify, plan, select materials and equipment, and implement and evaluate a developmentally appropriate curriculum.

EDU 235-School-Age Dev \& Program 202 This course presents developmentally appropriate practices in group care for school-age children. Topics include principles of development, environmental planning, and positive guidance techniques. Upon completion, students should be able to discuss developmental principles for children
five to twelve years of age and plan and implement age-appropriate activities.

EDU 247-Physical Disabilities
303
This course covers characteristics, intervention strategies, adaptive procedures, and technologies for children with physical disabilities. Topics include intervention strategies, inclusive placement options, and utilization of support services for children with physical disabilities. Upon completion, students should be able to identify and utilize intervention strategies for specific disabilities and service delivery options for those disabilities. This course is a unique concentration requirement in the Special Education concentration in the Early Childhood Associate program. Prerequisite: EDU 144.

## EDU 248-Mental Retardation

223
This course covers the causes and assessment of mental retardation and individualized instruction and curriculum for children with mental retardation. Emphasis is placed on definition, characteristics, assessment, and educational strategies for children with mental retardation. Upon completion, students should be able to identify, assess, and plan educational intervention strategies for children with mental retardation. This course is a unique concentration requirement in the Special Education concentration in the Early Childhood Associate program.

## EDU 251-Exploration Activities

303
This course covers discovery experiences in science, math, and social studies. Emphasis is placed on developing concepts for each area and encouraging young children to explore, discover, and construct concepts. Upon completion, students should be able to discuss the discovery approach to teaching, explain major concepts in each area, and plan appropriate experiences for children.

EDU 259-Curriculum Planning
303
This course covers early childhood curriculum planning. Topics include philosophy, curriculum, indoor and outdoor environmental design, scheduling, observation and assessment, and instructional planning and evaluation. Upon completion, students should be able to assess children and curriculum; plan for daily, weekly, and long-range instruction; and design environments with appropriate equipment and supplies. Prerequisites: EDU 119.

EDU 261-Early Childhood Admin I 202 This course covers the policies, procedures, and responsibilities for the management of early childhood education programs. Topics include implementation of goals, principles of supervision, budgeting and financial management, and meeting the standards for a NC Child Day Care license. Upon completion, students should be able to develop program goals, explain licensing standards, determine budgeting needs, and describe effective methods of personnel supervision.

## EDU 262-Early Childhood Admin II 303

This course provides a foundation for budgetary, financial, and personnel management of the child care center. Topics include budgeting, financial management, marketing, hiring, supervision, and professional development of a child care center. Upon completion, students should be able to formulate marketing, financial management, and
fund development plans and develop personnel policies, including supervision and staff development plans. Prerequisites: EDU 261.

EDU 275-Effective Teach Train 202 This course provides specialized training using an experienced-based approach to learning. Topics include instructional preparation and presentation, student interaction, time management, learning expectations, evaluation, and curriculum principles and planning. Upon completion, students should be able to prepare and present a six-step lesson plan and demonstrate ways to improve students' time-on-task.

EDU 282-Early Childhood Lit
303
This course covers the history, selection, and integration of literature and language in the early childhood curriculum. Topics include the history and selection of developmentally appropriate children's literature and the use of books and other media to enhance language and literacy in the classroom. Upon completion, students should be able to select appropriate books for storytelling, reading aloud, puppetry, flannel board use, and other techniques.

EDU 285-Internship Exp-School Age 101
This course provides an opportunity to discuss internship experiences with peers and faculty. Emphasis is placed on evaluating and integrating practicum experiences. Upon completion, students should be able to demonstrate competence in early childhood education. This course is a unique concentration requirement in the Teacher Associate concentration in the Early Childhood Associate program. Prerequisite: ENG 111 and completion of curriculum core requirements. Corequisite: COE 121.

EDU 288-Adv Issues/Early Child Ed 202 This course covers advanced topics and issues in early childhood. Emphasis is placed on current advocacy issues, emerging technology, professional growth experiences, and other related topics. Upon completion, students should be able to list, discuss, and explain advanced current topics and issues in early childhood education.

## ENGINEERING

EGR 285-Design Project
042
This course provides the opportunity to design and construct an instructor-approved project using previously acquired skills. Emphasis is placed on selection, proposal, design, construction, testing, and documentation of the approved project. Upon completion, students should be able to present and demonstrate operational projects.

## ELECTRICITY

ELC 111-Intro to Electricity
223
This course introduces the fundamental concepts of electricity and test equipment to nonelectrical/electronic majors. Topics include basic DC and AC principles (voltage, resistance, current, impedance); components (resistors, inductors, and capacitors); power; and operation of test equipment. Upon completion, students should be able to construct and analyze simple DC and AC circuits using electrical test equipment.

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and computations related to DC/AC electricity. Emphasis is placed on DC/AC circuits, components, operation of test equipment; and other related topics. Upon completion, students should be able to construct, verify, and analyze simple DC/AC circuits.

ELC 113-Basic Wiring I
264
This course introduces the care/usage of tools and materials used in electrical installations and the requirements of the National Electrical Code. Topics include NEC, electrical safety, and electrical blueprint reading; planning, layout; and installation of electrical distribution equipment; lighting; overcurrent protection; conductors; branch circuits; and conduits. Upon completion, students should be able to properly install conduits, wiring, and electrical distribution equipment associated with basic electrical installations.

## ELC 114-Basic Wiring II

264
This course provides additional instruction in the application of electrical tools, materials, and test equipment associated with electrical installations. Topics include the NEC; safety; electrical blueprints; planning, layout, and installation of equipment and conduits; and wiring devices such as panels and overcurrent devices. Upon completion, students should be able to properly install equipment and conduit associated with electrical installations. Prerequisites: ELC 113.

## ELC 115-Industrial Wiring

264
This course covers layout, planning, and installation of wiring systems in industrial facilities. Emphasis is placed on industrial wiring methods and materials. Upon completion, students should be able to install industrial systems and equipment. Prerequisites: ELC 113.

ELC 117-Motors and Controls
264
This course introduces the fundamental concepts of motors and motor controls. Topics include ladder diagrams, pilot devices, contractors, motor starters, motors, and other control devices. Upon completion, students should be able to properly select, connect, and troubleshoot motors and control circuits. Prerequisites: ELC 111, 112 or ELC 131.

ELC 118-National Electrical Code
122
This course covers the use of the current National Electrical Code. Topics include the NEC history, wiring methods, overcurrent protection, materials, and other related topics. Upon completion, students should be able to effectively use the NEC.

ELC 119-NEC Calculations
122
This course covers branch circuit, feeder, and service calculations. Emphasis is placed on sections of the National Electrical Code related to calculations. Upon completion, students should be able to use appropriate code sections to size wire, conduit, and overcurrent devices for branch circuits, feeders, and service.

## ELC 128-Intro to PLC

233
This course introduces the programmable logic controller (PLC) and its associated applications. Topics include ladder logic diagrams, input/ output modules, power supplies, surge protection, selection/installation of controllers, and interfacing of controllers with equipment. Upon completion, students should be able to install PLCs and create
simple programs.
ELC 131-DC/AC Circuit Analysis
435
This course introduces DC and AC electricity with an emphasis on circuit analysis, measurements, and operation of test equipment. Topics include DC and AC principles, circuit analysis laws and theorems, components, test equipment operation, circuit simulation software, and other related topics. Upon completion, students should be able to interpret circuit schematics; design, construct, verify, and analyze DC/AC circuits; and properly use test equipment. Corequisites: MAT 161.

ELC 131A-DC/AC Circuit Analysis Lab 031 This course provides laboratory assignments as applied to fundamental principles of DC/AC electricity. Emphasis is placed on measurements and evaluation of electrical components, devices and circuits. Upon completion, students should have gained hands-on experience by measuring voltage, current, and opposition to current flow utilizing various meters and test equipment. Corequisite: ELC 131.

## ELECTRONICS

ELN 131-Electronic Devices
334
This course includes semiconductor-based devices such as diodes, bipolar transistors, FETs, thyristors, and related components. Emphasis is placed on analysis, selection, biasing, and applications in power supplies, small signal amplifiers, and switching and control circuits. Upon completion, students should be able to construct, analyze, verify, and troubleshoot discrete component circuits using appropriate techniques and test equipment. Corequisites: ELC 112 or ELC 131.

ELN 132-Linear IC Applications
334
This course introduces the characteristics and applications of linear integrated circuits. Topics include op-amp circuits, differential amplifiers, instrumentation amplifiers, waveform generators, active filters, PLLS, and IC voltage regulators. Upon completion, students should be able to construct, analyze, verify, and troubleshoot linear integrated circuits using appropriate techniques and test equipment. Prerequisites: ELN 131.

ELN 133-Digital Electronics
334
This course covers combinational and sequential logic circuits. Topics include number systems, Boolean algebra, logic families, MSI and LSI circuits, AC/DC converters, and other related topics. Upon completion, students should be able to construct, analyze, verify, and troubleshoot digital circuits using appropriate techniques and test equipment.

ELN 135-Electronic Circuits
233
This course covers discrete component amplifiers, power supplies, wave-shaping, oscillators, and special purpose ICs. Topics include feedback, analog arithmetic circuits, current and voltage sources, amplifiers, timers, PLLs, filters, regulators, and other related circuits. Upon completion, students should be able to determine, by the configuration, the function of common analog circuits and troubleshoot circuits based on service information. Prerequisites: ELN 131.

ELN 150-CAD for Electronics
132
This course introduces computer-aided drafting (CAD) with an emphasis on applications in the electronics field. Topics include electronics industry standards (symbols, schematic diagrams, layouts); drawing electronic circuit diagrams; and specialized electronic drafting practices and components such as resistors, capacitors, and ICs. Upon completion, students should be able to prepare electronic drawings with CAD software. Prerequisites: CIS 110.

ELN 229-Industrial Electronics
244
This course covers semiconductor devices used in industrial applications. Topics include the basic theory, application, and operating characteristics of semiconductor devices (filters, rectifiers, FET, SCR, Diac, Triac, Op-amps, etc). Upon completion, students should be able to install and/or troubleshoot these devices for proper operation in an industrial electronic circuit. Prerequisites: ELC 112, ELC 131.

## ELN 231-Industrial Controls

233
This course introduces the fundamental concepts of solid-state control of rotating machinery and associated peripheral devices. Topics include rotating machine theory, ladder logic, electromechanical and solid state relays, motor controls, pilot devices, three-phase power systems, and other related topics. Upon completion, students should be able to interpret ladder diagrams and demonstrate an understanding of electromechanical and electronic control of rotating machinery. Prerequisites: ELC 112 or ELC 131.

ELN 232-Intro to Microprocessors
334
This course introduces microprocessor architecture and microcomputer systems including memory and input/output interfacing. Topics include assembly language programming, bus architecture, bus cycle types, I/O systems, memory systems, interrupts, and other related topics. Upon completion, students should be able to interpret, analyze, verify, and troubleshoot fundamental microprocessor circuits and programs using appropriate techniques and test equipment. Prerequisites: ELN 133.

ELN 233-Microprocessor Systems
334
This course covers the application and design of microprocessor control systems. Topics include control and interfacing of systems using AD/DA, serial/parallel I/O, communication protocols, and other related applications. Upon completion, students should be able to design, construct, program, verify, analyze, and troubleshoot fundamental microprocessor interface and control circuit using related equipment. Prerequisites: ELN 232.

## ENGLISH

Initial student placement in development courses is based on individual college placement testing policies and procedures. Students should begin developmental course work at the appropriate level indicated by the college's placement test.

## ENG 080-Writing Foundations

324
This course introduces the writing process and stresses effective sentences. Emphasis is placed on applying the conventions of written English, reflecting standard usage and mechanics in structuring a variety of sentences. Upon completion, students
should be able to write correct sentences and a unified, coherent paragraph. Prerequisites: Placement This course does not satisfy the developmental reading and writing prerequisite for ENG 111.

## ENG 090-Composition Strategies

303
This course provides practice in the writing process and stresses effective paragraphs. Emphasis is placed on learning and applying the conventions of standard written English in developing paragraphs within the essay. Upon completion, students should be able to compose a variety of paragraphs and a unified, coherent essay. Prerequisites: ENG 080 or Placement. This course satisfies the developmental prerequisite for ENG 111.

ENG 090A-Comp Strategies Lab
021
This writing lab is designed to practice the skills introduced in ENG 090. Emphasis is placed on learning and applying the conventions of standard written English in developing paragraphs within the essay. Upon completion, students should be able to compose a variety of paragraphs and a unified, coherent essay. Prerequisite: ENG 080 or Placement. Corequisite: ENG 090.

ENG 101-Applied Communications I
303
This course is designed to enhance reading and writing skills for the workplace. Emphasis is placed on technical reading, job-related vocabulary, sentence writing, punctuation, and spelling. Upon completion, students should be able to identify main ideas with supporting details and produce mechanically correct short writings appropriate to the workplace. This is a diploma-level course.

ENG 102-Applied Communications II 303 This course is designed to enhance writing and speaking skills for the workplace. Emphasis is placed on generating short writings such as job application documents, memoranda, and reports and developing interpersonal communication skills with employees and the public. Upon completion, students should be able to prepare effective, short, and job-related written and oral communications. This is a diploma-level course.

ENG 111-Expository Writing
303
This course is the required first course in a series of two designed to develop the ability to produce clear expository prose. Emphasis is placed on the writing process including audience analysis, topic selection, thesis support and development, editing, and revision. Upon completion, students should be able to produce unified, coherent, well-developed essays using standard written English. Prerequisites: ENG 090 and RED 090. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in English composition.

ENG 112-Argument-Based Research
303 This course, the second in a series of two, introduces research techniques, documentation styles, and argumentative strategies. Emphasis is placed on analyzing data and incorporating research findings into documented argumentative essays and research projects. Upon completion, students should be able to summarize, paraphrase, interpret, and synthesize information from primary and secondary sources using standard research format and style. Prerequisites: ENG 111. This course has been
approved to satisfy the Comprehensive Articulation Agreement general education core requirement in English composition.

ENG 113-Literature-Based Research 303 This course, the second in a series of two, expands the concepts developed in ENG 111 by focusing on writing that involves literature-based research and documentation. Emphasis is placed on critical reading and thinking and the analysis and interpretation of prose, poetry, and drama: plot, characterization, theme, cultural context, etc. Upon completion, students should be able to construct mechanically-sound, documented essays and research papers that analyze and respond to literary works. Prerequisites: ENG 111. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in English composition.

ENG 114-Prof Research \& Reporting 303 This course, the second in a series of two, is designed to teach professional communication skills. Emphasis is placed on research, listening, critical reading and thinking, analysis, interpretation, and design used in oral and written presentations. Upon completion, students should be able to work individually and collaboratively to produce wellorganized business and professional written and oral presentations. Prerequisite: ENG 111. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

ENG 125-Creative Writing I
303
This course is designed to provide students with the opportunity to practice the art of creative writing. Emphasis is placed on writing, fiction, poetry, and sketches. Upon completion, students should be able to craft and critique their own writing and critique the writing of others. Prerequisites: ENG 111. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

ENG 126-Creative Writing II
303
This course is designed as a workshop approach for advancing imaginative and literary skills. Emphasis is placed on the discussion of style, techniques, and challenges for first publications. Upon completion, students should be able to submit a piece of their writing for publication. Prerequisite: ENG 125. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

ENG 131-Introduction to Literature 303 This course introduces the principal genres of literature. Emphasis is placed on literary terminology, devices, structure, and interpretation. Upon completion, students should be able to analyze and respond to literature. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts. Prerequisites: ENG 111 Corequisites: ENG 112, ENG 113, or ENG 114.

ENG 231-American Literature I
303
This course covers selected works in American literature from its beginnings to 1865. Emphasis is placed on historical background, cultural context, and
literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts. Prerequisites: ENG 112, ENG 113, or ENG 114. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

ENG 232-American Literature II
303
This course covers selected works in American literature from 1865 to the present. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts. Prerequisites: ENG 112, ENG 113, or ENG 114. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

ENG 233-Major American Writers
303
This course provides an intensive study of the works of several major American authors. Emphasis is placed on American history, culture, and the literary merits. Upon completion, students should be able to interpret, analyze, and evaluate the works studied. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts. Prerequisites: ENG 112, ENG 113, or ENG 114.

ENG 241-British Literature I
303
This course covers selected works in British literature from its beginnings to the Romantic Period. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts. Prerequisites: ENG 112, ENG 113, ENG 114. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

ENG 242-British Literature II
303
This course covers selected works in British literature from the Romantic Period to the present. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts. Prerequisites: ENG 112, ENG 113, ENG 114. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

ENG 251-Western World Literature I
303 This course provides a survey of selected European works from the Classical period through the Renaissance. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to selected works. Prerequisites: ENG 112, ENG 113, ENG 114. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

ENG 252-Western World Literature II 303
This course provides a survey of selected European works from the neoclassical period to the present. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to selected works. Prerequisites: ENG 112, ENG 113, ENG 114. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

ENG 261-World Literature I
303
This course introduces selected works form the Pacific, Asia, Africa, Europe, and the Americas from their literary beginnings through the seventeenth century. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to selected works. Prerequisites: ENG 112, ENG 113, ENG 114. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

ENG 262-World Literature II
303
This course introduces selected works from the Pacific, Asia, Africa, Europe, and the Americas from the eighteenth century to the present. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to selected works. Prerequisites: ENG 112, ENG 113, or ENG 114. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

ENG 272-Southern Literature
303
This course provides an analytical study of the works of several Southern authors. Emphasis is placed on the historical and cultural contexts, themes, aesthetic features of individual works, and biographical backgrounds of the authors. Upon completion, students should be able to interpret, analyze, and discuss selected works. Prerequisites: ENG 112, ENG 113, or ENG 114. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

## FIRE PROTECTION

FIP 120-Intro to Fire Protection 202 This course provides an overview of the history, development, methods, systems, and regulations as they apply to the fire protection field. Topics include history, evolution, statistics, suppression, organizations, careers, curriculum, and other related topics. Upon completion, students should be able to demonstrate a broad understanding of the fire protection field.

## FIP 124-Fire Prevention \& Public Ed 303

This course introduces fire prevention concepts as they relate to community and industrial operations. Topics include the development and maintenance of fire prevention programs, educational programs, and inspection programs. Upon completion, students should be able to research, develop, and present a fire safety program to a citizens or industrial group.

FIP 128-Detection \& Investigation 303 This course covers procedures for determining the origin and cause of accidental and incendiary fires. Topics include collection and preservation of evidence, detection and determination of accelerants, courtroom procedure and testimony, and documentation of the fire scene. Upon completion, students should be able to conduct a competent fire investigation and present those findings to appropriate officials or equivalent.

FIP 132-Building Construction
303
This course covers the principles and practices related to various types of building construction, including residential and commercial, as impacted by fire conditions. Topics include types of construction and related elements, fire resistive aspects of construction materials, building codes, collapse, and other related topics. Upon completion, students should be able to understand and recognize various types of construction and their positive or negative aspects as related to fire conditions.

FIP 136-Inspections \& Codes
303
This course covers the fundamentals of fire and building codes and procedures to conduct an inspection. Topics include review of fire and building codes, writing inspection reports, identifying hazards, plan reviews, site sketches, and other related topics. Upon completion, students should be able to conduct a fire code compliance inspection and produce a written report. This course may contain the DOI course, COD 3101 and COD 3120 and will enable the successful completor to participate in the state certification exam for the Level Fire Inspector.

FIP 140-Industrial Fire Protect
202
This course covers fire protection systems in industrial facilities. Topics include applicable health and safety standards, insurance carrier regulations, other regulatory agencies, hazards of local industries, fire brigade operation, and loss prevention programs. Upon completion, students should be able to prepare a procedure to plan, organize, and evaluate an industrial facility's fire protection.

FIP 144-Sprinklers \& Auto Alarms
223
This course introduces various types of automatic sprinklers, standpipes, and fire alarm systems. Topics include wet or dry systems, testing and maintenance, water supply requirements, fire detection and alarm systems, and other related topics. Upon completion, students should be able to demonstrate a working knowledge of various sprinkler and alarm systems and required inspection and maintenance.

FIP 152-Fire Protection Law
202
This course covers fire protection law. Topics include torts, legal terms, contracts, liability, review of case histories, and other related topics. Upon completion, students should be able to discuss laws, codes, and ordinances as they relate to fire protection.

FIP 164-OSHA Standards
202
This course covers public and private sector OSHA work site requirements. Emphasis is placed on accident prevention and reporting, personal safety, machine operation, and hazardous material handling. Upon completion, students should be able to analyze and interpret specific OSHA regulations and write

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workplace policies designed to achieve compliance.
FIP 180-Wildland Fire Behavior
303
This course covers the principles of wildland fire behavior and meteorology. Emphasis is placed on fire calculations, fuels, and related weather effects. Upon completion, students should be able to demonstrate and apply fire behavior theories through written and performance evaluations.

FIP 184-Wildland Fire Safety
202
This course covers safety principles used when working in the wildland fire environment. Emphasis is placed on personal safety and working with equipment, aircraft, and fire-ground operations. Upon completion, students should be able to understand and demonstrate wildland fire safety procedures through written and performance evaluations.

FIP 188-Intro to Wildland Fires
324
This course introduces basic wildland fire suppression functions. Emphasis is placed on the operation of tools, equipment, aircraft, and basic fire suppression methods. Upon completion, students should be able to understand basic theories in wildland fire suppression and demonstrate them through written and performance evaluations.

FIP 220-Fire Fighting Strategies
303
This course provides preparation for command of initial incident operations involving emergencies within both the public and private sector. Topics include incident management, fire-ground tactics and strategies, incident safety, and command/control of emergency operations. Upon completion, students should be able to describe the initial incident system as it relates to operations involving various emergencies in fire and non-fire situations.

FIP 221-Adv Fire Fighting Strat
303
This course covers command-level operations for multi-company/agency operations involving fire and non-fire emergencies. Topics include advanced ICS, advanced incident analysis, command-level fire operations, and control of both man made and natural major disasters. Upon completion, students should be able to describe proper and accepted systems for the mitigation of emergencies at the level of overall scene command.

FIP 228-Local Govt Finance
202
This course introduces local governmental financial principles and practices. Topics include budget preparation and justification, revenue policies, statutory requirements, taxation, audits, and the economic climate. Upon completion, students should be able to comprehend the importance of finance as it applies to the operation of a department.

FIP 230-Chem of Hazardous Mat I
505
This course covers the evaluation of hazardous materials. Topics include use of the periodic table, hydrocarbon derivatives, placards and labels, parameters of combustion, and spill and leak mitigation. Upon completion, students should be able to demonstrate knowledge of the chemical behavior of hazardous materials.

FIP 231-Chem of Hazardous Mat II
425
This course covers hazardous materials characterization, properties, location, handling and response guidelines, hazard survey principles, and
other related topics. Topics include radiation hazards, instruments, inspections, and detection of the presence of hazardous materials in industrial/ commercial occupancies. Upon completion, students should be able to inspect chemical/radioactive sites and use on-site visits to gasoline and/or LPG storage facilities/chemical plants to develop a pre-plan.

FIP 232-Hydraulics \& Water Dist
223
This course covers the flow of fluids through fire hoses, nozzles, appliances, pumps, standpipes, water mains, and other devices. Emphasis is placed on supply and delivery systems, fire flow testing, hydraulic calculations, and other related topics. Upon completion, students should be able to perform hydraulic calculations, conduct water availability tests, and demonstrate knowledge of water distribution systems.

FIP 236-Emergency Management 202 This course covers the four phases of emergency management: mitigation, preparedness, response, and recovery. Topics include organizing for emergency management, coordinating for community resources, public sector liability, and the roles of government agencies at all levels. Upon completion, students should be able to demonstrate an understanding of comprehensive emergency management and the integrated emergency management system.

FIP 240-Fire Service Supervision
202
This course covers supervisory skills and practices in the fire protection field. Topics include the supervisor's job, supervision skills, the changing work environment, managing change, organizing for results, discipline and grievances, and loss control. Upon completion, students should be able to demonstrate an understanding of the roles and responsibilities of the effective fire service supervisor.

FIP 256-Munic Public Relations
202
This course is a general survey of municipal public relations and their effect on the governmental process. Topics include principles of public relations, press releases, press conferences, public information officers, image surveys, and the effects of perceived service on fire protection delivery. Upon completion, students should be able to manage the public relations functions of a fire service organization.

FIP 260-Fire Protect Planning
303
This course covers the need for a comprehensive approach to fire protection planning. Topics include the planning process, using an advisory committee, establishing goals and objectives, and techniques used to approve and implement a plan. Upon completion, students should be able to demonstrate a working knowledge of the concepts and principles of planning as it relates to fire protection.

FIP 276-Managing Fire Services
303
This course provides an overview of fire department operative services. Topics include finance, staffing, equipment, code enforcement, management information, specialized services, legal issues, planning, and other related topics. Upon completion, students should be able to understand concepts and apply fire department management and operations principles.

## GEOGRAPHY

GEO 111-World Regional Geography 303 This course introduces the regional concept which emphasizes the spatial association of people and their environment. Emphasis is placed on the physical, cultural, and economic systems that interact to produce the distinct regions of the earth. Upon completion, students should be able to describe variations in physical and cultural features of a region and demonstrate an understanding of their functional relationships. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

GEO 130-General Physical Geography 303 This course introduces both the basic physical components that help shape the earth and the study of minerals, rocks, and evolution of landforms. Emphasis is placed on the geographic grid, cartography, weather, climate, mineral composition, fluvial processes, and erosion and deposition. Upon completion, students should be able to identify these components and processes and explain how they interact. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

## GEOLOGY

GEL 111-Introductory Geology
324 This course introduces basic landforms and geological processes. Topics include rocks, minerals, volcanoes, fluvial processes, geological history, plate tectonics, glaciers, and coastal dynamics. Upon completion, students should be able to describe basic geological processes that shape the earth. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

GEL 120-Physical Geology
324
This course provides a study of the structure and composition of the earth's crust. Emphasis is placed on weathering, erosional and depositional processes, mountain building forces, rocks and minerals, and structural changes. Upon completion, students should be able to explain the structure, and formation of the earth's crust. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

## HEALTH

HEA 110-Personal Health/Wellness 303
This course provides an introduction to basic personal health and wellness. Emphasis is placed on current health issues such as nutrition, mental health, and fitness. Upon completion, students should be able to demonstrate an understanding of the factors necessary to the maintenance of health and wellness. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

This course provides first aid and safety education. Emphasis is placed on safe attitudes, accident
prevention, and response to accidents and injuries. Upon completion, students should be able to demonstrate proper first aid and safety skills.

HEA 120-Community Health 303 This course provides information about contemporary community health and school hygiene issues. Topics include health education and current information about health trends. Upon completion, students should be able to recognize and devise strategies to prevent today's community health problems. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

## HISTORY

HIS 111-World Civilizations I
303
This course introduces world history from the dawn of civilization to the early modern era. Topics include Eurasian, African, American, and Greco-Roman civilizations and Christian, Islamic and Byzantine cultures. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in pre-modern world civilizations. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

## HIS 112-World Civilizations II

303
This course introduces world history from the early modern era to the present. Topics include the cultures of Africa, Europe, India, China, Japan, and the Americas. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in modern world civilizations. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

HIS 121-Western Civilization I
303
This course introduces western civilization from prehistory to the early modern era. Topics include ancient Greece, Rome, and Christian institutions of the Middle-Ages and the emergence of national monarchies in Western Europe. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in early western civilization. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

HIS 122-Western Civilization II
303
This course introduces western civilization from the early modern era to the present. Topics include the religious wars, the Industrial Revolution, World Wars I and II, and the Cold War. Upon completion, students should be able to analyze significant political, socioeconomic, and the cultural developments in modern western civilization. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

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migrations to the Americas, the colonial and revolutionary periods, the development of the Republic, and the Civil War. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in early American history. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

HIS 132-American History II
303
This course is a survey of American history from the Civil War era to the present. Topics include industrialization, immigration, the Great Depression, the major American wars, the Cold War, and social conflict. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in American history since the Civil War. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

## HIS 228-History of the South

303
This course covers the origin and development of the South as a distinct region of the United States. Emphasis is placed on Southern identity and it's basic in cultural, social, economic, and political developments during the 19th and 20th centuries. Upon completion, students should be able to identify and analyze the major cultural, social, economic, and political developments in the South. As a portion of this class, we will travel to different areas then are of interest to Southern History. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

HIS 229-History of the Old South
303
This course is a study of the development of the South from European settlement through the Civil War. Topics include the multi-ethnic character of colonization, the plantation economy, relations between social classes, the nature of slavery, and issues leading to the Civil War. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in the antebellum South. As a portion of this class, we will travel to different areas that are of interest to Southern History. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

## HEALTH SCIENCES

HSC 110-Orientation to Health Careers 0001 This course is a survey of health care professions. Topics include professional duties and responsibilities, working environments, and career choices. Upon completion, students should be able to demonstrate an understanding of the health care professions and be prepared to make informed career choices.

HSC 120-CPR
0201
This course covers the basic knowledge and skills for the performance of infant, child, and adult CPR and the management of foreign body airway obstruction. Emphasis is placed on recognition, assessment, and proper management of emergency care. Upon completion, students should be able to perform
infant, child, and adult CPR and manage foreign body airway obstructions.

## HUMANITIES

HUM 120-Cultural Studies
303
This course introduces the distinctive features of a particular culture. Topics include art, history, music, literature, politics, philosophy, and religion. Upon completion, students should be able to appreciate the unique character of the study culture. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

HUM 122-Southern Culture
303
This course explores the major qualities that make the South a distinct region. Topics include music, politics, literature, art, religion, race relations, and the role of social class in historical and contemporary contexts. Upon completion, students should be able to identify the characteristics that distinguish Southern culture. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/ fine arts.

## HUM 170-The Holocaust

 303This course provides a survey of the destruction of European Jewry by the Nazis during World War II. Topics include the anti-Semitic ideology, bureaucratic structures, and varying conditions of European occupation and domination under the Third Reich. Upon completion, students should be able to demonstrate an understanding of the historical, social, religious, political, and economic factors which cumulatively resulted in the Holocaust. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

HUM 211-Humanities I
303
This course introduces the humanities as a record in literature, music, art, history, religion, and philosophy of humankind's answers to the fundamental questions of existence. Emphasis is placed on the interconnectedness of various aspects of cultures from ancient through early modern times. Upon completion, students should be able to identify significant figures and cultural contributions to the periods studied. Prerequisites: ENG 111. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

## HYDRAULICS

HYD 110-Hydraulics/Pneumatics I
233
This course introduces the basic components and functions of hydraulic and pneumatic systems. Topics include standard symbols, pumps, control valves, control assemblies, actuators, FRL, maintenance procedures, and switching and control devices. Upon completion, students should be able to understand the operation of a fluid power system, including design, application, and troubleshooting.

## INDUSTRIAL SCIENCE

ISC 110-Workplace Safety
101
This course introduces the basic concepts of workplace safety. Topics include fire, ladders, lifting, lock-out/tag-out, personal protective devices, and
other workplace safety issues related to OSHA compliance. Upon completion, students should be able to demonstrate an understanding of the components of a safe workplace.

ISC 112-Industrial Safety
202
This course introduces the principles of industrial safety. Emphasis is placed on industrial safety and OSHA and environmental regulations. Upon completion, students should be able to demonstrate knowledge of a safe working environment. Particular emphasis is placed on the management structure and practices required to achieve excellence in safety results.

## ISC 128-Industrial Leadership

202
This course introduces principles and techniques for managers in modern industry. Topics include leadership traits, management principles and processes, managing conflict, group dynamics, team building, counseling, motivation, and communication. Upon completion, students should be able to understand and apply leadership and management principles in work situations. Emphasis is given to: defining excellence, principles centered leadership, character ethic rather than personality based cultures, and achieving high trust levels essential in high performance organizations.

## ISC 132-Mfg Quality Control <br> 233

This course introduces quality concepts and techniques used in industry. Topics include elementary statistics and probability, process control, process capability, and quality improvement tools. Upon completion, students should be able to demonstrate an understanding of the concepts and principles of quality and apply them to the work environment. Emphasis is given to the development and use of control charts and operation involvement in achieving quality excellence.

ISC 133-Mfg Management Practices 202 This course covers successful industrial organizations and management practices for improving quality and productivity. Topics include self-managed work teams, problem-solving skills, and production management techniques. Upon completion, students should be able to demonstrate an understanding of day-to-day plant operations, team management processes, and the principles of group dynamics.

ISC 135-Principles of Industrial Mgmt 303 This course covers the managerial principles and practices required for organizations to succeed in modern industry. Topics include the functions and roles of all levels of management, organization design, and planning and control of manufacturing operations. Upon completion, students should be able to demonstrate an understanding of management principles and integrate these principles into job situations.

ISC 136-Productivity Analysis I
233
This course covers modern methods of improving productivity. Topics include traditional motion economy, methods analysis, time standards, process analysis, cycle time management, and human factors/ergonomics. Upon completion, students should be able to demonstrate an understanding of productivity concepts and apply productivity improvement techniques to work situations.

ISC 170-Problem-Solving Skills
303
This course covers basic concepts of interpersonal and problem-solving skills. Topics include leadership development, constructive feedback, building relationships, and winning support from others. Upon completion, students should be able to use interpersonal skills effectively and lead others.

ISC 221-Statistical Quality Control
303
This course covers the principles and techniques of statistical process control for the improvement of productivity. Emphasis is placed on basic statistics for quality control, organization and procedures for efficient quality control including inspections, process control, and tests of significance. Upon completion, students should be able to apply statistical principles and techniques to enhance production. Prerequisites: Completion of curriculum mathematics requirement.

ISC 233-Industrial Org \& Mgmt
303
This course covers advanced organization and management philosophies for organization improvement. Emphasis is placed on understanding comprehensive organization improvement concepts such as reengineering, MGQA, ISO 9000, and teams. Upon completion, students should be able to demonstrate an understanding of organizations and assess their strengths and weaknesses. Prerequisites: ISC 133 or ISC 128.

ISC 235-Management Problems
303 This course covers problem-solving strategies for a variety of industrial management problems. Emphasis is placed on integrating management principles and practices in an industrial setting through a case-study approach. Upon completion, students should be able to analyze a variety of management problems and provide oral and/or written reports which include problem definition and recommendations.

ISC 255-Engineering Economy
223
This course covers the process of economic evaluation of manufacturing industrial alternatives such as equipment selection, replacement studies, and cost reduction proposals. Topics include discounted cash flows, time value of money, income tax considerations, internal rates of return, and comparison of alternatives using computer programs. Upon completion, students should be able to analyze complex manufacturing alternatives based on engineering economy principles.

## INTERNET TECHNOLOGIES

ITN 110-Intro to Web Graphics
223
This course is the first of two courses covering the creation of web graphics, addressing problems peculiar to WWW display using appropriate software. Topics include web graphics file types, type conversion, RGB color, the browser-safe palette, elementary special effects, image maps, and other related topics. Upon completion, students should be able to create graphics such as banners, buttons, backgrounds, and other graphics for Web pages.

ITN 120-Intro Internet Multimedia
223
This is the first of two courses covering the creation of Internet Multimedia. Topics include Internet multimedia file types, file type conversion, acquisition of digital audio/video, streaming audio/video and
graphics animation plug-in programs and other related topics. Upon completion, students should be able to create Internet multimedia presentations utilizing a variety of methods and applications.

ITN 130-Web Site Management
223
This course covers the issues involved in web site architecture. Topics include operating system directory structures, web site structural design, web site navigation, web site maintenance, backup and security. Upon completion, students should be able to design a web site directory plan optimized for navigation and ease of maintenance. Prerequisite: CSC 160.

ITN 140-Web Development Tools
223
This course provides an introduction to web development software suites. Topics include the creation of web sites and applets using web development software. Upon completion, students should be able to create entire web sites and supporting applets. Prerequisite: CSC 160.

ITN 150-Internet Protocols
223
This course introduces the student to the application protocols used on the Internet. Topics include HTTP, Secure HTTP, TCP/IP, and related applications such as FTP, TELNET, and PING. Upon completion, students should be able to use the protocols as they pertain to the Internet as well as setup and maintain these protocols.

ITN 160-Principles of Web Design
223
This course introduces intermediate to advanced web page design techniques. Topics include effective use of graphics, fonts, colors, navigation tools, advanced markup language elements, as well as a study of bad design techniques. Upon completion, the student should be able to employ advanced design techniques to create high impact and highly functional web pages.

ITN 170-Intro to Internet Databases 223 This is the first to two courses introducing the use of databases to store, retrieve and query data through HTML forms. Topics include database design for Internet database, use of ODBC-compliant databases. Upon completion, students should be able to create and maintain a database that will collect, query and report on data via an HTML form.

ITN 180-Active Server Programming 223 This course introduces Active Server Programming. Topics include Jscript, VBScript, HTML forms processing, and the Active Server Object Model. Upon completion, students should be able to create and maintain Active Server applications. Prerequisite: CSC 139.

## ITN 210-Advanced Web Graphics

223
This course is the second of two courses covering web graphics. Topics include graphics acquisition using scanners and digital camera, graphics optimization, use of masks, advanced special effects, GIF animation, and other related topics. Upon completion, students should be able to create graphics that are optimized for size and graphic file type, properly converted from digitized sources and create useful animated graphics. Prerequisite: ITN 110.

This is the second of two courses covering Internet
multimedia. Topics include use of advanced Internet multimedia applications. Upon completion, students should be able to create interactive Internet multimedia presentations. Prerequisites: ITN 120.

ITN 230-Intranets
223
This course covers the setting up of Intranets. Topics include selection of server hardware and software, selection of client applications, security, conversion of existing data to Web based formats, Intranet applications and administration. Upon completion, students should be able to set up a corporate or institutional Intranet.

## ITN 240-Internet Security

223
This course covers security issues related to Internet services. Topics include the operating system and Internet service security mechanisms. Upon completion, students should be able to implement security procedures for operating system level and server level alerts.

ITN 250-Implement Internet Serv
223
This course covers the set up and configuration of news, mail, ftp, and WWW services. Topics include selection and installation of software to support common Internet services and related topics. Upon completion, students should be able to install and configure the most commonly used Internet service software. Prerequisite: ITN 130.

ITN 260-Intro to E-Commerce
223
This course introduces the concepts and tools to implement electronic commerce via the Internet. Topics include application and server software selection, security transactions, used and verification of credit cards, publishing of catalogs, and site administration. Upon completion, students should be able to set up a working e-commerce Internet web-site.

ITN 280-Unix Internet Prog
223
This course presents advanced concepts and features of the UNIX operating system as they pertain to Internet programming. Topics will include process control, shell-programming and scripts, advanced search techniques, power user utilities and programming for Internet service maintenance. Upon completion, students should be able to successfully perform various Internet-related UNIX programming tasks.

ITN 290-Emerging Technologies
223
This course will expose students to emerging technologies in the field of Internet Technologies. Emphasis is placed on the new technologies in the Internet related field. Upon completion, students should be aware of the emerging technologies of Internet Technologies.

## MACHINING

MAC 111-Machining Technology I
2126
This course introduces machining operations as they relate to the metalworking industry. Topics include machine shop safety, measuring tools, lathes, drilling machining, saws, milling machines, bench grinders, and layout instruments. Upon completion, students should be able to safely perform the basic operations of measuring, layout, drilling, sawing, turning, and milling.
practice in the use of precision measuring tools, lathes, milling machines, and grinders. Emphasis is placed on setup and operation of machine tools including the selection and use of work holding devices, speeds, feeds, cutting tools, and coolants. Upon completion, students should be able to perform basic procedures on precision grinders and advanced operations of measuring, layout, drilling, sawing, turning, and milling. Prerequisites: MAC 111.

MAC 113-Machining Technology III
2126 This course provides an introduction to advanced and special machining operations. Emphasis is placed on working to specified tolerances with special and advanced setups. Upon completion, students should be able to produce a part to specifications. Prerequisites: MAC 112.

MAC 121-Intro to CNC
202 This course introduces the concepts and capabilities of computer numerical control machine tools. Topics include setup, operation, and basic applications. Upon completion, students should be able to explain operator safety, machine protection, data input, program preparation, and program storage.

MAC 122-CNC Turning
132
This course introduces the programming, setup, and operation of CNC turning centers. Topics include programming formats, control functions, program editing, part production, and inspection. Upon completion, students should be able to manufacture simple parts using CNC turning centers. Prerequisites: MAC 111 or Instructor approval.

## MAC 124-CNC Milling

132
This course introduces the manual programming, setup, and operation of CNC machining centers. Topics include programming formats, control functions, program editing, part production, and inspection. Upon completion, students should be able to manufacture simple parts using CNC machining centers. Prerequisites: MAC 122 or Instructor approval.

## MATHEMATICS

Initial student placement in development courses is based on individual college placement testing policies and procedures. Students should begin developmental course work at the appropriate level indicated by that college's placement test.

MAT 060-Essential Mathematics
324
This course is a comprehensive study of mathematical skills which should provide a strong mathematical foundation to pursue further study. Topics include principles and applications of decimals, fractions, percents, ratio and proportion, order of operations, geometry, measurement, and elements of algebra and statistics. Upon completion, students should be able to perform basic computations and solve relevant, multi-step mathematical problems using technology where appropriate. Prerequisites: Placement.

## MAT 070-Introductory Algebra

324
This course establishes a foundation in algebraic concepts and problem solving. Topics include signed numbers, exponents, order of operations, simplifying expressions, solving linear equations and inequalities, graphing, formulas, polynomials,
factoring, and elements of geometry. Upon completion, students should be able to apply the above concepts in problem solving using appropriate technology. Prerequisites: MAT 060 or Placement. Corequisites: RED 080.

MAT 080-Intermediate Algebra
324
This course continues the study of algebraic concepts with emphasis on applications. Topics include factoring; rational expressions; rational exponents; rational; radical, and quadratic equations; systems of equations; inequalities; graphing; functions; variations; complex numbers; and elements of geometry. Upon completion, students should be able to apply the above concepts in problem solving using appropriate technology. Prerequisites: MAT 070 or Placement. Corequisites: RED 080.

MAT 101-Applied Mathematics I
223
This course is a comprehensive review of arithmetic with basic algebra designed to meet the needs of certificate and diploma programs. Topics include arithmetic and geometric skills used in measurement, ratio and proportion, exponents and roots, applications of percent, linear equations, formulas, and statistics. Upon completion, students should be able to solve practical problems in their specific areas of study. Prerequisites: MAT 060 This course is intended for certificate and diploma programs.

## MAT 102-Applied Mathematics II

223
This course introduces the concepts of right triangle trigonometry and geometry with emphasis on applications to problem solving. Topics include the basic definitions and properties of plane and solid geometry, area and volume, and right triangle trigonometry. Upon completion, students should be able to solve applied problems both independently and collaboratively. Prerequisites: MAT 101. This course is intended for certificate and diploma programs.

MAT 140-Survey of Mathematics 303
This course provides an introduction in a nontechnical setting to selected topics in mathematics. Topics include, but are not limited to, sets, logic, probability, statistics, matrices, mathematical systems, geometry, topology, mathematics of finance, and modeling. Upon completion, students should be able to understand a variety of mathematical applications, think logically, and be able to work collaboratively and independently. Prerequisites: MAT 070. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural science/mathematics.

MAT 140A-Survey of Mathematics Lab 021 This course is a laboratory for MAT 140. Emphasis is placed on experiences that enhance the materials presented in the class. Upon completion, students should be able to solve problems, apply critical thinking, work in teams, and communicate effectively. Prerequisites: MAT 070. Corequisites: MAT 140. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural science/mathematics.

MAT 141-Math I for Teachers/K-9
303
This course is the first of a two course sequence that develops a deeper understanding and appreciation
of the basic concepts of mathematics. Emphasis is placed on sets, logic, number bases, elementary number theory, introductory algebra, measurement including metrics, and problem solving. Upon completion, students should be able to communicate orally and in writing these basic mathematical concepts. Prerequisites: MAT 080. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

MAT 142-Math II for Teachers/K-9
303
This course is the second of a two course sequence that develops a deeper understanding and appreciation of the basic concepts of mathematics. Emphasis is placed on probability, statistics, functions, introductory geometry, and mathematics of finance. Upon completion, students should be able to communicate orally and in writing these basic mathematical concepts and utilize technology as a mathematical tool. Prerequisites: MAT 141. This course has been approved to satisfy the comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

MAT 151-Statistics I
303
This course provides a project-based approach to the study of basic probability, descriptive and inferential statistics, and decision making. Emphasis is placed on measures of central tendency and dispersion, correlation, regression, discrete and continuous probability distributions, quality control, population parameter estimation, and hypothesis testing. Upon completion, students should be able to describe important characteristics of a set of data and draw inferences about a population from sample data. Prerequisites: MAT 080. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

MAT 151A-Statistics I Lab
021
This course is a laboratory for MAT 151. Emphasis is placed on experiences that enhance the materials presented in class. Upon completion, students should be able to solve problems, apply critical thinking, work in teams, and communicate effectively. Prerequisites: MAT 080. Corequisites: MAT 151. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

MAT 161-College Algebra
303
This course provides an integrated technological approach to algebraic topics used in problem solving. Emphasis is placed on applications involving equations and inequalities; polynomial, rational, exponential and logarithmic functions; and graphing and data analysis/modeling. Upon completion, students should be able to choose an appropriate model to fit a data set and use the model for analysis and prediction. Prerequisites: MAT 080. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural science/mathematics for the Associate in Arts Degree. approach to trigonometric applications used in problem
solving. Emphasis is placed on applications involving trigonometric ratios, right triangles, oblique triangles, trigonometric functions, graphing, vectors, and complex numbers. Upon completion, students should be able to apply the above principles of trigonometry to problem solving and communication. Prerequisites: MAT 161. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural science/mathematics for the Associate in Arts Degree.

MAT 171-Precalculus Algebra
303
This is the first of two courses designed to emphasize topics which are fundamental to the study of calculus. Emphasis is placed on equations and inequalities, functions (linear, polynomial, rational), systems of equations and inequalities, and parametric equations. Upon completion, students should be able to solve practical problems and use appropriate models for analysis and predictions. Prerequisites: MAT 080. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural science/mathematics.

## MAT 171A-Precalculus Algebra Lab

021
This course is a laboratory for MAT 171. Emphasis is placed on experiences that enhance the materials presented in the class. Upon completion, students should be able to solve problems, apply critical thinking, work in teams, and communicate effectively. Prerequisite: MAT 080. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural science/mathematics.

MAT 172-Precalculus Trigonometry
303
This is the second of two courses designed to emphasize topics which are fundamental to the study of calculus. Emphasis is placed on properties and applications of transcendental functions and their graphs, right and oblique triangle trigonometry, conic sections, and vectors, and polar coordinates. Upon completion, students should be able to solve practical problems and use appropriate models for analysis and prediction. Prerequisites: MAT 171. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural science/mathematics.

MAT 172A-Precalculus Trig Lab
021
This course is a laboratory for MAT 172. Emphasis is placed on experiences that enhance the materials presented in the class. Upon completion, students should be able to solve problems, apply critical thinking, work in teams, and communicate effectively. Prerequisite: MAT 171. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural science/mathematics.

## MAT 175-Precalculus

404
This course provides an intense study of the topics which are fundamental to the study of calculus. Emphasis is placed on functions and their graphs with special attention to polynomial, rational, exponential, logarithmic and trigonometric functions, and analytic trigonometry. Upon completion, students should be able to solve practical problems and use appropriate models for analysis and prediction. Prerequisites: High School Algebra

III/Trigonometry. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural science/mathematics.

MAT 271-Calculus I
324
This course covers in depth the differential calculus portion of a three-course calculus sequence. Topics include limits, continuity, derivatives, and integrals of algebraic and transcendental functions of one variable, with applications. Upon completion, students should be able to apply differentiation and integration techniques to algebraic and transcendental functions. Prerequisites: MAT 172 or MAT 175. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural science/mathematics.

MAT 272-Calculus II
324
This course provides a rigorous treatment of integration and is the second calculus course in a three-course sequence. Topics include applications of definite integrals, techniques of integration, indeterminate forms, improper integrals, infinite series, conic sections, parametric equations, polar coordinates, and differential equations. Upon completion, students should be able to use integration and approximation techniques to solve application problems. Prerequisites: MAT 271. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural science/mathematics.

## MAT 273-Calculus III

324
This course covers the calculus of several variables and is the third calculus course in a three-course sequence. Topics include functions of several variables, partial derivatives, multiple integrals, solid analytical geometry, vector-valued functions, and line and surface integrals. Upon completion, students should be able to solve problems involving vectors and functions of several variables. Prerequisites: MAT 272. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural science/mathematics.

MAT 285-Differential Equations
303
This course provides an introduction to ordinary differential equations with an emphasis on applications. Topics include first-order, linear higherorder, and systems of differential equations; numerical methods; series solutions, eigenvalues and eigenvectors; Laplace transforms; and Fourier series. Upon completion, students should be able to use differential equations to model physical phenomena, solve the equations, and use the solutions to analyze the phenomena. Prerequisites: MAT 272. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

## MECHANICAL

 placed on transferring part geometry from CAD to CAM for the development of a CNC-ready program. Upon completion, students should be able to useCAD/CAM software to produce a CNC program.
MEC 111-Machine Processes I
233
This course introduces safety, hand tools, machine processes, measuring instruments, and the operation of machine shop equipment. Topics include safety, measuring tools, and the basic setup and operation of lathes, milling machines, drill presses, and saws. Upon completion, students should be able to manufacture a simple part to a specified tolerance.

MEC 112-Machine Processes II
233
This course covers advanced use of milling machines and lathes. Emphasis is placed on safety and compound set up of milling machines and lathes for manufacture of projects with a specified fit. Upon completion, students should be able to demonstrate proper procedures for manufacture of assembled parts. Prerequisites: MEC 111.

MEC 161-Manufacturing Processes I 303 This course provides the fundamental principles of processing materials into usable forms for the customer. Emphasis is placed on material forming, removal, and value-added processing provided to the customer by the manufacturers. Upon completion, students should be able to apply principles of traditional and non-traditional processing for metals and non-metals.

MEC 165-Fabrication Techniques
132
This course expands skills in bench work, welding, and machinery. Emphasis is placed on integrating techniques of welding and machine processes. Upon completion, students should be able to design, fabricate, and repair parts and/or modify existing equipment. Prerequisites: WLD 112 and MEC 111.

MEC 172-Intro to Metallurgy
223
This course covers the production, properties, testing, classification, microstructure, and heattesting effects of ferrous and non-ferrous metals. Topics include the iron-carbon phase diagram, ITT diagram, ANSI code, quenching, senescing, and other processes concerning metallurgical transformations. Upon completion, students should be able to understand the iron-carbon phase diagram, ITT diagram, microstructure images, and other phenomena concerning the behavior of metals.

## MEDICAL ASSISTING

MED 121-Medical Terminology I
303
This course introduces prefixes, suffixes, and word roots used in the language of medicine. Topics include medical vocabulary and the terms that relate to the anatomy, physiology, pathological conditions, and treatment of selected systems. Upon completion, students should be able to pronounce, spell, and define medical terms as related to selected body systems and their pathological disorders.

MED 122-Medical Terminology II
303
This course is the second in a series of medical terminology courses. Topics include medical vocabulary and the terms that relate to the anatomy, physiology, pathological conditions, and treatment of selected systems. Upon completion, students should be able to pronounce, spell, and define medical terms as related to selected body systems and their pathological disorders. Prerequisite: MED 121.

## MARKETING AND RETAILING

MKT 120-Principles of Marketing 303 This course introduces principles and problems of marketing goods and services. Topics include promotion, placement, and pricing strategies for products. Upon completion, students should be able to apply marketing principles in organizational decision making.

MKT 122-Visual Merchandising
303
This course introduces basic layout design and commercial display in retail and service organizations. Topics include an analysis of display as a visual merchandising medium and an examination of the principles and applications of display and design. Upon completion, students should be able to plan, build, and evaluate designs and displays. This course is a unique concentration requirement of the Marketing and Retailing concentration in the Business Administration program.

## MKT 123-Fundamentals of Selling

303
This course is designed to emphasize the necessity of selling skills in a modern business environment. Emphasis is placed on sales techniques involved in various types of selling situations. Upon completion, students should be able to demonstrate an understanding of the techniques covered.

MKT 125-Buying and Merchandising 303 This course includes an analysis of the organization for buying-what, when and how to buy-and the principles of effective inventory and stock control. Topics include organization for buying, analysis of buyers' responsibilities, pricing, inventory control, planning, cost effectiveness, and vendor relationships. Upon completion, students should be able to demonstrate an understanding of the concepts covered through application.

MKT 220-Adv. and Sales Promotion 303 This course covers the elements of advertising and sales promotion in the business environment. Topics include advertising and sales promotion appeals, selection of media, use of advertising and sales promotion as a marketing tool, and means of testing effectiveness. Upon completion, students should be able to demonstrate an understanding of the concepts covered though application.

MKT 225-Marketing Research
303
This course provides information for decision making by providing guidance in developing, analyzing, and using data. Emphasis is placed on marketing research as a tool in decision making. Upon completion, students should be able to design and conduct a marketing research project and interpret the results. Prerequisites: MKT 120. This course is a unique concentration requirement of the Marketing and Retailing concentration in the Business Administration program.

## MKT 226-Retail Applications

303
This course is designed to develop occupational competence through participation in case studies, group work, and simulations. Emphasis is placed on al aspects of store ownership and operation, including securing financial backing and a sufficient market share. Upon completion, students should be able to demonstrate an understanding of concepts
covered through application. This course is a unique concentration requirement of the Marketing and Retailing concentration in the Business Administration program.

MKT 227-Marketing Applications
303
This course extends the study of diverse marketing strategies. Emphasis is placed on case studies and small-group projects involving research or planning. Upon completion, students should be able to effectively participate in the formulation of a marketing strategy. This course is a unique concentration requirement of the Marketing and Retailing concentration in the Business Administration program.

## MAINTENANCE

MNT 110-Intro to Maint Procedures
132
This course covers basic maintenance fundamentals for power transmission equipment. Topics include equipment inspection, lubrication, alignment, and other selected maintenance procedures. Upon completion, students should be able to demonstrate knowledge of accepted maintenance procedures and practices according to current industry standards.

## MNT 150-Basic Building Maintenance <br> 132

This course introduces the basic skills of building maintenance. Topics include basic carpentry and masonry skills including forming, framing, laying block to a line, repairing, and other related topics. Upon completion, students should be able to perform basic carpentry and masonry skills in a maintenance setting.

## MUSIC

MUS 110-Music Appreciation
303
This course is a basic survey of the music of the Western world. Emphasis is placed on the elements of music, terminology, composers, form, and style within a historical perspective. Upon completion, students should be able to demonstrate skills in basic listening and understanding of the art of music. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

## NURSING ASSISTANT (Proposed Fall 2003)

NAS 101-Nursing Assistant I
3235
This course introduces basic nursing skills required to provide personal care for patients, residents, or clients in a health care setting. Topics include communications, safety, patients' rights, personal care, vital signs, elimination, nutrition, emergencies, rehabilitation, and mental health. Upon completion, students should be able to demonstrate skills necessary to qualify as a Nursing Assistant I with the North Carolina Nurse Aid I Registry. This is a certificate-level course. Proposed Fall 2003.

## NAS 102-Nursing Assistant II

3266
This course provides training in selected advanced nursing assistant procedures. Emphasis is placed on sterile techniques, respiratory procedures, catheterizations, wound and trach care, irrigations, and ostomy care. Upon completion, students should be able to demonstrate skills necessary to qualify as a Nursing Assistant II with the North Carolina Board of Nursing. This is a certificate-level course. Proposed Fall 2003.

NAS 103-Home Health Care
2002
This course covers basic health issues that affect clients in the home setting. Emphasis is placed on home safety, recognizing significant changes in the client's condition, family dynamics, and use of home health care equipment. Upon completion, students should be able to identify care for clients at home. This is a certificate-level course. Proposed Fall 2003.

## NETWORKING TECHNOLOGY

NET 110-Data Comm/Networking
223
This course introduces data communication and networking. Topics include telecommunication standards, protocols, equipment, network topologies, communication software. LANs, WANs, the Internet, and network operating systems. Upon completion, students should be able to demonstrate understanding of the fundamentals of telecommunication and networking. Corequisites: CIS 130.

NET 120-Network Install/Admin I
223
This course covers the installation and administration of network hardware and system software. Topics include network topologies, various network operating systems, server and workstation and configuration, printer services, and connectivity options. Upon completion, students should be able to perform basic installation and administration of departmental networks. Prerequisites: NET 110 and CIS 215.

NET 125-Routing and Switching I
143
This course introduces the OSI model, network topologies, IP addressing, and subnet masks, simple routing techniques, and basic switching terminology. Topics include the basic functions of the seven layers of the OSI model, different classes of IP addressing and subnetting, router login scripts. Upon completion, students should be able to list the key internetworking functions of the OSI Networking Layer and how they are performed in a variety of router types.

NET 126-Routing and Switching II 143
This course introduces router configurations, router protocols, switching methods, and hub terminology. Topics include the basic flow control methods, router startup commands, manipulation of router configuration files, IP and data link addressing. Upon completion, students should be able to prepare the initial router configuration files, as well as enable, verify, and configure IP addresses. Prerequisite: NET 125.

NET 145-Introduction to Linux
223
This course develops the necessary skills for students to develop both GUI and command line skills for using and customizing a Linux workstation. Topics include Linux file system and access permissions, GNOME interface, VI editor, X Window System expression pattern matching, I/O redirection, network and printing utilities. Upon completion, students should be able to customize and use Linux systems for command line requirements and desktop productivity roles.

This course introduces the Linux file system, group administration, and system hardware controls. Topics include installation, creation and maintaining file systems, NIS client and DHCP client
configuration, NFS, SMB/Samba, Configure X, Gnome, KDE, basic memory, processes, and security. Upon completion, students should be able to perform system administration tasks including installation, configuring and attaching a new Linux workstation to an existing network. Prerequisite: NET 145.

NET 220-Network Install/Admin II
223
This course covers advanced network installation and administration concepts and procedures. Topics include basic network troubleshooting techniques, advanced print services, traffic management, security, backup, multiple protocol support, server configuration options, fault tolerance, and internetwork options. Upon completion, students should be able to demonstrate understanding of advanced management of departmental networks. Prerequisites: NET 120 and ELC 111.

NET 230-Wide Area Networking
223
This course is designed to introduce significant aspects of network interconnectivity. Topics include LAN-toLAN, LAN-to-host, LAN-to-WAN connectivity, Internet connections, and voice-video-data transmission. Upon completion, students should be able to demonstrate an understanding of wide area networking. Prerequisites: NET 120, 220 and ELC 111.

## NET 235-Netwkg/Troubleshooting

223
This course covers principles and techniques of troubleshooting hardware and software problems in a local area network. Topics include tools and methods, physical layer problems, server problems, and client problems. Upon completion, the student should be able to perform baseline LAN monitoring and to resolve common local area network problems. Prerequisite: NET 110.

NET 240-Network Design
303
This course covers the principles of the design of LANs and WANs. Topics include network architecture, transmission systems, traffic management, bandwidth requirements, Internet working devices, redundancy, and broad-band versus base-band systems. Upon completion, students should be able to design a network to meet specified business and technical requirements. Prerequisites: NET 120 and ELC 111.

NET 250-Advanced Networks I
223
This course covers advanced network management, security, and server issues. Topics include server types (file, database, fax, communication, FTP, email, CD-ROM), encryption, authentication, remote monitoring, viruses, and disaster recovery. Upon completion, students should be able to perform advanced monitoring and management of various types of serves and networks. Prerequisites: CIS 245.

## NET 251-Advanced Networks II

223
This course is a continuation of NET 250. Topics include further discussion of network management, monitoring and security, as well as additional work with various types of servers. Upon completion, students should be able to detect and resolve problems relating to network security, performance, and recovery on various types of servers. Prerequisites: NET 250.

NET 260-Internet Dev \& Support
303
This course covers issues relating to the
development and implementation of Internet related tools and services. Topics include Internet organization, site registration, e-mail servers, Web servers, Web page development, legal issues, firewalls, multimedia, TCP/IP, service providers, FTP, list servers, and gateways. Upon completion, students should be able to develop and support the Internet services needed within an organization. Prerequisites: NET 110 and NET 120.

## NET 270-Scalable Networks Design 143

 This course covers principles and techniques of scalable networks. Topics include building multilayer networks, controlling overhead traffic in growing routed networks, and router capabilities used to control traffic over LANs and WANs. Upon completion, students should be able to design; implement; and improve traffic flow, reliability, redundancy, and performance in enterprise networks.
## NET 280-Networking Project <br> 143

This course provides an opportunity to complete a significant networking project from the design phase through implementation with minimal instructor support. Emphasis is placed on project definition, documentation, installation, testing, presentation, and training. Upon completion, students should be able to complete a project from the definition phase through implementation. Prerequisites: NET 240 and completion of 30 hours in the Networking Technology program.

## NURSING

NUR 101-Practical Nursing I
76611 This course introduces concepts as related to the practical nurse's caregiver and discipline-specific roles. Emphasis is placed on the nursing process, legal/ethical/professional issues, wellness/illness patterns, and basic nursing skills. Upon completion, students should be able to demonstrate beginning understanding of nursing process to promote/ maintain/restore optimum health for diverse clients throughout the life span. Prerequisites: Enrollment in the Practical Nursing program. This is a diplomalevel course.

NUR 102-Practical Nursing II
801212
This course includes more advanced concepts as related to the practical nurse's caregiver and discipline-specific roles. Emphasis is placed on the nursing process, delegation, cost effectiveness, legal/ethical/professional issues, and wellness/illness patterns. Upon completion, students should be able to begin participating in the nursing process to promote/maintain/restore optimum health for diverse clients throughout the life span. Prerequisites: NUR 101. This is a diploma-level course.

## NUR 103-Practical Nursing III 601210

This course focuses on use of nursing/related concepts by practical nurses as providers of care/members of discipline in collaboration with health team members. Emphasis is placed on the nursing process, wellness/illness patterns, entrylevel issues, accountability, advocacy, professional development, evolving technology, and changing health care delivery systems. Upon completion, students should be able to use the nursing process to promote/maintain/ restore optimum health for diverse clients throughout the life span. Prerequisites: NUR
102. This is a diploma-level course.

NUR 115-Fundamentals of Nursing 2365 This course introduces concepts basic to beginning nursing practice. Emphasis is placed on the application of the nursing process to provide and manage care as a member of the discipline of nursing. Upon completion, students should be able to demonstrate beginning competence in caring for individuals with common alterations of health. Prerequisites: Admission to the Associate Degree Nursing program. Corequisites: NUR 117, BIO 155, BIO 165.

NUR 117-Pharmacology
1302 This course introduces information concerning sources, effects, legalities, and the safe use of medications as therapeutic agents. Emphasis is placed on nursing responsibility, accountability, pharmacokinetics, routes of medication administration, contraindications and side effects. Upon completion, students should be able to compute dosages and administer medication safely. Prerequisites: Admission to program. Corequisites: NUR 115.

NUR 125-Maternal-Child Nursing
5368 This course introduces nursing concepts related to the delivery of nursing care for the expanding family. Emphasis is placed on utilizing the nursing process as a framework for managing/ providing nursing care to individuals and families along the wellness-illness continuum. Upon completion, students should be able to utilize the nursing process to deliver nursing care to mothers, infants, children, and families. Prerequisites: NUR 115, NUR 135.
Corequisites: NUR 233.
NUR 133-Nursing Assessment
2303
This course provides theory and application experience for performing nursing assessment of individuals across the life span. Emphasis is placed on interviewing and physical assessment techniques and documentation of findings appropriate for nursing. Upon completion, students should be able to complete a health history and perform a noninvasive physical assessment. Prerequisites: BIO 165, NUR 115. Corequisites: BIO 166.

NUR 135-Adult Nursing I
5399
This course introduces concepts related to the nursing care of individuals experiencing acute and chronic alterations in health. Emphasis is placed on utilizing the nursing process as a framework for providing and managing nursing care to individuals along the wellness-illness continuum. Upon completion, students should be able to apply the nursing process to individuals experiencing acute and chronic alterations in health. Community and acute episodic settings will be utilized for applying the associate degree nursing roles. Prerequisites: NUR 115. Corequisites: BIO 166.

NUR 185-Mental Health Nursing
3065
This course includes concepts related to the nursing care of individuals experiencing alterations in social and psychological functioning. Emphasis is placed on utilizing the nursing process to provide and manage nursing care for individuals with common psychiatric disorders or mental health needs. Upon completion, students should be able to apply psychosocial theories in the nursing care of
individuals with psychiatric/mental health needs. Prerequisites: NUR 135. Corequisites: NUR 133.

NUR 189-Nursing Transition
1302
This course is designed to assist the licensed practical nurse in transition to the role of the associate degree nurse. Topics include the role of the registered nurse, nursing process, homeostasis, and validation of selected nursing skills and physical assessment. Upon completion, students should be able to articulate into the A.D.N. program at the level of the generic student. Prerequisites: Enrollment in Associate Degree Nursing program and current nonrestricted North Carolina LPN license.

## NUR 191-Selected Topics in Pharmacology

0301
This course introduces information concerning the safe use of medications as therapeutic agents. Emphasis is placed on nursing responsibility, accountability, and application of the nursing process regarding drug therapy. Upon completion, students should be able to compute dosages and administer medication safely.

NUR 233-Leadership in Nursing
2002
This course is designed to enhance nursing leadership and management skills in a variety of health care settings. Emphasis is placed on leadership styles, supervision, delegation, leadership and management theories, conflict resolution, change, and time management. Upon completion, students should be able to apply leadership and management skills in a variety of health care settings. Prerequisites: NUR 135, NUR 185. Corequisites: NUR 125.

NUR 235-Adult Nursing II
$\begin{array}{llll}4 & 3 & 15 & 10\end{array}$
This course provides expanded concepts related to nursing care for individuals experiencing common complex alterations in health. Emphasis is placed on the nurse's role as a member of a multidisciplinary team and as a manager of care for a group of individuals. Upon completion, students should be able to provide comprehensive nursing care for groups of individuals with common complex alterations in health. Acute care and long term care settings will be utilized for practicums in complex care and leadership experiences. Prerequisites: NUR 125, NUR 135, NUR 185. Corequisites: NUR 244, NUR 233.

NUR 244-Issues and Trends
2002 This course presents an overview of current trends and issues in nursing as they affect nursing practice in a changing health care environment. Emphasis is placed on making an effective transition into the roles of the practicing nurse. Upon completion, students should be able to articulate professional aspects of the practice of nursing. Prerequisites: NUR 135. Corequisites: NUR 125.

## OPERATIONS MANAGEMENT

OMT 150-Op Mgt Behavioral Sci
303
This course introduces social and behavioral science theories as they relate to operational management. Emphasis is placed on the studies and conclusions of McGregor, Maslow, Herzburg, Likert, Aggyris, and Blake. Upon completion, students should be able to recognize and place emphasis on behavioral science in developing and creating an environment that promotes quality. Emphasis is given to learning
those factors of motivation that work in the "real world" or manufacturing and how to use these skills.

OMT 155-Meeting \& Present Skills 303
This course is designed to develop skills for facilitating successful meetings by enhancing employee involvement and initiative. Topics include planning meetings that promote results, encouraging diverse points of view, handling disruptive behavior, encouraging participation, and taking action when required. Upon completion, students should be able to plan and participate in meetings that accomplish positive results.

## OFFICE SYSTEMS TECHNOLOGY

OST 122-Office Computations
122
This course introduces the keypad and the touch method using the electronic calculator. Topics include mathematical functions in business applications. Upon completion, students should be able to use the electronic calculator to solve a wide variety of problems commonly encountered in business.

OST 131-Keyboarding
122
This course covers basic keyboarding skills. Emphasis is placed on the touch system, correct techniques, and development of speed and accuracy. Upon completion, students should be able to key at an acceptable speed and accuracy level using the touch system. The student should also be able to key business correspondence and reports.

OST 132-Keyboard Skill Building
122
This course provides accuracy- and speed-building drills. Emphasis is placed on diagnostic tests to identify accuracy and speed deficiencies followed by corrective drills. Upon completion, students should be able to keyboard rhythmically with greater accuracy and speed.

OST 134-Text Entry \& Formatting
223
This course is designed to provide the skills needed to increase speed, improve accuracy, and format documents. Topics include letters, memos, tables, and business reports. Upon completion, students should be able to produce mailable documents.

OST 135-Adv Text Entry \& Format
324
This course is designed to incorporate computer application skills in the generation of office documents. Emphasis is placed on the production of letters, manuscripts, business forms, tabulation, legal documents, and newsletters. Upon completion, students should be able to make independent decisions regarding planning, style, and method of presentation. Prerequisites: OST 134.

## OST 136-Word Processing

122
This course introduces word processing concepts and applications. Topics include preparation of a variety of documents and mastery of specialized software functions. Upon completion, students should be able to work effectively in a computerized word processing environment. Prerequisites: OST 131.

OST 137-Office Software App.
122
This course introduces the concepts and functions of software that meets the changing needs of the community. Emphasis is placed on the terminology and use of software through a hands-on approach. Upon completion, students should be able to use
software in a business environment.

## OST 148-Med Coding Billing \& Insu 303

 This course introduces CPT and ICD coding as they apply to medical insurance and billing. Emphasis is placed on accuracy in coding, forms preparation, and posting. Upon completion, students should be able to describe the steps of the total billing cycle and explain the importance of accuracy. This course is a unique concentration requirement in the Medical Office Administration program.OST 149-Med Legal Issues
303
This course introduces the complex legal, moral, and ethical issues involved in providing health-care services. Emphasis is placed on the legal requirements of medical practices; the relationship of physician, patient, and office personnel; professional liabilities; and medical practice liability. Upon completion, students should be able to demonstrate a working knowledge of current medical law and accepted ethical behavior. This course is a unique concentration requirement in the Medical Office Administration program.

OST 155-Legal Terminology
303
This course covers the terminology appropriate to the legal profession. Topics include legal research, court systems, litigation, civil and criminal law, probate, real and personal property, contracts and leases, domestic relations, equity, and corporations. Upon completion, students should be able to spell, pronounce, define, and demonstrate an understanding of the use of these legal terms.

OST 156-Legal Office Procedures
223
This course covers legal office functions involved in the operation of a law office. Emphasis is placed on procedures in the law office involving the court system, legal research, litigation, probate, and real estate, personal injury, criminal, and civil law. Upon completion, students should be able to demonstrate a high level of competence in performing legal office duties. Prerequisite: OST 134.

OST 159-Legal Office Ethics
202
This course introduces the complex legal and ethical issues involved in the role of administrative support personnel in a variety of law-related offices. Topics include conduct compatible with the professional obligations of the employer, legally protected relationships, and the professional responsibilities of the employee. Upon completion, students should be able to conduct themselves in an ethical manner appropriate to a variety of law-related workplaces.

OST 164-Text Editing Applications
303
This course provides a comprehensive study of editing skills needed in the workplace. Emphasis is placed on grammar, punctuation, sentence structure, proofreading, and editing. Upon completion, students should be able to use reference materials to compose and edit text.

OST 181-Intro to Office Systems
223
This course introduces the skills and abilities needed in today's office. Topics include effectively interacting with co-workers and the public, processing simple financial and informational documents, and performing functions typical of today's offices. Upon completion, students should be able to display skills and decision-making abilities essential for functioning in the total office context.

OST 184-Records Management
122
This course includes the creation, maintenance, protection, security, and disposition of records stored in a variety of media forms. Topics include alphabetic, geographic, subject, and numeric filing methods. Upon completion, students should be able to set up and maintain a records management system.

OST 201-Medical Transcription I
324
This course introduces dictating equipment and typical medical dictation. Emphasis is placed on efficient use of equipment, dictionaries, PDRs, and other reference materials. Upon completion, students should be able to efficiently operate dictating equipment and to accurately transcribe a variety of medical documents in a specified time. Prerequisites: OST 136 and OST 164. Corequisites: MED 122 or OST 142. This course is intended for diploma programs.

OST 202-Medical Transcription II 324 This course provides additional practice in transcribing documents from various medical specialties. Emphasis is placed on increasing transcription speed and accuracy and understanding medical procedures and terminology. Upon completion, students should be able to accurately transcribe a variety of medical documents in a specified time. Prerequisites: OST 201. This course is intended for diploma programs.

OST 223-Machine Transcription I
122
This course covers the use of transcribing machines to produce mailable documents. Emphasis is placed on appropriate formatting, advanced text editing skills, and transcription techniques. Upon completion, students should be able to transcribe documents into mailable copy. Prerequisites: OST 134, OST 136, and OST 164.

OST 224-Machine Transcription II
122
This course provides advanced transcription skills. Emphasis is placed on specialized transcription features. Upon completion, students should be able to transcribe complex business documents into mailable copy with minimal assistance. Prerequisites: OST 223.

OST 233-Office Publications Design
223
This course provides entry-level skills in using software with desktop publishing capabilities. Topics include principles of page layout, desktop publishing terminology and applications, and legal and ethical considerations of software use. Upon completion, students should be able to design and produce professional business documents and publications. Prerequisites: OST 136.

OST 236-Adv Word/Information Proc
223
This course develops proficiency in the utilization of advanced word/information processing functions. Topics include tables, graphics, macros, sorting, document assembly, merging, and newspaper and brochure columns. Upon completion, students should be able to produce a variety of complex business documents. Prerequisites: OST 135 or OST 136.

OST 241-Med Ofc Transcription I
122
This course introduces machine transcription techniques as applied to medical documents. Emphasis is placed on accurate transcription,
proofreading, and use of reference materials as well as vocabulary building. Upon completion, students should be able to prepare accurate and usable transcripts of voice recordings in the covered specialties. Prerequisites: MED 121, 122 and OST 135. This course is a unique concentration requirement in the Medical Office Systems Technology concentration in the Office Systems Technology program.

OST 242-Med Ofc Transcription II
122
This course continues building machine transcription techniques as applied to medical documents. Emphasis is placed on accurate transcription, proofreading, and use of reference materials as well as continued proofreading/editing skills and vocabulary building. Upon completion, students should be able to perform competently in preparing accurate and usable transcripts of voice recordings in the covered specialties. Prerequisites: OST 241. This course is a unique concentration requirement in the Medical Office Systems Technology concentration in the Office Systems Technology program.

## OST 243-Med Office Simulation <br> 223

This course introduces medical systems used to process information in the automated office. Topics include traditional and electronic information resources, storing and retrieving information, and the billing cycle. Upon completion, students should be able to use the computer accurately to schedule, bill, update, and make corrections. Prerequisites: OST 148. This course is a unique concentration requirement in the Medical Office Systems Technology concentration in the Office Systems Technology program.

OST 252-Legal Transcription I
122
This course provides experience in using the transcriber to produce legal correspondence, forms, and documents with mailable accuracy from recorded tapes. Emphasis is placed on operating the transcriber, developing listening skills to translate the audio into hard copy, and producing mailable documents. Upon completion, students should be able to transcribe legal forms and documents with reasonable accuracy. Prerequisites: OST 134 or OST 136 and OST 155. This course is a unique concentration requirement in the Legal Office Systems Technology concentration in the Office Systems Technology program.

OST 286-Professional Development 303 This course covers the personal competencies and qualities needed to project a professional image in the office. Topics include interpersonal skills, health lifestyles, appearance, attitude, personal and professional growth, multicultural awareness, and professional etiquette. Upon completion, students should be able to demonstrate these attributes in the classroom, office, and society.

OST 289-Office Systems Management 223 This course provides a capstone course for the office professional. Topics include administrative office procedures, imaging, communication techniques, ergonomics, and equipment utilization. Upon completion, students should be able to function proficiently in a changing office environment. Prerequisites: OST 164 and either OST 134 or OST 136.

## PHLEBOTOMY

PBT 100-Phlebotomy Technology 5206 This course provides instruction in the skills needed for the proper collection of blood and other specimens used for diagnostic testing. Emphasis is placed on ethics, legalities, medical terminology, safety and universal precautions, health care delivery systems, patient relations, anatomy and physiology, and specimen collection. Upon completion, students should be able to demonstrate competence in the theoretical comprehension of phlebotomy techniques. Prerequisites: Enrollment in the Phlebotomy Technology program. This is a certificate-level course.

PBT 101-Phlebotomy Practicum
0093 This course provides supervised experience in the performance of venipuncture and microcollection techniques in a clinical facility. Emphasis is placed on patient interaction and application of universal precautions, proper collection techniques, special procedures, specimen handling, and data management. Upon completion, students should be able to safely perform procedures necessary for specimen collections on patients in various health care settings. Prerequisites: PBT 100. This is a certificate-level course.

## PHYSICAL EDUCATION

PED 110-Fit and Well for Life
122
This course is designed to investigate and apply the basic concepts and principles of lifetime physical fitness and other health-related factors. Emphasis is placed on wellness through the study of nutrition, weight control, stress management, and consumer facts on exercise and fitness. Upon completion, students should be able to plan a personal, lifelong fitness program based on individual needs, abilities, and interests. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

PED 113-Aerobics I
031
This course introduces a program of cardiovascular fitness involving continuous, rhythmic exercises. Emphasis is placed on developing cardiovascular efficiency, strength, and flexibility and on safety precautions. Upon completion, students should be able to select and implement a rhythmic aerobic exercise program. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

PED 115-Step Aerobics I
031
This course introduces the fundamentals of step aerobics. Emphasis is placed on basic stepping up and down on an adjustable platform; cardiovascular fitness; and upper body, floor, and abdominal exercises. Upon completion, students should be able to participate in basic step aerobics. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

PED 117-Weight Training I
031
This course introduces the basics of weight training. Emphasis is placed on developing muscular strength, muscular endurance, and muscle tone. Upon
completion, students should be able to establish and implement a personal weight training program. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

PED 121-Walk, Jog, Run
031
This course covers the basic concepts involved in safely and effectively improving cardiovascular fitness. Emphasis is placed on walking, jogging, or running as a means of achieving fitness. Upon completion, students should be able to understand and appreciate the benefits derived from these activities. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

PED 122-Yoga I
021
This course introduces the basic discipline of yoga. Topics include proper breathing, relaxation techniques, and correct body positions. Upon completion, students should be able to demonstrate the procedures of yoga. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

PED 123-Yoga II
021
This course introduces more detailed aspects of the discipline of yoga. Topics include breathing and physical postures, relaxation, and mental concentration. Upon completion, students should be able to demonstrate advanced procedures of yoga. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course.

PED 125-Self-Defense-Beginning
021
This course is designed to aid students in developing rudimentary skills in self-defense. Emphasis is placed on stances, blocks, punches, and kicks as well as non-physical means of self-defense. Upon completion, students should be able to demonstrate basic self-defense techniques of a physical and nonphysical nature. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

PED 128-Golf -Beginning
021
This course emphasizes the fundamentals of golf. Topics include the proper grips, stance, alignment, swings for the short and long game, putting, and the rules and etiquette of golf. Upon completion, students should be able to perform the basic golf shots and demonstrate a knowledge of the rules and etiquette of golf. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

PED 129-Golf -Intermediate
021
This course covers the more advanced phases of golf. Emphasis is placed on refining the fundamental skills and learning more advanced phases of the games such as club selection, trouble shots, and course management. Upon completion, students should be able to demonstrate the knowledge and ability to play a recreational round of golf. Prerequisites: PED 128. This course has been approved to satisfy the Comprehensive Articulation

Agreement for transferability as a premajor and/or elective course requirement.

PED 130-Tennis-Beginning
021
This course emphasizes the fundamentals of tennis. Topics include basic strokes, rules, etiquette, and court play. Upon completion, students should be able to play recreational tennis. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

PED 131-Tennis-Intermediate
021
This course emphasizes the refinement of playing skills. Topics include continuing the development of fundamentals, learning advanced serves, and strokes and pace and strategies in singles and doubles play. Upon completion, students should be able to play competitive tennis. Prerequisites: PED 130. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

PED 144-Volleyball
021
This course covers the fundamentals of volleyball. Emphasis is placed on the basics of serving, passing, setting, spiking, blocking, and the rules and etiquette of volleyball. Upon completion, students should be able to participate in recreational volleyball. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

PED 145-Basketball-Beginning
021
This course covers the fundamentals of basketball. Emphasis is placed on skill development, knowledge of the rules, and basic game strategy. Upon completion, students should be able to participate in recreational basketball. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

PED 170-Backpacking
021
This course covers the proper techniques for establishing a campsite, navigating in the wilderness, and planning for an overnight trip. Topics include planning for meals, proper use of maps and compass, and packing and dressing for extended periods in the outdoors. Upon completion, students should be able to identify quality backpacking equipment, identify the principles of no-trace camping, and successfully complete a backpacking experience. Prerequisite: PED 111 or Departmental approval. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

PED 171-Nature Hiking
021
This course provides instruction on how to equip and care for oneself on the trail. Topics include clothing, hygiene, trail ethics, and necessary equipment. Upon completion, students should be able to successfully participate in nature trail hikes. Prerequisite: PED 111 or Departmental approval. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

## PHILOSOPHY

PHI 210-History of Philosophy 303 This course introduces fundamental philosophical issues through an historical perspective. Emphasis is placed on such figures as Plato, Aristotle, Lao-Tzu, Confucius, Augustine, Aquinas, Descartes, Locke, Kant, Wollstonecraft, Nietzsche, and Sartre. Upon completion, students should be able to identify and distinguish among the key positions of the philosophers studied. Prerequisites: ENG 111. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

PHI 240-Introduction to Ethics
303
This course introduces theories about the nature and foundations of moral judgements and applications to contemporary moral issues. Emphasis is placed on utilitarianism, rule-based ethics, existentialism, relativism versus objectivism, and egoism. Upon completion, students should be able to apply various ethical theories to individual moral issues such as euthanasia, abortion, crime and punishment, and justice. Prerequisites: ENG 111. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

## PHYSICS

PHY 101-Fundamentals of Physics I 324
This course introduces fundamental physical concepts with emphasis on applications. Topics include systems of units, problem-solving methods, graphical analyses, vectors, motion, forces, Netwon's laws of motion, work, energy, power, momentum, and properties of matter. Upon completion, students should be able to demonstrate an understanding of the principles studies as applied to their specific programs. This course is intended for certificate and diploma programs.

PHY 102-Fundamentals of Physics II 324 This course introduces fundamental physical concepts with emphasis on applications. Topics include systems of units, problem-solving methods, graphical analyses, electrostatics, AC and DC circuits, magnetism, transformers, AC and DC motors, and generators. Upon completion, students should be able to demonstrate an understanding of the principles studied as applied to their specific programs. This course is intended for certificate and diploma programs.

PHY 131-Physics-Mechanics
324
This algebra/trigonometry-based course introduces fundamental physical concepts as applied to engineering technology fields. Topics include systems of units, problem-solving methods, graphical analysis, vectors, motion, forces, Newton's laws of motion, work, energy, power, momentum, and properties of matter. Upon completion, students should be able to apply the principles studied to applications in engineering technology fields. Prerequisites: MAT 161.

PHY 151-College Physics I
324
This course uses algebra-and trigonometry-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include units and measurement, vectors, linear
kinematics and dynamics, energy, power, momentum, fluid mechanics, and heat. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered. Prerequisites: MAT 161 or MAT 171 and MAT 171A. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

PHY 152-College Physics II
324
This course uses algebra-and trigonometry-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include electrostatic forces, electric fields, electric potentials, direct-current circuits, magnetostatic forces, magnetic fields, electromagnetic induction, alternating-current circuits, and light. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered. Prerequisites: PHY 151. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

PHY 251-General Physics I
334
This course uses calculus-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include units and measurement, vector operations, linear kinematics and dynamics, energy, power, momentum, rotational mechanics, periodic motion, fluid mechanics, and heat. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered. Prerequisites: MAT 271. Corequisites: MAT 272. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

PHY 252-General Physics II
334
This course uses a calculus-based mathematical model to introduce the fundamental concepts that describe the physical world. Topics include eletrostatics forces, electric fields, electric potentials, direct-current circuits, magnetostatics forces, magnetic fields, electromagnetic induction, alternating-current circuits, and light. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered. Prerequisites: MAT 272 and PHY 251. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

## PLUMBING

PLU 110-Modern Plumbing
4159
This course introduces the tools, equipment, and materials associated with the plumbing industry. Topics include safety, use and care of tools, recognition and assembly of fittings and pipes, and other related topics. Upon completion, students should be able to safely assemble various pipes and fittings in accordance with state code requirements.

PLU 120-Plumbing Applications
4159 This course covers general plumbing layout, fixtures, and water heaters. Topics include drainage, waste and vent pipes, water service and distribution, fixture installation, water heaters, and other related topics. Upon completion, students should be able to safely install common fixtures and systems in compliance with state and local building codes.

## PLU 130-Plumbing Systems

396
This course covers the maintenance and repair of plumbing lines and fixtures. Emphasis is placed on identifying and diagnosing problems related to water, drain and vent lines, water heaters, and plumbing fixtures. Upon completion, students should be able to identify and diagnose needed repairs to the plumbing system.

## PLU 140-Intro to Plumbing Codes

122
This course covers plumbing industry codes and regulations. Emphasis is placed on North Carolina regulations and the minimum requirements for plumbing materials and design. Upon completion, students should be able to research and interpret North Carolina plumbing codes.

PLU 150-Plumbing Diagrams
122
This course introduces sketching diagrams and interpretation of blueprints applicable to the plumbing trades. Emphasis is placed on plumbing plans for domestic and/or commercial buildings. Upon completion, students should be able to sketch plumbing diagrams applicable to the plumbing trades.

## POLITICAL SCIENCE

POL 120-American Government 303 This course is a study of the origins, development, structure, and functions of American national government. Topics include the constitutional framework, federalism, the three branches of government including the bureaucracy, civil rights and liberties, political participation and behavior, and policy formation. Upon completion, students should be able to demonstrate an understanding of the basic concepts and participatory processes of the American political system. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

POL 220-International Relations
303
This course provides a study of the effects of ideologies, trade, armaments, and alliances on relations among nation-states. Emphasis is placed on regional and global cooperation and conflict, economic development, trade, non-governmental organizations, and international institutions such as the World Court and UN. Upon completion, students should be able to identify and discuss major international relationships, institutions, and problems. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

## PSYCHOLOGY

This course introduces the basic principles of psychology as they apply to daily life. Topics include
perception, emotions, motivation, adjustment, behavior management, communication, and related topics that promote growth and development on the job and in one's personal life. Upon completion, students should be able to apply the principles learned in this class to everyday living. This course is intended for certificate and diploma programs.

PSY 102-Human Relations
202
This course covers the skills necessary to handle human relationships effectively. Topics include selfunderstanding, interpersonal communication, group dynamics, leadership skills, diversity, time and stress management, and conflict resolution with emphasis on work relationships. Upon completion, students should be able to demonstrate improved personal and interpersonal effectiveness. This course is intended for certificate and diploma programs.

PSY 110-Life Span Development 303 This course provides an introduction to the study of human growth and development. Emphasis is placed on the physical, cognitive, and psychosocial aspects of development from conception to death. Upon completion, students should be able to demonstrate knowledge of development across the life span and apply this knowledge to their specific field of study.

## PSY 118-Interpersonal Psychology

303
This course introduces the basic principles of psychology as they relate to personal and professional development. Emphasis is placed on personality traits, communication/leadership styles, effective problem solving, and cultural diversity as they apply to personal and work environments. Upon completion, students should be able to demonstrate an understanding of these principles of psychology as they apply to personal and professional development.

PSY 135-Group Processes
303
This course provides an examination of group dynamics and structure. Topics include teambuilding, interpersonal communication, leadership, decision making, and problem solving. Upon completion, students should be able to demonstrate the knowledge and skills necessary for effective group participation.

## PSY 150-General Psychology

303 This course provides an overview of the scientific study of human behavior. Topics include history, methodology, biopsychology, sensation, perception, learning, motivation, cognition, abnormal behavioral, personality theory, social psychology, and other relevant topics. Upon completion, students should be able to demonstrate a basic knowledge of the science of psychology. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

## PSY 239-Psychology of Personality

303
This course covers major personality theories and personality research methods. Topics include psychoanalytic, behavioristic, social learning, cognitive, humanistic, and trait theories including supporting research. Upon completion, students should be able to compare and contrast traditional and contemporary approaches to the understanding of individual differences in human behavior. Prerequisites: PSY 150. This course has been
approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

PSY 241-Developmental Psych 303 This course is a study of human growth and development. Emphasis is placed on major theories and perspective as they relate to the physical, cognitive, and psychosocial aspects of development from conception to death. Upon completion, students should be able to demonstrate knowledge of development across the life span. Prerequisites: PSY 150. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

PSY 243-Child Psychology
303
This course provides an overview of physical, cognitive, and psychosocial development from conception through adolescence. Topics include theories and research, interaction of biological and environmental factors, language development, learning and cognitive processes, social relations, and moral development. Upon completion, students should be able to identify typical and atypical childhood behavior patterns as well as appropriate strategies for interacting with children. Prerequisites: PSY 150. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

PSY 281-Abnormal Psychology
303
This course provides an examination of the various psychological disorders, as well as theoretical, clinical, and experimental perspectives of the study of psychopathology. Emphasis is placed on terminology, classification, etiology, assessment, and treatment of the major disorders. Upon completion, students should be able to distinguish between normal and abnormal behavior patterns as well as demonstrate knowledge of etiology, symptoms, and therapeutic techniques. Students are taught basic skills to assist in the assessment of disorders. Prerequisites: PSY 150. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

## RADIOGRAPHY

RAD 110-Rad Intro \& Patient Care 2303 This course provides an overview of the radiography profession and student responsibilities. Emphasis is placed on basic principles of patient care, radiation protection, technical factors, and medical terminology. Upon completion, students should be able to demonstrate basic skills in these areas. Prerequisites: Enrollment in Radiography program. Corequisites: RAD 111 and RAD 151.

RAD 111-RAD Procedures I
3304
This course provides the knowledge and skills necessary to perform standard radiographic procedures. Emphasis is placed on radiography of the chest, abdomen, extremities, spine, and pelvis. Upon completion, students should be able to demonstrate competence in these areas. Prerequisites: Enrollment in the Radiography program. Corequisites: RAD 110 and RAD 151.

RAD 112-RAD Procedures II
3304
This course provides the knowledge and skills necessary to perform standard radiographic procedures. Emphasis is placed on radiography of the skull, bony thorax, and gastrointestinal, biliary, and urinary systems. Upon completion, students should be able to demonstrate competence in these areas. Prerequisites: RAD 110, RAD 111, and RAD 151.

RAD 121-Radiographic Imaging I 2303
This course covers factors of image quality and methods of exposure control. Topics include density, contrast, recorded detail, distortion, technique charts, manual and automatic exposure control, and tube rating charts. Upon completion, students should be able to demonstrate an understanding of exposure factors on image quality. Prerequisites: RAD 110, RAD 111, and RAD 151. Corequisites: RAD 112 and RAD 161.

RAD 122-Radiographic Imaging II
1302 This course covers image receptor systems and processing principles. Topics include film, film storage, processing, intensifying screens, grids, and beam limitation. Upon completion, students should be able to demonstrate the principles of selection and usage of imaging accessories to produce quality images. Prerequisites: RAD 112, RAD 121, and RAD 161. Corequisites: RAD 131 and RAD 171.

RAD 131-Radiographic Physics I
1302 This course introduces the fundamental principles of physics that underlie diagnostic X-ray production and radiography. Topics include electromagnetic waves, electricity and magnetism, electrical energy, and power and circuits as they relate to radiography. Upon completion, students should be able to demonstrate an understanding of basic principles of physics as they relate to the operation of radiographic equipment. Prerequisites: RAD 112, RAD 121, and RAD 161. Corequisites: RAD 122 and RAD 171.

RAD 151-RAD Clinical Ed I
0062
This course introduces patient management and basic radiographic procedures in the clinical setting. Emphasis is placed on mastering positioning of the chest and extremities, manipulating equipment, and applying principles of ALARA. Upon completion, students should be able to demonstrate successful completion of clinical objectives. Prerequisites: Enrollment in the Radiography program. Corequisites: RAD 110 and RAD 111.

RAD 161-RAD Clinical Ed II
00155
This course provides additional experience in patient management and in more complex radiographic procedures. Emphasis is placed on mastering positioning of the spine, pelvis, head and neck, and thorax and adapting procedures to meet patient variations. Upon completion, students should be able to demonstrate successful completion of clinical objectives. Prerequisites: RAD 110, RAD 111, and RAD 151. Corequisites: RAD 112 and RAD 121.

RAD 171- RAD Clinical Ed III 00124 This course provides experience in patient management specific to fluoroscopic and advanced radiographic procedures. Emphasis is placed on applying appropriate technical factors to all studies and mastering positioning of gastrointestinal and urological studies. Upon completion, students should be able to
demonstrate successful completion of clinical objectives. Prerequisites: RAD 112, RAD 121, and RAD 161. Corequisites: RAD 122 and RAD 131.

RAD 211-RAD Procedures III 2303 This course provides the knowledge and skills necessary to perform standard and specialty radiographic procedures. Emphasis is placed on radiographic specialty procedures, pathology, and advanced imaging. Upon completion, students should be able to demonstrate competence in these areas. Prerequisites: RAD 122. Corequisites: RAD 231, RAD 241, and RAD 251.

RAD 231-Radiographic Physics II
1302 This course continues the study of physics that underlie diagnostic X-ray production and radiographic and fluoroscopic equipment. Topics include X-ray production, electromagnetic interactions with matter, X-ray devices, equipment circuitry, targets, filtration, and dosimetry. Upon completion, students should be able to demonstrate an understanding of the application of physical concepts as related to image production. Prerequisites: RAD 171. Corequisites: RAD 211, RAD 241, and RAD 251.

RAD 241-Radiation Protection
2002
This course covers the principles of radiation protection and radiobiology. Topics include the effects of ionizing radiation on body tissues, protective measures for limiting exposure to the patient and personnel, and radiation monitoring devices. Upon completion, students should be able to demonstrate an understanding of the effects and uses of radiation in diagnostic radiology. Prerequisites: RAD 122, RAD 131, and RAD 171. Corequisites: RAD 211, RAD 231, and RAD 251.

RAD 245-Radiographic Analysis 2303 This course provides an overview of imaging concepts and introduces methods of quality assurance. Topics include a systematic approach for image evaluation and analysis of imaging service and quality assurance. Upon completion, students should be able to establish and administer a quality assurance program and conduct a critical review of images. Prerequisites: RAD 251. Corequisites: RAD 261.

RAD 251-RAD Clinical Ed IV
00217
This course provides the opportunity to continue mastering all basic radiographic procedures and to attain experience in advanced areas. Emphasis is placed on equipment operation, pathological recognition, pediatric and geriatric variations, and a further awareness of radiation protection requirements. Upon completion, students should be able to demonstrate successful completion of clinical objectives. Prerequisites: RAD 122, RAD 131, and RAD 171. Corequisites: RAD 211, RAD 231, and RAD 241.

RAD 261-RAD Clinical Ed V
00217
This course is designed to enhance expertise in all radiographic procedures, patient management, radiation protection, and image production and evaluation. Emphasis is placed on developing an autonomous approach to the diversity of clinical situations and successfully adapting to those procedures. Upon completion, students should be able to demonstrate successful completion of clinical
objectives. Prerequisites: RAD 251. Corequisites: RAD 245.

## READING

Initial student placement in developmental courses is based on individual college placement testing policies and procedures. Students should begin developmental course work at the appropriate level indicated by that college's placement test.

RED 080-Intro to College Reading
324
This course introduces effective reading and inferential thinking skills in preparation for RED 090. Emphasis is placed on vocabulary, comprehension, and reading strategies. Upon completion, students should be able to determine main ideas and supporting details, recognize basic patterns of organization, draw conclusions, and understand vocabulary in context. Prerequisites: Placement This course does not satisfy the developmental reading prerequisite for ENG.

RED 090-Improved College Reading
324
This course is designed to improve reading and critical thinking skills. Topics include vocabulary enhancement; extracting implied meaning; analyzing author's purpose, tone, and style; and drawing conclusions and responding to written material. Upon completion, students should be able to comprehend and analyze college-level reading material. Prerequisites: RED 080 or Placement. This course satisfies the developmental reading prerequisite for ENG 111.

## RELIGION

REL 110-World Religions
303
This course introduces the world's major religious traditions. Topics include Primal religions, Hinduism, Buddhism, Islam, Judaism, and Christianity. Upon completion, students should be able to identify the origins, history, beliefs, and practices of the religions studied. The subject matter is taught from a nonsectarian stance not promoting any particular group's religious beliefs. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

REL 111-Eastern Religions
303
This course introduces the major Asian religious traditions. Topics include Hinduism, Buddhism, Taoism, Confucianism, and Shinto. Upon completion, students should be able to identify the origins, history, beliefs, and practices of the religions stated. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

REL 112-Western Religions
303
This course introduces the major western religious traditions. Topics include Zoroastrianism, Islam, Judaism, and Christianity. Upon completion, students should be able to identify the origins, history, beliefs, and practices of the religions studied. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

Hebrews with readings from the law, prophets, and other writings. Emphasis is placed on the use of literary, historical, archeological and cultural analysis. Upon completion, students should be able to use the tools of critical analysis to read and understand Old Testament literature. The subject matter is taught from a nonsectarian stance not promoting any particular group's religious beliefs. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

REL 212-Intro to New Testament 303 This course is a survey of the literature of firstcentury Christianity with readings from the gospels, Acts, and the Pauline and pastoral letters. Topics include the literary structure, audience, and religious perspective of the writings, as well as the historical and cultural context of the early Christian community. Upon completion, students should be able to use the tools of critical analysis to read and understand New Testament literature. The subject matter is taught from a nonsectarian stance not promoting any particular group's religious beliefs. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

REL 221-Religion in America
303
This course is an examination of religious beliefs and practice in the United States. Emphasis is placed on mainstream religious traditions and non-traditional religious movements from the Colonial period to the present. Upon completion, students should be able to recognize and appreciate the diversity of religious traditions in America. This is a summer travel course. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

## REAL ESTATE

RLS 112-Real Estate Fundamentals
505
This course provides basic instruction in real estate principles and practices. Topics include law, finance, brokerage, closing, valuation, management, taxation, mathematics, construction, land use, property insurance, and NC License Law and Commission Rules. Upon completion, students should be able to demonstrate basic knowledge and skills necessary for real estate sales. Prerequisites: Satisfactory college placement test scores in reading and mathematics; or a grade of "C" or higher in RED 90 (Improved College Reading), and a grade of "C" or higher in MAT 60; or permission of the Dean of Business Technologies.

RLS 113-Real Estate Mathematics
202 This course provides basic instruction in business mathematics applicable to real estate situations. Topics include area computations, percentage of profit/loss, bookkeeping and accounting methods, appreciation and depreciation, financial calculations and interest yields, property valuation, insurance, taxes, and commissions. Upon completion, students should be able to demonstrate proficiency in applied real estate mathematics.

## RLS 115-Real Estate Finance

202
This course provides advanced instruction in financing real estate transactions and real property valuation. Topics include sources of mortgage funds, financing
instruments, mortgage types, loan underwriting, essential mathematics, and property valuation. Upon completion, students should be able to demonstrate knowledge of real estate finance necessary to act as real estate brokers. Prerequisites: RLS 112 or current Real Estate license.

RLS 116-Real Estate Law
202
This course provides advanced instruction in legal aspects of real estate brokerage. Topics include property ownership and interests, brokerage relationships, agency law, contracts, settlement statements, and NC License Law and Commission Rules. Upon completion, students should be able to demonstrate knowledge of laws relating to real estate brokerage necessary to act as real estate brokers. Prerequisites: RLS 112 or current Real Estate License.

RLS 117-Real Estate Brokerage
404
This course consists of advanced-level instruction on a variety of topics related to Real Estate law and brokerage practices. Topics include: Real estate brokerage, finance and sales, RESPA, fair housing issues, selected North Carolina Real Estate License Law and North Carolina Real Estate Commission Rule issues. Upon completion, students should be able to demonstrate knowledge of real estate brokerage, law, and finance. Prerequisite: RLS 112.

## SOCIOLOGY

SOC 210-Introduction to Sociology 303 This course introduces the scientific study of human society, culture, and social interactions. Topics include socialization, research methods, diversity and inequality, cooperation and conflict, social change, social institutions, and organizations. Upon completion, students should be able to demonstrate knowledge of sociological concepts as they apply to the interplay among individuals, groups, and societies. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in the social/behavioral sciences.

SOC 213-Sociology of the Family $\quad \begin{aligned} & 303 \\ & \text { This course covers the institution of the family and }\end{aligned}$ other intimate relationships. Emphasis is placed on mate selection, gender roles, sexuality, communication, power and conflict, parenthood, diverse lifestyles, divorce and remarriage, and economic issues. Upon completion, students should be able to analyze the family as a social institution and the social forces which influence its development and change. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

SOC 220-Social Problems
303
This course provides an in-depth study of current social problems. Emphasis is placed on causes, consequences, and possible solutions to problems associated with families, schools, workplaces, communities, and the environment. Upon completion, students should be able to recognize, define, analyze, and propose solutions to these problems. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

SOC 225-Social Diversity
303
This course provides a comparison of diverse roles,

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interests, opportunities, contributions, and experiences in social life. Topics include race, ethnicity, gender, sexual orientation, class, and religion. Upon completion, students should be able to analyze how cultural and ethnic differences evolve and how they affect personality development, values, and tolerance. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

## SPANISH

SPA 111-Elementary Spanish I
303
This course introduces the fundamental elements of the Spanish language within a cultural context. Emphasis is placed on the development of basic listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written Spanish and demonstrate cultural awareness. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

SPA 112-Elementary Spanish II
303
This course is a continuation of SPA 111 focusing on the fundamental elements of the Spanish language within a cultural context. Emphasis is placed on the progressive development of listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written Spanish and demonstrate further cultural awareness. Prerequisites: SPA 111 This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

SPA 120-Spanish for the Workplace 303 This course offers applied Spanish for the workplace to facilitate basic communication with people whose native language is Spanish. Emphasis is placed on oral communication and career-specific vocabulary that targets health, business, and/or public service professions. Upon completion, students should be able to communicate at a functional level with native speakers and demonstrate cultural sensitivity.

SPA 141-Culture and Civilization
303
This course provides an opportunity to explore issues related to the Hispanic world. Topics include historical and current events, geography, and customs. Upon completion, students should be able to identify and discuss selected topics and cultural differences related to the Hispanic world. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

SPA 161-Cultural Immersion
233
This course explores Hispanic culture through intensive study on campus and field experience in a host country or area. Topics include an overview of linguistic, historical, geographical, sociopolitical, economic, and/or artistic concerns of the area visited. Upon completion, students should be able to exhibit first-hand knowledge of issues pertinent to the host area and demonstrate understanding of cultural differences. This course has been approved to satisfy
the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement. Prerequisite: SPA 111.

SPA 181-Spanish Lab 1
021
This course provides an opportunity to enhance acquisition of the fundamental elements of the Spanish language. Emphasis is placed on the progressive development of basic listening, speaking, reading, and writing skills through the use of various supplementary learning media and materials. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written Spanish, and to demonstrate cultural awareness. Corequisite: Be enrolled in SPA 111.

SPA 182-Spanish Lab 2
021
This course provides an opportunity to enhance acquisition of the fundamental elements of the Spanish language. Emphasis is placed on the progressive development of basic listening, speaking, reading, and writing skills through the use of various supplementary learning media and materials. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written Spanish, and to demonstrate cultural awareness. Prerequisites: SPA 181 Corequisites: Be enrolled in SPA 112.

SPA 211-Intermediate Spanish I
303
This course provides a review and expansion of the essential skills of the Spanish language. Emphasis is placed on the study of authentic and representative literary and cultural texts. Upon completion, students should be able to communicate effectively, accurately, and creatively about the past, present, and future. Prerequisites: SPA 112 This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

SPA 212-Intermediate Spanish II
303
This course provides a continuation of SPA 211. Emphasis is placed on the continuing study of authentic and representative literary and cultural texts. Upon completion, students should be able to communicate spontaneously and accurately with increasing complexity and sophistication. Prerequisites: SPA 211 This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

SPA 215-Spanish Phonetics/
303 Structure of Language
This course is designed to improve the understanding of Spanish phonetics and the structure of the Spanish language. Topics include the structure of the Spanish language, phonology, morphology, and syntax. Upon completion, students should have an understanding of the phonetics and structure of the Spanish language and be able to contrast the structure of the Spanish and English languages.

SPA 221-Spanish Conversation
303
This course provides an opportunity for intensive communication in spoken Spanish. Emphasis is placed on vocabulary acquisition and interactive communication through the discussion of media materials and authentic texts. Upon completion,
students should be able to discuss selected topics, express ideas and opinions clearly, and engage in formal and informal conversations. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

SPA 231-Reading and Composition
303
This course provides an opportunity for intensive reading and composition in Spanish. Emphasis is placed on the use of literary and cultural materials to enhance and expand reading and writing skills. Upon completion, students should be able to demonstrate in writing an in-depth understanding of assigned readings. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

SPA 281-Spanish Lab 3
021
This course provides an opportunity to enhance the review and expansion of the essential skills of the Spanish language. Emphasis is placed on the study of authentic and representative literary and cultural texts through the use of various supplementary learning media and materials. Upon completion, students should be able to communicate effectively, accurately, and creatively about the past, present, and future. Prerequisites: SPA 182 Corequisites: Be enrolled in SPA 211.

SPA 282-Spanish Lab 4
021
This course provides an opportunity to enhance the review and expansion of the essential skills of the Spanish language. Emphasis is placed on the continuing study of authentic and representative literary and cultural texts through the use of various supplementary learning and materials. Upon completion, students should be able to communicate spontaneously and accurately with increasing sophistication. Prerequisite: SPA 181. Corequisite: Be enrolled in SPA 212.

## SPANISH INTERPRETER

SPI 113-Intro to Spanish Interpreter 303 This course introduces the field of interpreting, interpretation models, cognitive processes associated with interpretation, professional ethical standards, employment opportunities, and working conditions. Topics include specialized jargon, code of ethics, interpreter assessments/qualifications, and protocol associated with various settings. Upon completion, students should be able to explain the rationale for placement of interpreters and apply ethical standards to a variety of working situations.

## SPI 114-Analytical Skills for Spanish Interpreters

This course is designed to improve cognitive processes associated with interpreting, listening, short-term memory, semantic equivalence, visual/auditory processing, thought organization and logic. Emphasis is place on developing skills necessary to generate equivalent messages between Spanish and English. Upon completion, students should be able to consecutively interpret non-technical, interactive messages between Spanish and English.
elements of Spanish grammar in oral and written form. Emphasis is placed on the fundamental grammatical concepts of the Spanish language. Upon completion, students should be able to demonstrate comprehension and correct usage of specified grammatical concepts in both oral and written form.

SPI 214-Introduction to Translation 303
This course is designed to improve the quality of Spanish to English and English to Spanish translation. Emphasis is placed on the practice of Spanish to English and English to Spanish translation in a variety of prose styles. Upon completion, students should be able to demonstrate the usage and understanding of the processes involved in translating.

## WELDING

## WLD 110-Cutting Processes

132
This course introduces oxy-fuel and plasma-arc cutting systems. Topics include safety, proper equipment setup, and operation of oxy-fuel and plasma-arc cutting equipment with emphasis on straight line, curve and bevel cutting. Upon completion, students should be able to oxy-fuel and plasma-arc metals of varying thickness.

WLD 111-Oxy-Fuel Welding
132
This course introduces the oxy-fuel welding process. Topics include safety, proper equipment setup, and operation of oxy-fuel welding equipment with emphasis on bead application, profile, and discontinuities. Upon completion, students should be able to oxy-fuel weld fillets and grooves on plate and pipe in various positions.

WLD 112-Basic Welding Processes 132 This course introduces basic welding and cutting. Emphasis is placed on beads applied with gases, mild steel fillers, and electrodes and the capillary action of solder. Upon completion, students should be able to set up welding and oxy-fuel equipment and perform welding, brazing, and soldering processes.

WLD 115-SMAW (Stick) Plate
295
This course introduces the shielded metal arc (stick) welding process. Emphasis is placed on padding, fillet, and groove welds in various positions with SMAW electrodes. Upon completion, students should be able to perform SMAW fillet and groove welds on carbon plate with prescribed electrodes.

WLD 121-GMAW (MIG) FCAW/Plate
264
This course introduces metal arc welding and flux core arc welding processes. Topics include equipment setup and fillet and groove welds with emphasis on application of GMAW and FCAW electrodes on carbon steel plate. Upon completion, students should be able to perform fillet welds on carbon steel with prescribed electrodes in the flat, horizontal, and overhead positions.

WLD 122-GMAW (MIG) Plate/Pipe
163
This course is designed to enhance skills with the gas metal arc (MIG) welding process. Emphasis is placed on advancing skills with the GMAW process making groove welds on carbon steel plate and pipe in various positions. Upon completion, students should be able to perform groove welds with prescribed electrodes on various joint geometry. Prerequisite: WLD 121

## $358 \cdot$ Course Descriptions

WLD 131-GTAW (TIG) Plate
264
This course introduces the gas tungsten arc (TIG) welding process. Topics include correct selection of tungsten, polarity, gas, and proper filler rod with emphasis placed on safety, equipment setup, and welding techniques. Upon completion, students should be able to perform GTAW fillet and groove welds with various electrodes and filler materials.

WLD 132-GTAW (TIG) Plate/Pipe
163
This course is designed to enhance skills with the gas tungsten arc (TIG) welding process. Topics include setup, joint preparation, and electrode selection with emphasis on manipulative skills in all welding positions on plate and pipe. Upon completion, students should be able to perform GTAW welds with prescribed electrodes and filler materials on various joint geometry. Prerequisite: WLD 131.

WLD 141-Symbols and Specifications 223 This course introduces the basic symbols and specifications used welding. Emphasis is placed on interpretation of lines, notes, welding symbols, and specifications. Upon completion, students should be able to read and interpret symbols and specifications commonly used in welding.

WLD 215-SMAW (Stick) Pipe 194 This course covers the knowledge and skills that apply to welding pipe. Topics include pipe positions, joint geometry, and preparation with emphasis placed on bead application, profile, and discontinuities. Upon completion, students should be able to perform SMAW welds to applicable codes on carbon steel pipe with prescribed electrodes in various positions. Prerequisite: WLD 115.


## CONTINUTING EDUCATION PROGRAMS (NON-CREDIT)



## STRATEGIC VISION (Statement of Purpose)

Continuing Education, in partnership with business and industry and community agencies, strengthens the economic, civic, and cultural life in Cleveland County. The Unit does this by offering a variety of courses and programs which meet the needs of people beyond compulsory school age whose major occupation may not be that of a full time student. Broad categories of services are workforce development, economic development, basic skills and literacy education, and quality of life enhancement.

## Goals:

1. Lead the College in refining the Continuing Education Plan which addresses four major areas: workforce development (training and retraining), economic development (services to business and industry), basic skills and literacy education, and quality of life enhancement (cultural and leisure programming).
2. Continuously evaluate instructional and program effectiveness.
3. Continue refinement of student support services such as registration, student records, and student information.
4. Provide leadership that promotes systems thinking to ensure a more effective Student Information System.
5. Continue staff development that encompasses current national trends and issues by providing specific training for Continuing Education team needs and which results in a Continuing Education identity.
6. Identify and acquire human and fiscal resources to meet student needs.
7. Continuously evaluate College/community partnerships and events to improve and expand services to students and the community.

## CONTINUING EDUCATION COURSES

The Continuing Education Unit promotes the concept of life-long learning opportunities by providing meaningful educational courses that will help adults meet occupational and professional goals and fulfill social and personal needs.

## ADMISSION

Adults, 18 years of age or older, are eligible to participate in Continuing Education classes. High School students, 16 and 17 years old, may enroll in a course with written permission from their high school.

## REGISTRATION

A student may register for a continuing education class either in person or by mail. To register in person, come to the Continuing Education Department and complete a registration form. To register by mail, complete a registration form which is included with advertising and mail it to the Continuing Education Department. All registration must be completed at least one week prior to the beginning date of the class. Registration is on a first come, first serve basis. Some class enrollment may be limited. A student will not be registered unless the appropriate fees accompany the registration form.

## REGISTRATION FEES

Fees for occupational extension are set by the North Carolina Legislature. Community services class fees are set by Cleveland Community College's Board of Trustees. Registration fees are waived for Fire Service and Law Enforcement Training Programs including Civil Preparedness courses, programs for Emergency Medical personnel, and North Carolina residents 65 years of age or older except for self supporting courses. Students are responsible for buying supplies and materials as necessary.

## REFUNDS

The College may refund registration fees under the following circumstances:

1. If a student officially withdraws from the class prior to the first class session, the student will receive $100 \%$ refund.
2. If a class is canceled due to insufficient enrollment, the student will receive 100\% refund.
3. After a class begins and a student officially withdraws from the class prior to or on the $10 \%$ point of the scheduled hours, the student will receive $75 \%$ refund.

This refund is limited to the registration fee and does not include accident insurance, liability insurance, textbooks, or supplies.

## ATTENDANCE

Students are expected to attend class regularly. Attendance records are maintained by instructors. Insufficient enrollment or attendance will result in cancellation of the class.

## COURSE REPETITION POLICY

Continuing Education students may enroll in a course as many times as necessary to accomplish their personal, educational/training goals provided they continue 1) to show progress, 2) do not prohibit other students from participating, 3) pay the appropriate fees and 4) do not violate North Carolina Community College System policy.

Students who take the same Occupational Extension course more than twice are required to pay for the actual cost of the course. This applies if the course is repeated within a five-year period since September 1, 1993. Courses taken for certification, licensure, or recertification are exempt from this policy.

## RELEASE OF CONTINUING EDUCATION TRANSCRIPTS

Written consent from the student is required before a transcript may be released from the Continuing Education Department. The student may do this by filling out a Continuing Education Transcript Release Form, or by a written request from the student.

## CLASS LOCATIONS

Many of the Continuing Education classes are held on the campus at Cleveland Community College. Other classes are conducted throughout Cleveland County in public schools, community centers, churches, industries, businesses or wherever a suitable meeting place can be arranged. Classes may be organized in any community in Cleveland County whenever a sufficient number of prospective class members indicates an interest.

## CERTIFICATES

Certificates are awarded to students who successfully complete the requirements of the class and are given for certification, state testing, and documentation of training, when requested by the instructor or student.

## CONTINUING EDUCATION UNITS (CEUs)

The Southern Association of Colleges and Schools, of which Cleveland Community College is an accredited member, has recommended that the Continuing Education Unit (CEU) be used as the basic instrument of measurement for an individual's participation in non-credit classes, courses, and programs. One Continuing Education Unit will be awarded for each ten (10) contact hours of instruction that will be determined prior to the beginning of the class.

## OCCUPATIONAL EXTENSION CLASSES

Occupational classes help adults build their job skills or knowledge. These classes are held on campus or in the workplace. Business, industry, and public service organizations have benefited from their employees' development through occupational courses. Some examples of occupational-oriented courses are:

Auto Safety Inspection
Certified Public Accountants CPEs
Computer Applications
Effective Teacher Training
Electrical Contractor Renewal
Emergency Medical Services
Fire Fighting
Funeral Service
Introduction to Cabinet Making

Law Enforcement<br>NC Manufacturing Certification<br>Program<br>Nursing Assistant I \& II<br>Notary Public<br>Online Computer Classes<br>Plumbing, Heating, \& Air Conditioning<br>License-Renewal<br>Surveyor's PDHs<br>Spanish for the Workplace

## COMMUNITY SERVICE CLASSES

Lifelong Learning courses help adults broaden their talents, stimulate their creativity, develop new skills, improve themselves, and just have fun. Examples of these courses include:

| Basic Obedience for Dogs/Puppies | Quilting |
| :--- | :--- |
| Cake Decorating | Real Estate License Renewal |
| Ceramics | Rubber Stamping |
| Computer Classes | Sewing |
| Crafts | Scrap booking |
| Doll Making | Stained Glass |
| Genealogy | Upholstery |
| Investing | Woodworking |
| Painting |  |
| Photography |  |
| Picture Framing |  |

## NEW AND EXPANDING INDUSTRY TRAINING

The purpose of the New and Expanding Industry Training (NEIT) Program is to provide customized training assistance in support of new, full-time production positions created in Cleveland County. New and Expanding Industry Training enhances the growth potential of area industries while preparing the area workforce with the skills essential for successful employment in emerging industries.

Companies that create 12 or more new production jobs in excess of their previous three-year maximum level are eligible for assistance through the New and Expanding Industry Training Program. NEIT may provide training needs assessment, program development, instructional costs, and training delivery for new, frontline production personnel and their supervisors. There is no charge to the company for New and Expanding Industry Training.

## FOCUSED INDUSTRIAL TRAINING

Focused Industrial Training (FIT) programs provide for customized training and services for manufacturing industries in our service area. Companies that manufacture products and/or process industrial materials are eligible for Focused Industrial Training and services. FIT programs are directed toward skilled and semiskilled production workers, industrial maintenance workers, and leaders of personnel who perform industrial processes. A registration is assessed for participants in Focused Industrial Training program classes.

## BASIC SKILLS PROGRAMS

The Basic Skills Programs provide a variety of educational experiences for adults by guiding them in the development of individual strategies to improve the necessary skills for coping with change in today's complex society.

Striving to meet the spectrum of needs of the College and the community, the staff of the Basic Skills Programs provides flexibility within each program. The goal of the department is to assist participants as they strive to become independent learners and productive citizens.

Educational, cultural, economic, and social needs are considered when students apply for various programs. Class sites are on campus and at various locations in Cleveland County.

Following are the programs and services available through the Basic Skills Programs:

Adult High School Diploma Program
Adult Basic Education Program
General Educational Development Preparatory
English As A Second Language
Compensatory Education Program
Adults, eighteen years of age or older, desiring to make application for any of the Basic Skills Programs should contact the appropriate department 704-484-4050 for additional information.

## ADULT BASIC EDUCATION PROGRAM (ABE) (Grades 1-8)

Adults who have less than a high school education may enroll in the Adult Basic Education Program. The program includes instruction in reading, language skills/writing and mathematics. In each of these areas, instruction is designed to assist students in meeting adult responsibilities by improving fundamental skills. Learning opportunities range from instruction for those who have received no formal education to those who have received as much as eight years of instruction.

Students are placed in the appropriate ABE class that correlates to their TABE test. Classes are designed to incorporate independent study, group lecture and sequential learning methods of instruction.

Students may enter ABE classes at any time. In order to take advantage of the complete program being offered, the College encourages students to maintain attendance in these classes over a period of several school semesters.

There is no fee for ABE classes or ABE books and materials. Classes are held on campus and at various locations throughout the county.

## ADULT HIGH SCHOOL DIPLOMA PROGRAM (AHS) (Grades 9-12)

The Adult High School Program is a cooperative program between the College and the local school systems. It is available to adults who achieve a 9.0 on the basic skills placement evaluation and wish to complete the high school program. The successful completion of twenty units and a passing score on the North Carolina Competency Test are required for graduation from the Adult High School Program. Any previously earned high school units are accepted toward the total requirements. The remaining requirements will be completed through a prescribed educational plan which incorporates mastery learning skills. The program is free, although there may be a small fee for some textbooks at some class locations. A graduation fee is charged to each student completing the high school requirements. Graduates will be issued a diploma and may participate in AHS/GED graduation exercises.

Adult High School students may arrange a schedule to complete high school through the Learning Lab program. The lab provides flexible scheduling and a variety of instructional methods to accommodate students' learning styles. Interested persons may enroll in the Adult High School Program at any time.

Requirements for graduation include the following:

| English | 4 units |
| :---: | :---: |
| Social Studies | . 3 units |
| Mathematics | . 3 units |
| Science. | . 3 units |
| Electives. | . 7 units |
| N.C. Competen |  |

Upon completion of the Adult High School Program, graduates may apply to enroll in one of the curriculum programs at Cleveland Community College or some other college.

## GENERAL EDUCATIONAL DEVELOPMENT (GED) PREPARATORY

The GED (high school equivalency) Preparatory Program is designed for adults preparing to take the GED examination. After the administration of the required PreGED examination, each student's academic skills are evaluated to determine specific instructional needs. The student primarily studies in the areas of English, reading, science, social studies and math. After achieving specific skills and knowledge demonstrated by passing the official GED Practice Test, the student is prepared to take the GED examination.

## LEARNING LAB PROGRAM

The Learning Lab, located on the campus, includes the free high school program and the GED study program.

Because there are no organized classes in the Learning Lab, the staff will assist the student in arranging a study schedule to meet his or her needs. The student may attend the hours and days which are most convenient. The Learning Lab is open from 8:00 am to 9:00 pm, Monday through Thursday, and 8:00 am to 4:00 pm on Friday.

## HUMAN RESOURCES DEVELOPMENT PROGRAM (HRD)

The Human Resources Development Program provides employability skills training for unemployed and underemployed adults. Upon graduation, participants receive assistance with job placement or opportunities for skills training.

The goal of HRD is to prepare persons for successful performance in the work force. The primary objective of the program is to reduce unemployment and underemployment by making it possible for the participants to become and remain productive employees.

Classes held on campus average five weeks. The curriculum includes assessment of an individual's assets and limitations, development of positive selfconcept, employability skills, communication skills, problem-solving skills, and awareness of the impact of information technology in the workplace.

Off-campus classes may be arranged on a short or long-range schedule as needed.

## ENGLISH AS A SECOND LANGUAGE (ESL)

English language for the foreign born is taught as written English and as conversational English. Classes are free of charge to those seeking English language skills and citizenship instruction. Classes are available for refugees, migrant workers, and other aliens.

## COMPENSATORY EDUCATION PROGRAMS

The Compensatory Education Program provides classes in basic education, socialization, and community living skills for the adult mentally retarded adult.

This program is a cooperative effort through Pathways-Cleveland Center, Cleveland Community College, and other service provider agencies.

Certification of mental retardation is required prior to enrollment.

## SMALL BUSINESS CENTER (SBC)

The Small Business Center of Cleveland Community College provides workshops, seminars, counseling, information and referral services for small business owners and operators in Cleveland County. The Center's objectives are:

* To provide accessible and flexible training programs for small business operators including workshops, seminars, and continuing education courses.
* To provide a resource center of print and non-print reference materials for use by small business operators and employees.
* To offer special assistance to small business owners and would-be owners via a network of referral services to the chambers of commerce, banks, the Small Business Administration, and other agencies such as the Department of Commerce.
* To offer consultative services on a direct one-to-one basis.

A variety of seminars are presented including How To Start A Small Business, How To Write A Business Plan, Small Business Recordkeeping and Taxes, Financing Your Small Business, and Advertising and Marketing Your Small Business, just to list a few. For more information, call the Small Business Center Director at (704) 484-4146.


## CLEVELAND COMMUNITY COLLEGE

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David Thompson
Mark Treffinger
Talmadge Turner
Wayne Walton
Phil Weathers
Floyd Williams
Ed Yarboro

## FACULTY AND STAFF OF CLEVELAND COMMUNITY COLLEGE

Adams, Clyde Q.<br>Director, Campus Security<br>24 years exp. with the Shelby Police Department<br>Allen, Kay<br>Purchasing Officer<br>A.A.S., Cleveland Community College<br>B.S., Limestone College

Allison, Cynthia
2002
Housekeeper
Arey, Jennifer
Secretary, Student Services
A.A.S., Cleveland Community College
B.S., Gardner-Webb University

Bostic, Risë
2003
Secretary, Basic Skills Program
A.A.S., Isothermal Community College
A.A.S., Western Piedmont C.C.
B.S., Gardner-Webb University

Bowen, Laura
Printshop Technician
A.A., Cleveland Community College

Bowman, Brian
2002
Controller/Office Manager
B.A., North Carolina State University

Boyles, Barry
Instructor, Anatomy \& Physiology
B.A., Lenoir-Rhyne University
D.C., Life Chiropractic College

Bridges, LouAnn
Vice President, Student Services
A.A.S., Cleveland Technical College
B.S., Gardner-Webb College
M.A., Gardner-Webb College

University of South Carolina at Spartanburg
Bryant, Hal
1975
Instructor, Art \& Director of Art Gallery
B.A., Gardner-Webb College
M.A., University of South Carolina at Columbia

Bryant, Lee
Office Manager, Academic Programs
A.A.S., Cleveland Community College
A.G.E., Cleveland Community College

Budd, Severne
Secretary,
Community Relations and Development
B.S., Livingstone College

Appalachian State University
Camp, Jana

Camper, Starr Morrow
Instructor, History
A.A., Isothermal Community College
B.A., University of North Carolina at Charlotte
M.A., University of North Carolina at Charlotte
Ph.D., University of South Carolina at Columbia

Carpenter, Nancy
Office Manager/Fire/Rescue Coordinator Jr. Secretarial Degree, Kings College
A.A.S., Cleveland Community College Gardner-Webb University

Champion, Phyllis
Secretary, Academic Programs
A.A.S., Cleveland Community College

Chandler, Linda
2001
Instructor, Psychology
B.S., Campbell University
M.A., Austin Peay State University

Chaney, Wes
Graphic Designer/Webmaster
B.F.A., Appalachian State University

Chavis, Barbara
2000
Coordinator, Academic Support Center
B.A., Pembroke State University
M.A., Appalachian State University

Cheshire, Jeanette
2001
Director, Associate Degree Nursing
A.A.S., Western Piedmont Community College
B.S.N., University of North Carolina at Chapel Hill
M.P.H., University of North Carolina at Chapel Hill

Chitty, Kay
2000
Instructor, Mathematics
B.A., University of North Carolina
M.A., University of North Carolina at Charlotte

Clary, David
Emergency Medical Services Coordinator
EMT, Cleveland Community College
EMT Paramedic, McDowell Community College
NR-EMT-P, Davidson Community College
Collins, Pam 1993
Instructor, Computer Information Technology
B.S., East Carolina University
M.A., Appalachian State University

Instructor, Academic Support Center B.S., Appalachian State University Appalachian State University
Collum, Joe
Program Coordinator, Plumbing/Carpentry
Cleveland Community College
10 years experience in construction
Cox, Joanne
Instructor, Chemistry
B.A., Shippensburg State College
M.A., Shippensburg State College
Cranor, Sherry
Secretary, Financial Aid
A.A.S., Cleveland Community College
Dulin, Amy
Secretary,
Small Business Center/Continuing Education
A.A.S., Cleveland Community College
Duncan, Deborah P.
Instructor, Associate Degree Nursing
A.A.S., Western Piedmont Community
College
B.S.N., Winston-Salem State University
University of North Carolina at Greensboro
Dunkleman, AI
Instructor, Sociology
A.A., Virginia Highlands Community College
B.A., University of North Carolina at
Wilmington
M.A., East Carolina University
The University of Virginia's College at Wise
Art Institute of Pittsburgh
Durant, Nettie
Librarian, Reference/Public Service
B.S., Winston-Salem State University
M.L.S., North Carolina Central University
Appalachian State University

Dyer, Robin
1994
Network Administrator
A.A.S., Cleveland Community College
B.S., Gardner-Webb University

Appalachian State University

| Eaker, Pat <br> Receptionist <br> Cleveland Community College | 1995 |
| :--- | ---: |
| Everett, Kathy |  |
| Secretary, Academic Programs |  |
| A.A.S., Cleveland Community College <br> B.S., Gardner-Webb University |  |
| Farris, James |  |
| Maintenance | 1995 |
| Findlay, Susan | 1994 |

Program Coordinator, Early Childhood
B.S., Virginia Polytechnic Institute \& State

University
M.A., Gardner-Webb University

Fisher, Ray
Program Coordinator,
Electrical/Electronics Technology
A.A., Gaston College
B.S., Western Carolina University

Licensed Electrical Contractor
30 years Electrical Experience
Francis, Jean
1971
Dean, Arts/Sciences/Public Services
A.A.S., Cleveland Technical College
B.S., Limestone College
M.A., University of South Carolina

University of North Carolina at Charlotte
Gantt, Dori
2002
Instructor, Cosmetoloy
Diploma, Southeastern College of Beauty Culture

Gardner, Andy
Director, Financial Aid/Veterans Services
A.A., Cleveland Community College
B.S., Gardner-Webb University

Appalachian State University
Gauthier, Theresa 1090
Instructor, Mathematics
B.A., University of Missouri
B.A., University of North Carolina at Charlotte
M.A., University of North Carolina at Charlotte

Glenn, Woodrow
Instructor, Business Administration
B.S., Gardner-Webb College
M.A., Appalachian State University

Western Carolina University
Greene, Barbara
1989
Vice President, Continuing Education
B.S., Gardner-Webb College
M.A., Gardner-Webb College

Greene, Tommy C. 1983-1992, 1999
Vice President, Finance/Administrative Services
A.A., Cleveland Technical College
B.A., Limestone College
M.B.A., Winthrop College

Griggs, Donna
1995
Cashier/Secretary
A.A.S., Cleveland Community College

Hamilton, Russ 2002
Instructor, AC/Heating \& Refrigeration U.S. Navy

Diploma, Cleveland Community College
Work Experience
Hamrick, John E. 2002
Chief GED Examiner/Basic Skills Recruiter
B.S., Gardner Webb University
M.A., Appalachian State Univeristy

Ed.S., Western Carolina University

| Hamrick, Sherry 1993 |  |
| :---: | :---: |
| Instructor, Practic |  |
| B.S.N., University of North Carolina at Charlotte |  |
| B.A., Appalachian State University |  |
| M.S.N., University of North Carolina at Greensboro |  |
| ardin, Lori | 200 |
| Admissions Counselor |  |
| A.A., Cleveland Community College |  |
| B.A., University of North Carolina at Charlotte |  |
| Appalachian State University |  |
| are, Rebecca | 99 |
| Instructor, Biology |  |
| B.S., Appalachian State Univers |  |
| M.S., University of North Carolina at Charlotte |  |
| Hart, Libby 2001 |  |
| Instructor, Mathematics |  |
| B.S., Appalachian State University |  |
| B.A., University of North Carolina at Charlotte |  |
| M.A., Appalachian State University |  |
| M.S., University of North Carolina at Charlotte |  |
| Clemson University |  |
| Haynes, Phyllis 198 |  |
| System Administrator |  |
| A.A.S., Cleveland Technical Colle |  |
| Gardner-Webb University |  |
| University of North Carolina at Charlotte |  |
| Hensley, James 2000 |  |
|  |  |
| EMT, Cleveland Community College |  |
| National Fire Academy |  |
| NC DOI Certified Fire Instruc |  |
| NC Certified Paramedic |  |
| Instructor/Coordinator |  |
| NC Certified State Examination Proctor NC Probationary Level III Fire Inspector |  |
|  |  |
| Davidson County Community College |  |
| Holbrook, Eddie 2002 |  |
| Dean, Community Relations and Development |  |
| B.A., Lenoir-Rhyne College |  |
| M.A., Appalachian State University |  |
| Furman University |  |
| Holbrook, Millie 2002 |  |
| Instructor, Physical Education/Hea |  |
| B.S., Winthrop University |  |
| M.S., Florida International University |  |
| University of North Carolina at Greensboro |  |
|  | 1979 |
| Coordinator, HRD Program |  |
| A.A.S., Cleveland Technical College |  |
| B.S., Gardner-Webb College |  |
| Appalachian State University |  |

Hardin, Lori
Admissions Counselor
A.A., Cleveland Community College
B.A., University of North Carolina at Charlotte
Appalachian State University

Haynes, Phyllis 1985
System Administrator
College
Gardner-Webb University

Hensley, James 2000
mergency Training Center Coordinator National Fire Academy
NC DOI Certified Fire Instructor
NC Certified Paramedic
nstructor/Coordinator
NC Probationary Lexel III Fire Inspector
Davidson County Community College

Holbrook, Eddie
2002
B.A., Lenoir-Rhyne College
M.A., Appalachian State University Furman University

Holbrook, Millie
2002
B.S., Winthrop University
M.S., Florida International University University of North Carolina at Greensboro

Hosch, Joyce
A.A.S., Cleveland Technical College

Appalachian State University

Howell, Kenny
1996
Instructor, Plumbing
A.A., Isothermal Community College
B.A., Warren Wilson College

Cleveland Community College
Howze, Pam
2002
Instructor, Industrial Management
B.S., Western Carolina University
M.S., Troy State University

Hughes, Mark
Instructor, Electronics Engineering Technology
A.A.S., Gaston College
B.S., Southeastern Oklahoma State University
M.Technology, Southeastern Oklahoma State University
Clemson University
Hunt, Rosaline
1976
Dean, Basic Skills Programs
B.S., Fayetteville State University

Western Carolina University
M.A., Appalachian State University

Ed.S., Appalachian State University
Johnson, Linda Kay 1998
Instructor, Associate Degree Nursing
B.S.N., Clemson University
M.S.N., University of North Carolina at Greensboro

Jones, Katherine
Department Head, Practical Nursing
A.A., Gardner-Webb College
R.N., Rex Hospital School of Nursing
B.S.N., North Carolina Wesleyan College
M.S.N., East Carolina University

Jones, Kelly
1997
Instructor, Associate Degree Nursing
B.S.N., University of North Carolina at Charlotte
M.S.N., Case Western Reserve University
C.N.M., Frontier School

Kennedy, Shannon
2000
Director, Public Information \& Grants
Development
B.S., Millersville University
M.A., Gardner-Webb University

Appalachian State University
King, Lawrence
2000
Instructor, History/Religion
B.A., Florida State University
M.C.M., Southwestern Seminary
M.L.A., Winthrop University

Gardner-Webb University
Koontz, K. Dale 2003
Instructor, Communications/Public Speaking
B.A., Hollins College
M.Ed., University of North Carolina at Greensboro
J.D., Wake Forest University

Kue, Phoua
Instructor, Cosmetology
D. Burke Academy of Cosmetic Art
A.A., Western Piedmont Community College
B.S., Gardner-Webb University

Lawrence, Wanda
Secretary, Student Services
A.A.S., Cleveland Community College

Gardner-Webb University
Ledford, Jody
Instructor, Computer Information Technology
Coordinator, Distance Learning
B.S., Gardner-Webb College
M.A., Gardner-Webb College

Appalachian State University
Leonhardt, Shaunda
Registrar
A.A.S., Cleveland Community College
A.A., Cleveland Community College
B.A., University of North Carolina at Charlotte
Appalachian State University
Lindsey, Kathy W.
Instructor, Associate Degree Nursing
A.D.N., Gardner-Webb University
B.S.N., Western Carolina University

Western Carolina University

| Lott, Jessie J. |  |
| :--- | ---: |
| Housekeeper |  |
| Lovelace, Carolyn |  |
| Secretary, Planning and I.E. |  |
| A.A.S., Cleveland Community College |  |
| Mack, Bruce |  |
| Program Coordinator, Mechanical Drafting |  |
| Technology |  |
| A.A.S., Gaston College |  |
| B.S.T., University of North Carolina at |  |
| Charlotte |  |
| Maddox, Nedra |  |
| Admissions Counselor |  |
| B.A., North Carolina State University |  |
| Appalachian State University |  |
| Martin, Susan |  |
| Coordinator, Continuing Education |  |
| A.A.S., Cleveland Community College |  |
| B.S., Gardner-Webb University |  |
| Western Carolina University |  |
| Appalachian State University |  |

Mayse, Lee Ann 2000
Clinical Instructor, Radiography
A.A.S., Cleveland Community College

McDaniel, Beth
2000
Accounting Technician
A.A.S., Cleveland Community College Wingate College

McIntyre, Dorothy P.
1970
Assistant to the President for Planning and I.E.
A.A., Gardner-Webb College
B.A., Limestone College
M.Ed., University of North Carolina at Charlotte
Ed.S., Appalachian State University
CAGS, Ed.D., Virginia Polytechnic Institute \& State University

McKibbin, Barbara
Director, Library
B.A., Gardner-Webb College
M.S.L.S., University of North Carolina at Chapel Hill

McSwain, Lydia 1986
Manager, College Store
A.A.S., Cleveland Community College

McSwain, Mike 1983
Dean, Vocational/Engineering Technologies
A.A.S., United Electronics Institute
B.S., Western Carolina University

Western Piedmont Community College
Appalachian State University
10 years Electronic Technician
Meade, Joyce
Department Head, Accounting/Business
Administration/ Office Technologies
B.S., University of North Carolina at Greensboro
M.A., Winthrop College

Millican, Bill 2002
Admissions Specialist and Student Activities
Advisor
A.A.S., Guilford Technical Community College
B.A., Appalachian State University

Mintz, Nancy 1995
Housekeeper
Mitchell, Jean 1976
Instructor, Office Technologies/Medical
B.S., North Carolina Central University
M.A., Appalachian State University

Montgomery, Jill 2002
Accounts Payable Technician
B.S., University of South Carolina at Spartanburg
Gardner Webb University
Moore, Danny 1993
Director, Physical Plant
A.A.S., Cleveland Community College

Moore, Hilda 1991
Instructor, Spanish
B.A., Gardner-Webb College
M.A.T., Appalachian State University

Ross, Linda
Instructor, Business Administration
Diploma, Cleveland Technical College
A.A.S., Cleveland Technical College
B.A., Limestone College
M.S., North Carolina A \& T University
North Carolina State University
Winthrop College
Center for Creative Leadership Certificate
Western Carolina University
Gardner-Webb University

Rousseau, Alease
Department Head, Radiography
A.A., Wilkes Community College
D. Wilkes Hospital School of Radiologic Technology
B.S., Gardner-Webb University

Rush, Ed
Instructor, Internet Technologies
A.A.S., Cleveland Community College

Limestone College
Sain, Becky Parrish
Program Coordinator,
Marketing/Retailing/Economics
A.A.S., Cleveland Technical College
B.S., Winthrop College
M.A., Gardner-Webb University
University of North Carolina at Charlotte

Scruggs, Danny
Instructor, Computer Information Technology
A.A.S., Cleveland Community College
B.S., Appalachian State University
M.A., Appalachian State University

Seagle, John 2000
Maintenance
Sepaugh, Mitchell 2002
Instructor, Electronics Engineering
A.A.S., Isothermal Community College

Sharpe, Carolyn 1976
Instructor, Office Systems
A.A.S., Cleveland Technical College
B.S., Gardner-Webb College

Appalachian State University
Sims, Deller
Records Retention Specialist
A.A.S., Cleveland Community College
B.S., Gardner-Webb University

Appalachian State University
Sisk, Mike 1998
Instructor, Computer Information Technology
B.S., Gardner-Webb University
M.A., University of North Carolina at

Charlotte
University of North Carolina at Chapel Hill University of Hartford University of California Nova University

Smith, Caren
2002
Clinical Instructor, Radiography
A.S., Piedmont Technical College

BSPA, Saint Joseph's College of Maine
Smith, Philip
2001
Instructor, Religion/History
A.A., Butte College
B.A., University of Alabama at Birmingham
M.A., University of Alabama at Birmingham
M.TH.S., Houston Graduate School of Theology
Tomlinson College
Jefferson State Junior College
Southards, Joseph M.
1981
Department Head, Mathematics and Science
B.S., Gardner-Webb College
M.A., Appalachian State University

Stone, Libby
1996
Technical Services Librarian
B.A., Erskine College
M.L.I.S., University of North Carolina at Greensboro

Strain, Bee
Director, Small Business Center
B.A., Wofford College

Appalachian State University
Talbert, Rosa Linda
2001
Instructor, Religion
A.B., Pfeiffer College
M.A., Pfeiffer College

Taylor, Barbara
1974
Department Head, Liberal Arts
B.S., Mississippi University for Women
M.A., Appalachian State University

University of Southern Maine
University of South Carolina
Thornburg, L. Steve 1990
President
B.A.J., University of North Carolina at Chapel Hill
M.P.A., University of North Carolina at Chapel Hill
Ed.D., North Carolina State University
Tillman, Greg
2001
Program Coordinator, Broadcasting/Production
Technology and Cable Access Director
B.S., Appalachian State University

Gardner-Webb College

| Walker, Barbara |
| :--- |
| Housekeeper |
| Walker, Jr., Hugh |
| Director, Information Systems/Personnel |
| A.A.S., Cleveland County Technical Institute |
| B.S., North Carolina State University |
| M.A.Ed., Western Carolina University |
| Gardner-Webb College |
| Appalachian State University |

Housekeeper
Walker, Jr., Hugh 1973 A.A.S., Cleveland County Technical Institute B.S., North Carolina State University
M.A.Ed., Western Carolina University

Appalachian State University
Wallen, Brett ..... 1998
Instructor, English
B.A., Gardner-Webb University
M.A., University of North Carolina at Charlotte
Whitaker, Tom ..... 1993
Instructor, Welding
Diploma, Isothermal Community College Western Carolina University
White, Shellie Hamrick ..... 1989
Occupational Studies Admissions Counselor B.A., Gardner-Webb College Appalachian State University
Williams, AI ..... 2001Program Coordinator, Fire ProtectionB.A., University of South CarolinaSt. Petersburg Junior College
Midlands Technical Community CollegePinellas County Fire AcademyNational Fire Academy
Williams, Ellen ..... 2001
Library TechnicianA.A.S., Cleveland Community College
Wilson, Bruce ..... 1997
Computer Network SpecialistA.A.S., Cleveland Community CollegeB.A., Gardner-Webb UniversityCertified A+ Service TechnicianMicrosoft Certified System Engineer
Wilson, Lucille ..... 1992
Housekeeper
Wilson, Patricia ..... 1976Housekeeper

Wilson, Ron
2000
Assistant Director, Physical Plant
A.A.S., Cleveland Community College

Wisher, Tim1994

Program Coordinator, Welding
Certificate, Cleveland Community College
Certificate, Spartanburg Technical College
Certificate, Sanders Brothers
Woods, Dorothy
Housekeeper
Wray, Madge1971

Dean, Business Technologies
B.S., North Carolina A \& T University M.A., Winthrop College

Wright, Ronald
Vice President, Academic Programs
A.A., Gardner-Webb College
B.A., Gardner-Webb College
M.A., Western Carolina University

Ph.D., University of South Carolina
Appalachian State University Cambridge University

Young, Deborah 2002
Financial Aid Technician
A.A.S., Cleveland Community College

Zamora, B.J. 1996
Instructor, English
B.A., University of Texas at Austin M.S., Corpus Christi State University Ph.D., University of Pittsburgh

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[^0]:    ** New measures

[^1]:    *If accident insurance is desired, contact Finance/Administrative Services for up-to-date information.

[^2]:    Total Major Hours: 49

[^3]:    Total Major Hours: 52

[^4]:    Total Major Hours: 51
    TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 70

[^5]:    Total Other Required Hours: 1-3

[^6]:    TOTAL CONTACT HOURS REQUIRED BY THE NORTH CAROLINA STATE BOARD OF COSMETIC ART EXAMINERS:1500

