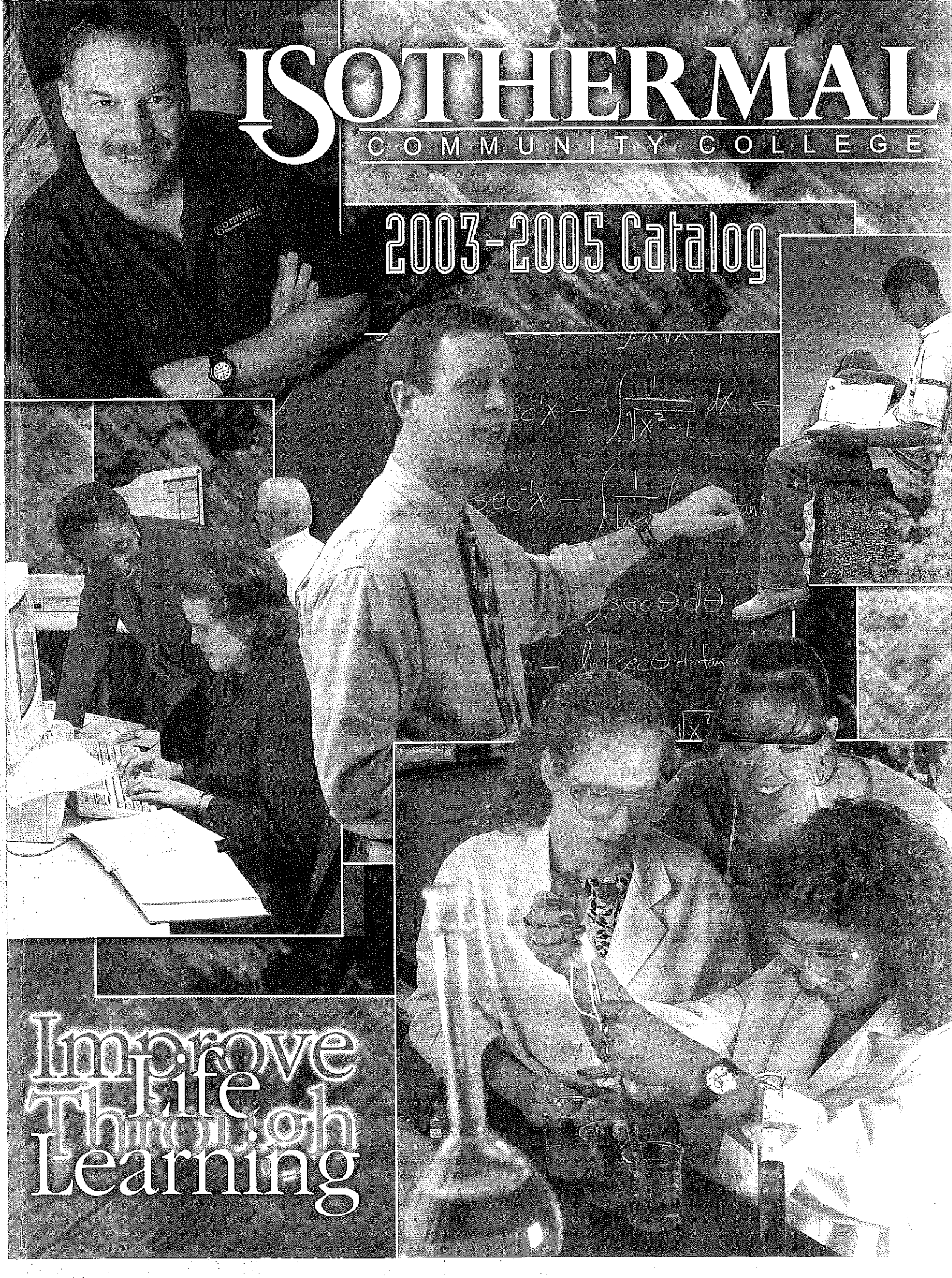
ISOTHERMAL
COMMUNITY COLLEGE

2003-2005 Catalog



Improve Life Through Learning

MESSAGE FROM THE PRESIDENT

Welcome, and thank you for choosing Isothermal Community College as you seek to improve the quality of your life through learning. Since 1964, thousands of individuals have taken the opportunity that you now pursue. The College continues to evolve so you attend a different institution than many of your predecessors. By the same token, I am confident that you will have a positive experience that will assist you toward your personal goals.

Isothermal Community College has made a commitment to becoming a learning-centered institution. This carefully considered change builds upon the institutional values that are at the core of the College while propelling us forward to meet the unique needs of students. Simultaneously, we pledge to meet the needs of our business and industrial community, the need for a life-long education, and the cultural needs of our service region. I refer you to our mission, values, ar ' vision statements which appear later in this docu at s you may gain further insight into the means thr we approach this formidable task.

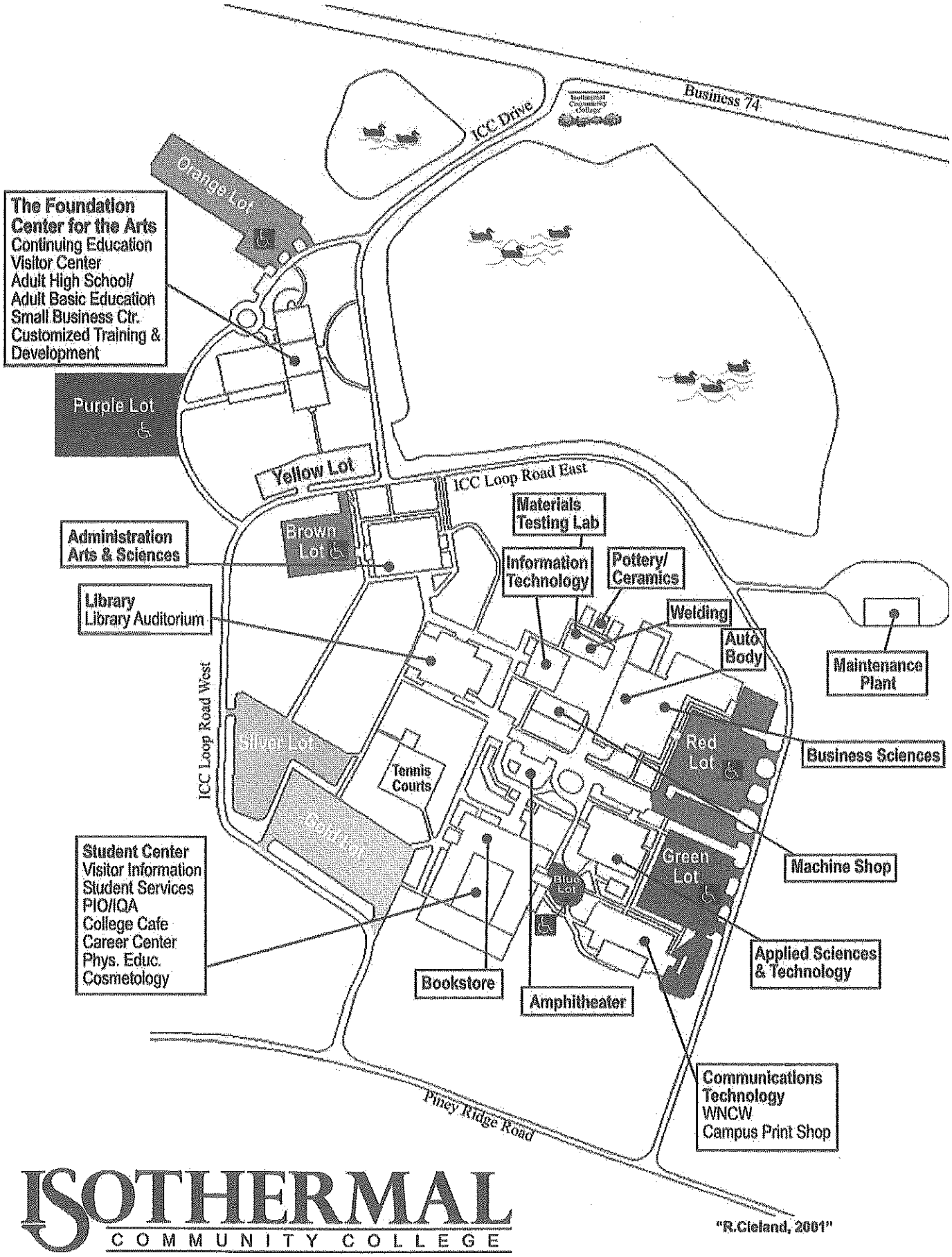
As you come to know our institution, I am confident will find a collection of individuals who are comm excellence in all that we do as we eliminate barriers for student learning. You will also note that w commit the resources of this institution to student success, we place the responsibility for learning students and ask them to recognize that the goals that they seek are often accompanied by the struggl discomfort that is a part of personal growth. We genuinely believe that this environment is one in w students can flourish and learn the most valuable lesson of higher education which is to be self-directe their learning. In this way, students can continue to adapt to the breadth of changes that face them in future.

The faculty and staff of Isothermal Community College welcome you to a challenging, learning experience and look forward to the opportunity for providing academic and personal support services that will help you reach your personal goals.

Willard L. Lewis

Table of Contents

Spindale Campus Map



ISOTHERMAL
COMMUNITY COLLEGE

ISOTHERMAL COMMUNITY COLLEGE
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Office of Director of the Polk County Campus

Carole Bartol ..... Director, Polk County Campus
Anna Gibbs ..... Administrative Assistant

INTRODUCTION

Historical Sketch

Interest in a community college for Rutherford and Polk Counties began even before a statewide community college system was established. In 1963 the General Assembly passed Chapter 115A, General Statutes of North Carolina, establishing the Department of Community Colleges, and shortly thereafter the Rutherford County Commissioners appointed a committee to study and promote plans for a community college in the County. Their preliminary report, submitted in March 1964, recommended that the proposed College serve Rutherford and Polk Counties, that a site south of Spindale be chosen, and that the college be financed by a bond issue and a special tax levy. On September 5, 1964, Rutherford County citizens voted by a margin of over 16 to 1 in favor of a $500,000 bond issue for construction of the College, to be matched by state funds, and a property tax increase to pay the County's portion of the operating costs. The College was chartered on October 1, 1964, by the State Board of Education. The first meeting of the Board of Trustees was held on November 17, and on November 23 the Board approved the name "Isothermal Community College." Fred J. Eason was chosen by the Board as the College's first president on December 22. On July 1, 1965, the Industrial Education Center, which had been operating since 1962 as an extension of Gaston Technical Institute, became the vocational and technical division of Isothermal Community College. The College thus began operation with 66 students, some of whom received the first diplomas issued by Isothermal in exercises that August. August 1965 was also the culmination of a fund-raising drive by Rutherford and Polk County citizens and businesses for the purchase of land for the Spindale campus.

Until the new campus was ready, the vocational-technical, college transfer (begun in September 1966) and adult education divisions were scattered in a number of temporary locations in Avondale, Spindale, and Caroleen. College transfer and vocational-technical education each had about 100 students. The adult education program was boosted by the creation of the High School Diploma program in May 1967. That same year, I.C.C.'s Polk County program began with continuing education courses in Tryon. The first three buildings on the Spindale campus opened on April 8, 1968, and the College's first full-fledged graduation exercises were held on August 30. The lake and initial landscaping of the campus were completed by April 27, 1969, when the College's charter was presented. By that time 554 full-time students were enrolled. On January 11, 1970, the College was accredited by the Southern Association of Colleges and Schools.

Expansion continued with a new Occupational Education Building opening. A satellite program for Polk County was approved in September 1974, and in November 1974 Rutherford County voters passed a $1.8 million bond issue for additional construction on the Spindale campus. This enabled construction of a new vocational building with electronics facilities which opened in September 1978, and the student center/physical education building which opened in the spring of 1979. Both buildings were dedicated on October 21, 1979.President Eason retired effective June 30, 1978, and the Board of Trustees selected Dr. Ben E. Fountain, Jr., as his successor. Dr. Dillard L. Morrow served as acting president until Dr. Fountain could assume his duties in September. Growth in facilities continued with help from local business and industry which made possible such projects as the Individualized Instruction Center, opened in the fall of 1979, and the marble marker at the entrance to the campus, completed in November 1979. Generous support was also evident in the creation of the Robert W. Eaves Outstanding Teacher Award, established in 1982 by the widow of the noted Rutherford County educator.

The Polk County Campus also progressed, beginning an independent study program and college transfer courses in 1976, and obtaining classroom space in the old Jervey-Palmer Building in Tryon. A permanent site for the campus became available in October 1982, when the Polk County Commissioners granted the college 10 1/2 acres near St. Luke's Hospital. This new site was dedicated on July 25, 1983. Construction of the new facility was completed in the fall of 1989.

Under the leadership of President Dr. Willard L. Lewis III, appointed on June 9, 1986, following the retirement of Dr. Fountain (1985) and the interim service of Dr. G. Herman Porter, further expansion of the Spindale campus included the completion of the High Tech Center (1988) which houses drafting, broadcasting, advertising/graphic design and electronics engineering. The Center is also the home of public radio station WNCW, established in 1989. A second major building program resulted in The Foundation: A Center for Learning and the Arts. This 61,216 square foot facility opened in November of 1999 with a gala celebration performance of the North Carolina Symphony Orchestra. The Foundation houses conference center facilities, a 1,400 seat auditorium, and continuing education facilities with a range of services from literacy instruction to customized business and industry training.

In the 90's in conjunction with a reexamination of mission and philosophy, the college began a transformation in culture from the teaching paradigm to the learning paradigm. In seeking ways to improve learning the college dedicated resources in support of cooperative learning in the classroom as part of an ongoing commitment to developing a learning centered environment.

MISSION STATEMENT

Mission
Isothermal Community College exists to improve life through learning.

Values
In improving life through learning, we embrace the following values:
- a commitment to excellence
- nurturing an organizational climate of integrity, care and respect for individuals
- innovation, evaluation and informed change
- elimination of barriers to learning
- self-directed learning and critical thinking
- the preservation and perpetuation of our diverse cultural heritage
- serving as a catalyst for positive community growth

Vision Statement
To transform Isothermal Community College into a preeminent center recognized nationally for excellence in learning and services.

Vivid Description
- Learning outcomes will be monitored and documented for student credentials
- Learning facilitators will remove barriers and guide learners as they connect with resources, experts and learning experiences
- Options for learners will accommodate varying needs and abilities and will provide choices in support services and a variety of delivery methods any time, any place
- All employees will be involved in ongoing professional development in support of the College mission.

Isothermal Community College, a member of the North Carolina Community College System, is a comprehensive, two-year, public institution that serves the individuals in Rutherford and Polk Counties. The College offers individual courses and certificate, diploma and degree programs that enable students to transfer to four-year institutions or to acquire skills for new or continued employment, as well as to function effectively as citizens in our society. In addition, the College provides training for area business and industry, personal enrichment courses, remedial and developmental courses and community service activities.

Isothermal Community College shall be open to all eligible individuals who can benefit regardless of age, gender, socio-economic status, ethnic origin, race, religion or disabilities. The essence of the College's efforts shall be to contribute, in cooperation with other local educational systems and institutions, to a higher quality of life in the community it serves.

Accreditation
Isothermal Community College is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award associate degrees.

Inquiries relating to the accreditation status of the college may be made to Commission on Colleges, Southern Association of Colleges and Schools, 1866 Southern Lane, Decatur, Georgia 30033-4097, Telephone number 404-679-4501.

Please direct inquiries regarding college admission information to:

Admissions Office
Isothermal Community College
286 ICC Loop Road, P.O. Box 804
Spindale, North Carolina 28160-0804
Telephone: 828-286-3636 ext 288

Office Hours
The administrative offices of the College are open Monday through Friday from 8:00 a.m. to 4:30 p.m.

General Class Hours
In order to provide educational opportunities to the majority of the residents of Rutherford, Polk and contiguous counties, most academic programs are offered during both day and evening hours. Day classes are normally scheduled from 8:00 a.m. through 4:45 p.m. Monday through Friday. Evening classes usually are scheduled from 5:30 p.m. through 10:15 p.m. Monday through Thursday evenings. A limited number of special classes are offered on Friday evening and on Saturday.

Visits To The Campus

Visitors are always welcome. An information desk is maintained on the main floor of the administration building Monday through Friday. The receptionist will contact the Dean of Student Affairs to provide general information and a tour of the campus when requested, or you may arrange a tour by writing or calling the Dean of Student Affairs. When writing, please specify the time and the number of persons in your party.

NCCCS Performance Measures for Isothermal Community College

Over the past three decades, the North Carolina Community College System has utilized numerous processes to ensure public accountability for state monies spent. These processes have included fiscal audits, program audits, institutional effectiveness plans and program review.

Beginning with the 1999-2000 fiscal year, a new system of accountability based on 12 performance measures has been implemented and will become the cornerstone of public accountability. Isothermal Community College is committed to using this new system to continuously improve the quality of programs offered.

In 2002, Isothermal met 10 of the 12 performance measures and 5 of the 6 required measures qualifying the college for superior performance status and funding.

Data Source: **2002 NCCCS Critical Success Factors Report**

Performance Measure	State Performance Standard	Isothermal 2002 CSF Data	Standard Met
Progress of Basic Skills Students[1]	75%	81%	Yes[1]
Performance of College Transfer Students[1]	Equivalent to Native UNC Sophomores and Juniors (82.9%)	90%	Yes[1]
Passing Rates on Licensure/ Certification Exams for First-time Test Takers[1]	80% Aggregate 70% Individual	74% Aggregate 1 exam < 70%	No[1]
Passing Rates in Developmental Courses	70%	85%	Yes
Success Rate of Developmental Students in Subsequent College-level Courses	No statistically significant difference between developmental and non-developmental students	Developmental students 95% Non-developmental students 90%	Yes
Program Enrollment	Three-year average of 10 students per program	1 program <10	No
Student Satisfaction of Completers and Non-completers[2]	90%	99%	Yes[2]
Goal Completion of Completers [1]	95%	99%	Yes[1]
Curriculum Student Retention and Graduation	60%	69%	Yes
Employer Satisfaction with Graduates	85%	93%	Yes
Employment of Graduates[1]	94%	96.83%	Yes[1]
Business/Industry Satisfaction with Services Provided	90%	98%	Yes

1 One of the five required performance-funding measures

2 Sixth measure selected by the college

Nondiscrimination Statement
Isothermal Community College is dedicated to equality of opportunity for its staff, students, and community. Isothermal Community College does not discriminate against eligible students, employees or applicants on the grounds of race, color, religion, age, gender, national origin, or disability. Isothermal Community College is committed to this policy. Isothermal Community College supports the protection available to members of its community under all applicable Federal Laws including Title VI and Title VII of the Civil Rights Act of 1964, Equal Pay Act of 1963, Title IX of the 1972 Education Amendments, Executive Order 11246 as amended by 11375, Title VI (section 799A) and Title VIII (section 8451) of the Public Health Service Act, Age Discrimination Act, Americans With Disabilities Act of 1990 and the Rehabilitation Act of 1973.

Any member of the Isothermal Community College Community believing they have been discriminated against or desiring more information concerning these provisions should contact:

Director of Administrative Services
Isothermal Community College
P.O. Box 804
Spindale, NC 28160-0804

Sexual Harassment Policy
Isothermal Community College is committed to providing and promoting an atmosphere in which employees realize their maximum potential in the workplace and students can engage fully in the learning process. Accordingly, sexual harassment by and of both employees and students is prohibited by this policy.

Sexual harassment is defined as deliberate, unsolicited, unwelcomed verbal and/or physical conduct of a sexual nature or with sexual implications. The definition does not include personal compliments welcomed by the recipient or relationships which are freely entered into by both parties.

Isothermal Community College, as part of its continuing Affirmative Action efforts, endorses the following:

1. It is illegal and against the policies of Isothermal Community College for any employee to sexually harass another employee by (a) making unwelcomed sexual advances or requests for sexual favors or other verbal or physical conduct of a sexual nature a condition of an employee's continued employment or b) making submissions to or rejections of such conduct the basis for employment decisions affecting the employee or (c) creating an intimidating, hostile, or offensive working environment by such conduct.
2. It is against the policies of Isothermal Community College for any employee to sexually harass a student by (a) making unwelcomed sexual advances or requests for sexual favors or other verbal or physical conduct of a sexual nature a condition of a student's grade, progress, or recommendation or (b) creating an intimidating, hostile, or offensive learning environment by such conduct.
3. It is against the policies of Isothermal Community College for any student to sexually harass another student or college employee by (a) making unwelcomed sexual advances or by (b) creating an intimidating, hostile, or offensive environment by such conduct.

Sexual harassment shall be deemed a form of discrimination based on sex as prohibited by Section 703 of Title VII of the Civil Rights Act, and North Carolina General Statute 126-16 (in the case of employees) and Title IX of the Education Amendments Act of 1972 (in the case of students).

Employees of Isothermal Community College wishing to discuss a possible sexual harassment incident should contact the Affirmative Action/Title IX Coordinator.

Isothermal Community College students who have a complaint or grievance regarding sexual harassment should contact the Dean of Student Affairs.

THE FOUNDATION PERFORMING ARTS AND CONFERENCE CENTER

Each year, a variety of events featuring live performances take place in the Frank & Mabel West Auditorium located in the Performing Arts & Conference Center. Disciplines include jazz, blues, country and big band music, dance, theatre, family variety shows, educational theatre for young audiences, and guest lecturers in the literary arts and more. Most events are part of The Foundation Series and the Cultural Events Series, but programming by community groups is also available. Ticket charges range from free to $20+, with some special rates available to students. All programming is made available to the general public. The Center is located on the second and third floors of The Foundation Building. The main lobby and The Foundation Box Office are located at the second floor entrance just off the parking lot. For ticket information call (828) 286-9990.

POLK COUNTY CAMPUS

The Polk County Campus offers a limited number of credit courses. Students may choose to complete specialized course work at the Spindale campus or prepare for transfer to a four-year institution.

A wide variety of non-credit courses (continuing education) ranges from self-enrichment classes to those which offer training to volunteer firemen, rescue personnel, and nursing assistants. Courses to improve occupational skills are offered as well. Adult Basic Education, Adult High School, and General Educational Development (GED) programs are available. English as a Second Language (ESL) classes are offered for persons whose native language is not English.

Bulletins listing credit and non-credit courses are mailed out periodically. News releases describing various courses and special events are placed in local newspapers.

The Polk Campus library is available for use by students as well as other members of the community.

The Polk County Campus is fortunate to have dedicated volunteers actively participating in the Polk County Campus I.C.C. Foundation, Inc. The Foundation has a significant role in fundraising, provides scholarship aid, and promotes Isothermal Community College in the community.

Regular hours at the Polk County Campus are Monday through Thursday, 8:00 a.m. to 9:30 p.m., Friday from 8:00 a.m. to 4:30 p.m., and other prearranged times including weekends. Additional information may be obtained by visiting the campus or calling 894-3092.

Polk County Campus
Isothermal Community College
1255 West Mills Street
Columbus, NC 28722

Curriculum Classes

A limited number of classes are offered for college credit through the Polk County Campus.

Continuing Education

The Continuing Education Division provides educational non-credit opportunities for adults who desire to learn occupational skills, to upgrade their capabilities for professional success, or to enrich their personal lives. In order to accommodate a variety of student needs and interests, Continuing Education classes include computer, Certified Nursing Assistant, Emergency Medical Technician (EMT), Firefighter Certification, and a wide range of special interest classes.

Adult High School Diploma Program

Isothermal Community College in cooperation with the Polk County Schools has developed an Adult High School Diploma Program which provides an adult the opportunity to complete high school. There are no fees for these classes.

Requirements for an adult high school diploma include:

(1) Satisfactory completion of units in English, mathematics, social studies, sciences, and health.
(2) Satisfactory completion of a variety of elective units.
(3) Passing score on the North Carolina Competency Test.

Students may choose to study at the Polk Campus or at other locations in the county. Each student in the program arranges his own study schedule and proceeds at his own individual pace.

Adult Basic Education

Adult Basic Education is a program designed to improve skills in reading, writing and math. These skills are related to practical situations that adults deal with in everyday life. The Adult Basic Education instructors work closely with the Polk County Literacy Council which provides tutors for students desiring one-on-one instruction.

Day and evening classes are available. There is no charge for these classes.

Upon completion of the Adult Basic Education program, a student may enroll in the Adult High School Diploma or GED program. High School completion programs are held at the same times and places as the Adult Basic Education classes.

General Educational Development Program (GED)

The GED is a high school completion program. The GED test is offered on the Spindale Campus. Students may enroll on the Polk Campus to study and complete their practice tests. There is a charge of $7.50 for the GED test.

A student must be a resident of North Carolina to take the actual GED test in North Carolina.

English as a Second Language (ESL)

The Polk County Campus has instruction five days and four evenings a week for those whose native language is not English. Instructors work with students in a lab-type setting which allows each student to proceed at his/her own pace. Specially trained volunteers help students to work with computer programs designed for ESL students. In addition, students learn basic computer skills. The college has had generous cooperation from Polk County Literacy Council and grants from the Polk County Community Foundation in setting up this program.

ADMISSIONS

ADMISSION REQUIREMENTS AND PROCEDURES

Isothermal operates an "Open Door" admission policy. Applicants are required to have a high school diploma or its equivalent and to have passed the North Carolina Competency Test. The following are specific requirements for degree, diploma, and certificate programs.

Associate Degree and Diploma Applicants:

1. Complete an application for admission.
2. Provide official high school transcript or GED score.
3. Submit official transcript(s) from all colleges you have attended.
4. Complete the ASSET or COMPASS placement test.
   Applicants who have completed college level courses in English, reading, and mathematics at an accredited college(s) with a grade of "C" or better may be exempt from the test.

Certificate Applicants:

1. Complete an application for admission.
2. Provide official high school transcript or GED score.
3. Submit official transcript(s) from all colleges you have attended.
4. The ASSET or COMPASS placement test may be required in selected certificate programs.
   Applicants who have completed college level courses in English, reading, and mathematics at an accredited college(s) with a grade of "C" or better may be exempt from the test.

Associate Degree in Nursing applicants are required to:

1. Complete an application for admission.
2. Provide official high school transcript or GED score.
3. Submit official transcript(s) from all colleges you have attended. College courses accepted for transfer must reflect a 2.0 grade point average.
4. Complete ASSET or COMPASS placement test which will be administered at the college to which you apply.
   Applicants who have completed college level courses in English, reading, and mathematics at an accredited college(s) with a grade of "C" or better may be exempt from the test.
   ***Specific admission requirements and deadlines for the Associate Degree in Nursing program may be obtained in the Career Center.**

Practical Nursing applicants are required to:

1. Complete an application for admission.
2. Provide official high school transcript or GED score.
3. Submit official transcript(s) from all colleges you have attended. College courses accepted for transfer must reflect a 2.0 grade point average.
4. Complete ASSET or COMPASS placement test which includes Reading, English/Writing, and Numerical skills.
   Applicants who have completed college level courses in English, reading, and mathematics at an accredited college(s) with a grade of "C" or better may be exempt from the test.
   ***Specific admission requirements and deadlines for the Practical Nurse Education program may be obtained in the Career Center.**

Veterans and Veterans' Dependents receiving veterans' educational benefits must provide transcripts (high school and college) of all education before certifications can be processed.

Students applying for financial aid must provide transcripts (high school and college) of all education.

ADMISSION PROCEDURE FOR FOREIGN STUDENTS

In addition to the general admission requirements, all students entering the country on a I-20 Visa are required to:

1. Complete an affidavit of support. This affidavit should be completed by the applicant's sponsor or parent, or by the applicant if they are self-supporting. This document requires a notarized signature and must be accompanied by an original letter from the sponsor's bank showing adequate financial support to cover educational and living costs for the student for the duration of his or her studies.
2. Submit official copies of all secondary and post-secondary transcripts. These transcripts should be sent directly to Isothermal Communtiy College or included with the Application for Admission in the respective school's sealed envelope(s). All transcripts must be translated if necessary. Cost of translation is the responsibility of the student.
3. Provide official reports of TOEFL scores (500 or higher) and the Math, Reading and Writing portions of the ASSET placement test offered by Isothermal Community College.
4. Provide proof of current legal non-immigrant status in the United States for applicants who are already in the U.S. This includes a photocopy of a valid non-immigrant visa in a current passport, and a photocopy of the Form I-94 (Arrival/Departure card, front and back).

TRANSFER ADMISSION REQUIREMENTS

Transfer applicants must also meet the general admission requirements outlined previously. Students transferring a grade of C or better in college English and math may be exempt from the placement test. Each applicant requesting transfer of credits from another institution will be considered on an individual basis (see Transfer of Credit under Academic Procedures and Policies). All transfer students will enter the College with good academic standing. Once enrolled academic standing will be determined by grades on course work completed solely at Isothermal.

TRANSIENT STUDENTS

Transient students who are enrolling at Isothermal Community College must meet the following requirements:

1. Complete an application for admission.
2. Submit official college transcript(s) showing appropriate prerequisite courses have been completed.
3. Submit a letter granting approval to attend Isothermal from the college they are attending or plan to attend.

CONDITIONAL ADMISSION

Students are cautioned that unless all applicable supporting documents for admission are acknowledged by the Admissions Office prior to their initial registration, permission to register for classes may be denied. In the case of extenuating circumstances, a conditional admission to the College may be granted. Conditions must be met within a period of one semester from the day of registration or the student may be withdrawn from the College.

READMISSION

Any student having been suspended for disciplinary reasons from the College must submit a request for readmission to the Dean of Student Affairs.

SPECIAL CREDIT

A special credit student is defined as one who is enrolled in curriculum credit courses but who is not working toward a degree or diploma. Special credit students will be allowed to register for courses provided that prerequisite requirements are met.

Students may enroll in the college as special credit students by submitting an application for admission. Special Credit students enrolling in courses requiring the minimum proficiency in English, reading or math must provide one of the following: 1. An official college transcript showing the appropriate prerequisite courses have been completed with at least a grade of 'C', or 2. Satisfactory Asset or Compass placement test scores. When 15 credit hours have been accumulated, the student will be counseled to declare a major and submit proof of high school graduation or GED completion. Students will not be allowed to continue in curriculum courses until the College receives proof of graduation. Special credit students will be asked to submit proof of high school graduation or equivalent and meet placement criteria if they desire to be reclassified as curriculum students with intent to pursue and earn a degree, diploma, or certificate.

ADMISSION OF HIGH SCHOOL STUDENTS (DUAL ENROLLMENT)

Students enrolled in high school may take college level classes for enrichment and advanced placement under two programs. The Dual Enrollment Program allows selected students to enroll with the approval of their high school principal and the Admissions Office. Students may also enroll under the Cooperative Agreement Program which is designed for the more advanced high school student. This program also requires the approval of the principal and the Admissions Office of the College. Students planning to enroll under either program must take the ASSET placement test before enrolling in math, English, or any course requiring placement testing.

DEVELOPMENTAL PLACEMENT POLICY

Degree seeking students entering Isothermal Community College in the Arts and Sciences, Business Sciences, and Applied Sciences and Technology programs must complete one or more developmental courses in the areas of English, reading or mathematics as a result of any one of the following conditions:

1. A scaled score below the cut-off scores established by the College on any of the ASSET or COMPASS placement tests (Writing Skills, Reading Skills, Numerical Skills, Elementary, Intermediate, or College Algebra).
2. Referral by a faculty member to developmental courses when a student's work in curriculum courses demonstrates academic skill deficiencies in one or more of the areas of English, reading or mathematics.

Students should be encouraged to enroll in required developmental courses during the first semester of their enrollment because of reading and writing requirements in college level courses.

Transfer students who have completed college level or developmental courses in English, reading or mathematics with a grade of "C" or better will be exempted from placement testing in the area(s) they have completed.

Students must achieve a grade of "C" or better in required developmental courses to advance into college curriculum courses. Upon completion of the required developmental courses, students may enroll in the regular sequence of English and mathematics courses. Because credits for developmental courses are used as institutional credits only, they cannot be counted toward graduation. Developmental course credits determine course load for payment, eligibility for financial aid, and/or classification of a full-time student. Any exceptions to the overall policy must be approved by the Director of Developmental Education and Academic Support.

ACADEMIC POLICIES AND PROCEDURES

Regulations and Requirements

In publishing these regulations, the College does not recognize any implied contract as having validity beyond the present academic catalog year. The President reserves the right to make changes in curricula and in regulations when, in his judgment, such changes are for the best interest of the students and the College. Until revised, the current catalog is the catalog of record for all students seeking to complete certificate, diplomas, or degrees in the fall of 2003 or later. Students enrolled prior to the fall of 2003 must confer with their advisor and the Office of Student Affairs in order to determine semester equivalents of quarter course credits.

Each student is responsible for observing the procedures, regulations, and requirements of the College as they are announced here and in other official College publications. This section sets forth some of the requirements and regulations which are of particular concern to students, but it is not intended to constitute a complete list of all such regulations and requirements. Unless otherwise stated, these regulations uniformly govern the academic progress of the student from his first year in the College through the final semester. It must be emphasized that the staff of the College will gladly assist students with details of their program or other academic problems, but that such assistance does not relieve the students of their individual responsibility for meeting the requirements and observing the regulations of the College.

Registration

The College operates on the semester system. Registration dates are listed in the Academic Calendar at the front of this catalog. All students are required to register in accordance with the procedures and calendar established for the current year. Registration for classes which begin at a time other than the beginning of a semester will be completed on an individual basis.

Registration Clearance

Students are responsible for obtaining registration clearance for unpaid fines or loans prior to registration. Students on academic probation or suspension must also have clearance.

Auditing Courses

Students who wish to audit courses must register through the regular procedure. Audits will be charged the same fee as students taking courses for credit. AN AUDIT CANNOT BE CHANGED TO CREDIT OR CREDIT TO AUDIT AFTER THE DEADLINE FOR ADDING COURSES. Courses taken as an audit may be repeated for credit only. No curriculum course may be audited more than once. (See "Repeating Courses")

Student Records

Isothermal Community College in the execution of its responsibilities to students, must maintain accurate and confidential student records. The Office of Student Affairs has the responsibility for maintaining these records in accordance with existing state laws, College policy, and the Family Educational Rights and Privacy Act of 1974 as amended. Students are notified annually of their rights through the Student Handbook.

Student Academic Record

The Admissions and Records Office will develop and maintain a permanent academic record for each curriculum student who enrolls in the College. This record will include name, address, social security number, date of birth, sex and major. The academic portion of the record will include courses taken, grades, hours attempted, hours earned, quality points, quality point averages, courses and credits transferred (if applicable), Dean's List, academic probation or suspension and degrees, diplomas or certificates earned. A transcript(s) of the official academic record may be released or obtained by the student upon written request to the Student Records Office. An official transcript will not be released unless all tuition, fees and other obligations due the College have been satisfied.

Educational Records And Privacy Rights

Isothermal Community College accords all the rights under the law to students who are declared independent. No one outside the institution shall have access to nor will the institution disclose any information from students' education records without the written consent of students except to personnel within the institution, to accrediting agencies carrying out their accreditation function, to persons in compliance with a judicial order, and to persons in an emergency in order to protect the health or safety of students or other persons. All these exceptions are permitted under the Act.

Within the institution only those members, individually or collectively, acting in the students' educational interest are allowed access to student education records. These members include personnel in the Office of Student Affairs Admission/ Records, Financial Aid, Dean of Students and the Career and Testing Center) and academic personnel within the limitations of their need to know.

At its discretion, Isothermal may provide Directory Information in accordance with the provisions of the Act to include: student name, address, telephone number, date and place of birth, major field of study, dates of attendance, degrees, and awards received, the most recent previous educational agency or institution attended by the student, participation in officially recognized activities, and other similar information such as a photograph. Students may withhold Directory Information by notifying the Dean of Students (or designee) in writing within two weeks after the first day of class for any semester.

The law provides students with the right to inspect and review information contained in their education records, to challenge the contents of their education records, to have a hearing if the outcome of the challenge is unsatisfactory, and to submit explanatory statements for inclusion in their files if the decision of the hearing panel is unacceptable. The Dean of Students at Isothermal has been designated by the institution to coordinate the inspection and review procedures for student education records, which include admission, personal, academic, and financial files. Students wishing to review their education records must make written requests to the Dean of Students listing the item or items of interest.

Students may not inspect and review the following as outlined by the Act: financial information submitted by their parents; confidential letters and recommendations associated with admissions, employment or job placement to which they have waived their rights of inspection and review; or education records containing information about more than one student, in which case the institution will permit access only to that part of the record which pertains to the inquiring student.

Students who believe that their education records contain information that is inaccurate or misleading, or is otherwise in violation of their privacy or other rights should contact the Dean of Students (or designee).

Students who believe that the adjudications of their challenges were unfair or not in keeping with the provisions of the Act may request, in writing, assistance from the president of the institution to aid them in filing complaints with the Family Educational Rights and Privacy Act Office (FERPA).

The above is a general statement concerning student records. The complete policy and the guidelines and procedures used to enforce the policy are located in the Student Affairs Office and may be examined upon request. The policy is also included in the Student Handbook.

Transcript of Record

The transcript is a statement of the official academic record of the student while attending the College. The College will not release an official transcript unless all tuition, fees, and other obligations due to the College have been cleared. Transcript(s) will not be released without the written consent of the student. (See section entitled **Student Records**).

Program Changes
Program changes should be initiated by the student through his/her advisor or the Admissions Office. In some cases these changes may be initiated by the Committee on Academic Continuation or other college personnel.

Drop/Add
In order to officially drop or add a course these steps should be followed:

1. Secure a Schedule Change form from the Division Secretary.
2. Have a Drop/Add approved by faculty advisor and instructor.
3. Record the Drop/Add in the computer.

NOTE: Students will not be allowed to add or change sections after the deadline listed in the Academic Calendar and Semester Schedule book. Students may officially drop a course(s) without academic penalty and receive a grade of 'W' if this drop is made before the drop deadline as published in the college calendar. The Vice President for Academic and Student Affairs may approve a drop after the deadline.

Withdrawal From College
All Official Withdrawals Must:

1. Be made through the Advisor before the final exam period begins.
2. Be made in person if possible.
3. Be recorded by the Student Records Office to be official.
4. Receive a grade of "W". Students who leave class without officially withdrawing may receive a grade of "F".

Withdrawal Date
The official withdrawal date will be the exact date of the request for withdrawal.

TUITION AND FEES
Isothermal Community College receives financial support from local, state, and federal sources, allowing each student an educational opportunity at a minimum cost. Tuition is set by the State Board of Community Colleges and is subject to change without notice. Cost of textbooks and supplies are additional expenses which vary according to the program of study. The payment of all fees is required at the time of registration. If fees cannot be paid during registration, the student is required to make arrangements with the Business Office.

Student Activity Fee
A student activity fee is charged fall and spring semesters for students registering on the Spindale campus. Enrollees in mini courses and other off-campus courses will not be charged the student activity fee. Any student not required to pay the fee can, however, elect to do so if he/she desires. There is no student activity fee for summer semester. The proceeds from this fee are budgeted cooperatively by students and administration in support of co-curricular activities.

Student Identification Cards
Student Identification Cards are issued without charge to each student who enrolls for 9 or more semester hours and pays the student activity fee. Students who enroll for less than 9 semester hours may purchase a card by paying the activity fee at registration.

This ID card will admit students to social, cultural, educational and athletic events sponsored by the College. Students are advised that, without the activity card, admission charges may be assessed at certain student activity functions.

Residence Status For Tuition Payment
Applicants are responsible for submission of information needed by the institution to determine resident classification.

North Carolina G.S. 116-143.1 requires that to qualify for in-state tuition a legal resident must have maintained his/her domicile (one's permanent dwelling place of indefinite duration) in North Carolina for at least 12 months immediately prior to his/her classification as a resident for tuition purposes. N.C. G.S. 116-143.1 also set forth statutory definitions, rules, and special provisions for determining resident status for tuition purposes. Classification of in-state or out-of-state for tuition purposes will be based on statements and supportive evidence provided by each applicant. In some cases the applicant may be asked to furnish additional information to support the residency claim. Failure to provide requested information for residency classification can result in classification as non-resident. Students classified as out-of-state for tuition are responsible for applying to the Director of Enrollment Management for reclassification to in-state status at the conclusion of the 12 month waiting period. No prior notice will be given by the institution. The change in classification, if deemed to be warranted, shall be effective at the next academic semester following the date of application for reclassification. Regulations concerning the classification of students by residence are set forth in A Manual to Assist the Public Higher Educations institutions of North Carolina in the Matter of Student Residence Classification for Tuition Purposes. A copy of the manual is available in the Student Affairs Office.

The requisite domiciliary intent is tested by evaluating relevant, objectively verifiable conduct which may constitute a manifestation of the state of mind of the actor. The following types of inquiries, or combinations thereof, may be significant, though no one item, nor any combination of items, will necessarily control resolution of the question:

a. Living or not living in the home of one's parents.
b. Place where one voted or registered to vote.
c. Place where one has served on jury duty.
d. Place where one has registered and/or licensed a car.
e. Place where one last acquired a driver's license.
f. Place where one has filed state income tax returns.
g. Place where one maintains personal property and last listed such for taxation.
h. Place where one owns a home or other real property and pays taxes thereon.
i. Place where one spends substantial parts of available vacation time.
j. Place where one is or was employed or working gainfully.
k. Place where one maintains membership in one or more professional associations, unions, and other organizations.
l. Place where one last attended or graduated from high school
m. Place where one resided before enrolling in an institution of higher education.
n. Sources of one's financial support.

Senior Citizens

North Carolina residents 65 years of age and older shall be exempt from the payment of curriculum tuition, student activity fee, and extension registration fees in accordance with Chapter 981 of the 1977 Session Laws.

TUITION REFUND POLICY AND PROCEDURES

Tuition Refunds

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

(1) (a) A 100 percent refund shall be made if the student officially withdraws prior to the first day of class(es) of the academic semester as noted in the College calendar. Also, a student is eligible for a 100 percent refund if the class in which the student is officially registered fails to "make" due to insufficient enrollment.

(b) 75 percent refund shall be made if the student officially withdraws from the class(es) prior to or on the official 10 percent point of the semester.

(c) For classes beginning at times other than the first week (seven calendar days) of the semester a 100 percent refund shall be made if the student officially withdraws from the class prior to the first class meeting. A 75 percent refund shall be made if the student officially withdraws from the class prior to or on the 10 percent point of the class.

(2) To comply with applicable federal regulations regarding refunds, federal regulations will supercede state refund regulations.

(3) Where a student having paid the required tuition for a semester, dies during the semester (prior to or on the last day of examinations of the college the student was attending), all tuition and fees for that semester may be refunded to the estate of the deceased.

Procedures For Requesting A Refund

(1) Student must officially withdraw from class(es) using a drop form with proper signatures.
(2) Drop(s) must be recorded in the computer data system.
(3) Refund will be mailed to student by the Business Office.

Academic Probation and Suspension

A student performing below the minimum satisfactory academic level will be placed on academic probation for the following semester. A student whose GPA falls below the minimum satisfactory level at the end of the academic probation semester may be placed on suspension for one semester.

Appeal of Suspension/Conditional Enrollment

A student who is placed on academic suspension may appeal the suspension to the Dean of Students who may 1) approve re-enrollment, 2) refer the student to a counselor, or 3) refer the student to the Admission Committee for the appeal. If the appeal is accepted, the student will be allowed to enroll under conditional enrollment status. The student's enrollment status will then be determined on a semester by semester basis until the student reaches a satisfactory academic level. This determination will be made by the Dean of Students or Admission Committee.

Re-Entering After Suspension/Conditional Enrollment

After observing the suspension period, a student must have a program of study approved by the Dean of Student Affairs or the Admission Committee before re-entering. After re-entering, a student's enrollment status will be determined on a semester by semester basis until the minimum satisfactory academic level is reached. The student will also remain on conditional enrollment status until the minimum satisfactory academic level is reached.

Appeals
A student may appeal decisions made by the Dean of Students or the Admission Committee to the President of the College.

The following schedule of semester hours attempted and grade point average will be used to determine academic probation, suspension, and conditional admission:

DEGREE PROGRAMS

Cumulative Semester Hours Attempted	GPA Below
6-19	1.50
20-39	1.75
40-57	1.95
58-above	2.00

DIPLOMA PROGRAMS

Cumulative Semester Hours Attempted	GPA Below
6-16	1.50
17-32	1.90
33-above	2.00

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

Academic Probation and Suspension Policy for the Practical Nurse Education Program
The Academic Probation and Suspension Policy for the Practical Nurse Education Program may be obtained from the Nursing Department or the Dean of Students.

The Academic Probation and Suspension Policy for the Associate Degree Nursing Program may be obtained from the Nursing Department or the Dean of Students.

Student Classifications
Freshman—Earned less than 30 credit hours
Sophomore—Earned 30 credit hours or more
Part-time—Enrolled for less than 12 credit hours

Academic Load	Maximum Hours
Arts and Sciences	19 credit hours
Business Sciences	21 credit hours
Applied Sciences	21 credit hours

Approval from the appropriate Dean is required to register for more than the maximum of hours at this or any other institution.

Class Attendance
Regular class attendance is a student obligation. The student is also responsible for all work, including tests and written assignments, and for all class meetings. No right or privilege exists that permits a student to be absent from any given number of class meetings.

Instructors establish their own class attendance policy. This attendance policy is explained in detail at the first class meeting and includes the relationship of absences to grades.

Students who stop going to class without officially withdrawing may receive a grade of "F" at the end of the semester.

Examinations
Final examinations in all subject areas are held at the end of each semester.

Grading System
Isothermal Community College is on a semester system. One hour of credit is earned for each lecture hour per week. Where laboratory is required, one credit hour is earned for at least two contact hours. Where shop/clinical/practicum is required, one credit hour is earned for three contact hours.

The grading system is as follows:

Grade Significance		Grade Points
A	Excellence	4 per semester hour
B	Above Average	3 per semester hour
C	Average	2 per semester hour
D	Below Average	1 per semester hour
F	Failed	0 per semester hour
W	Withdrawn	0 per semester hour
I	Incomplete	0 per semester hour
Y	No Credit—Audit	0 per semester hour
S	Satisfactory	0 per semester hour
U	Unsatisfactory	0 per semester hour
P	*Progress	0 per semester hour
CE	Credit By Examination	0 per semester hour
DE	Diagnostic Examination	0 per semester hour
NS	No Show	0 per semester hour
CR	Transfer Credit	0 per semester hour
R	Repeat	0 per semester hour

An asterisk (*) beside a letter grade indicates developmental course work, institutional credits only.
A percent (%) beside a letter grade indicates student was granted an academic fresh start, does not count in GPA calculation.
A number (#) beside a "W" grade indicates student was administratively dropped, does not count in GPA calculation.

Grade Reports
Final grade reports are furnished to the student by mail at the close of Fall, Spring, and Summer terms.

Progress Policy
*The "P" (PROGRESS) grade allows a student in a developmental education course, who has attended regularly and made satisfactory progress, to continue the course in a subsequent semester until all the course requirements are met. The student must register for the course in the subsequent semester. The hours credit and hours attempted will not be given until the course is completed. The grade of "P" may be assigned only the first semester the student enrolls in a developmental course. Exceptions to continue the "P" into a third semester must have the written permission of the instructor and the appropriate Dean.

Grade Appeals
A student, after conferring with the instructor concerned, may present in writing to the appropriate instructional Dean an appeal of a course grade. Appeals may not be made after the last day of classes of the next succeeding semester. The Dean will refer the appeal to the Vice President for Academic and Student Affairs. A change of grade will not be made except as a result of the Vice President's decision, which is final.

Incomplete Policy
A grade of "I" is assigned when the course work is incomplete. This grade must be removed by completing the course before the end of the following semester or the grade automatically becomes an "F" on the permanent record. Instructors may extend the time for removing the incomplete by written notification to the records office. Incompletes earned in the spring term will have until the end of fall term to complete.

Repeating Courses
Courses with earned grades of "D" or "F" may be repeated. Courses with earned grade of "C" or better may be repeated only by special permission from the Vice President for Academic and Student Affairs. When a course has been repeated, the higher grade will be counted. Physical education credit classes may not be taken for a grade of "audit." Credit students may not receive more than five physical education credits. Exceptions for physical education majors may be granted by the Vice President for Academic and Student Affairs. Non-credit recreation classes offered through Continuing Education may be repeated at will. Courses taken as audit may be repeated for credit only. No course may be audited more than once.

Students receiving Veterans benefits can only receive benefits for repeated courses if the prior grade is an "F".

Academic Fresh Start Policy

Any Isothermal Community College student who has experienced a lapse in enrollment at Isothermal for a period of at least three consecutive academic years may petition in writing to have grades older than three years old and below "C" disregarded in calculating the GPA. Following re-enrollment the student must complete at least 12 semester hours with a minimum grade point average of 2.0 prior to requesting an academic fresh start.

In some instances students who change majors and complete 2 academic semesters with at least 12 semester hours and a 2.0 GPA in the new major may petition for an academic fresh start even if there has not been a lapse in enrollment.

The student requesting a fresh start should complete an application for Academic Fresh Start that is available in the Student Affairs office. Students may be granted an academic fresh start only once. An academic review committee will consider the request and determine the student's eligibility for grade forgiveness. If the request is approved, the grades will be removed from GPA calculation. Students transferring to another college should contact the institution to determine the impact of Academic Fresh Start on transfer. Fresh start GPA calculations are not used in determining eligibility for student financial aid.

AWARDING OF CREDIT

Transfer of credit for educational work taken at a regionally accredited institution may be accepted. Previous course work must be submitted on an official transcript. Credit will normally be allowed for applicable courses in which a grade of "C" or higher has been earned. Grades of "D" may be considered for transfer in sequence courses or special cases. In all cases the cumulative grade point average on all courses accepted must be at least 2.0 ("C" equivalent). Grades of previous enrollments will not be used in the grade point calculation of Isothermal Community College. Course work is evaluated according to the student's selected program. Time and program selection may be a factor in determining credit. Some technical credits 5 years or more may be subject to review by the Records Office and appropriate faculty/dean. Courses under the 5 year limitation are determined and reviewed by Division Deans and a list is maintained in the Records Office. Students may be requested to provide prior course descriptions and/or documentation demonstrating required knowledge before credits are accepted. Note: Students requiring further math classes are STRONGLY advised to take a refresher course if it has been more than two years since completing their last math course.

Results of the transfer of credit evaluation may be appealed to the Committee on Admissions, Academic Continuation, and Records.

Transfer students must earn 50% of the credits required for graduation in their particular program at Isothermal Community College (see Graduation Requirements).

All transfer students will enter the college with good academic standing. Once enrolled, academic standing will be determined by grades on course work done solely at Isothermal.

Transfer of Credit Within the Institution

Students transferring from one curriculum to another within the College may be handled in the same manner as transfer credits from another institution. Courses designed for satisfaction of Associate of Arts and Associate of Science degree requirements may be accepted in Associate of Applied Science degree programs; however, courses designed for career preparation in Associate of Applied Science degrees, diploma, and certificates may not apply to Associate of Arts and Associate of Science programs. A list of courses approved for Arts and Sciences credit is maintained in the office of the Dean of Arts and Sciences. Cumulative grade point averages are normally continued when changing programs. The GPA for graduation is based only on the courses required in the program.

Other Credit

Credit may also be given in the occupational areas for noncollegiate and military educational experiences. These educational experiences will be evaluated on the basis of the current editions of College Credit Recommendations and The Guide To Evaluation of Educational Experiences in The Armed Services. Time and program selection may be a factor in determining credit. A maximum of 16 semester hours may be awarded. (Also see requirements for the Occupational Education Associate Program)

CREDIT BY EXAMINATION

Any student at Isothermal Community College can receive course credit by examination through one of the following three methods: 1) Challenge Exam, 2) CLEP Exam, or 3) Advanced Placement Exams.

Challenge Exam:

A student may request permission through the appropriate instructional dean to challenge a course through a comprehensive exam for credit. Only those courses for which tests have been developed and have been filed in the dean's office may be challenged. The procedure for challenging is as follows:

1. The student must be registered for the course, have paid proper tuition, and have approval of the instructor.
2. If the exam is failed, the student must continue the course.
3. A course may be challenged only once and must be done during the first week of class.
4. If the exam is passed, the student's grade must be submitted to the Student Records Office during the first two weeks of the semester. This grade will be recorded as a "CE".

CLEP Exam:
A student can also receive course credit through the College Level Examination Program. These exams were designed for persons who have gained knowledge through experiential learning or personal study and have not yet received college credit for their learning. The student must make arrangements to take the exam and have the score sent to the Registrar (contact the Career Center in Student Affairs for test applications and information on testing centers). Credits will be given only for subject examinations, not for the general examinations, and then only according to the following chart:

CLEP CHART

Exam	Minimum Score For Awarding Credit	ICC Course(s) Comparable	Semester Hours
Prin of Accounting	50	ACC 120-121	8
American Government	50	POL 120	3
History of U.S. I	50	HIS 131	3
History of U.S. II	50	HIS 132	3
American Literature	50	ENG 231, 232	6
Biology, General	50	BIO 111, 112,	8
Calculus, with Elementary Functions	50	MAT 271, 272	8
Chemistry, General	50	CHM 151, 152,	8
College Algebra	50	MAT 161	3
Trigonometry	50	MAT 162	3
College Algebra & Trigonometry	50	MAT 161, 162	6
College Spanish level I	50	SPA 111, 112	8
*Level II	50	SPA 211, 212	8
Information Systems and Computer Applications	50	CIS 110	3
English Literature	50	ENG 241,242	6
Freshman College Composition	50	ENG 111, 113	6
Principles of Marketing	50	MKT 120	3
Principles of Macroeconomics	50	ECO 252	3
Principles of Microeconomics	50	ECO 251	3
Introduction to Psychology	50	PSY 150	3
Introduction to Sociology	50	SOC 210	3
Western Civilization I	50	HIS 111	3
Western Civilization II	50	HIS 112	3

*If Level II of a Foreign Language is taken without Level I, then credit for both levels, (i.e., 16 semester hours) will be awarded if the necessary minimum score is attained.

Advanced Placement (AP) Examination
If a student has taken Advanced Placement courses in high school and the respective exam with a grade of (3) or higher on the exam, then the student can receive college credit for that score. (Example: A score of at least 3 on the biology AP exam would entitle a student to receive 8 semester hours credit for BIO 111 and 112.) (Note: Transfer institutions may have different policies in granting AP credit.)

Dean's List
Dean's List is designed to recognize all students whose academic performance is outstanding. In order to qualify for the Dean's List, a student must carry at least twelve (12) semester hours of credit during the Fall or Spring terms; or at least nine (9) semester hours of credit during the Summer term and maintain a 3.25 grade point average for the semester. Developmental Education hours do not count toward hours earned for the Dean's List.

Director's List
The Director's List recognizes the academic performance of students who have enrolled in Developmental Education. In order to qualify for the Director's List, a student must carry at least twelve (12) semester hours including one or more developmental courses. The student must also maintain a 3.25 grade point average for the semester.

GRADUATION

Requirements
In order to qualify for a degree, diploma, or certificate in their program of study, the student must:

1) Complete all of the required courses as outlined in the official Curriculum Standards,
2) Earn the minimum required total semester hours, and
3) Maintain a grade point average of 2.00 or better in their program of study.
4) Submit an application for graduation.

The student is responsible for monitoring his/her program toward graduation. The college catalog of record for graduation evaluation will be the current catalog. All students graduating after summer 1997 must graduate under the semester requirements.

In the case of students transferring into Isothermal Community College, at least half of the credits required for graduation must be earned at Isothermal Community College.

Course Substitutions
Course substitutions may be approved to fulfill graduation requirements provided the substitution is appropriate to the student's program and a comparable course(s) offered. In all cases course substitutions must be consistent with the program requirements as outlined in the Curriculum Standards published by the North Carolina Community College System. Each student is limited to nine (9) credit hours of substitutions; however, in cases where courses have been discontinued additional substitutions may be approved. All course substitutions must be approved by the appropriate instructional dean and the Vice President for Academic and Student Affairs and recorded in the Student Records Office.

Graduation Procedure
Students are expected to file graduation applications with the Student Records Office at least one semester preceding the completion of degree requirements. Commencement is held at the conclusion of the spring semester. A diploma fee is charged to each graduating student who wishes to purchase a diploma. The specific date of the commencement exercise is listed in the College Calendar in front of this catalog. All students who have completed degree requirements since the previous commencement are expected to participate in graduation exercises.

Graduation With Honors
Students who complete a degree, diploma or certificate program with a grade point average of 4.0 will graduate with High Honors. The student who earns a grade point average of 3.50 to 3.99 will graduate with Honors.

Graduation Orders
Graduation applicants will be notified by mail concerning orders for caps, gowns, diplomas, rings, and invitations. Orders are placed in the bookstore.

HONORS

Awards Day
Awards Day is an annual assembly held to recognize students whose scholarship, leadership, citizenship and service have been meritorious. Appropriate certificates, trophies, or plaques and letters of citation are presented to the winners.

Who's Who Among Students in American Junior Colleges
Annually, a directory recognizing outstanding campus leaders from over 500 junior colleges in the 50 states and the District of Columbia is published in Tuscaloosa, Alabama. Only second-year college students are eligible for nomination. Nominees are selected each year by a faculty committee composed of representatives from each department of the College. The number of nominees is determined by the national office and is based on current enrollment. The selection committee is instructed to consider students whose academic standing, service to the community, leadership in extracurricular activities and future potential are decidedly above average. The winners submit biographical information which is included in the Directory. They receive certificates suitable for framing.

Outstanding Student Award

In order to recognize students who display excellence, the Outstanding Student Award will be presented each semester in the following categories: full-time students in business, arts and sciences, applied sciences (degree and diploma), developmental education, and full-time or part-time students in the adult high school program. Recognition certificates will be presented in the fifteenth week of the semester.

STUDENT AFFAIRS

Introduction

The Office of Student Affairs provides a professional staff, varied programs and services to assist students in achieving their goals. Effective leadership, coordination and management ensure that these programs and services are designed and delivered to facilitate student learning.

Mission Statement

The Office of Student Affairs supports the mission of Isothermal Community College by helping students identify, pursue and achieve their goals.

Goals

1. To provide quality programs and services which contribute to student success.
2. To enhance the quality of student life.

The Student Center

The hub of student interest and activity is the Student Center which is designed to stimulate social interaction as well as relaxation. Located in the Student Affairs Building, the Center embodies a lounge, student conference room, television area, and dining area where food service is available. Offices for the Student Government Association, Phi Theta Kappa, and Workforce Investment Act are also located in this area.

Orientation

Orientation of all new students is a major goal of the Office of Student Affairs and is an important part of a positive start for students at Isothermal. The program introduces students to services and resources available at the College, provides information, answers questions and, in general, helps to solve problems normally faced by students. Orientation sessions are held at the end of each ASSET test and once during the summer.

ACA 115: Success and Study Skills

The Orientation process is further extended for full-time degree students who are required to take ACA 115: Success and Study Skills, a one credit hour orientation course.

The Career Center

Counseling

Counseling services at Isothermal Community College are provided by Student Affairs and are available to the total institution and its communities. Viewed as an educational and supportive service, counseling takes place on an individual basis or, when appropriate, in groups. Referral services to other agencies are available for those individuals who may need specialized professional assistance.

Counselors offer assistance with the development of self-management skills, self-concept building, educational planning, and improvement of interpersonal relationships. Students may call 286-3636, ext. 244 for an appointment, or they may drop in to talk with a counselor.

Career Development

Isothermal Community College has a well-established program of career development services that assists students in choosing and moving toward a career that is right for them. These services include:

A Career Resource Area staffed by a Counselor Associate and secretary.

Career Development Counselors qualified to help individuals assess and understand their abilities, aptitudes, and interests in the process of career decision-making.

Interest testing: Strong Interest Inventory: Cost $5.00. Uses 325 items to measure person's interest in a wide range of occupations, leisure activities, hobbies, school subjects, and types of people. Self-Directed Search: Provides an extensive personalized report that includes a comprehensive list of careers.

"Please Understand Me": A computerized program that provides insight into temperament with a printout report.

Career information: Books and videos related to job search preparation, interviewing, negotiating job offers, and self-help.

Undergraduate and graduate information: catalogs and applications.

Transfer information: Course equivalencies, transfer agreements, NC Transfer Counselors' Network.

Mini-workshops
Interest inventory assessment
Resume writing and interviewing skills
Communication skills

For more information students may call ext. 266 or visit the Career Center which is located off the lounge of the Student Center, Room 18.

Disability Support Services
Isothermal Community College is committed to providing equal access to education for persons with disabilities. However, it is the responsibility of the student to make his or her disability known and to request accommodations. Requests should be made in a timely manner, preferably 30 days prior to registration, and submitted to the Special Populations Coordinator. Every reasonable effort will be made to provide services.

In order to establish the student's eligibility for services, documentation of a disability is required of all students who request accommodations. Documentation must be provided from an appropriately licensed/certified professional and must be complete enough to establish the student's status as a person with a disability as well as establishing the need for any requested accommodations. The age of acceptable documentation is dependent upon the disabling condition, the current status of the student and the student's specific request for accommodations. The Special Populations Coordinator may require that the documentation be no older than three years. Necessary documentation to request accommodations/services, in general, should include the following:

1) Identification of the nature and extent of the disability including diagnosis.
2) Specific information on the functional limitation as related to the academic environment.
3) Description of the current course of treatment including medical side effects.
4) Prognosis for the disability.
5) Recommended reasonable accommodations.

An Individualized Education Plan (IEP) may help to identify services that have been effective for the student, but will not be considered acceptable documentation of a disability. All documentation and records provided will be maintained in a confidential manner as outlined in the Family Educational Rights and Privacy Act of 1974.

Testing Services

Placement Testing
ASSET is a one-stop testing/advising registration program designed to gather information about a student's skills, needs, and plans as an important step in developing and implementing a sound program of study. ASSET identifies basic skill levels of students in reading, English, and mathematics.
ASSET is part of a One-Stop program that includes orientation, a review of test results, and registration for classes immediately following testing. Students are scheduled for a one-stop session once an Isothermal application is on file with the admissions office. No fee is charged for ASSET testing.

COMPASS, a computerized placement testing program, is available for students with documented disabilities and students retesting after taking ASSET. Students should contact the Career Center for more information. No fee is charged for COMPASS testing.

The following are required to take ASSET or COMPASS:

* Degree and Diploma applicants.
* Applicants for Certificate programs if applicable.
* Basic Law Enforcement Training (BLET) applicants either prior to enrollment or during their first semester of enrollment.
* Special Credit students enrolling in English, math or courses that require prerequisites.
* Dual enrollment or Huskins Bill students from area high schools enrolling in English, math or courses that require prerequisites.
* Students without a high school diploma who have to prove "ability to benefit."

A student transferring from another institution who has successfully completed a freshman English, reading, basic math or algebra course may be exempt from placement testing in those areas. If applicants tested prior to the adoption of ASSET in September 1990 have not enrolled in and successfully completed English and/or math classes, their test scores are invalid. ASSET and COMPASS test scores are valid for three years.

Job Placement

Computer stations with Internet access are available in the Career Center for job search and career assistance. In addition, instructors in each program area assist students as requested.

Health Services

The College has no facilities for medical treatment other than for minor first aid and assumes no responsibility for injuries or sickness of students. First aid supplies are located at secretaries' desks in each building and in the shop areas.

Students suffering from acute illness or injury requiring more than minor first aid are asked to seek medical treatment. The student is responsible for all costs incurred in such treatment.

Students are encouraged to provide themselves with medical insurance to cover illness/injury. Insurance covering accidents at the College or en route to or from the College is available.

Housing

The College does not provide living accommodations for students. The student is responsible for making his/her own housing arrangements. The College assumes no responsibility for rental negotiations between student and homeowner.

Student Activities

The College encourages student participation in student organizations and activities. A member of the Student Affairs staff is assigned the responsibility of coordinating all student activities and serves as the SGA advisor.

The following are available on campus:
Student Government Association (S.G.A.) Only students of the College who pay a student activity fee are members of the Student Government Association and are entitled to all membership privileges of the organization. The Student Government Association Officers are active in promoting the interests of the students, improving facilities, planning social functions, and assisting student organizations.

The S.G.A. President is the chief executive of the Student Government Association which includes program area representatives and members at large. Student interest and assistance are welcomed. The S.G.A. President is an ex officio member of the Board of Trustees.

The following clubs and activities are chartered on the campus:

Afro-American Club
Child Care Club
Cosmetology - Day
Cosmetology - Evening
International Association of Administrative Professionals
Intramurals
ADN Nursing Club
Phi Beta Lambda
Phi Theta Kappa
Publications — IsoJournal
Anuran (Poetry Magazine)
Student Practical Nurses' Club
SCHOOL COLORS: Blue and White
SCHOOL MASCOT: Patriot

Student Publications - Purposes and Responsibilities

The purpose of **The IsoJournal**, the Isothermal student newspaper, is to communicate and integrate new ideas within the college community; increase awareness of current issues facing the campus; create a published forum which encourages input from students and staff; and provide an opportunity for those students enrolled in the course to learn and practice high levels of reporting, writing, photojournalism, and lay-out design.

The purpose of the **ANURAN** is to fulfill the expectations of an exceptional, annual literary journal. It is designed as a published collection of poems and essays, the culmination of a yearly poetry and essay contest drawing on the talents of Isothermal and the communities it serves.

The purpose of **THE MENTOR** is to provide a forum for faculty and staff. This annual publication features articles on pedagogy, personal essays, poetry, fiction and art work by employees of the College.

All these publications of Isothermal Community College must abide by state and federal laws governing proper journalistic behavior as well as local college regulations.

The College's responsibilities to student publications include the following:

1. To provide fiscal support necessary for materials, supplies, equipment, and printing.
2. To provide an appropriate work space.
3. To make arrangements for responsible, qualified faculty/professional sponsors to oversee student work.

Veterans Affairs

Isothermal Community College provides information and assistance to eligible veterans and dependents of disabled or deceased veterans in applying for educational benefits. The Department of Veterans Affairs offers several programs (Chapters):

Chapter 30 - Montgomery GI Bill
Chapter 31 - Vocational Rehabilitation
Chapter 35 - Survivors' & Dependents Educational Assistance
Chapter 1606 - Montgomery GI Bill Selected Reserve

Eligibility, length of eligibility, number of months you can receive benefits, and the amount of assistance are determined by the Department of Veterans Affairs. Rates are determined by your chapter and the number of semester credit hours registered for the term.

Before you can draw Veterans Benefits, you must complete all Isothermal admission and Department of Veterans Affairs requirements listed below:

- Must complete Application for Benefits
- Submit certified copy of DD-214 (discharge papers) or NOBE (Notice of Basic Eligibility) and/or approval from the DVA depending on Chapter
- Must complete the Application Process at Isothermal
  - Application
  - Official High School and College Transcripts
  - Placement Test (ASSET or COMPASS)
- Choose a program of study - all programs are not eligible for DVA benefits, check with Isothermal Veterans Office.
- Submit registration information each semester.

Students receiving benefits from the DVA must report any information or changes to prevent overpayment. If any changes have been made in your enrollment, entrance, re-entrance, program of study, hours of credit, address, name, etc., notify the Isothermal Veterans Office immediately.

The Department of Veterans Affairs will only pay for courses required in your program of study. They will not pay for courses previously passed, audited courses, credits by exam or dropped courses. You will receive payment for remedial courses only if you placed in those courses based on your ASSET or COMPASS scores. A student must maintain satisfactory progress to continue to receive benefits.

STUDENT FINANCIAL AID

Isothermal Community College offers a comprehensive program of financial aid for students who, without such aid, would be unable to continue their education. Assistance is provided in the form of grants, part-time employment, and scholarships. Financial aid awards may include one or more of these. Most financial assistance is awarded on the basis of need. In determining the student's need, it is assumed that the student and/or the student's family will provide assistance in an amount proportionate to their income and assets. Financial assistance from the institution is intended to be supplementary to the efforts of the family.

How to Apply for Financial Aid

1. Submit a completed application for admission to the College. Submit official transcripts of credit from all secondary and postsecondary schools attended. Take the placement tests administered by the College.
2. Complete the Free Application for Federal Student Aid. This form can be completed using a paper application or on the web at www.fafsa.ed.gov.
3. Submit a completed Isothermal Community College Student Financial Aid Data Sheet.
4. Signed copies of student/parent federal tax returns, applicable W-2 forms, and additional supporting information may be requested.
5. Request and submit applications for other aid programs in which you feel you can establish eligibility. A number of financial aid programs require separate applications. Please note these under the "Types of Aid Available" section.

The Free Application for Financial Aid may be obtained from the Isothermal Community College financial aid office, on the internet at www.fafsa.ed.gov or in high school guidance offices. All students and prospective students may apply for aid. Applications must be filed annually for an academic year (August through July). Students planning on attending the fall semester should complete their FAFSA between the months of January and May proceeding the start of the fall semester. Those starting school in the spring or the summer should complete a FAFSA at least six weeks prior to the beginning of the term. Only one FAFSA should be submitted each year. In order to be considered for the North Carolina Student Incentive Grant, the application must be submitted by March 15 preceding fall enrollment. Funding for many programs is limited. Late applicants may find that many funds are obligated. An enrolled student must reapply in order to receive aid during subsequent years of attendance.

Types of Aid Available

Federal Pell Grant

The Pell Grant is a federally sponsored aid program for low-income families. It is intended to be the first and basic component of a financial aid package. The grant, which does not have to be repaid, is based on schedules and formulas approved annually by Congress.

Undergraduate students who have a bachelor's degree are not eligible for Federal Pell Grants.

Federal Supplemental Educational Opportunity Grant (FSEOG)

The FSEOG program provides aid to the neediest students with demonstrated financial need, with priority awarded to Federal Pell eligible recipients. Any student who completes the Free Application for Federal Student Aid applies for this grant. The number of grant awards is based on the availability of funds at the College. Repayment is not required. Undergraduate students who have a bachelor's degree are not eligible for Federal SEOG's.

North Carolina Student Incentive Grant (NCSIG)

Full-time students who are legal residents of North Carolina may apply for the NCSIG. These grants are awarded by College Foundation, Inc., Raleigh, NC. Students must demonstrate substantial financial need. Application is made on the Free Application for Federal Student Aid by giving the U. S. Department of Education permission to send financial information to the financial aid agencies in N.C. The deadline for the NCSIG is March 15 preceding the academic year. Repayment is not required.

Federal Work Study

The Federal Work-Study program is a federal program which provides part-time jobs on campus for needy students. Students receive a monthly paycheck. Applicants for work-study must first apply for the Pell Grant, as well as apply for work-study on the institutional financial aid application. A limited number of jobs are available in the program. Some of the jobs give students the opportunity to perform community services. Community services are designed to improve the quality of life for community residents, particularly low-income individuals, or to solve problems related to their needs.

North Carolina Prospective Teachers Scholarship Loan (NCPTSL)
North Carolina residents preparing to teach in public schools within the state are eligible to apply. For each full school year a recipient teaches in North Carolina public schools, one year of the loan amount and the accrued interest is forgiven. Applications may be obtained at www.dpi.state.nc.us/scholarships/ptsl.htm.

Nurse Education Scholarship Loan Program (NESLP)
North Carolina residents enrolled in a nurse education program who plan to obtain full-time employment as a nurse in North Carolina are eligible to apply. For each six months of employment as a nurse, a portion of the recipient's obligation will be canceled. All students who are accepted in the nursing program and who apply for federal student aid are considered.

Nurse Scholars Program (NSP)
The Nurse Scholars Program is a competitive, merit-based scholarship/loan program available to North Carolina students who have chosen to enter the nursing profession. Recipients enter into a contract with the State of North Carolina to work full time as a Registered Nurse in North Carolina. One year of loan will be forgiven for twelve months of service as a full-time nurse. A minimum of six months consecutive full-time employment with one employer is required to qualify for service concellation. Applications can be obtained at the Financial Aid Office or from NCSEAA, P.O. Box 14223, Research Triangle Park, NC 27709-4223, or by calling (919)549-8614.

J. D. Cooley Technical Education Loan Fund
Students enrolled in an approved technical program may apply for this loan. A first-year student must have a 2.0 average or better in their high school studies. A second-year student must have maintained a 2.7 GPA in their studies at Isothermal. Applicants are required to complete a loan application. Repayment is required.

Student Emergency Loan Fund
The Student Government Association has established a loan fund to assist students having a minor financial crisis by providing monies that will enable students to continue their education. A minor financial crisis generally is defined as needing money for a power bill, an unpaid medical bill, or a car repair. The maximum loan amount is $200.00. Applications may be obtained from the Career Center. Documentation is required. Emergency loans must be repaid.

Scholarships
A number of scholarships are available to Isothermal Community College students. Criteria for selection most often include academic promise/standing and financial need. Other special requirements may be set by the donor. For on campus scholarships, college personnel participate in the selection of recipients. Students do not usually apply for specific on-campus scholarships. Instead application is made by completing the FAFSA as discussed in "How to Apply for Financial Aid". Scholarships do not have to be repaid.

Teacher Assistant Scholarship Loan (TASL)
The Teacher Assistant Scholarship Loan (two-year) program provides funding to attend a North Carolina community college to receive an early childhood associate degree or a two-year degree in other skills of particular use to the state's public school system. Applications and further information can be obtained by going to www.dpi.state.nc.us/scholarships/taschol.htm.

Off campus scholarships, defined as scholarships in which college personnel do not participate in the selection of recipients, are awarded to Isothermal Community College students each year. Students interested in applying for these scholarships must contact the grantor. The Financial Aid Office has information about many off campus scholarships.

Listed below are on campus scholarships which are usually available:

Jack E. Buchanan Scholarship
George Chatham Business Sciences Scholarship
Mabel and James Doggett Music Scholarship
Dr. W.M. Elliott Scholarship
Hazel Beam Crossman Nursing Scholarship
Isothermal Community College Alumni Scholarship
Julia Goforth Music Scholarship

William V. Lee Memorial Scholarship Fund
Lions Club/Pinkie H. And T.D. Carson Scholarship
Lovelace Nursing Scholarship
G. K. McClure Educational Fund
James Monroe McDonald Memorial Scholarship
W. H. "Shorty" McDonald Scholarship
Kate Moore Scholarship
Putnam Scholarship
Ruppe Bible Class-Forest City First Baptist Church
Robert R. Spratt Memorial Scholarship
Wachovia Technical Scholarship
Frank and Mabel West Scholarship
Dr. J. F., Sr. and Ola H. Whisnant Scholarship

An institutional scholarship application is required for some of these scholarships. Contact the Financial Aid Office for applications, as well as information regarding eligibility requirements and application deadlines.

Satisfactory Academic Progress Standards for Financial Aid Recipients
Federal law requires students receiving federal student aid to maintain satisfactory academic progress as defined by the institution. Federal student aid includes the Federal Pell Grant, Federal Supplemental Educational Opportunity Grant, Federal Work Study, and the North Carolina Student Incentive Grant. The institution's Satisfactory Academic Progress policy must include both qualitative (cumulative grade point average) and quantitative (hours earned compared to hours attempted, and a maximum time limit) elements.

Cumulative Grade Point Average (GPA)
Students receiving financial aid at Isothermal Community College must maintain a cumulative grade point average at or above the minimum "Appeal of Suspension" section of this catalog. These standards are consistent with academic standards required for graduation.

GPA requirements will be monitored at the end of each semester. Any student earning less than the minimum required cumulative GPA shall be placed on financial aid probation. The student will be notified of his/her probationary status in writing and may receive financial aid for one more semester of enrollment, consecutive or otherwise. If the student does not earn the minimum required cumulative grade point average by the end of the probationary semester, he/she will be placed on financial aid suspension until he/she earns the minimum required cumulative grade point average. The student is not eligible for aid while on suspension.

*Credit hours attempted will be cumulative and will include all hours for which the student was enrolled as of the census date of each academic term for which the student received a grade of A, B, C, D, F, I, W.,W, R, or NS.

**Cumulative GPA is computed by dividing the total number of quality points earned by the total credit hours attempted for which the student received grades of A, B, C, D, F, or I. No quality points are earned for an I.

Maximum Time Limit
Any student receiving federal financial aid will have a maximum time frame in which he/she is expected to complete a program of study. Federal law requires that the time frame be no more than 150 percent of the established length of the program for full-time students. At Isothermal Community College, the 150% time frame will be measured in terms of credit hours attempted.*

Example: If a program required 65 semester credit hours to complete, then a student may receive financial aid for 97.5 (65 x 150%) semester hours attempted.

Once the student has attempted 150% of the credit hours allowed in his/her program he/she is no longer eligible for financial aid at Isothermal Community College.

*For the quantitative measure, credit hours attempted will be cumulative and will include all hours for which the student was enrolled at the end of the census date of each academic term and received a grade of A, B, C, D, F, I, W., W, R, or NS.

Only grades of A,B,C, or D will be counted as earned hours. Grades of F, R, I, W., W, and P will not count as hours earned. Grades of Y and CE will not count as attempted or earned hours.

Any student who has not earned 67% of the cumulative credit hours attempted at the end of each semester will be notified of his/her probationary status in writing and may receive federal financial aid for one more semester of enrollment, consecutive or otherwise. If the student does not earn the minimum required cumulative hours during the probationary semester, he/she will be placed on financial aid suspension and all federal student aid will be terminated. The student will remain on financial aid suspension until he/she earns the minimum required cumulative credit hours.

Both the qualitative and quantitative standards are cumulative and include all periods of enrollment at Isothermal, even those for which the student did not receive financial aid funds.

Effects of Developmental Coursework
Students who have been accepted into a degree program and are required to take developmental coursework as determined by placement testing, may receive financial aid for up to 30 semester hours of required developmental coursework. Hours of developmental coursework will not be counted as hours attempted or hours earned.

Effects of Previous Credits

1. Transfer Students – Any student transferring from a school other than Isothermal Community College will be considered to be making satisfactory progress at the time of his/her enrollment. The student's maximum time frame will be reduced by the equivalent number of credit hours attempted toward his/her degree.
2. Isothermal Community College Returning Students – Returning students will have their cumulative GPA carried forward, subject to the institutional policy regarding transfer of credit within the institution. All credit hours attempted will be converted to semester hours and carried forward. This policy is in accordance with federal regulations stating that satisfactory academic progress standards must cover all periods of the student's enrollment, including those periods for which the student did not receive federal student aid funds.
3. Isothermal Graduates – If a student graduates from a program at Isothermal Community College and desires to pursue another degree, that student will assume the maximum time frame of the new program less any attempted hours in a previous program for which the student did not receive a diploma or degree.

Procedure for Reinstatement of Financial Aid
Students who have had their aid terminated may reestablish eligibility for financial aid in one of two ways: (1) By enrolling for subsequent semester(s) at his/her own expense until satisfactory academic progress is achieved, or (2) By the appeals process, if approved. Retroactive payments of financial aid for periods in which a student did not meet satisfactory progress standards are prohibited.

How to Appeal Financial Aid Suspension
To appeal financial aid suspension, a student must be able to demonstrate mitigating circumstances. Mitigating circumstances are defined as injury or illness of the student, death of a relative, change in employment situations, or undue hardship caused by special circumstances.

The procedure for appeal is as follows:

1. A student will indicate in writing to the Financial Aid Director the reason(s) why he/she did not make satisfactory academic progress and why financial aid should not be terminated. Documentation to support the appeal is encouraged. The appeal must be received within two weeks of the date in which the student was notified of his/her suspension.
2. The Financial Aid Committee will review the appeal and determine whether or not termination of aid is justified. The student will be advised of the decision in writing.

Policy on Return on Title IV Funds
Federal financial aid funds are awarded with the expectation that students will complete the entire period of enrollment. Students "earn" a percentage of the funds that are disbursed with each day of class attendance. When a student who has received federal financial aid funds (Title IV Funds) leaves school, officially or unofficially, before the end of the semester or period of enrollment, federal law requires the college to calculate the percentage and amount of "unearned" financial aid funds that must be returned to the federal government. Once a student has completed more than 60% of the enrollment period, students are considered to have earned all funding received. This calculation may have the effect of requiring the student to repay funds that have already been disbursed to the student. Students are encouraged to meet with an employee in the financial aid office prior to making the decision to withdraw from school.

THIS POLICY IS SUBJECT TO CHANGE BASED ON INSTITUTIONAL AND FEDERAL GUIDELINES.

Workforce Investment Act
The Workforce Investment Act provides funds to students who are enrolled in a technical or vocational Program. Eligibility is determined by WIA income guidelines and other criteria. Funds may be provided for one or more of the following: books, travel, needs-based allowance, tuition, and fees. A limited number of openings are available. Required applications may be obtained in the Student Center and at the Polk County campus.

Vocational Rehabilitation
The N.C. Division of Vocational Rehabilitation also offers financial assistance to eligible students. In order to qualify, a student must have a mental or physical disability which is a handicap to employment. There also must be reasonable expectation that as a result of vocational rehabilitation services, the person becomes gainfully employed. Each rehabilitation program is designed individually with the student. The amount of the award is based on need and the type of program in which the student is enrolled. It generally pays for tuition and fees and for some books and supplies. In some cases, supportive services such as interpreter services, attendant services, and transportation may be provided. To apply, the student should contact Vocational Rehabilitation.

BOOKSTORE

The College operates a bookstore where the student may purchase needed books and supplies with profits being used for college projects and services. The hours are 9:00 a.m. to 3:30 p.m. Monday through Friday at all times except the first two weeks of each semester as follows:

DAY	NIGHT
First week 8:30 a.m. to 3 p.m.	6 p.m. to 8:30 p.m.
Monday through Friday	Monday through Thursday
Second week 8:30 a.m. to 3 p.m.	6 p.m. to 7:30 p.m.
Monday through Friday	Monday through Thursday

INFORMATION SERVICES AND TECHNOLOGY

Information Services and Technology includes the Library, Distance Learning Services, and Information Technology.

Library (www.isothermal.edu/library)
The library contains a variety of materials in print and non-print formats to support the needs of students and staff in our learning college environment. The library staff is happy to assist anyone who may need help in utilizing print materials and online resources. The library website provides access to the library handbook, research tips, documentation styles, and other helpful information, including support for Distance Learning students. The College library, which is open to the community, is part of the CMC Consortium, a cooperative of academic, public and municipal libraries within Rutherford and Polk counties. The CMC Consortium maintains a web-based online catalog, available at www.cmclibraries.org.

Library hours: 7:45 am – 9:00 pm Monday – Thursday
7:45 am – 4:15 pm Friday
Holiday and Semester Break Hours as Posted

Distance Learning Services (www.isothermal.edu/onlcourse.htm)
The College cooperates with public and private colleges and universities in mutually beneficial projects that enhance and expand the curricular opportunities of students. To address the needs of students for flexible scheduling and delivery of classes, an ever-expanding selection of online courses is offered through Isothermal's Distance Learning initiative. Online courses require student workloads and outcomes comparable to traditional courses. Faculty who teach online courses, and those who may wish to incorporate technology into traditional courses, are offered training in using online course software and other software and equipment.

Information Technology
The goal of the Information Technology staff is to enhance the learning experience of students through the use of appropriate technologies. IT pursues this goal by providing college-wide technology support, and by offering training to staff members who use, or wish to use, technology as part of the learning experience, whether in instructional or support capacities. Information Technology staff maintain an e-mail system, a fiber optic based network, a records system, the College website (www.isothermal.edu), and the workstations necessary to access online information.

Conduct

The personal conduct of the college student is subject to the moral and legal restraints found in any law-abiding community. The conduct of a student, both in and out of school, will be measured on an adult standard. The student assumes full responsibility for the consequences of his/her actions and behavior. It is the personal responsibility of each student to uphold the rules and regulations of Isothermal Community College. The College reserves the right to dismiss any student who, in its judgment, conducts him or herself in a manner that is not in compliance with the purposes of this institution. The complete policy for Students' Rights, Responsibilities, and Judicial Procedures is available in the Student Affairs Office and printed in the Student Handbook.

Communicable Disease Policy

Isothermal Community College shall not exclude individuals with communicable diseases unless a determination is made that the individual presents a health risk to himself/herself or others. It is the policy of Isothermal Community College to consider the educational or employment status of those with a communicable disease on an individual basis. Communicable diseases as defined in this policy include but are not limited to acquired immunodeficiency syndrome (AIDS), chicken pox, hepatitis, measles, tuberculosis, meningitis, mononucleosis and whooping cough.

Communicable Diseases: Administrative Procedures

1. All information and records that identify a person as having a communicable disease shall be strictly confidential.
2. Disclosure of medical information shall be by the president only to those on a need-to-know basis to protect the welfare of persons infected with a communicable disease or the welfare of other members of the college community.
3. Unauthorized disclosure of medical information by an employee of the College is prohibited. Violation of this prohibition may result in the suspension from or termination of employment at Isothermal Community College.
4. Persons who know or have a 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 toward other members of the college community.
5. Faculty and staff of Isothermal Community College and employees of contractors or contracted services who are infected with a communicable disease are urged to notify the Vice President so that the College can respond appropriately to their health needs. Students are urged to share information with the appropriate Dean for the same reason.
6. Persons infected with a communicable disease (including the AIDS virus whether active AIDS, AIDS-Related Complex, or zero positive to virus) will not be excluded from enrollment or employment or restricted in their access to the college's services or facilities unless medically-based judgment in individual cases establish that exclusion or restriction is necessary. Included in making decisions in individual cases which restrict access to enrollment or employment shall be the college president, the college attorney, the department head or Dean, the individual's personal physician, the local health director (or designee), and if necessary, another physician with expertise in managing communicable disease cases.
7. The college shall communicate the most current information regarding communicable diseases, especially AIDS.

Dress

One of the purposes of college experience is to afford a student the opportunity to practice effective personal grooming. Appropriate dress is encouraged and required. While the College aims to honor the individuality of each student, it reserves the prerogative to announce and implement regulations concerning dress.

Drug and Alcohol Policy

It is the policy of Isothermal Community College that the unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance or alcohol, is prohibited while in the workplace, on College premises, or as part of any activity initiated by the College. Any employee or student violating this policy will be subject to disciplinary action up to and including termination or expulsion and referral for prosecution. Copies of the complete policy are available in the Office of Student Affairs.

Internet and Network Use Policy

Information regarding the College Internet and Network Use Policy is available in the Student Handbook.

Crime Awareness and Registered Sex Offenders

As required by the Crime Awareness and Campus Security Act of 1990, information regarding crime awareness and campus safety is available in the Student Handbook. Information regarding registered sex offenders in the local region may be obtained by contacting the Rutherford County Sherriff Department at (828) 287-6247 or at the web site: http://sbi.jus.state.nc.us.

Students' Rights

It is the duty of the president to exercise full authority in the regulation of student affairs and discipline in the institution. Delegation of this authority is normally made to the Dean of Students. Nevertheless, it is the duty of the president to insure to every student the right of due process and fair hearing, the presumption of innocence until found guilty, the right to know the evidence and to face witnesses testifying against him/her and the right to such advice and assistance in his/her own defense as may be allowable under the regulations of the College. In those instances where denial of any of these rights is alleged, it shall be the duty of the president to review the procedures of the disciplinary hearing. A complete policy of Students' Rights, Responsibilities and Judicial Procedures is available for review in the Student Affairs Office.

ADDITIONAL INFORMATION ON RULES AND REGULATIONS IS CONTAINED IN THE *STUDENT HANDBOOK*. IT IS THE INDIVIDUAL RESPONSIBILITY OF EACH STUDENT TO READ AND UNDERSTAND THIS HANDBOOK. A MANUAL OF STUDENT RIGHTS, RESPONSIBILITIES AND JUDICIAL PROCEDURES IS AVAILABLE UPON REQUEST IN THE STUDENT AFFAIRS OFFICE.

Traffic Regulations

Faculty, staff and visitor parking areas are shown on the Campus Map as Staff Parking. These areas, and a small portion in front of Building #6(Student Parking 2), have yellow parking lines with reserved numbers. Students are asked not to park in these reserved spaces.

Student parking areas 1, 2, 3, 4, and 5 have sufficient parking to accommodate all vehicles driven by students. At times, the student may not be able to use the parking area most convenient and will have to park in a student area more removed from his/her destination. Students are required to park in the assigned parking areas. Parking along the roadways and in the staff and faculty parking spaces is prohibited.

CUSTOMIZED TRAINING & DEVELOPMENT

Isothermal Community College is committed to providing business and industry with a broad array of educational and training services. In addition to customized training and regular curricular offerings, the college can assist business and industry through the following program areas.

New and Expanding Industry Training

New and Expanding Industry Training is a special training program to help new and/or expanding industries creating 12 or more new productive jobs to meet immediate manpower needs. New and Expanding Industry Training uses individualized need assessments and consultations to design customized training for a new workforce.

Focused Industrial Training

Focused Industrial Training uses individualized needs assessments and consultants to design and implement targeted customized training for established organizations who need to upgrade employee skills needed for technological or process advance.

North Carolina Manufacturing Certificate Program

North Carolina Manufacturing Certificate Program is a certification program designed to raise the skill levels of employees in North Carolina. It serves the needs of both experienced workers at different stages of careers as well as students embarking on their initial course of study.

In-Plant Training Program

The In-Plant Training Program assists with developing an on-the-job training program that meets industry needs and assists with the delivery of training. Training is directly related to improving job skills.

Small Business Center

If you are considering a new business venture, an expansion of your current business, or need help in developing a business plan, Isothermal Community College's Small Business Center can work for you. Generally designed for the company with fewer than 100 employees, the Small Business Center provides additional training, one-on-one counseling, access to a state-wide network of business experts or the professional contacts and information needed by the small business. Our resource center also provides the latest literature and audiovisual material on operating a small business.

CONTINUING EDUCATION

www.isothermal.edu/conedu

Continuing Education's flexibility provides the opportunity to meet a wide variety of individual and group needs. Adults can study a high tech skills, learn to read, take a course for self-enrichment, or develop quality management techniques. Some courses are offered on a continuing basis while others are given in response to requests of individuals or groups. Groups meet in schools, churches, community clubs, fire stations, and industry throughout Rutherford and Polk counties and on campus. Class hours, the length of the course, and the number of meetings per week can be arranged for the convenience of the participants.

Admission and Registration

Adults 18 years of age or older are eligible to participate in Continuing Education classes. High school students from Rutherford and Polk counties, ages 6 and 17, may enroll in a course with permission from their high school.

Registration Fees

Student fees depend on the type of course. There are no registration fees for Adult Basic Education, GED, HRD, and the High School Diploma programs. Law enforcement, fire, rescue, and EMT personnel pay no fees for their in-service training. Prisoners and mentally handicapped adults are fee exempt. North Carolina residents 65 and over, do not pay a fee for some classes. Fees for other courses range from $7 up.

Continuing Education Refund Policy

1. A student who withdraws from a class prior to the first day of class or if the class is canceled will be eligible for a 100 percent refund of the registration fee.
2. After the class has started, requests for refunds should be made using the following schedule.

Scheduled Course Length	Request Made By or on
4 times or less	The first day of class
5 or more times	10% of the class has passed

3. An option to a refund: The student may request a transfer to another Continuing Education course before 10% of the course has expired. The course that is being transferred into must be within the same semester, have space available, and have the instructor's approval.
4. Exceptions to this policy can be made by the following:

Courses Originating In	Exceptions Made By
Continuing Education Division	Dean of Continuing Education
Physical Education	Physical Education Department Chair
Polk Campus	Polk Campus Director

Continuing Education Repetition Policy

Continuing Education students may enroll in a course as many times as necessary to accomplish their personal or 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 Department of Community College policy.

Students who take the same Occupational Extension course more than twice are required to pay for the actual cost of the course or the registration fee, whichever is more. 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.

Continuing Education Units

One Continuing Education Unit will be awarded for each 10 contact hours of instruction that will be determined prior to the beginning of the experience. A decision to award the CEU will be made after the program or activity has been offered. Calculations of contact hours will include the following elements:

1. Classroom time with direct participation between the students and instructors will be converted directly to contact hours.
2. Activities that use instruction such as supervised independent study, directed reading, or project based assignments will be awarded CEU's. Contact hours will be determined after finding the average amount of time and hours required to complete the learning activity.
3. Field trips and other experiential course activities will be awarded CEU's. This will usually be done on the basis of two hours required for each contact hour of instruction.

The CEU is used in three ways, as follows:

1. A unit of measure to recognize an individual's participation in non-credit activities that meet appropriate criteria.
2. The accounting unit of Isothermal Community College non-credit courses, programs, and activities.
3. The basis for quality assurance in Continuing Education programming.

The Dean of Continuing Education and the Director of Polk Campus have responsibility for final determination of the CEU's awarded for a particular Continuing Education experience. The instructor will verify and report that each participant has or has not met the specified requirements for satisfactory completion and is or is not awarded a CEU.

A permanent record of the student's participation will be maintained by Isothermal Community College.
See section on release of permanent records.

Occupational Extension
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 employee's development through occupational courses. Here are some examples of occupational oriented courses.

Building Contractor's Code	Nursing Assistant
Emergency Medical Services	Teacher Renewal Credit
Fire Fighting	Team Building
Geriatric Care	Truck Driver Training
Law Enforcement	

Lifelong Learning
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:

Cake Decorating	Crafts	Painting	Pottery
Ceramics	Creative Writing	Language & Culture	Quilting
Computers Skills	Dance	Music	Sign Language
Cooking & Nutrition	Health & Wellness	Notary Public	Vehicle Inspection/Emissions

Adult Basic Education
Adult Basic Education is designed for those who need basic reading, writing, and mathematics skills. It offers training that will help adults become better shoppers, consumers, workers, and problem solvers. Classes may be geared toward helping adults get better jobs or improving present literacy-related job skills. Emphasis is placed on individual study for advancement at one's own pace. The program uses a variety of materials, ranging from basic reading to high school entry level, which are designed for adults. Adult Basic Education uses the CASAS system.

Classes usually meet for a three-hour session twice a week. To accommodate a variety of student needs, both daytime and evening classes are scheduled. They are held on campus, in neighborhoods or work places throughout Rutherford and Polk counties. There are no fees for these classes.

Upon completion of basic instruction, the student is eligible to study toward an Adult High School Diploma in the Learning Place or in an extension adult high school class.

English As A Second Language - ESL
The Adult Basic Skills Program offers English as a Second Language - ESL. This program is designed for adults who want to learn the English language skills necessary to function effectively in an English-speaking environment. ESL classes are held on campus and in businesses and industries in Rutherford and Polk counties.

HRD Program
"Our mission is to educate and train individuals for success in the workplace." The HRD (Human Resources Development) programs helps unemployed, under employed, and dislocated workers with motivation, attitudinal changes, and pre-job orientation. Instruction addresses six core competencies:

assessment of individual assets and limitations
development of a positive self-concept
development of employability skills
development of communication skills

development of problem-solving skills
development of awareness of information technology in workplace

The structured pre-employment training and counseling are designed to help participants achieve success.

Students learn how to be better employees through a variety of instructional activities: individual participation, group interaction, discussion, creative expression, projects, team tasks. Students are encouraged to use their abilities, to develop attitudes and skills necessary to obtain and maintain satisfactory employment. Some classes include specific work-related training appropriate for employment such as basic office assistant, bank teller, child care worker.

Compensatory Education
The Compensatory Education Program is provided for adults with mental handicaps. The focus of the program is on skills needed by adults with mental handicaps to function as independently as possible in society. It assumes an end result of productivity, employment, independence, and self-sufficiency.

The education programming includes: language, math, social science, community living, consumer education, health, and vocational education.

These educational opportunities enable adults with mental handicaps to become more independent and self-directed. Also, they become more familiar with occupational skills and acquire skills to meet and manage community, social, work, and personal adult responsibilities.

In order to accommodate student needs, classes are offered during the day and evening with class hours being flexible. Classes are offered in communities, rest homes, nursing centers, and vocational workshops. There is no registration fee.

Adult High School
The adult high school programs, Adult High School Diploma (AHSD) and the General Educational Development (GED), provide self-paced, individualized instruction to adults. Guidelines for the AHSD program are established through the Department of Community Colleges and through a cooperative agreement with the Polk County Board of Education, the Rutherford County Board of Education, and Isothermal Community College. Guidelines for the GED program are set by the Department of Community Colleges and the American Council on Education. Both programs are offered in Rutherford and Polk County.

Any 18 year old or older may enroll in either program. A sixteen or seventeen year old may apply with special written permission from proper authorities.

Adult High School Diploma
Requirements include:
1) Satisfactory completion of units in English, mathematics, social studies, sciences, and health.
2) Satisfactory completion of elective units.
3) Passing score on the North Carolina Competency Test.

General Educational Development (GED)
GED Testing
A North Carolina High School Equivalency Diploma is awarded upon satisfactory completion of a series of tests in the areas of writing, reading, social studies, science, and mathematics. Spanish verions of the tests are also available. Anyone interested in taking the GED tests should first contact the Adult High School Coordinator in the Oak Room of the Foundation (286-3636 ext. 218). GED Testing accomodations may be available to examinees with documented disabilities. Contact the Chief Examiner (286-3636 ext. 266) for more information.

GED practice tests and GED study material are available in all classes. Individual scores on the practice GED test determine whether or not the student needs to study and determines the subject(s) to review before attempting the actual test. A student must be a resident of North Carolina to take the actual GED test in North Carolina.

Classes are offered in communities throughout Rutherford and Polk counties, in industries, and on both the Spindale and Polk campuses. These classes are free and are scheduled in the mornings, afternoons, and evenings.

Professional Truck Driver Training
www.isothermal.edu/truck
The Professional Truck Driver Training is a certified program of the Professional Truck Driving Institute. This 168 hour program is offered in daytime or evening classes. Work with the truck will be scheduled at times from early morning to late evening, Monday-Sunday. Classes start about every five weeks.

Program Features:

44 hours of individual driving time and 124 hours of classroom
One-on-one instruction behind the wheel
Satisfaction guarantee
CDL State testing conducted in-house
Job placement assistance, if needed

Admission Requirements

21 years of age to drive interstate
High School or GED graduate. Non-graduates can take a placement test
Valid driver's license
Motor vehicle driving record free of any current serious offenses
Be able to pass a DOT physical and drug screen

PROGRAMS OF STUDY

Programs of study fall into two major categories—college transfer and career preparation. The Associate of Arts and Associate of Science Degree Programs are designed primarily for students planning to transfer to a four-year college or university. The Associate of Applied Science Degree, Diploma, and Certificate Programs are designed for career preparation. Some Associate of Applied Science Degree Programs are also transferable to four-year colleges and universities.

DEGREE PROGRAMS

Program	Code
ARTS AND SCIENCES	
Associate of Arts	A 10 10 0
Associate of Science	A 10 40 0
BUSINESS TECHNOLOGIES	
Business Administration	A 25 12 0
Banking and Finance	A 25 12 A
Electronic Commerce	A 25 12 I
Marketing and Retailing	A 25 12 F
Operations Management	A 25 12 G
Computer Programming	A 25 13 0
Information Systems	A 25 26 0
Network Administration and Support	A 25 26 D
Medical Office Administration	A 25 31 0
Office Systems Technology	A 25 36 0
COMMERCIAL & ARTISTIC PRODUCTION TECHNOLOGIES	
Advertising and Graphic Design	A 30 10 0
Broadcasting and Production Technology	A 30 12 0
CONSTRUCTION TECHNOLOGIES	
Electrical/Electronics Technology	A 35 22 0
ENGINEERING TECHNOLOGIES	
Computer Engineering Technology	A 40 16 0
Electronics Engineering Technology	A 40 20 0
Mechanical Engineering Technology	A 40 32 0
HEALTH SCIENCES	
Associate Degree Nursing	A 45 12 0
INDUSTRIAL TECHNOLOGIES	
Industrial Systems Technology	A 50 24 0
Manufacturing Technology	A 50 32 0
Composites Concentration	A 50 32 D
Plastics Concentration	A 50 32 A
Mechanical Drafting Technology	A 50 34 0
Welding Technology	A 50 42 0
PUBLIC SERVICE TECHNOLOGIES	
Cosmetology	A 55 14 0
Criminal Justice Technology	A 55 18 0
Early Childhood Associate	A 55 22 0
Teacher Associate Concentration	A 55 22 B
Occupational Education Associate	A 55 32 0

DIPLOMA PROGRAMS

Program	Code
BUSINESS TECHNOLOGIES	
Business Administration	D 25 12 0
Electronic Commerce	D 25 12 I
Operations Management	D 25 12 G
Medical Office Administration	D 25 31 0
Office Systems Technology	D 25 36 0
COMMERCIAL & ARTISTIC PRODUCTION TECHNOLOGIES	
Broadcasting and Production Technology	D 30 12 0
CONSTRUCTION TECHNOLOGIES	
Electrical/Electronics Technology	D 35 22 0
HEALTH SCIENCES	
Practical Nursing	D 45 66 0
INDUSTRIAL TECHNOLOGIES	
Machining Technology	D 50 30 0
Mechanical Drafting Technology	D 50 34 0
Plastics Technology	D 50 32 A
Welding Technology	D 50 42 0
PUBLIC SERVICE TECHNOLOGIES	
Cosmetology	D 55 14 0
Criminal Justice Technology	D 55 18 0
Early Childhood Associate	D 55 22 0
General Occupational Technology	D 55 28 0
Occupational Education Associate	D 55 32 0
TRANSPORTATION SYSTEMS TECHNOLOGIES	
Autobody Repair	D 60 10 0

CERTIFICATE PROGRAMS

Program	Code
BUSINESS TECHNOLOGIES	
Business Administration	C 25 12 0
Electronic Commerce	C 25 12 I
Operations Management	C 25 12 G
Information Systems	C 25 26 0
Insurance	C 25 28 0
Medical Office Administration	C 25 31 0
Office Systems Technology	C 25 36 0
Real Estate	C 25 40 0
COMMERCIAL & ARTISTIC PRODUCTION TECHNOLOGIES	
Broadcasting and Production Technology	
Basic Audio Production	C 30 12 0
CONSTRUCTION TECHNOLOGIES	
Electrical/Electronics Technology	
Industrial Controls	C 35 22 0
Electrical Wiring	C 35 22 1
HEALTH SCIENCES	
Licensed Practical Nurse Refresher	C 45 39 0

INDUSTRIAL TECHNOLOGIES

Machining Technology	
Machining	C 50 30 0
CNC	C 50 30 1
Mechanical Drafting Technology	C 50 34 0
Plastics Technology	C 50 32 A01
Plastics Welding	C 50 32 A02
Welding Technology	C 50 42 0

PUBLIC SERVICE TECHNOLOGIES

Basic Law Enforcement Training	C 55 12 0
Cosmetology	C 55 14 0
Cosmetology Instructor	C 55 16 0
Criminal Justice Technology	C 55 18 0
Early Childhood Associate	C 55 22 0
Esthetics Technology	C 55 23 0
Esthetics Instructor	C 55 27 0
Manicuring Instructor	C 55 38 0
Occupational Education Associate	C 55 32 0

TRANSPORTATION SYSTEMS TECHNOLOGIES

Autobody Repair	
Basic Autobody	C 60 10 0
Advanced Autobody	C 60 10 1

ONE PLUS ONE PROGRAMS

Physical Therapy Assistant, Dental Hygiene, and Occupational Therapy Assistant

Through an agreement with Greenville Technical College, a limited number of Isothermal students can enter these vital health care programs. These programs are arranged as two separate components called One Plus One (1+1). The first component is taken at Isothermal and the second at Greenville Tech. Please contact the Arts and Sciences Dean for further information.

INDIVIDUALIZED INSTRUCTION

The Arts and Sciences Individualized Instruction Center provides the opportunity to take college credit courses through the use of individualized and/or audio-visual-tutorial materials, as well as the use of the internet. These courses cover the same material as the traditional classroom courses, and they carry the same number of credit hours. This instructional method features self-paced learning materials and personalized instruction.

Registration procedures for individualized instruction courses are the same as for any other course. All courses in the Center may be taken for college credit or audit.

Specific course requirements for these courses are available in the Individualized Instruction Center. Feel free to drop by at any time during the semester and examine any course materials in which you might be interested. The Individualized Instruction Center is located in room 114 in Building 6, the Business Sciences building.

ARTS AND SCIENCES OFFERINGS

*HIS	111	World Civilization I
*HIS	112	World Civilization II
*HIS	131	American History I
*HIS	132	American History II
*POL	120	American Government
*PSY	150	General Psychology
*SOC	210	Introduction to Sociology
*SOC	220	Social Problems

**These courses are also available in the traditional classroom.*

COOPERATIVE EDUCATION PROGRAM

Cooperative Education is an alternative college program in which students are employed for specific periods of on- or off-campus work. This employment is related as closely as possible to each student's course of study and individual interest. The blend of classroom theory and practical on-the-job training adds a vital dimension to learning experiences. Numerous advantages accrue from the Cooperative Education approach to learning, such as career direction and financial assistance for participating students, a source of manpower for employers, and an avenue to better relate the college to the community.

A student may participate in the Co-Op Program and earn credit toward degree requirements depending on his/her major.

In order to be eligible for the Co-Op Program, the student should:

1. Be enrolled in a curriculum program.
2. Have been at Isothermal for at least 1 semester.
3. Have at least a 2.0 GPA.
4. Be employable.

DEVELOPMENTAL EDUCATION AND ACADEMIC SUPPORT

This college level educational support program is designed to enable students to complete their chosen curriculum by increasing options for academic success for all students.

Each student's strengths and weaknesses are diagnosed in the areas of English, reading, and mathematics. Students participate in stimulating self-paced, teacher-assisted instruction, as well as lecture and discussion. Computer-assisted instruction is also available. The instructor prescribes individual programs to assist students in improving those skills which would afford them the greatest degree of satisfaction, competency, and success.

Both day and evening classes are available to full- and part-time students.

A. Academic Support Courses:

ENG 080	Writing Foundations
ENG 090	Composition Strategies
ENG 095	Reading & Comp. Strategies
MAT 060	Essential Mathematics
MAT 070	Introductory Algebra
RED 080	Introduction to College Reading
RED 090	Improved College Reading

B. Other Support Services Available:

Supplemental Instruction
Computer Assisted Learning
Personal, Career, and Financial Aid Counseling

ARTS AND SCIENCES PROGRAM

Objectives:
The primary objective of the Arts and Sciences Curricula is to provide students with the general education courses required in the first two years of a traditional four-year degree. Depending on proposed majors at the four-year schools, students at Isothermal Community College will pursue either the A.A. (Associate of Arts) or the A.S. (Associate of Science) degree.

Graduation Requirements:
Students enrolled in both the A.A. and the A.S. degree programs must earn 64 semester hours in designated disciplines with an overall grade point average of 2.0 to graduate. Both programs require a 44 hour general education core as well as other institutional requirements. A.S. degree students are required to take additional hours in upper level math and science while A.A. degree students take more electives in the liberal arts.

Transferability of courses:
A comprehensive Articulation Agreement between the North Carolina Community College System and the 16 institutions of the University of North Carolina contains the following components:

1. Students who complete the A.A. or A.S. degree and who are accepted by institutions within the North Carolina University System will transfer as juniors provided they also meet institutional and/or program requirements at the University to which they are transferring.

2. Students who complete the 44 hour general education core at a college within the North Carolina Community College System will have met the general education requirements at the universities within the North Carolina University System. Some universities have institutional requirements such as foreign language which, if not taken as a part of the 44 hour core, will be required after transfer.

3. Students who transfer before completing the 44 hour core will have transcripts evaluated on a course by course basis and will be required to meet the general education requirements of the transfer institution.

Students who transfer to private colleges or to public universities outside of North Carolina will have transcripts evaluated in accordance with their policies. The final decision on transferability rests with the transfer institution.

The average rate of student persistence toward degree completion at Isothermal Community College is available in the office of Student Affairs.

GRADUATION COURSE REQUIREMENTS
ASSOCIATE OF ARTS (A.A.)
(A 10 10 0)

The Associate of Arts degree will be awarded to those students completing the general liberal arts requirements listed below. When considering options, students should consult four-year college catalogs to determine institutional and program requirements at the schools to which they intend to transfer.

44 hours general education core

Subject	Course (s)	Minimum Credit Hours
Composition/Communication	ENG 111, 113	6
Literature	Two courses from: ENG 231, 232,241, 242, 261, 262, 272	6
Humanities/Fine Arts	Two courses with two different prefixes from: ART 111, HUM 211, HUM 220, MUS 110, PHI 215, PHI 240, REL 211, 212, 110, SPA 111, 211	6
History	*Either: HIS 111, 112 or HIS 131,132	6
Social/Behavioral Science	Two courses with two different prefixes from: ANT 210, 220, ECO 251, 252,GEO 111, 112, POL 120, PSY 150, SOC 210, 213, 220	6
Mathematics	Two courses from the following: MAT 151, 161, 162, 171, 172, 175, 263, 271, 272 (One course must be an introductory college level math course such as 161 or 171)	6

Laboratory Science	Two laboratory science courses From the following: AST 151, 152, BIO 111, 112,GEL 111, 113, CHM 131, 132 CHM 151, 152,PHY 151, 152, 251, 252	8
Other Requirements:		
Orientation	**ACA 115	1
Physical Education	PED 111 and one PED activity course	2
Computer Requirement	CIS 110 or higher level course	3
Electives	(Choose from approved list of Transferable courses)	15
Total Hours:		64-65**

***HIS 111 & 112 are preferred by most universities.**
****ACA115 is an institutional requirement not included in the 64 hour state requirement.**

A.A. Degree Pre-Major Programs

Associate of Arts pre-major articulation agreements and program guidelines designed for transfer into baccalaureate programs within the North Carolina University System are available in the fields listed below through Arts and Sciences advisors:

Major	Code
Business Administration	A10100B
Business Education and Marketing	A10100C
Criminal Justice	A10100D
Elementary, Middle Grades, Special Education	A10100P
English	A10100E
English Education	A10100F
Health Education	A10100G
History	A10100H
Nursing	A10100I
Physical Education	A10100J
Political Science	A10100K
Psychology	A10100L
Social Science Secondary Education	A10100M
Sociology	A10100N
Social Work	A10100Q

Guidelines for the above programs are designed to meet the requirements of the Comprehensive Articulation Agreement as well as Isothermal's institutional requirements. If discrepancies exist, see the Arts and Sciences Dean for explanation or resolution.

GRADUATION COURSE REQUIREMENTS
ASSOCIATE OF SCIENCE (A.S.)
(A 10 40 0)

The Associate of Science degree will be awarded to students who complete the requirements listed below. Students planning to transfer to science/math based programs within the UNC System should also follow the guidelines in articulation agreements available through advisors and/or consult four-year college catalogs when considering course options.

44 hours general education core

Subject	Course (s)	Minimum Credit Hours
Composition/Communication	ENG 111, 113	6
Literature	Two courses from: ENG 231, 232, 241, 242, 261, 262	6
Humanities/Fine Arts	Two courses with two different prefixes from: ART 111, HUM 211, HUM 220 MUS 110, PHI 215,PHI 240, REL 211, 212, 110, SPA 111, 211	6
History	*Either: HIS 111,112, or HIS 131, 132	6
Social/Behavioral Science	Two courses with two different Prefixes from: ANT 210, 220 ECO 251, 252, GEO 111, 113, POL 120, PSY 150, SOC 210, 213, 220	6
Mathematics	Two courses from the following: MAT 175, (171 and 172), 271, 272	6
Laboratory Science	Two courses from the same discipline: BIO 111, 112, CHM 151, 152,PHY 151, 152, 251, 252	8
Other Requirements: Orientation	***ACA 115	1
Physical Education	PED 111 and one PED activity course	2
Additional hours in upper level math and science		14-16
Electives		2 -4
Total Hours:		**64-65**

NOTE: Computer competency is a must for A.S. degree students; CIS 110 or a higher level computer course is recommended.
**HIS 111 & 112 are preferred by most universities.*
****ACA115 is an institutional requirement not included in the 64 hour state requirement.**

A.S. DEGREE PRE-MAJOR PROGRAMS

Associate of Science pre-major articulation agreements and program guidelines designed for transfer into baccalaureate programs within the North Carolina University System are available in the programs listed below through Arts and Sciences advisors:

Major	Code
Biology and Biology Education	A10400A
Chemistry and Chemistry Education	A10400B
Engineering	A10400D
Mathematics	A10400E
Mathematics Educations	A10400F

Program guidelines for the above programs are designed to meet the requirements of the Comprehensive Articulation Agreement as well as Isothermal's institutional requirements. If discrepancies exist, see the Arts and Sciences Dean for explanation or resolution.

ASSOCIATE OF APPLIED SCIENCE DEGREES (A.A.S.)

Graduation Requirements
An Associate of Applied Science (A.A.S.) Degree will be awarded to students completing a prescribed two-year program of study with a minimum of a 2.0 grade point average and passing all courses.

DIPLOMA and CERTIFICATE PROGRAMS

A diploma or certificate will be awarded to students completing a prescribed program of study of one year or less with a minimum of a 2.0 grade point average.

Degree, diploma, and certificate programs are listed alphabetically in the pages that follow. Upon completion of all courses listed in a program, the student is eligible to receive the program credential.

Advertising and Graphic Design - Degree (A 30 10 0)

Curriculum Description
The Advertising and Graphic Design curriculum is designed to provide students with knowledge and skills necessary for employment in the graphic design profession which emphasizes design, advertising, illustration, and digital and multimedia preparation of printed and electronic promotional materials.

Students will be trained in the development of concept and design for promotional materials such as newspaper and magazine advertisements, posters, folders, letterheads, corporate symbols, brochures, booklets, preparation of art for printing, lettering and typography, photography, and electronic media.

Graduates should qualify for employment opportunities with graphic design studios, advertising agencies, printing companies, department stores, a wide variety of manufacturing industries, newspapers, and businesses with in-house graphics operations.

			Class Hours	Lab Hours	Credit Hours
I.	**General Education Requirements - 15 Credit Hours**				
	ENG 111	Expository Writing	3	0	3
	ENG 114	Professional Research & Reporting	3	0	3
	MAT 115	Mathematical Models	2	2	3
		Humanities Elective	3	0	3
		Social Science Elective	3	0	3
II.	**Required Core Courses - 7 Credit Hours**				
	GRD 110	Typography I	2	2	3
	GRD 280	Portfolio Design	2	4	4

			Class Hours	Lab Hours	Credit Hours
III.	**Required Subject Courses - 26 Credit Hours**				
	ART 131	Drawing I	0	6	3
	GRD 131	Illustration I	1	3	2
	GRD 141	Graphic Design I	2	4	4
	GRD 142	Graphic Design II	2	4	4
	GRD 151	Computer Design Basics	1	4	3
	GRD 152	Computer Design Tech I	1	4	3
	GRD 241	Graphic Design III	2	4	4
	ART 121	Design I	0	6	3
IV.	**Other Major Required Courses - 22 Credit Hours**				
	GRA 110	Graphic Arts Orientation	2	0	2
	GRD 111	Typography II	2	2	3
	GRD 132	Illustration II	1	3	2
	GRD 153	Computer Design Tech II	1	4	3
	GRD 160	Photo Fundamentals I	1	4	3
	GRD 161	Photo Fundamentals II	1	4	3
	GRD 242	Graphic Design IV	2	4	4
	GRD 281	Design of Advertising	2	0	2
	5 Semester Hours To Be Selected From The Following:				5
	ART 132	Drawing II			
	ART 140	Basic Painting			
	COE 111	Co-Op Work Experience I			
	COE 121	Co-Op Work Experience II			
	GRA 121	Graphic Arts I			
	GRD 133	Illustration III			
	GRD 162	Photo Portfolio			
	GRD 210	Airbrush I			
	GRD 263	Illustrative Imaging			
V.	**Other Required Hours - 1 Credit Hour**				
	ACA 115	Success & Study Skills	0	2	1
Total Required Hours					**76**

Associate Degree Nursing Non-Integrated - Degree (A 45 12 0)

Curriculum Description
The Associate Degree Nursing curriculum provides individuals with the knowledge and skills necessary to provide nursing care to clients and groups of clients throughout the lifespan in a variety of settings.

Courses will include content related to the nurse's role as provider of nursing care, as manager of care, as 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-RN) which is required for practice as a Registered Nurse. Employment opportunities include hospitals, long term care facilities, clinics, physicians' offices, industry, and community agencies.

			Class Hours	Lab Hours	Clin. Hours	Credit Hours
I.	**General Education Requirements - 26 Credit Hours**					
	BIO 165	Anatomy & Physiology I	3	3	0	4
	BIO 166	Anatomy & Physiology II	3	3	0	4
	BIO 175	General Microbiology	2	2	0	3
	ENG 111	Expository Writing	3	0	0	3
	ENG 113	Literature Based Research	3	0	0	3
		Humanities Elective	3	0	0	3
	PSY 150	General Psychology	3	0	0	3
	PSY 241	Developmental Psychology	3	0	0	3

			Class Hours	Lab Hours	Clin. Hours	Credit Hours
II.	**Required Core Courses - 37 Credit Hours**					
	NUR 115	Fundamentals of Nursing	2	3	6	5
	NUR 125	Maternal-Child Nursing	5	3	6	8
	NUR 135	Adult Nursing I	5	3	9	9
	NUR 185	Mental Health Nursing	3	0	6	5
	NUR 235	Adult Nursing II	4	3	15	10
III.	**Other Major Required Courses - 12 Credit Hours**					
	NUR 117	Pharmacology	1	3	0	2
	NUR 133	Nursing Assessment	2	3	0	3
	NUR 233	Leadership in Nursing	2	0	0	2
	NUR 244	Issues and Trends	2	0	0	2
	BIO 155	Nutrition	3	0	0	3
		OR				
	NUR 189	Nursing Transition	(1)	(3)	(0)	(2)
IV.	**Other Required Hours - 1 Credit Hour**					
	ACA 115	Success & Study Skills	0	2	0	1
Total Required Hours						**76**

Note: Eligibility for graduation requires either BIO 155 or NUR 189

Autobody Repair - Diploma (D 60 10 0)

Curriculum Description

The Autobody Repair curriculum provides training in the use of equipment and materials of the autobody repair trade. The student studies the construction of the automobile body and techniques of autobody repairing, rebuilding, and refinishing.

The course work includes autobody fundamentals, industry overview, and safety. Students will perform hands-on repairs in the areas of non-structural and structural repairs, MIG welding, plastics and adhesives, refinishing, and other related areas.

Graduates of the curriculum should 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.

			Class Hours	Lab Hours	Credit Hours
I.	**General Education Requirements - 6 Credit Hours**				
	ENG 101	Applied Communications I	3	0	3
	MAT 101	Applied Mathematics I	2	2	3
II.	**Required Core Courses - 31 Credit Hours**				
	AUB 111	Painting & Refinishing I	2	6	4
	AUB 121	Non-Structural Damage I	1	4	3
	AUB 131	Structural Damage I	2	4	4
	AUB 134	Autobody MIG Welding	1	4	3
	AUB 136	Plastics and Adhesives	1	4	3
	AUB 112	Painting & Refinishing II	2	6	4
	AUB 122	Non-Structural Damage II	2	6	4
	AUB 132	Structural Damage II	2	6	4
	AUB 114	Special Finishes	1	2	2
III.	**Other Major Required Courses - 11 Credit Hours**				
	AUB 141	Mech & Elec Components I	2	2	3
	AUB 150	Automotive Detailing	1	3	2
	AUB 160	Body Shop Operations	1	0	1
	AUB 162	Autobody Estimating	1	2	2
	CIS 110	Introduction to Computers	2	2	3
Total Required Hours					**48**

Autobody Repair - Certificate

		Class Hours	Lab Hours	Credit Hours
Basic Autobody - 14 Credit Hours (C 60 10 0)				
AUB 111	Painting & Refinishing I	2	6	4
AUB 121	Non-Structural Damage I	1	4	3
AUB 131	Structural Damage I	2	4	4
AUB 134	Autobody MIG Welding	1	4	3
Advanced Autobody - 12 Credit Hours (C 60 10 1)				
AUB 112	Painting and Refinishing II	2	6	4
AUB 122	Non-Structural Damage II	2	6	4
AUB 132	Structural Damage II	2	6	4

Basic Law Enforcement Training - Certificate (C 55 12 0)

Curriculum Description
Basic Law Enforcement Training (BLET) is designed to give 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.

Students must successfully complete and pass all units of study which include the certification examination mandated by the North Carolina Criminal Justice Education and Training Standards Commission and the North Carolina Sheriffs' Education and Training Standards Commission to receive a certificate.

		Class Hours	Lab Hours	Credit Hours
CJC 100	Basic Law Enforcement Training	8	30	18
Total Required Hours				**18**

Broadcasting and Production Technology - Degree (A 30 12 0)

Curriculum Description
Students enrolled in the Broadcasting 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.

			Class Hours	Lab Hours	Co-Op Hours	Credit Hours
I.	**General Education Requirements - 15 Credit Hours**					
	ENG 111	Expository Writing	3	0	0	3
	ENG 114	Professional Research and Reporting	3	0	0	3
	MAT 115	Mathematical Models	2	2	0	3
		Humanities Elective	3	0	0	3
		Social Science Elective	3	0	0	3

			Class Hours	Lab Hours	Co-Op Hours	Credit Hours
II.	**Required Core Courses - 13 Credit Hours**					
	BPT 110	Introduction to Broadcasting	3	0	0	3
	BPT 111	Broadcast Law and Ethics	3	0	0	3
	BPT 112	Broadcast Writing	3	2	0	4
	BPT 113	Broadcast Sales	3	0	0	3
III.	**Other Major Required Courses - 34 Credit Hours**					
	Select A or B					
	(A)					
	BPT 135	Radio Performance I	0	6	0	2
	BPT 136	Radio Performance II	0	6	0	2
	BPT 137	Radio Performance III	0	6	0	2
	(B)					
	BPT 235	TV Performance I	0	6	0	2
	BPT 236	TV Performance II	0	6	0	2
	BPT 237	TV Performance III	0	6	0	2
	Additional Major Required Courses					
	BPT 131	Audio/Radio Production I	2	6	0	4
	BPT 132	Audio/Radio Production II	2	6	0	4
	BPT 140	Introduction to TV Systems	2	0	0	2
	BPT 210	Broadcast Management	3	0	0	3
	BPT 215	Broadcast Programming	3	0	0	3
	BPT 231	Video/TV Production I	2	6	0	4
	BPT 232	Video/TV Production II	2	6	0	4
	COE 111	Co-Op Work Experience I	0	0	10	1
	FVP 227	Multimedia Production	2	3	0	3
	Options: Select 12 credit hours from the following courses:					
	BPT 238	TV Performance IV	0	6	0	2
	BPT 239	TV Performance V	0	6	0	2
	BPT 250	Institutional Video	2	3	0	3
	COE 115	Work Exp. Seminar I	1	0	0	1
	COE 121	Co-Op Work Experience II	0	0	10	1
	MIT 115	Introduction to Video Concepts	2	2	0	3
	BPT 121	Broadcast Speech I	2	3	0	3
	BPT 241	Broadcast Journalism I	3	2	0	4
	BPT 242	Broadcast Journalism II	3	2	0	4
	BPT 138	Radio Performance IV	0	6	0	2
	BPT 139	Radio Performance V	0	6	0	2
	BPT 260	Multi-Track Recording	2	2	0	3
	MIT 120	Introduction to Audio Concepts	2	2	0	3
	CIS 172	Introduction to the Internet	2	3	0	3
	CIS 110	Introduction to Computers	2	2	0	3
	BPT 115	Public Relations	3	0	0	3
	BPT 122	Broadcast Speech II	2	3	0	3
	BPT 220	Broadcast Marketing	3	0	0	3
IV.	**Other Required Hours - 1 Credit Hour**					
	ACA 115	Success & Study Skills	0	2	0	1
Total Required Hours						75

Broadcasting and Production Technology - Diploma (D 30 12 0)

			Class Hours	Lab Hours	Co-Op Hours	Credit Hours
I.	**General Education Requirements - 6 Credit Hours**					
	ENG 111	Expository Writing	3	0	0	3
		Social Science Elective	3	0	0	3
II.	**Major Required Courses - 40 Credit Hours**					
	BPT 110	Introduction to Broadcasting	3	0	0	3
	BPT 111	Broadcast Law and Ethics	3	0	0	3
	BPT 112	Broadcast Writing	3	2	0	4
	BPT 113	Broadcast Sales	3	0	0	3
	BPT 121	Broadcast Speech I	2	3	0	3
	BPT 122	Broadcast Speech II	2	3	0	3
	BPT 131	Audio/Radio Production I	2	6	0	4
	BPT 132	Audio/Radio Production II	2	6	0	4
	BPT 135	Radio Performance I	0	6	0	2
	BPT 136	Radio Performance II	0	6	0	2
	BPT 137	Radio Performance III	0	6	0	2
	BPT 210	Broadcast Management	3	0	0	3
	COE 111	Co-op Work Experience	0	0	10	1
	CIS 110	Introduction to Computers	2	2	0	3
Total Required Hours						46

Broadcasting and Production Technology - Certificate (C 30 12 0)

		Class Hours	Lab Hours	Credit Hours
Basic Audio Production - 17 Credit Hours				
BPT 121	Broadcast Speech I	2	3	3
BPT 131	Audio/Radio Production I	2	6	4
BPT 132	Audio/Radio Production II	2	6	4
BPT 260	Multi-Track Recording	2	2	3
MIT 120	Introduction to Audio Concepts	2	2	3

Business Administration Degree (A 25 12 0)

Curriculum Description

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.

			Class Hours	Lab Hours	Credit Hours
I.	**General Education Requirements - 15 Credit Hours**				
	ECO 252	Prin of Macroeconomics	3	0	3
	ENG 111	Expository Writing	3	0	3
		Humanities elective	3	0	3
	ENG 115	Oral Communication	3	0	3
	MAT 115	Mathematical Models	3	0	3

			Class Hours	Lab Hours	Credit Hours
II.	**Required Core Courses - 16 Credit Hours**				
	ACC 120	Prin of Financial Acct	3	2	4
	BUS 115	Business Law I	3	0	3
	BUS 137	Principles of Management	3	0	3
	ECO 251	Prin of Microeconomics	3	0	3
	MKT 120	Principles of Marketing	3	0	3
III.	**Other Major Required Courses - 42 Credit Hours**				
	ACC 121	Prin of Managerial Acct	3	2	4
	ACC 129	Individual Income Taxes	2	2	3
	BUS 116	Business Law II	3	0	3
	BUS 121	Business Math	2	2	3
	BUS 153	Human Resource Management	3	0	3
	BUS 225	Business Finance	2	2	3
	BUS 253	Leadership and Mgt. Skills	3	0	3
	BUS 255	Org. Behavior in Business	3	0	3
	BUS 260	Business Communication	3	0	3
		Elective (choose one)			2
		OST 136 Word Processing			
		CIS 112 Windows			
		CIS 152 Database Concepts & Apps.			
		CIS 165 Desktop Publishing I			
		CIS 169 Business Presentations			
		CIS 172 Intro to the Internet			
		ECM 168 Electronic Business			
	CIS 110	Introduction to Computers	2	2	3
	CIS 120	Spreadsheet I	2	2	3
	MKT 220	Advertising & Sales Promotion	3	0	3
	OST 131	Keyboarding	1	2	2
	COE 110	World of Work	1	0	1
IV.	**Other Required Hours - 1 Credit Hour**				
	ACA 115	Success and Study Skills	0	2	1
Total Required Hours					74

Business Administration- Diploma (D 25 12 0)

			Class Hours	Lab Hours	Credit Hours
I.	**General Education - 9 Credit Hours**				
	ECO 252	Prin of Macroeconomics	3	0	3
	ENG 111	Expository Writing	3	0	3
	MAT 115	Mathematical Models	3	0	3
II.	**Required Core Courses - 13 Credit Hours**				
	ACC 120	Prin of Financial Acct	3	2	4
	BUS 115	Business Law I	3	0	3
	BUS 137	Principles of Management	3	0	3
	MKT 120	Principles of Marketing	3	0	3
III.	**Other Major Required Courses - 22 Credit Hours**				
	ACC 121	Prin of Managerial Acct	3	2	4
	BUS 121	Business Math	2	2	3
	BUS 225	Business Finance	2	2	3
	BUS 255	Org Behavior in Business	3	0	3
	CIS 110	Introduction to Computers	2	2	3
	CIS 120	Spreadsheet I	2	2	3
	COE 110	World of Work	1	0	1

		Class Hours	Lab Hours	Credit Hours
OST 131	Keyboarding	1	2	2
IV. Other Required Hours - 1 Credit Hour				
ACA 115	Success and Study Skills	0	2	1
Total Required Hours				45

Business Administration – Certificate (C 25 12 0)

		Class Hours	Lab Hours	Credit Hours
CIS 110	Introduction to Computers	2	2	3
COE 110	World of Work	1	0	1
Choose four of the following (include at least one BUS and one MKT prefix):				
BUS 137	Principles of Management	3	0	3
BUS 153	Human Resource Management	3	0	3
BUS 253	Leadership and Management Skills	3	0	3
MKT 120	Principles of Marketing	3	0	3
MKT 220	Advertising and Sales Promotion	3	0	3
OST 131	Keyboarding	1	2	2
Total Required Hours				15/16

Business Administration Degree - Banking and Finance Concentration (A 25 12 A)

Curriculum Description

Banking and Finance is a concentration under the curriculum title of Business Administration. This curriculum is designed to prepare individuals for a career with various financial institutions and other businesses.

Course work includes principles of banking, money and banking, lending fundamentals, banking and business law, and practices in the areas of marketing, management, accounting, and economics.

Graduates should qualify for a variety of entry-level jobs in banking and finance. Also available are employment opportunities with insurance, brokerage and mortgage companies, and governmental lending agencies.

			Class Hours	Lab Hours	Credit Hours
I.	**General Education Requirements - 15 Credit Hours**				
	ECO 252	Prin of Macroeconomics	3	0	3
	ENG 111	Expository Writing	3	0	3
		Humanities elective	3	0	3
	ENG 115	Oral Communication	3	0	3
	MAT 115	Mathematical Models	3	0	3
II.	**Required Core Courses - 16 Credit Hours**				
	ACC 120	Prin of Financial Acct	3	2	4
	BUS 115	Business Law I	3	0	3
	BUS 137	Principles of Management	3	0	3
	ECO 251	Prin of Microeconomics	3	0	3
	MKT 120	Principles of Marketing	3	0	3
III.	**Required Concentration Courses - 12 Credit Hours**				
	BAF 110	Principles of Banking	3	0	3
	BAF 131	Fund. Of Bank Lending	3	0	3

			Class Hours	Lab Hours	Credit Hours
	BAF 141	Law and Banking: Principles	3	0	3
	BAF 222	Money and Banking	3	0	3
IV.	**Other Major Required Courses - 30 Credit Hours**				
	ACC 121	Prin of Managerial Acct	3	2	4
	ACC 129	Individual Income Taxes	2	2	3
	BUS 121	Business Math	2	2	3
	BUS 225	Business Finance	2	2	3
	BUS 255	Org Behavior in Business	3	0	3
	BUS 260	Business Communication	3	0	3
		Elective (Choose One)	1	2	2
		OST 136 Word Processing			
		CIS 112 Windows			
		CIS 152 Database Concepts & Apps			
		CIS 165 Desktop Publishing I			
		CIS 169 Business Presentations			
		CIS 172 Intro to the Internet			
		ECM 168 Electronic Business			
	CIS 110	Introduction to Computers	2	2	3
	CIS 120	Spreadsheet I	2	2	3
	OST 131	Keyboarding	1	2	2
	COE 110	World of Work	1	0	1
V.	**Other Required Hours - 1 Credit Hour**				
	ACA 115	Success and Study Skills	0	2	1
Total Required Hours					74

Business Administration Degree – Electronic Commerce Concentration (A 25 12 I)

Curriculum Description

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, and 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 life long learning. Graduates are prepared for employment opportunities in government agencies, financial institutions, and small to medium sized businesses or industry.

			Class Hours	Lab Hours	Credit Hours
I.	**General Education Requirements - 15 Credit Hours**				
	ECO 252	Prin of Macroeconomics	3	0	3
	ENG 111	Expository Writing	3	0	3
		Humanities elective	3	0	3
	ENG 115	Oral Communication	3	0	3
	MAT 115	Mathematical Models	3	0	3
II.	**Required Core Courses - 19 Credit Hours**				
	ACC 120	Prin of Financial Acct	3	2	4
	BUS 115	Business Law I	3	0	3
	BUS 137	Principles of Management	3	0	3

			Class Hours	Lab Hours	Credit Hours
	ECO 251	Prin of Microeconomics	3	0	3
	MKT 120	Principles of Marketing	3	0	3
	CIS 110	Introduction to Computers	2	2	3
III.	**Required Concentration Courses – 15 Hours**				
	CIS 172	Intro to the Internet	2	3	3
	ECM 168	Electronic Business	2	2	3
	ECM 210	Introduction to E-Commerce	2	2	3
	ECM 220	E-Commerce Plan & Implem	2	2	3
	ECM 230	Capstone Project	1	6	3
IV.	**Other Major Required Courses - 24 Credit Hours**				
	ACC 121	Prin of Managerial Acct	3	2	4
	BUS 121	Business Math	2	2	3
	BUS 260	Business Communication	3	0	3
	CIS 120	Spreadsheet I	2	2	3
	CIS 152	Database Concepts & Apps	2	2	3
	CIS 153	Database Applications	2	2	3
	CSC 160	Intro to Internet Prog	2	2	3
	OST 131	Keyboarding	1	2	2
IV.	**Other Required Hours - 1 Credit Hour**				
	ACA 115	Success and Study Skills	0	2	1
Total Required Hours					**74**

Business Administration- Electronic Commerce - Diploma (D 25 12 I)

			Class Hours	Lab Hours	Credit Hours
I.	**General Education - 6 Credit Hours**				
	ENG 111	Expository Writing	3	0	3
	MAT 115	Mathematical Models	3	0	3
II.	**Required Core Courses - 19 Credit Hours**				
	ACC 120	Prin of Financial Acct	3	2	4
	BUS 115	Business Law I	3	0	3
	BUS 137	Principles of Management	3	0	3
	ECO 252	Prin of Macroeconomics	3	0	3
	MKT 120	Principles of Marketing	3	0	3
	CIS 110	Introduction to Computers	2	2	3
III.	**Required Concentration Courses – 15 Credit Hours**				
	CIS 172	Intro to the Internet	2	3	3
	ECM 168	Electronic Business	2	2	3
	ECM 210	Introduction to E-Commerce	2	2	3
	ECM 220	E-Commerce Plan. & Implem.	2	2	3
	ECM 230	Capstone Project	1	6	3
IV.	**Other Major Required Courses - 6 Credit Hours**				
	CIS 152	Database Concepts & Apps	2	2	3
	CSC 160	Intro to Internet Prog	2	2	3
V.	**Other Required Hours - 1 Credit Hour**				
	ACA 115	Success and Study Skills	0	2	1
Total Required Hours					**47**

Business Administration - Electronic Commerce - Certificate (C 25 12 I)

		Class Hours	Lab Hours	Credit Hours
CIS 172	Introduction to the Internet	2	3	3
ECM 168	Electronic Business	2	2	3
ECM 210	Introduction to E-Commerce	2	2	3
CSC 160	Intro to Internet Programming	2	2	3

Choose two of the following:

BUS 137	Principles of Management	3	0	3
CIS 110	Introduction to Computers	2	2	3
MKT 120	Principles of Marketing	3	0	3

Total Required Hours **18**

Business Administration Degree - Marketing and Retailing Concentration (A 25 12 F)

Curriculum Description

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.

			Class Hours	Lab Hours	Credit Hours
I.	**General Education Requirements - 15 Credit Hours**				
	ECO 252	Prin of Macroeconomics	3	0	3
	ENG 111	Expository Writing	3	0	3
		Humanities elective	3	0	3
	ENG 115	Oral Communication	3	0	3
	MAT 115	Mathematical Models	3	0	3
II.	**Required Core Courses - 16 Credit Hours**				
	ACC 120	Prin of Financial Acct	3	2	4
	BUS 115	Business Law I	3	0	3
	BUS 137	Principles of Management	3	0	3
	ECO 251	Prin of Microeconomics	3	0	3
	MKT 120	Principles of Marketing	3	0	3
III.	**Required Concentration Courses - 15 Hours**				
	MKT 122	Visual Merchandising	3	0	3
	MKT 123	Fundamentals of Selling	3	0	3
	MKT 220	Advertising & Sales Promotion	3	0	3
	MKT 225	Marketing Research	3	0	3
	MKT 226	Retail Applications	3	0	3
IV.	**Other Major Required Courses - 28 Credit Hours**				
	ACC 121	Prin of Managerial Acct	3	2	4
	BUS 121	Business Math	2	2	3
	BUS 253	Leadership and Mgt. Skills	3	0	3
	BUS 255	Org Behavior in Business	3	0	3
	BUS 260	Business Communication	3	0	3
	CIS 110	Introduction to Computers	2	2	3
	CIS 120	Spreadsheet I	2	2	3
	COE 110	World of Work	1	0	1
	MKT 125	Buying and Merchandising	3	0	3
	OST 131	Keyboarding	1	2	2

			Class Hours	Lab Hours	Credit Hours
V.	**Other Required Hours - 1 Credit Hour**				
	ACA 115	Success and Study Skills	0	2	1
Total Required Hours					75

Business Administration Degree - Operations Management Concentration (A 25 12 G)

Curriculum Description

Operations Management is a concentration under the curriculum title of Business Administration. This curriculum is designed to educate individuals in the technical and managerial aspects of operations for manufacturing and service industries.

Emphasized are analytical reasoning, problem solving, and continuous improvement concepts required in today's dynamic business and industry environments. Concepts include quality, productivity, organizational effectiveness, financial analysis, and the management of human, physical, and information resources.

Graduates should qualify for leadership positions or enhance their professional skills in supervision, team leadership, operations planning, quality assurance, manufacturing and service management, logistics/distribution, health and safety, human resources management, and inventory/materials management.

			Class Hours	Lab Hours	Credit Hours
I.	**General Education Requirements - 15 Credit Hours**				
	ECO 252	Prin of Macroeconomics	3	0	3
	ENG 111	Expository Writing	3	0	3
		Humanities elective	3	0	3
	ENG 115	Oral Communication	3	0	3
	MAT 115	Mathematical Models	3	0	3
II.	**Required Core Courses - 16 Credit Hours**				
	ACC 120	Prin of Financial Acct	3	2	4
	BUS 115	Business Law I	3	0	3
	BUS 137	Principles of Management	3	0	3
	ECO 251	Prin of Microeconomics	3	0	3
	MKT 120	Principles of Marketing	3	0	3
III.	**Required Concentration Courses - 15 Hours**				
	ISC 121	Envir Safety & Health	3	0	3
	ISC 210	Oper and Prod Planning	3	0	3
	ISC 221	Statistical Qual Control	3	0	3
	OMT 112	Materials Management	3	0	3
	OMT 260	Issues in Operations Mgt	3	0	3
IV.	**Other Major Required Courses - 28 Credit Hours**				
	ACC 121	Prin of Managerial Acct	3	2	4
	BUS 121	Business Math	2	2	3
	BUS 153	Human Resource Management	3	0	3
	BUS 253	Leadership and Mgt. Skills	3	0	3
	BUS 255	Org Behavior in Business	3	0	3
	BUS 260	Business Communication	3	0	3
	CIS 110	Introduction to Computers	2	2	3
	CIS 120	Spreadsheet I	2	2	3
	OST 131	Keyboarding	1	2	2
	COE 110	World of Work	1	0	1
V.	**Other Required Hours - 1 Credit Hour**				
	ACA 115	Success and Study Skills	0	2	1
Total Required Hours					75

Business Administration - Operations Management - Diploma (D 25 12 G)

			Class Hours	Lab Hours	Credit Hours
I.	**General Education - 9 Credit Hours**				
	ECO 252	Prin of Macroeconomics	3	0	3
	ENG 111	Expository Writing	3	0	3
	MAT 115	Mathematical Models	3	0	3
II.	**Required Core Courses - 13 Credit Hours**				
	ACC 120	Prin of Financial Acct	3	2	4
	BUS 115	Business Law I	3	0	3
	BUS 137	Principles of Management	3	0	3
	MKT 120	Principles of Marketing	3	0	3
III.	**Required Concentration Courses - 15 Credit Hours**				
	ISC 121	Envir Safety & Health	3	0	3
	ISC 210	Oper and Prod Planning	3	0	3
	OMT 112	Materials Management	3	0	3
	ISC 221	Statistical Quality Control	3	0	3
	OMT 260	Issues in Operation Management	3	0	3
IV.	**Other Major Required Courses - 9 Credit Hours**				
	BUS 121	Business Math	2	2	3
	CIS 110	Introduction to Computers	2	2	3
	OST 131	Keyboarding	1	2	2
	COE 110	World of Work	1	0	1
V.	**Other Required Hours - 1 Credit Hour**				
	ACA 115	Success and Study Skills	0	2	1
Total Required Hours					47

Business Administration - Operations Management - Certificate (C 25 12 G)

		Class Hours	Lab Hours	Credit Hours
CIS 110	Introduction to Computers	2	2	3
COE 110	World of Work	1	0	1
ISC 121	Environmental Health and Safety	3	0	3
Choose three of the following:				
BUS 137	Principles of Management	3	0	3
BUS 153	Human Resource Management	3	0	3
BUS 253	Leadership and Management Skills	3	0	3
OST 131	Keyboarding	1	2	2
Total Required Hours				**15/16**

Computer Engineering Technology – Degree (A 40 16 0)

Curriculum Description

The Computer Engineering Technology curriculum provides the skills required to install, service, and maintain computers, peripherals, networks, and microprocessor and computer controlled equipment. It includes training in both hardware and software, emphasizing operating systems concepts to provide a unified view of computer systems.

Coursework includes mathematics, physics, electronics, digital circuits, and programming, with emphasis on the operation, use, and interfacing of memory and devices to the CPU. Additional topics may include communications, networks, operating systems, programming languages, Internet configuration and design, and industrial applications.

Graduates should qualify for employment opportunities in electronics technology, computer service, computer networks, server maintenance, programming, and other areas requiring a knowledge of electronic and computer systems. Graduates may also qualify for certification in electronics, computers, or networks.

			Class Hours	Lab Hours	Credit Hours
I.	**General Education Requirements – 15 Credit Hours**				
	ENG 111	Expository Writing	3	0	3
	ENG 114	Prof Research & Reporting	3	0	3
	MAT 161	College Algebra	3	0	3
		Humanities Elective	3	0	3
		Social Science Elective	3	0	3
II.	**Required Core Courses – 27 Credit Hours**				
	CET 111	Computer Upgrade/Repair I	2	3	3
	ELC 131	DC/AC Circuit Analysis	4	3	5
	ELN 131	Electronic Devices	3	3	4
	ELN 133	Digital Electronics	3	3	4
	ELN 232	Introduction to Microprocessors	3	3	4
	MAT 162	College Trigonometry	3	0	3
	PHY 131	Physics-Mechanics	3	2	4
III.	**Required Subject Courses – 3 Credit Hours**				
	CSC 134	C++ Programming	2	3	3
IV.	**Other Major Required Courses - 30 Credit Hours**				
	CET 211	Computer Upgrade/Repair II	2	3	3
	CET 225	Digital Signal Processing	2	2	3
	CIS 110	Intro to Computers	2	2	3
	CIS 115	Intro to Programming & Logic	2	2	3
	CSC 139	Visual Basic Programming	2	3	3
	EGR 285	Design Project	0	4	2
	ELC 128	Intro to PLC	2	3	3
	ELN 152	Fabrication Techniques	1	3	2
	ELN 235	Data Communication System	3	3	4
	PHY 132	Physics-Elect & Magnetism	3	2	4
V.	**Other Required Hours – 1 Credit Hour**				
	ACA 115	Success & Study Skills	0	2	1
Total Required Hours					**76**

Computer Programming Degree (A 25 13 0)

Curriculum Description

The Computer Programming curriculum prepares individuals for employment as computer programmers and related positions through study and applications in 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/analysts, software developers, computer operators, systems technicians, database specialists, computer specialists, software specialists, or information systems managers.

			Class Hours	Lab Hours	Credit Hours
I.	**General Education Requirements - 15 Credit Hours**				
	ECO 252	Prin of Macroeconomics	3	0	3
	ENG 111	Expository Writing	3	0	3
		Humanities Elective	3	0	3
	ENG 115	Oral Communication	3	0	3
	MAT 115	Mathematical Models			
	OR				
	MAT 161	College Algebra	3	0	3
II.	**Required Core Courses - 27 Credit Hours**				
	CIS 110	Introduction to Computers	2	2	3
	CIS 115	Intro to Prog and Logic	2	2	3
	CIS 130	Survey of Operating Systems	2	3	3
	CIS 152	Database Concepts & Apps	2	2	3
	CSC 134	C++ Programming	2	3	3
	CSC 138	RPG Programming	2	3	3
	CSC 234	Advanced C++	2	3	3
	CSC 238	Advanced RPG	2	3	3
	NET 110	Data Comm/Networking	2	2	3
III.	**Other Major Required Hours - 31 Credit Hours**				
	ACC 120	Prin of Financial Acct	3	2	4
	BUS 260	Business Communication	3	0	3
	CIS 153	Database Applications	2	2	3
	CIS 244	Operating System-AS/400	2	3	3
	CIS 286	Systems Analysis and Design	3	0	3
	CIS 288	Systems Project	1	4	3
	COE 110	World of Work	1	0	1
	CSC 139	Visual BASIC Programming	2	3	3
	Computer Electives - Select a minimum of 8 Credit Hours from the following:				
	CIS 120	Spreadsheet I	2	2	3
	CIS 169	Business Presentations	1	2	2
	CIS 172	Intro to the Internet	2	3	3
	CIS 211	AS/400 Maint & Operations	2	2	3
	CIS 215	Hardware Install/Maint	2	3	3
	CIS 217	Computer Train & Support	2	2	3
	CSC 144	AS/400 CL Programming	2	3	3
	CSC 160	Intro to Internet Prog	2	2	3
	COE 111	Co-op Work Experience I	0	10	1
	ECM 168	Electronic Business			

			Class Hours	Lab Hours	Credit Hours
IV.	**Other Required Hour - 1 Credit Hour**				
ACA 115	Success & Study Skills		0	2	1
Total Required Hours					74

Cosmetology - Degree (A 55 14 0)

Curriculum Description

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 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 related businesses.

			Class Hours	Lab Hours	Co-Op Hours	Credit Hours
I.	**General Education Requirements - 15 Credit Hours**					
ENG 111	Expository Writing		3	0	0	3
ENG 114	Professional Research & Reporting		3	0	0	3
MAT 115	Mathematical Models		2	2	0	3
	Humanities Elective		3	0	0	3
	Social Science Elective		3	0	0	3
II.	**Required Core Courses - 34 Credit Hours**					
COS 111	Cosmetology Concepts I		4	0	0	4
COS 112	Salon I		0	24	0	8
COS 113	Cosmetology Concepts II		4	0	0	4
COS 114	Salon II		0	24	0	8
COS 115	Cosmetology Concepts III		4	0	0	4
COS 116	Salon III		0	12	0	4
COS 117	Cosmetology Concepts IV		2	0	0	2
III.	**Other Major Required Courses - 12 Credit Hours**					
CIS 110	Introduction to Computers		2	2	0	3
COS 118	Salon IV		0	21	0	7
COS 223	Contemp Hair Coloring		1	3	0	2
	Options: Select 7 credit hours from the following courses					
COE 111	Co-Op Work Experience I		0	0	10	1
COE 115	Work Experience Seminar I		1	0	0	1
COS 119	Esthetics Concepts I		2	0	0	2
COS 224	Trichology and Chemistry		1	3	0	2
COS 240	Contemporary Design		1	3	0	2
COS 121	Manicure/Nail Technology I		4	6	0	6
COS 222	Manicure/Nail Technology II		4	6	0	6
BUS 115	Business Law I		3	0	0	3
BUS 253	Leadership & Mgt Skills		3	0	0	3
BUS 137	Principles of Management		3	0	0	3
CIS	Elective:					3
	CIS 120	Spreadsheet I				
	CIS 152	Database Concepts & Applications				
	CIS 172	Introduction to the Internet				

			Class Hours	Lab Hours	Co-Op Hours	Credit Hours
IV.	**Other Required Hours - 1 Credit Hour**					
	ACA 115	Success & Study Skills	0	2	0	1
Total Required Hours						72

Cosmetology - Diploma (D 55 14 0)

			Class Hours	Lab Hours	Co-Op Hours	Credit Hours
I.	**General Education Requirements - 6 Credit Hours**					
	ENG 101	Applied Communications I	3	0	0	3
	MAT 101	Applied Mathematics I	2	2	0	3
II.	**Required Core Courses - 32 Credit Hours**					
	COS 111	Cosmetology Concepts I	4	0	0	4
	COS 112	Salon I	0	24	0	8
	COS 113	Cosmetology Concepts II	4	0	0	4
	COS 114	Salon II	0	24	0	8
	COS 115	Cosmetology Concepts III	4	0	0	4
	COS 116	Salon III	0	12	0	4
III.	**Other Major Required Courses - 5 Credit Hours**					
	CIS 110	Introduction to Computers	2	2	0	3
	COS 223	Contemp Hair Coloring	1	3	0	2
Total Required Hours						43

Cosmetology - Certificate (C 55 14 0)

			Class Hours	Lab Hours	Co-Op Hours	Credit Hours
	Manicure					
	COS 121	Manicure/Nail Technology I	4	6	0	6
	COS 222	Manicure/Nail Technology II	4	6	0	6
Total Required Hours						12

Cosmetology Instructor – Certificate (C 55 16 0)

Curriculum Description
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.

		Class Hours	Lab Hours	Credit Hours
I.	**General Education Requirements**			
	None			

			Class Hours	Lab Hours	Credit Hours
II.	**Major Courses**				
	Required Core Courses				
	COS 271	Instructor Concepts I	5	0	5
	COS 272	Instructor Practicum I	0	21	7
	COS 273	Instructor Concepts II	5	0	5
	COS 274	Instructor Practicum II	0	21	7
Total Required Hours					24

Esthetics Instructor – Certificate (C 55 27 0)

Curriculum Description
The Esthetics Instructor curriculum provides a course of study covering the skills needed to teach the theory and practices of esthetics as required by the North Carolina State Board of Cosmetology.

Course work includes all phases of esthetics theory laboratory instruction.

Graduates should be prepared to take the North Carolina Cosmetology State Board Esthetics Instructor Licensing Exam and upon passing be qualified for employment in a cosmetology or esthetics school.

			Class Hours	Lab Hours	Credit Hours
I.	**General Education Requirements**				
	None				
II.	**Major Courses**				
	Required Core Courses				
	COS 253	Esthetics Instructor Concepts I	6	15	11
	COS 254	Esthetics Instructor Concepts II	6	15	11
Total Required Hours					22

Manicuring Instructor – Certificate (C 55 38 0)

Curriculum Description
The Manicuring Instructor curriculum provides a course of study covering the skills needed to teach the theory and practices of manicuring as required by the North Carolina State Board of Cosmetology.

Course work includes all phases of manicuring theory laboratory instruction.

Graduates should be prepared to take the North Carolina Cosmetology State Board Manicuring Instructor Licensing Exam and upon passing be qualified for employment in a cosmetology or manicuring school.

			Class Hours	Lab Hours	Credit Hours
I.	**General Education Requirements**				
	None				
II.	**Major Courses**				
	Required Core Courses				
	COS 251	Manicure Instructor Concepts	8	0	8
	COS 252	Manicure Instructor Practicum	0	15	5
Total Required Hours					13

			Class Hours	Lab Hours	Credit Hours
III.	**Other Required Hours - 1 Credit Hour**				
	ACA 115	Success & Study Skills	0	2	1
Total Required Hours					46

Criminal Justice Technology - Certificate (C 55 18 0)

		Class Hours	Lab Hours	Credit Hours
CJC 111	Introduction to Criminal Justice	3	0	3
CJC 113	Juvenile Justice	3	0	3
CJC 121	Law Enforcement Operations	3	0	3
CJC 141	Corrections	3	0	3
CJC 212	Ethics and Community Relations	3	0	3
CJC	Electives: CJC 232 Civil Liability CJC 214 Victimology CJC 222 Criminalistics			3
Total Required Hours				18

Early Childhood Associate - Degree (A 55 22 0)

Curriculum Description

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.

			Class Hours	Lab Hours	Co-Op Hours	Credit Hours
I.	**General Education Requirements - 15 Credit Hours**					
	ENG 111	Expository Writing	3	0	0	3
	ENG 114	Professional Research & Reporting	3	0	0	3
	MAT 115	Mathematical Models	2	2	0	3
		Humanities Elective	3	0	0	3
		Social Science Elective	3	0	0	3
II.	**Required Core Courses - 10 Credit Hours**					
	COE 111	Co-Op Work Experience I	0	0	10	1
	EDU 131	Child, Family, & Community	3	0	0	3
	EDU 146	Child Guidance	3	0	0	3
	EDU 221	Children with Special Needs	3	0	0	3
III.	**Required Subject Courses - 10 Credit Hours**					
	EDU 119	Early Childhood Education	4	0	0	4
	EDU 144	Child Development I	3	0	0	3
	EDU 145	Child Development II	3	0	0	3

			Class Hours	Lab Hours	Co-Op Hours	Credit Hours
IV.	**Other Major Required Courses - 28 Credit Hours**					
	CIS 110	Introduction to Computers	2	2	0	3
	COE 115	Work Experience Seminar I	1	0	0	1
	COE 121	Co-Op Work Experience II	0	0	10	1
	COE 125	Work Experience Seminar II	1	0	0	1
	COE 131	Co-Op Work Experience III	0	0	10	1
	COE 135	Work Experience Seminar III	1	0	0	1
	EDU 151	Creative Activities	3	0	0	3
	EDU 251	Exploration Activities	3	0	0	3
	EDU 251A	Exploration Activities Lab	0	2	0	1
	EDU 259	Curriculum Planning	3	0	0	3
	EDU 261	Early Childhood Administration I	2	0	0	2
	EDU 262	Early Childhood Administration II	3	0	0	3
	EDU 282	Early Childhood Literature	3	0	0	3
	HEA 112	First Aid and CPR	1	2	0	2
	Options: Select 12 credit hours from the following courses:					
	EDU 185	Cognitive and Language Activity	3	0	0	3
	PSY 150	General Psychology	3	0	0	3
	SOC 210	Introduction to Sociology	3	0	0	3
	SOC 213	Sociology of the Family	3	0	0	3
	ACC 120	Prin of Accounting I	3	2	0	4
	ACC 121	Principles of Accounting II	3	2	0	4
	BUS 115	Business Law I	3	0	0	3
	BUS 116	Business Law II	3	0	0	3
	BUS 153	Human Resources Management	3	0	0	3
	CIS 120	Spreadsheet I	2	2	0	3
	CIS 172	Introduction to the Internet	2	3	0	3
V.	**Other Required Hours - 1 Credit Hour**					
	ACA 115	Success & Study Skills	0	2	0	1
Total Required Hours						76

Early Childhood Associate - Diploma (D 55 22 0)

			Class Hours	Lab Hours	Co-Op Hours	Credit Hours
I.	**General Education Requirements - 6 Credit Hours**					
	ENG 111	Expository Writing	3	0	0	3
	MAT 115	Mathematical Models	2	2	0	3
II.	**Required Core Courses - 10 Credit Hours**					
	COE 111	Co-Op Work Experience I	0	0	10	1
	EDU 131	Child, Family, and Community	3	0	0	3
	EDU 146	Child Guidance	3	0	0	3
	EDU 221	Children with Special Needs	3	0	0	3
III.	**Required Subject Courses - 10 Credit Hours**					
	EDU 119	Early Childhood Education	4	0	0	4
	EDU 144	Child Development I	3	0	0	3
	EDU 145	Child Development II	3	0	0	3
IV.	**Other Major Required Courses - 21 Credit Hours**					
	CIS 110	Introduction to Computers	2	2	0	3
	COE 115	Work Experience Seminar I	1	0	0	1

		Class Hours	Lab Hours	Co-Op Hours	Credit Hours
EDU 151	Creative Activities	3	0	0	3
EDU 251	Exploration Activities	3	0	0	3
EDU 251A	Exploration Activities Lab	0	2	0	1
EDU 261	Early Childhood Administration I	2	0	0	2
EDU 262	Early Childhood Administration II	3	0	0	3
EDU 282	Early Childhood Literature	3	0	0	3
HEA 112	First Aid and CPR	1	2	0	2
Total Required Hours					47

Early Childhood Associate - Certificate (C 55 22 0)

		Class Hours	Lab Hours	Co-Op Hours	Credit Hours
COE 111	Co-Op Work Experience I	0	0	10	1
COE 115	Work Experience Seminar I	1	0	0	1
COE 121	Co-Op Work Experience II	0	0	10	1
COE 125	Work Experience Seminar II	1	0	0	1
EDU 119	Early Childhood Education	4	0	0	4
EDU 261	Early Childhood Administration I	2	0	0	2
EDU 262	Early Childhood Administration II	3	0	0	3
HEA 112	First Aid and CPR	1	2	0	2
Total Required Hours					15

Early Childhood Associate Degree – Teacher Associate Concentration (A 55 22 B)

Curriculum Description
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.

			Class Hours	Lab Hours	Co-Op Hours	Credit Hours
I.	**General Education Requirements - 15 Credit Hours**					
	ENG 111	Expository Writing	3	0	0	3
	ENG 114	Professional Research & Reporting	3	0	0	3
	MAT 115	Mathematical Models	2	2	0	3
		Humanities Elective	3	0	0	3
		Social Science Elective	3	0	0	3
II.	**Required Core Courses - 10 Credit Hours**					
	COE 111	Co-Op Work Experience I	0	0	10	1
	EDU 131	Child, Family, & Community	3	0	0	3
	EDU 146	Child Guidance	3	0	0	3
	EDU 221	Children with Special Needs	3	0	0	3

			Class Hours	Lab Hours	Co-Op Hours	Credit Hours
III.	**Required Subject Courses - 10 Credit Hours**					
	EDU 119	Early Childhood Education	4	0	0	4
	EDU 144	Child Development I	3	0	0	3
	EDU 145	Child Development II	3	0	0	3
IV.	**Required Concentration Courses - 12 Credit Hours**					
	Teacher Associate					
	COE 121	Co-Op Work Experience II	0	0	10	1
	EDU 118	Teacher Associate Princ. & Prac.	3	0	0	3
	EDU 186	Reading & Writing Methods	3	0	0	3
	EDU 235	School-Age Dev. & Program	2	0	0	2
	EDU 275	Effect Teaching Training	2	0	0	2
	EDU 285	Internship Exp-School Age	1	0	0	1
V.	**Other Major Required Courses - 26 Credit Hours**					
	CIS 110	Introduction to Computers	2	2	0	3
	COE 115	Work Experience Seminar I	1	0	0	1
	COE 125	Work Experience Seminar II	1	0	0	1
	COE 131	Co-Op Work Experience III	0	0	10	1
	COE 135	Work Experience Seminar III	1	0	0	1
	EDU 151	Creative Activities	3	0	0	3
	EDU 251	Exploration Activities	3	0	0	3
	EDU 259	Curriculum Planning	3	0	0	3
	EDU 261	Early Childhood Administration I	2	0	0	2
	EDU 262	Early Childhood Administration II	3	0	0	3
	EDU 282	Early Childhood Literature	3	0	0	3
	HEA 112	First Aid and CPR	1	2	0	2
VI.	**Other Required Hours - 1 Credit Hour**					
	ACA 115	Success & Study Skills	0	2	0	1
Total Required Hours						74

Electrical/Electronics Technology - Degree (A 35 22 0)

Curriculum Description

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 local needs require.

Graduates should 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.

			Class Hours	Lab Hours	Credit Hours
I.	**General Education Requirements - 15 Credit Hours**				
	ENG 111	Expository Writing	3	0	3
	ENG 114	Professional Research and Reporting	3	0	3
	MAT 115	Mathematical Models	2	2	3
		Humanities Elective	3	0	3
		Social Science Elective	3	0	3
II.	**Required Core Courses - 16 Credit Hours**				
	ELC 112	DC/AC Electricity	3	6	5

			Class Hours	Lab Hours	Credit Hours
	ELC 113	Basic Wiring I	2	6	4
	ELC 117	Motors and Controls	2	6	4
	ELC 128	Introduction to PLC	2	3	3
III.	**Required Subject Courses - 12 Credit Hours**				
	ELC 114	Basic Wiring II	2	6	4
	ELN 133	Digital Electronics	3	3	4
	ELN 229	Industrial Electronics	2	4	4
IV.	**Other Major Required Courses - 25 Credit Hours**				
	CIS 110	Introduction to Computers	2	2	3
	ELC 115	Industrial Wiring	2	6	4
	ELC 118	National Electrical Code	1	2	2
	ELC 119	NEC Calculations	1	2	2
	ELC 135	Electrical Machines I	2	2	3
	ELC 228	PLC Applications	2	6	4
	ELC 229	Applications Project	1	3	2
	ELN 231	Industrial Controls	2	3	3
		Technical Elective: (select a course from the following)			2
		DFT 111 Technical Drafting I			
		DFT 111A Technical Drafting I Lab			
		DFT 115 Architectural Drafting			
		DFT 151 CAD I			
		ELC 127 Software for Technicians			
		ELC 132 Electrical Drawings			
		HYD 110 Hydraulics/Pneumatics I			
V.	**Other Required Hours - 1 Credit Hour**				
	ACA 115	Success & Study Skills	0	2	1
Total Required Hours					**69**

Electrical/Electronics Technology - Diploma (D 35 22 0)

			Class Hours	Lab Hours	Credit Hours
I.	**General Education Requirements - 6 Credit Hours**				
	ENG 101	Applied Communications I	3	0	3
	MAT 101	Applied Mathematics I	2	2	3
II.	**Required Core Courses - 13 Credit Hours**				
	ELC 112	DC/AC Electricity	3	6	5
	ELC 113	Basic Wiring I	2	6	4
	ELC 117	Motors and Controls	2	6	4
III.	**Required Subject Courses - 4 Credit Hours**				
	ELC 114	Basic Wiring II	2	6	4
IV.	**Other Major Required Courses - 17 Credit Hours**				
	CIS 110	Introduction to Computers	2	2	3
	ELC 115	Industrial Wiring	2	6	4
	ELC 118	National Electrical Code	1	2	2
	ELC 119	NEC Calculations	1	2	2
	ELC 135	Electrical Machines I	2	2	3
	ELN 231	Industrial Controls	2	3	3
Total Required Hours					**40**

Electrical/Electronics Technology - Certificate

		Class Hours	Lab Hours	Credit Hours
INDUSTRIAL CONTROLS CERTIFICATE - 15 Credit Hours (C 35 22 0)				
ELC 112	DC/AC Electricity	3	6	5
ELC 117	Motors and Controls	2	6	4
ELC 128	Introduction to PLC	2	3	3
ELN 231	Industrial Controls	2	3	3
ELECTRICAL WIRING CERTIFICATE - 17 Credit Hours (C 35 22 1)				
ELC 112	DC/AC Electricity	3	6	5
ELC 113	Basic Wiring I	2	6	4
ELC 114	Basic Wiring II	2	6	4
ELC 115	Industrial Wiring	2	6	4

Electronics Engineering Technology - Degree (A 40 20 0)

Curriculum Description

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, communication 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.

			Class Hours	Lab Hours	Credit Hours
I.	**General Education Requirements - 15 Credit Hours**				
	ENG 111	Expository Writing	3	0	3
	ENG 114	Professional Research and Reporting	3	0	3
	MAT 161	College Algebra	3	0	3
		Humanities Elective	3	0	3
		Social Science Elective	3	0	3
II.	**Required Core Courses - 28 Credit Hours**				
	ELC 131	DC/AC Circuit Analysis	4	3	5
	ELN 131	Electronic Devices	3	3	4
	ELN 132	Linear IC Applications	3	3	4
	ELN 133	Digital Electronics	3	3	4
	ELN 232	Intro to Microprocessors	3	3	4
	MAT 162	College Trigonometry	3	0	3
	PHY 131	Physics Mechanics	3	2	4
III.	**Other Major Required Courses - 14 Credit Hours**				
	CIS 110	Introduction to Computers	2	2	3
	ELC 112	DC/AC Electricity	3	6	5
	ELN 152	Fabrication Techniques	1	3	2
	PHY 132	Physics Elec & Magnetism	3	2	4
	Options: Select 18 credit hours from the following courses:				
	CSC 134	C++ Programming	2	3	3
	CSC 139	Visual BASIC Programming	2	3	3

			Class Hours	Lab Hours	Credit Hours
	ELC 128	Introduction to PLC	2	3	3
	ELC 228	PLC Applications	2	6	4
	ELN 231	Industrial Controls	2	3	3
	ELN 233	Microprocessor Systems	3	3	4
	ELN 234	Communication Systems	3	3	4
	ELN 235	Data Communication System	3	3	4
	ELN 236	Fiber Optics and Lasers	3	2	4
	ELN 248	Analog Communication	2	3	3
	ELN 237	Local Area Networks	2	3	3
IV.	Other Required Hours - 1 Credit Hour				
	ACA 115	Success & Study Skills	0	2	1
Total Required Hours					76

General Occupational Technology - Diploma (D 55 28 0)

Curriculum Description
The General Occupational Technology curriculum provides individuals with an opportunity to upgrade their skills and to earn an associate degree by taking courses suited for their occupational interests and/or needs.

The curriculum content will be individualized for students according to their occupational interests and needs. A program of study for each student will be selected from associate degree-level courses offered by the College.

Graduates will become more effective workers, better qualified for advancements within their field of employment, and become qualified for a wide range of entry-level employment opportunities.

			Class Hours	Lab Hours	Credit Hours
I.	General Education Requirements - 9 Credit Hours				
	ENG 111	Expository Writing	3	0	3
	ENG 113	Literature-Based Research	3	0	3
	ENG 115	Oral Communication	3	0	3
II.	Required Core Courses - 14 Credit Hours				
	ACA 115	Success & Study Skills	0	2	1
	BIO 111	General Biology I	3	3	4
	CIS 110	Introduction to Computers	2	2	3
	PSY 150	General Psychology	3	0	3
	SOC 210	Introduction to Sociology	3	0	3
III.	Other Major Required Courses - 15 Credit Hours				
	BIO 155	Nutrition	3	0	3
	BIO 163	Basic Anatomy and Physiology	4	2	5
	BIO 165	Anatomy and Physiology I	3	3	4
	BIO 166	Anatomy and Physiology II	3	3	4
	BIO 175	General Microbiology	2	2	3
	CHM 131	Introduction to Chemistry	3	0	3
	CHM 131A	Introduction to Chemistry Lab	0	3	1
	MAT 115	Mathematical Models	2	2	3
	MAT 161	College Algebra	3	0	3
	PSY 241	Developmental Psychology	3	0	3
		Humanities Elective	3	0	3
Total Required Hours					38

Industrial Systems Technology – Degree (A 50 24 0)

Curriculum Description
The Industrial Systems Technology curriculum is designed to prepare or upgrade individuals to safely service, maintain, repair, or install equipment. Instruction includes theory and skill training needed for inspecting, testing, troubleshooting, and diagnosing industrial systems.

Students will learn multi-craft technical skills in blueprint reading, mechanical systems maintenance, electricity, hydraulics/pneumatics, welding, machining or fabrication, and includes various diagnostic and repair procedures. Practical application in these industrial systems will be emphasized and additional advanced course work may be offered.

Upon completion of this curriculum, graduates should be able to individually, or with a team, safely install, inspect, diagnose, repair, and maintain industrial process and support equipment. Students will also be encouraged to develop their skills as life-long learners.

			Class Hours	Lab Hours	Credit Hours
I.	**General Education Requirements – 18 Credit Hours**				
	MAT 115	Mathematical Models	2	2	3
	ENG 111	Expository Writing	3	0	3
	ENG 114	Professional Research & Reporting	3	0	3
	ECO 251	Principles of Microeconomics	3	0	3
		Humanities Elective	3	0	3
		Social Science Elective	3	0	3
II.	**Required Core Courses – 4 Credit Hours**				
	MNT 110	Intro to Maintenance Procedures	1	3	2
	WLD 112	Basic Welding Processes	1	3	2
III.	**Required Subject Courses – 15 Credit Hours**				
	ELC 112	DC/AC Electricity	3	6	5
	BPR 111	Blueprint Reading	1	2	2
	HYD 110	Hydraulics/Pneumatics I	2	3	3
	MEC 111	Machine Processes I	1	4	3
	ISC 112	Industrial Safety	2	0	2
IV.	**Other Major Required Courses – 30 Credit Hours**				
	ELC 111	Intro to Electricity	2	2	3
	ELC 128	Intro to PLC	2	3	3
	ELC 132	Electrical Drawings	1	3	2
	WLD 121	GMAW (Mig) FCAW/Plate	2	6	4
	AHR 120	HVACR Maintenance	1	3	2
	AHR 160	Refrigerant Certification	1	0	1
	CIS 110	Introduction to Computers	2	2	3
	MEC 112	Machine Processes II	2	3	3
	PLU 111	Introduction to Basic Plumbing	1	3	2
	AHR 130	HVAC Controls	2	2	3
	ELC 115	Industrial Wiring	2	6	4
V.	**Other Required Hours – 1 Credit Hour**				
	ACA 115	Success & Study Skills	0	2	1
Total Required Hours					**68**

Information Systems Degree (A 25 26 0)

Curriculum Description

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 should 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.

			Class Hours	Lab Hours	Credit Hours
I.	**General Education Requirements - 15 Credit Hours**				
	ECO 252	Prin of Macroeconomics	3	0	3
	ENG 111	Expository Writing	3	0	3
		Humanities Elective	3	0	3
	ENG 115	Oral Communication	3	0	3
	MAT 115	Mathematical Models			
	OR				
	MAT 161	College Algebra	3	0	3
II.	**Required Core Courses - 19 Credit Hours**				
	CIS 110	Introduction to Computers	2	2	3
	CIS 115	Intro to Prog & Logic	2	2	3
	CIS 130	Survey of Operating Sys	2	3	3
	CIS 152	Database Concepts and Apps	2	2	3
	NET 110	Data Comm/Networking	2	2	3
	ACC 120	Prin of Financial Acct	3	2	4
III.	**Other Major Required Courses - 39 Credit Hours**				
	BUS 260	Business Communication	3	0	3
	CIS 120	Spreadsheet I	2	2	3
	CIS 153	Database Applications	2	2	3
	CIS 165	Desktop Publishing I	2	2	3
	CIS 169	Business Presentations	1	2	2
	CIS 215	Hardware Install/Maint	2	3	3
	CIS 217	Computer Train & Support	2	2	3
	CIS 225	Integrated Software	1	2	2
	CIS 244	Operating System - AS/400	2	3	3
	CIS 286	Systems Analysis & Design	3	0	3
	CIS 288	Systems Project	1	4	3
	COE 110	World of Work	1	0	1
	OST 136	Word Processing	1	2	2
	Elective (Select two of the following:)				5
	BUS 115	Business Law I			
	CIS 172	Intro to the Internet			
	CIS 175	Network Management I			
	CSC 139	Visual BASIC Programming			
	CSC 160	Intro to Internet Prog			
	OST 131	Keyboarding			
	ECM 168	Electronic Business			
IV.	**Other Required Hours - 1 Credit Hour**				
	ACA 115	Success and Study Skills	0	2	1
Total Required Hours					74

Information Systems – Certificate (C 25 26 0)

		Class Hours	Lab Hours	Credit Hours
CIS 110	Introduction to Computers	2	2	3
CIS 130	Survey of Operating Systems	2	3	3
NET 110	Data Communications/Networking	2	2	3
CIS 152	Database Concepts & Applications	2	2	3
CIS 120	Spreadsheet I	2	2	3
Choose one of the following:				
CIS 169	Business Presentations	1	2	2
CIS 244	Operating System – AS/400	2	3	3
Total Required Hours				17/18

Information Systems Degree – Network Administration and Support Concentration (A 25 26 D)

Curriculum Description

Network Administration and Support is a concentration under the curriculum title of Information Systems. This curriculum prepares students to install and support networks and develops 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. Elective choices provide opportunity for specialization individualization.

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.

			Class Hours	Lab Hours	Credit Hours
I.	**General Education Requirements - 15 Credit Hours**				
	ECO 252	Prin of Macroeconomics	3	0	3
	ENG 111	Expository Writing	3	0	3
		Humanities Elective	3	0	3
	ENG 115	Oral Communication	3	0	3
	MAT 115	Mathematical Models			
	OR				
	MAT 161	College Algebra	3	0	3
II.	**Required Core Courses - 19 Credit Hours**				
	ACC 120	Prin of Financial Acct	3	2	4
	CIS 110	Introduction to Computers	2	2	3
	CIS 115	Intro to Prog & Logic	2	2	3
	CIS 130	Survey of Operating Sys	2	3	3
	CIS 152	Database Concepts & Apps	2	2	3
	NET 110	Data Comm/Networking	2	2	3
III.	**Concentration Requirements - 15 Credit Hours**				
	CIS 174	Network System Manager I	2	2	3
	CIS 175	Network Management I	2	2	3
	CIS 287	Network Support	2	2	3
	CIS 274	Network System Manager II	2	2	3
	CIS 275	Network Management II	2	2	3
IV.	**Other Major Required Courses - 25 Credit Hours**				
	BUS 260	Business Communication	3	0	3
	COE 110	World of Work	1	0	1

			Class Hours	Lab Hours	Credit Hours
	CIS 215	Hardware Install/Maint	2	3	3
	CIS 217	Computer Train & Support	2	2	3
	CIS 277	Network Design and Imp	2	2	3
	CIS 282	Network Technology	3	0	3
	CIS 286	Systems Analysis & Design	3	0	3
	CIS 288	Systems Project	1	4	3
	CSC 134	C++ Programming	2	3	3
V.	Other Required Hours - 1 Credit Hour				
	ACA 115	Success and Study Skills	0	2	1
Total Required Hours					75

Insurance - Certificate (C 25 28 0)

Curriculum Description
The Insurance curriculum provides prelicensing education required by the North Carolina Department of Insurance and prepares individuals to enter the insurance profession.

Course work includes the fundamentals of risk and insurance law, life and health insurance, Medicare and long-term care insurance, property and liability insurance, and claims adjusting principles and practices.

Graduates should qualify for North Carolina insurance licensing examinations and be able to provide service to insurance consumers in a competent manner. Employment opportunities include insurance agent, claims adjuster, customer service representative, and special agent.

		Class Hours	Lab Hours	Credit Hours
INS 101	Life/Accident/Health Ins.	4	0	4
INS 102	Medicare Supp/L-T Care	1	0	1
INS 103	Property & Casualty Ins	4	0	4
INS 105	Risk Management	3	0	3
Total Required Hours				12

Machining Technology - Diploma (D 50 30 0)

Curriculum Description
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 that 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.

			Class Hours	Lab Hours	Credit Hours
I.	General Education Requirements - 9 Credit Hours				
	ENG 101	Applied Communications I	3	0	3
	MAT 101	Applied Mathematics I	2	2	3
	MAT 102	Applied Mathematics II	2	2	3
II.	Required Core Courses - 18 Credit Hour				
	MAC 111	Machining Technology I	2	12	6
	MAC 112	Machining Technology II	2	12	6
	MAC 113	Machining Technology III	2	12	6

			Class Hours	Lab Hours	Credit Hours
III.	Required Subject Courses - 8 Credit Hours				
	BPR 111	Blueprint Reading	1	2	2
	BPR 121	Blueprint Reading: Mechanical	1	2	2
	MAC 122	CNC Turning	1	3	2
	MAC 124	CNC Milling	1	3	2
IV.	Other Major Required Courses - 5 Credit Hours				
	ISC 110	Workplace Safety	1	0	1
	MAC 121	Introduction to CNC	2	0	2
	MAC 151	Machining Calculations	1	2	2
Total Required Hours					40

Machining Technology - Certificate

		Class Hours	Lab Hours	Credit Hours
MACHINING CERTIFICATE - 12 Hours (C 50 30 0)				
MAC 111	Machining Technology I	2	12	6
MAC 112	Machining Technology II	2	12	6
CNC CERTIFICATE - 12 Hours (C 50 30 1)				
MAC 113	Machining Technology III	2	12	6
MAC 122	CNC Turning	1	3	2
MAC 124	CNC Milling	1	3	2
MAC 121	Introduction to CNC	2	0	2

Manufacturing Technology - Degree (A 50 32 0)

Curriculum Description

The Manufacturing Technology curriculum provides an introduction to the principles and practices of manufacturing in today's global marketplace. The student will be exposed to valuable high-tech concepts applicable in a variety of industries such as plastics, metals, furniture, textiles, and electronics.

Students will gain real-world knowledge in manufacturing management practices, manufacturing materials and processes, research and development, and quality assurance. Course work will include machining processes, CAD/CAM, CNC principles, and other computerized production techniques.

Graduates should qualify for employment as a manufacturing technician, quality assurance technician, CAD/CAM technician, team leader, or research and development technician. The student will be able to advance in the workplace and develop with new technologies.

			Class Hours	Lab Hours	Credit Hours
I.	General Education Requirements - 15 Credit Hours				
	ENG 111	Expository Writing	3	0	3
	ENG 114	Professional Research & Reporting	3	0	3
	MAT 115	Mathematical Models	2	2	3
		Humanities Elective	3	0	3
		Social Science Elective	3	0	3
II.	Required Core Courses - 8 Credit Hours				
	ISC 112	Industrial Safety	2	0	2
	ISC 132	Manufacturing Quality Control	2	3	3
	MEC 145	Manufacturing Materials I	2	3	3

			Class Hours	Lab Hours	Credit Hours
III.	**Required Subject Courses - 4 Credit Hours**				
	DFT 111	Technical Drafting I	1	3	2
	ISC 133	Manufacturing Management Practices	2	0	2
IV.	**Other Major Required Courses - 47 Credit Hours**				
	DFT 111A	Technical Drafting I Lab	0	3	1
	DFT 151	CAD I	2	3	3
	DFT 152	CAD II	2	3	3
	ELC 111	Introduction to Electricity	2	2	3
	ELC 128	Introduction to PLC	2	3	3
	HYD 110	Hydraulics/Pneumatics I	2	3	3
	MAC 121	Introduction to CNC	2	0	2
	MEC 111	Machine Processes I	1	4	3
	MEC 112	Machine Processes II	2	3	3
	MEC 181	Introduction to CIM	2	0	2
	MEC 231	Computer Aided Manufacturing I	1	4	3
	MEC 232	Computer Aided Manufacturing II	1	4	3
	MEC 236	Regional Manufacturing	1	4	3
	PLA 110	Introduction to Plastics	2	0	2
	TEX 110	Fundamentals of Textiles	3	0	3
	WLD 112	Basic Welding Processes	1	3	2
		Major Elective (select from the following courses):			5
		PLA 120 Injection Molding			
		PLA 162 Plastics Manuf Processes			
		PLA 230 Adv Plastics Manufacturing			
		MAC 111 Machining Technology I			
		MAC 122 CNC Turning			
		MAC 124 CNC Milling			
		MEC 172 Introduction to Metallurgy			
		MEC 180 Engineering Materials			
		WLD 145 Thermoplastics Welding			
		BPR 111 Blueprint Reading			
V.	**Other Required Hours - 1 Credit Hour**				
	ACA 115	Success & Study Skills	0	2	1
Total Required Hours					75

Manufacturing Technology Degree - Plastics Concentration (A 50 32 A)

Curriculum Description

Plastics is a concentration under the curriculum title of Manufacturing Technology. This curriculum provides training in all aspects of the polymer processing industry, one of today's fastest growing manufacturing technologies. It will prepare individuals for employment by utilizing the latest technologies in both plastics materials and plastics processing.

Course work includes rigorous study of the polymer processing industry, including materials technology, injection molding, extrusion, thermoforming, blow molding, and other related areas. Students will also gain knowledge in machine operation, maintenance, setup, design and research, quality assurance, and safety.

Graduates should qualify for employment in the design and/or production of plastic-related items including such job titles as molding technician, estimator, QC technician, setup technician, or supervisor.

			Class Hours	Lab Hours	Credit Hours
I.	**General Education Requirements - 19 Credit Hours**				
	CHM 131	Introduction to Chemistry	3	0	3
	CHM 131A	Introduction to Chemistry Lab	0	3	1

			Class Hours	Lab Hours	Credit Hours
	ENG 111	Expository Writing	3	0	3
	ENG 114	Professional Research & Reporting	3	0	3
	MAT 115	Mathematical Models	2	2	3
		Humanities Elective	3	0	3
		Social Science Elective	3	0	3
II.	**Required Core Courses - 8 Credit Hours**				
	ISC 112	Industrial Safety	2	0	2
	ISC 132	Manufacturing Quality Control	2	3	3
	MEC 145	Manufacturing Materials I	2	3	3
III.	**Required Subject Courses - 4 Credit Hours**				
	DFT 111	Technical Drafting I	1	3	2
	ISC 133	Manufacturing Management Practices	2	0	2
IV.	**Required Concentration Courses - 14 Credit Hours**				
	PLA 110	Introduction to Plastics	2	0	2
	PLA 115	Polymer Processing	2	3	3
	PLA 120	Injection Molding	2	3	3
	PLA 210	Mold Maintenance/Design	2	3	3
	PLA 215	Polymeric Materials	2	3	3
V.	**Other Major Required Courses - 27 Credit Hours**				
	COE 111	Co-Op Work Experience I	0	10	1
	DFT 111A	Technical Drafting I Lab	0	3	1
	DFT 151	CAD I	2	3	3
	ELC 111	Introduction to Electricity	2	2	3
	ELC 128	Introduction to PLC	2	3	3
	HYD 110	Hydraulics/Pneumatics I	2	3	3
	MAC 121	Introduction to CNC	2	0	2
	MEC 111	Machine Processes I	1	4	3
	MEC 181	Introduction to CIM	2	0	2
	MEC 236	Regional Manufacturing	1	4	3
		Major Elective (Choose one):			3
		PLA 162 Plastics Manufacturing Processes			
		PLA 220 Moldflow			
		PLA 225 Extrusion			
		PLA 230 Adv Plastics Manufacturing			
		BPR 111 Blueprint Reading			
		WLD 145 Thermoplastic Welding			
VI.	**Other Required Hours - 1 Credit Hour**				
	ACA 115	Success & Study Skills	0	2	1
Total Required Hours					73

Manufacturing Technology
Plastics Manufacturing Technology Concentration – Diploma (D 50 32 A)

			Class Hours	Lab Hours	Credit Hours
I.	**General Education Requirements – 6 credit hours**				
	ENG 101	Applied Communications I	3	0	3
	MAT 101	Applied Mathematics I	2	2	3
II.	**Major Courses – 12 credit hours**				
	ISC 112	Industrial Safety	2	0	2
	ISC 132	Manufacturing Quality Control	2	3	3
	ISC 133	Manufacturing Management Practices	2	0	2

			Class Hours	Lab Hours	Credit Hours
	MEC 145	Manufacturing Materials I	2	3	3
	BPR 111	Blueprint Reading	1	2	2
III.	**Concentration – 14 credit hours**				
	PLA 110	Introduction to Plastics	2	0	2
	PLA 115	Polymer Processing	2	3	3
	PLA 120	Injection Molding	2	3	3
	PLA 210	Mold Maintenance/Design	2	3	3
	PLA 215	Polymeric Materials	2	3	3
IV.	**Other Major Required Courses – 6 credit hours**				
	HYD 110	Hydraulics/Pneumatics I	2	3	3
		Major Elective (Choose one):			3
		PLA 162 Plastics Manufacturing Processes			
		PLA 220 Moldflow			
		PLA 225 Extrusion			
		PLA 230 Adv Plastics Manufacturing			
		WLD 145 Thermoplastic Welding			
Total Required Hours					38

Manufacturing Technology
Plastics Manufacturing Technology Concentration – Certificate (C 50 32 A01)

		Class Hours	Lab Hours	Credit Hours
ISC 112	Industrial Safety	2	0	2
ISC 132	Manufacturing Quality Control	2	3	3
Concentration				
PLA 110	Introduction to Plastics	2	0	2
PLA 115	Polymer Processing	2	3	3
PLA 120	Injection Molding	2	3	3
PLA 215	Polymeric Materials	2	3	3
Total Required Hours				16

Manufacturing Technology - Plastics Welding Certificate (C 50 32 A02)

		Class Hours	Lab Hours	Credit Hours
PLA 110	Introduction to Plastics	2	0	2
PLA 215	Polymeric Materials	2	3	3
PLA 162	Plastics Manufacturing Processes	2	3	3
BPR 111	Blueprint Reading	1	2	2
ISC 112	Industrial Safety	2	0	2
WLD 145	Thermoplastic Welding	1	3	2
Total Required Hours				14

Manufacturing Technology Degree – Composites Concentration (A 50 32 D)

Curriculum Description

Composites is a concentration under the curriculum title of Manufacturing Technology. This curriculum provides training in various composite (reinforcing fiber in a polymer matrix) processing and testing methods. It will prepare individuals for employment by utilizing the latest technologies in composites processing and testing.

Course work includes the processing and design of composite structures and composite materials testing. Processes include compression molding, vacuum assisted transfer molding and resin transfer molding. Testing includes impact, shear, compression, flexure and tension tests based on anisotropic theory and stress analysis.

Graduates should qualify for employment as lab technicians or lab testing specialist in the composites, plastics, and fiberglass industries.

			Class Hours	Lab Hours	Credit Hours
I.	**General Education Requirements – 22 Credit Hours**				
	CHM 131	Introduction toChemistry	3	0	3
	CHM 131A	Introduction to Chemistry Lab	0	3	1
	ENG 111	Expository Writing	3	0	3
	ENG 114	Professional Research & Reporting	3	0	3
	MAT 161	College Algebra	3	0	3
	MAT 162	College Trigonometry	3	0	3
		Humanities Elective	3	0	3
		Social Science Elective	3	0	3
II.	**Required Core Courses – 12 Credit Hours**				
	DFT 111	Technical Drafting I	1	3	2
	ISC 112	Industrial Safety	2	0	2
	ISC 132	Manufacturing Quality Control	2	3	3
	ISC 133	Manufacturing Management Practices	2	0	2
	MEC 145	Manufacturing Materials I	2	3	3
III.	**Required Concentration Courses – 12 Credit Hours**				
	MEC 188	Processing Composites I	2	3	3
	MEC 189	Processing Composites II	2	3	3
	MEC 215	Design of Composite Structures	2	3	3
	MEC 212	Composite Materials Testing	2	3	3
IV.	**Other Major Required Courses – 25 Credit Hours**				
	DFT 111A	Technical Drafting I Lab	0	3	1
	ELC 128	Introduction to PLC	2	3	3
	HYD 110	Hydraulics/Pneumatics I	2	3	3
	MAC 121	Introduction to CNC	2	0	2
	MEC 111	Machine Processes I	1	4	3
	MEC 181	Introduction to CIM	2	0	2
	MEC 236	Regional Manufacturing	1	4	3
	MEC 252	Strength of Materials	2	2	3
		Major Elective			5
		BPR 111 Blueprint Reading			
		MEC 187 Composite Materials			
		PLA 162 Plastics Manufacturing Processes			
		PLA 225 Extrusion			
		PLA 230 Adv Plastics Manufacturing			
		WLD 145 Thermoplastic Welding			
V.	**Other Required Courses – 1 Credit Hour**				
	ACA 115	Success & Study Skills	0	2	1
Total Required Hours					72

Mechanical Drafting Technology - Degree (A 50 34 0)

Curriculum Description

The Mechanical Drafting Technology curriculum prepares technicians to produce drawings of mechanical parts, components of mechanical systems, and mechanisms. CAD 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 should qualify for employment in mechanical areas such as manufacturing, fabrication, research and development, and service industries.

			Class Hours	Lab Hours	Credit Hours
I.	**General Education Requirements - 15 Credit Hours**				
	ENG 111	Expository Writing	3	0	3
	ENG 114	Professional Research & Reporting	3	0	3
	MAT 115	Mathematical Models	2	2	3
	OR				
	MAT 161	College Algebra			
		Humanities Elective	3	0	3
		Social Science Elective	3	0	3
II.	**Required Core Courses - 10 Credit Hours**				
	DFT 111	Technical Drafting I	1	3	2
	DFT 112	Technical Drafting II	1	3	2
	DFT 151	CAD I	2	3	3
	DFT 152	CAD II	2	3	3
III.	**Required Subject Courses - 3 Credit Hours**				
	MEC 111	Machine Processes I	1	4	3
IV.	**Other Major Required Courses - 40 Credit Hours**				
	DDF 211	Design Drafting I	2	6	4
	DDF 221	Design Drafting Project	0	4	2
	DFT 111A	Technical Drafting I Lab	0	3	1
	DFT 112A	Technical Drafting II Lab	0	3	1
	DFT 115	Architectural Drafting	1	2	2
	DFT 121	Intro to Geometric Dimensioning and Tolerancing	1	2	2
	DFT 153	CAD III	2	3	3
	DFT 211	Gears, Cams, Pulleys	1	3	2
	DFT 218	Industrial Sys Schematics	1	2	2
	DFT 231	Jig & Fixture Design	1	2	2
	DFT	Elective (Choose one):			2
		DFT 161 Pattern Design & Layout			
		DFT 170 Engineering Graphics			
		DFT 221 Electrical Drafting			
	EGR 110	Intro. to Engineering Technology	2	0	2
	HYD 110	Hydraulics/Pneumatics I	2	3	3
	ISC 111	Quality Control	2	0	2
	MAC 121	Introduction to CNC	2	0	2
	MEC 145	Manufacturing Materials I	2	3	3
	MEC 181	Introduction to CIM	2	0	2
	MEC 236	Regional Manufacturing	1	4	3
V.	**Other Required Hours - 1 Credit Hour**				
	ACA 115	Success & Study Skills	0	2	1
Total Required Hours					69

Mechanical Drafting Technology – Diploma (D 50 34 0)

			Class Hours	Lab Hours	Credit Hours
I.	**General Education Courses – 6 Credit Hours**				
	ENG 111	Expository Writing	3	0	3
	MAT 115	Mathematical Models	2	2	3
II.	**Required Core Courses – 10 Credit Hours**				
	DFT 111	Technical Drafting I	1	3	2
	DFT 112	Technical Drafting II	1	3	2
	DFT 151	CAD I	2	3	3
	DFT 152	CAD II	2	3	3
III.	**Required Subject Courses – 3 Credit Hours**				
	MEC 111	Machine Processes I	1	4	3
IV.	**Other Major Required Courses – 18 Credit Hours**				
	DFT 111A	Technical Drafting I Lab	0	3	1
	DFT 112A	Technical Drafting II Lab	0	3	1
	DDF 211	Design Drafting I	2	6	4
	DFT 115	Architectural Drafting	1	2	2
	DFT 121	Intro to Geometric Dimensioning and Tolerancing	1	2	2
	DFT 153	CAD III	2	3	3
	DFT 218	Industrial Sys Schematics	1	2	2
	MEC 145	Manufacturing Materials I	2	3	3
Total Required Hours					37

Mechanical Drafting Technology – Certificate (C 50 34 0)

		Class Hours	Lab Hours	Credit Hours
DFT 111	Technical Drafting I	1	3	2
DFT 111A	Technical Drafting I Lab	0	3	1
DFT 112	Technical Drafting II	1	3	2
DFT 112A	Technical Drafting II Lab	0	3	1
DFT 151	CAD I	2	3	3
DFT 152	CAD II	2	3	3
MEC 111	Machine Processes I	1	4	3
Total Required Hours				15

Mechanical Engineering Technology - Degree (A 40 32 0)

Curriculum Description

The Mechanical Engineering Technology curriculum prepares graduates for employment as mechanical technicians. Typical assignments would include assisting in the design, development, testing, and repair of mechanical equipment. Emphasis is placed on the integration of theory and mechanical principles.

Course work includes applied mechanics, manufacturing methods and processes, computer usage, computer-aided drafting, mathematics, physics, and oral and written communications. The courses will stress critical thinking, planning, and problem solving.

Graduates of the curriculum will find employment opportunities in the diversified branches of the mechanical field. Mechanical engineering technicians are employed in many types of manufacturing, fabrication, research and development, and service industries.

		Class Hours	Lab Hours	Credit Hours

I.	**General Education Requirements - 15 Credit Hours**				
	ENG 111	Expository Writing	3	0	3
	ENG 114	Professional Research & Reporting	3	0	3
	MAT 161	College Algebra	3	0	3
		Humanities Elective	3	0	3
		Social Science Elective	3	0	3
II.	**Required Core Courses - 5 Credit Hours**				
	DFT 111	Technical Drafting I	1	3	2
	DFT 151	CAD I	2	3	3
III.	**Required Subject Courses - 13 Credit Hours**				
	MAT 162	College Trigonometry	3	0	3
	PHY 131	Physics Mechanics	3	2	4
	MEC 251	Statics	2	2	3
	MEC 252	Strength of Materials	2	2	3
IV.	**Other Major Required Courses - 41 Credit Hours**				
	DFT 111A	Technical Drafting I Lab	0	3	1
	EGR 110	Introduction to Engineering Tech.	2	0	2
	HYD 110	Hydraulics/Pneumatics I	2	3	3
	ISC 111	Quality Control	2	0	2
	ISC 112	Industrial Safety	2	0	2
	MAC 121	Introduction to CNC	2	0	2
	MEC 111	Machine Processes I	1	4	3
	MEC 112	Machine Processes II	2	3	3
	MEC 128	CNC Machining Processes	2	4	4
	MEC 145	Manufacturing Materials I	2	3	3
	MEC 180	Engineering Materials	2	3	3
	MEC 231	Comp-Aided Manufacturing I	1	4	3
	MEC 236	Regional Manufacturing	1	4	3
	MEC 270	Machine Design	3	3	4
	MEC 271	Machine Design Project	0	3	1
	PLA 110	Introduction to Plastics	2	0	2
V.	**Other Required Hours - 1 Credit Hour**				
	ACA 115	Success & Study Skills	0	2	1
Total Required Hours					75

Medical Office Administration - Degree (A 25 31 0)

Curriculum Description
This curriculum prepares individuals for employment in medical and other health-care related offices.

Course work will include medical terminology; information systems; office management; medical coding, billing and insurance; legal and ethical issues; and formatting and word 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 health-care related organizations.

			Class Hours	Lab Hours	Credit Hours
I.	**General Education Requirements - 15 Credit Hours**				
	MAT 115	Mathematical Models	3	0	3
	ENG 111	Expository Writing	3	0	3

			Class Hours	Lab Hours	Credit Hours
	ECO 252	Prin of Macroeconomics	3	0	3
	ENG 115	Oral Communication	3	0	3
	HUM	Humanities Elective	3	0	3
II.	**Required Core Courses – 14 Credit Hours**				
	CIS 110	Introduction to Computers	2	2	3
	OST 134	Text Entry & Formatting	2	2	3
	OST 136	Word Processing	1	2	2
	OST 164	Text Editing Applications	3	0	3
	OST 289	Office Systems Management	2	2	3
III.	**Concentration - 17 Credit Hours**				
	MED 121	Medical Terminology I	3	0	3
	MED 122	Medical Terminology II	3	0	3
	OST 148	Med Coding Billing & Insu	3	0	3
	OST 149	Med Legal Issues	3	0	3
	OST 241	Med Ofc Transcription I	1	2	2
	OST 243	Med Office Simulation	2	2	3
IV.	**Other Major Required Courses – 23 Credit Hours**				
	ACC 120	Prin of Financial Acct	3	2	4
	BUS 121	Business Math	2	2	3
	BUS 260	Business Communication	3	0	3
	CIS 120	Spreadsheet I	2	2	3
	CIS 152	Database Concepts & Apps	2	2	3
	OST 131	Keyboarding	1	2	2
	OST 184	Records Management	1	2	2
	OST 286	Professional Development	3	0	3
V.	**Other Required Hours - 2 Credit Hours**				
	ACA 115	Success & Study Skills	0	2	1
	COE 110	World of Work	1	0	1
Total Required Hours					71

Medical Office Administration - Diploma (D 25 31 0)

			Class Hours	Lab Hours	Credit Hours
I.	**General Education Requirements - 6 Credit Hours**				
	MAT 115	Mathematical Models	3	0	3
	ENG 111	Expository Writing	3	0	3
II.	**Core Courses – 24 Credit Hours**				
	CIS 110	Introduction to Computers	2	2	3
	OST 134	Text Entry & Formatting	2	2	3
	MED 121	Medical Terminology I	3	0	3
	MED 122	Medical Terminology II	3	0	3
	OST 148	Med Coding Billing & Insu	3	0	3
	OST 149	Med Legal Issues	3	0	3
	OST 164	Text Editing Applications	3	0	3
	OST 289	Office Systems Management	2	2	3
III.	**Other Major Required Courses - 16 Credit Hours**				
	ACC 120	Prin of Financial Acct	3	2	4
	BUS 121	Business Math	2	2	3

			Class Hours	Lab Hours	Credit Hours
	OST 131	Keyboarding	1	2	2
	OST 136	Word Processing	1	2	2
	OST 184	Records Management	1	2	2
	OST 286	Professional Development	3	0	3
IV.	**Other Required Hours - 2 Credit Hours**				
	ACA 115	Success & Study Skills	0	2	1
	COE 110	World of Work	1	0	1
Total Required Hours					48

Medical Office Administration – Certificate (C 25 31 0)

		Class Hours	Lab Hours	Credit Hours
CIS 110	Introduction to Computers	2	2	3
OST 131	Keyboarding	1	2	2
MED 121	Medical Terminology I	3	0	3
MED 122	Medical Terminology II	3	0	3
OST 148	Med Coding Billing & Insu	3	0	3
OST 286	Professional Development	3	0	3
Total Required Hours				17

Occupational Education Associate - Degree (A 55 32 0)

Curriculum Description

The Occupational Education Associate curriculum is designed for individuals skilled and experienced in a trade or technical specialty who would like to receive an associate degree in preparation for teaching or other purposes.

Course work is designed to supplement previous education, training, and/or experience the individual has already attained.

Graduates of the program may find employment as instructors in the field of occupational education.

			Class Hours	Lab Hours	Credit Hours
I.	**General Education Requirements - 19 Credit Hours**				
	ENG 111	Expository Writing	3	0	3
	ENG 114	Professional Research & Reporting	3	0	3
	MAT 115	Mathematical Models	2	2	3
		Humanities Elective	3	0	3
		Social Science Elective			3
		Natural Science Elective(Choose one):			4
		BIO 111 General Biology I			
		CHM 151 General Chemistry I			
II.	**Required Core Courses - 21 Credit Hours**				
	EDU 175	Introduction to Trade & Ind Ed	3	0	3
	EDU 176	Occupational Analysis and Course Dev	3	0	3
	EDU 177	Instructional Methods	2	2	3
	EDU 186	Reading & Writing Methods	3	0	3
	EDU 271	Media Techniques for Teachers	2	2	3
	EDU 179	Vocational Student Organizations	3	0	3
	OR				

			Class Hours	Lab Hours	Credit Hours
	EDU 240	Work-based Learning Practices & Techniques			
	ISC 121	Environmental Health & Safety	3	0	3
III.	**Other Major Required Courses - 31 Credit Hours**				
	EDU 178	Facilities Organization & Planning	2	2	3
	CIS 110	Introduction to Computers	2	2	3
	Specialty Area				25
	1.	Through work experience or informal course work			
	2.	Through formal training in field			
IV.	**Other Required Hours - 1 Credit Hour**				
	ACA 115	Success & Study Skills	0	2	1
Total Required Hours					72

Occupational Education Associate – Diploma (D 55 32 0)

			Class Hours	Lab Hours	Credit Hours
I.	**General Education – 6 Credit Hours**				
	ENG 111	Expository Writing	3	0	3
	PSY 150	General Psychology	3	0	3
II.	**Required Core Courses – 24 Credit Hours**				
	EDU 175	Introduction to Trade & Ind Ed	3	0	3
	EDU 176	Occupational Analysis and Course Dev	3	0	3
	EDU 177	Instructional Methods	2	2	3
	EDU 271	Media Tech for Teachers	2	2	3
	EDU 186	Reading & Writing Methods	3	0	3
	EDU 179	Vocational Student Organizations	3	0	3
	EDU 240	Work-based Learning Practices and Techniques	3	0	3
	ISC 121	Environmental Health & Safety	3	0	3
III.	**Other Major Required Courses – 8 Credit Hours**				
	EDU 275	Effective Teacher Training	2	0	2
	EDU 178	Facilities Organization & Planning	2	2	3
	CIS 110	Introduction to Computers	2	2	3
Total Required Hours					38

Occupational Education Associate – Certificate (C 55 32 0)

		Class Hours	Lab Hours	Credit Hours
EDU 175	Introduction to Trade & Ind Ed	3	0	3
EDU 177	Instructional Methods	2	2	3
EDU 179	Vocational Student Organizations	3	0	3
EDU 186	Reading & Writing Methods	3	0	3
EDU 271	Media Tech for Teachers	2	2	3
ISC 121	Environmental Health & Safety	3	0	3
Total Required Hours				18

Office Systems Technology (A 25 36 0)

Curriculum Description
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 non-technical 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.

			Class Hours	Lab Hours	Credit Hours
I.	**General Education Requirements - 15 Credit Hours**				
	ECO 252	Prin of Macroeconomics	3	0	3
	ENG 111	Expository Writing	3	0	3
	ENG 115	Oral Communication	3	0	3
	MAT 115	Mathematical Models	3	0	3
		Humanities Elective	3	0	3
II.	**Required Core Courses - 14 Credit Hours**				
	CIS 110	Introduction to Computers	2	2	3
	OST 134	Text Entry and Formatting	2	2	3
	OST 136	Word Processing	1	2	2
	OST 164	Text Editing Applications	3	0	3
	OST 289	Office Systems Management	2	2	3
III.	**Other Major Required Courses - 37 Credit Hours**				
	ACC 120	Prin of Financial Acct	3	2	4
	BUS 115	Business Law I	3	0	3
	BUS 121	Business Math	2	2	3
	BUS 260	Business Communication	3	0	3
	CIS 120	Spreadsheet I	2	2	3
	CIS 152	Database Concepts & Apps	2	2	3
	CIS 165	Desktop Publishing I	2	2	3
	CIS 169	Business Presentations	1	2	2
	COE 110	World of Work	1	0	1
	OST 131	Keyboarding	1	2	2
	OST 184	Records Management	1	2	2
	OST 223	Machine Transcription I	1	2	2
	OST 286	Professional Development	3	0	3
	Elective (must be selected from the following prefixes: ACC, CIS, COE, ECO, ECM, MED, MKT, OST) See advisor for a list				3
IV.	**Other Required Hours - 1 Credit Hour**				
	ACA 115	Success and Study Skills	0	2	1
Total Required Hours					67

Office Systems Technology - Diploma (D 25 36 0)

			Class Hours	Lab Hours	Credit Hours
I.	**General Education - 6 Credit Hours**				
	ENG 111	Expository Writing	3	0	3
	MAT 115	Mathematical Models	3	0	3

			Class Hours	Lab Hours	Credit Hours
II.	**Required Core Courses - 14 Credit Hours**				
	CIS 110	Introduction to Computers	2	2	3
	OST 134	Text Entry and Formatting	2	2	3
	OST 136	Word Processing	1	2	2
	OST 164	Text Editing Application	3	0	3
	OST 289	Office Systems Management	2	2	3
III.	**Other Major Required Courses -19 Credit Hours**				
	ACC 120	Prin of Financial Acct	3	2	4
	BUS 121	Business Math	2	2	3
	CIS 169	Business Presentations	1	2	2
	COE 110	World of Work	1	0	1
	OST 131	Keyboarding	1	2	2
	OST 184	Records Management	1	2	2
	OST 223	Machine Transcription I	1	2	2
	OST 286	Professional Development	3	0	3
IV.	**Other Required Hours - 1 Credit Hour**				
	ACA 115	Success and Study Skills	0	2	1
Total Required Hours					**40**

Office Systems Technology - Certificate (C 25 36 0)

		Class Hours	Lab Hours	Credit Hours
CIS 110	Introduction to Computers	2	2	3
OST 131	Keyboarding	1	2	2
OST 134	Text Entry and Formatting	2	2	3
OST 136	Word Processing	1	2	2
OST 184	Records Management	1	2	2
OST 286	Professional Development	3	0	3
COE 110	World of Work	1	0	1
Total Required Hours				**16**

Paralegal Technology Degree (A 25 38 0)

Curriculum Description

The Paralegal Technology curriculum prepares individuals to work under the supervision of attorneys by performing routine legal tasks and assisting with substantive legal work. A paralegal/legal assistant may not practice law, give legal advice, or represent clients in a court of law.

Coursework includes substantive and procedural legal knowledge in the areas of civil litigation, legal research and writing, real estate, family law, wills, estates, trusts, and commercial law. Required courses also include subjects such as English, mathematics, and computer utilization.

Graduates are trained to assist attorneys in probate work, investigations, public records search, drafting and filing legal documents, research, and office management. Employment opportunities are available in private law firms, governmental agencies, banks, insurance agencies, and other business organizations.

				Class Hours	Lab Hours	Credit Hours
I.	**General Education Courses - 18 credit hours**					
	*	ENG 111	Expository Writing	3	0	3
	+	ENG 112	Argument-Based Research	3	0	3
	*	ENG 114	Prof. Research and Reporting	3	0	3

				Class Hours	Lab Hours	Credit Hours
	*		Hum/Fine Arts Electve	3	0	3
+	MAT 140		Survey of Mathematics	3	0	3
	*		Social/Behavioral Science elective	3	0	3
II.	Major Core Courses - 50 credit hours					
+	LEX 110		Intro. To Paralegal Study	2	0	2
+	LEX 120		Legal Research/Writing I	2	2	3
+	LEX 130		Civil Injuries	2	0	2
+	LEX 140		Civil Litigation I	3	0	3
+	LEX 150		Commercial Law	2	2	3
+	LEX 210		Real Property I	2	0	2
+	LEX 240		Family Law	2	0	2
+	LEX 250		Wills, Estates, and Trusts	2	2	3
III.	Other Major Hours					
*	ACC 120		Prin of Financial Acct	3	2	4
*	CIS 110		Introduction to Computers	2	2	3
*	OST 136		Word Processing	1	2	2
+	LEX 121		Legal Research & Writing I	2	2	3
+	LEX 141		Civil Litigation II	2	2	3
+	LEX 160		Criminal Law & Procedure	2	2	3
+	LEX 211		Real Property II	1	4	3
+	LEX 270		Law Office Mgt./Tech.	1	2	2
+	LEX 280		Ethics and Professionalism	2	0	2
Select 2 hours from the following:						
+	LEX 170		Administrative Law	2	0	2
+	LEX 220		Corporate Law	2	0	2
+	LEX 260		Bankruptcy & Collections	2	0	2
+	LEX 292		Selected Topics in Para. Tech.	1	2	2
Total Required Hours						68

** = Conducted at Isothermal Community College*
+ = Conducted at Western Piedmont Community College

Practical Nursing - Diploma (D 45 66 0)

Curriculum Description
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. Employment opportunities include hospitals, rehabilitation/long term care/home health facilities, clinics, and physicians' offices.

			Class Hours	Lab Hours	Clin. Hours	Credit Hours
I.	General Education Requirements - 6 Credit Hours					
ENG 111		Expository Writing	3	0	0	3
PSY 110		Life Span Development	3	0	0	3
II.	Required Core Courses - 33 Credit Hours					
NUR 101		Practical Nursing I	7	6	6	11
NUR 102		Practical Nursing II	8	0	12	12
NUR 103		Practical Nursing III	6	0	12	10

			Class Hours	Lab Hours	Clin. Hours	Credit Hours
III.	**Other Major Required Courses - 8 Credit Hours**					
	BIO 163	Basic Anatomy and Physiology	4	2	0	5
	CIS 110	Introduction to Computers	2	2	0	3
IV.	**Other Required Hours - 1 Credit Hour**					
	ACA 115	Success & Study Skills	0	2	0	1
Total Required Hours						**48**

Licensed Practical Nurse Refresher Certificate (C 45 39 0)

Curriculum Description
The Licensed Practical Nurse Refresher curriculum provides a refresher course for individuals previously licensed as Practical Nurses and who are ineligible for reentry into nursing practice due to a lapse in licensure for five or more years. *Individuals entering this curriculum must have been previously licensed as a Practical Nurse.*

Course work includes common medical-surgical conditions and nursing approaches to their management, including mental health principles, pharmacological concepts, and safe clinical nursing practice.

Graduates will be eligible to apply for reinstatement of licensure by the North Carolina Board of Nursing. Employment opportunities include hospitals, long term care facilities, clinics, physicians' offices, industry, and community health agencies.

		Class Hours	Lab Hours	Clin. Hours	Credit Hours
NUR 107	LPN Refresher	9	0	9	12

Real Estate - Certificate (C 25 40 0)

Curriculum Description
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 should qualify for North Carolina Real Estate Sales and Broker examinations. They should be able to enter apprenticeship training and to provide real estate services to consumers in a competent manner.

			Class Hours	Lab Hours	Credit Hours
ACC 120	Prin of Financial Acct		3	2	4
BUS 225	Business Finance		2	2	3
RLS 112	Real Estate Fundamentals		5	0	5
RLS 113	Real Estate Mathematics	2	0	2	
RLS 117	Real Estate Broker		4	0	4

Total Required Hours					18

Welding Technology - Degree (A 50 42 0)

Curriculum Description

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 provides 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 metalworking industries. Career opportunities also exist in construction, manufacturing, fabrication, sales, quality control, supervision, and welding-related self-employment.

			Class Hours	Lab Hours	Credit Hours
I.	**General Education Requirements - 15 Credit Hours**				
	ENG 111	Expository Writing	3	0	3
	ENG 114	Professional Research & Reporting	3	0	3
	MAT 115	Mathematical Models	2	2	3
		Humanities Elective	3	0	3
		Social Science Elective	3	0	3
II.	**Required Core Courses - 18 Credit Hours**				
	WLD 110	Cutting Processes	1	3	2
	WLD 115	SMAW (stick) Plate	2	9	5
	WLD 121	GMAW (MIG) FCAW/Plate	2	6	4
	WLD 131	GTAW (TIG) Plate	2	6	4
	WLD 141	Symbols and Specifications	2	2	3
III.	**Other Major Required Courses - 33 Credit Hours**				
	BPR 111	Blueprint Reading	1	2	2
	BPR 121	Blueprint Reading: Mechanical	1	2	2
	CIS 110	Introduction to Computers	2	2	3
	WLD 116	SMAW (Stick) Plate/Pipe	1	9	4
	WLD 122	GMAW (MIG) Plate/Pipe	1	6	3
	WLD 132	GTAW (TIG) Plate/Pipe	1	6	3
	WLD 143	Welding Metallurgy	1	2	2
	WLD 145	Thermoplastic Welding	1	3	2
	WLD 151	Fabrication I	2	6	4
	WLD 251	Fabrication II	1	6	3
	WLD 261	Certification Practices	1	3	2
	WLD 262	Inspection and Testing	2	2	3
IV.	**Other Required Hours - 1 Credit Hour**				
	ACA 115	Success & Study Skills	0	2	1
Total Required Hours					67

Welding Technology - Diploma (D 50 42 0)

			Class Hours	Lab Hours	Credit Hours
I.	**General Education Requirements - 6 Credit Hours**				
	ENG 101	Applied Communications I	3	0	3
	MAT 101	Applied Mathematics I	2	2	3
II.	**Required Core Courses - 18 Credit Hours**				
	WLD 110	Cutting Processes	1	3	2
	WLD 115	SMAW (stick) Plate	2	9	5
	WLD 121	GMAW (MIG) FCAW/Plate	2	6	4
	WLD 131	GTAW (TIG) Plate	2	6	4
	WLD 141	Symbols and Specifications	2	2	3
III.	**Other Major Required Courses - 20 Credit Hours**				
	BPR 111	Blueprint Reading	1	2	2
	BPR 121	Blueprint Reading: Mechanical	1	2	2
	WLD 116	SMAW (Stick) Plate/Pipe	1	9	4
	WLD 122	GMAW (MIG) Plate/Pipe	1	6	3
	WLD 132	GTAW (TIG) Plate/Pipe	1	6	3
	WLD 145	Thermoplastic Welding	1	3	2
	WLD 151	Fabrication I	2	6	4
Total Required Hours					44

Welding Technology - Certificate (C 50 42 0)

		Class Hours	Lab Hours	Credit Hours
WLD 110	Cutting Processes	1	3	2
WLD 115	SMAW (stick) Plate	2	9	5
WLD 121	GMAW (MIG) FCAW/Plate	2	6	4
WLD 131	GTAW (TIG) Plate	2	6	4
Total Required Hours				15

COURSE DESCRIPTIONS

The courses listed on the following pages represent the current curriculum offerings in Arts and Sciences, Business Sciences, and Applied Sciences and Technology.

1. The courses are listed in alphabetical order by a 3-letter prefix (example - BUS for business; ANT for anthropology).

2. The courses are assigned a 3-digit number (example ACA 115)

3. Any course number less than 100 will not earn credit hours toward graduation.

4. The course title follows the number (example-ACA 115 Success & Study Skills)

5. The number of contact and credit hours follow the title (example ACA 115 Success & Study Skills 0 2 1). The first number represents the number of lecture hours per week; the second represents the number of lab, shop, clinical, or practicum hours per week; the last represents the number of credit hours assigned to the course.

COURSE DESCRIPTIONS

ACADEMIC RELATED

ACA 115 Success & Study Skills 0 2 1
Prerequisites:
Corequisites: None
This course provides an orientation to the campus 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.

ACCOUNTING

ACC 120 Prin Of Financial Acct 3 2 4
Prerequisites
Corequisites: None
This course introduces business decision-making 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 3 2 4
Prerequisites: ACC 120
Corequisites: None
This course includes a greater emphasis on managerial and cost accounting skills. 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.*

ACC 129 Individual Income Taxes 2 2 3
Prerequisites:
Corequisites: None
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.

AIR CONDITIONING, HEATING AND REFRIGERATION

AHR 120 HVACR Maintenance 1 3 2
Prerequisites: None
Corequisites: None
This course introduces the basic principles of industrial air conditioning and heating systems. Emphasis is placed on preventive maintenance procedures for heating and cooling equipment and related components. Upon completion, students should be able to perform routine preventive maintenance tasks, maintain records, and assist in routine equipment repairs.

AHR 130 HVAC Controls 2 2 3
Prerequisites: AHR 111 or ELC 111
Corequisites: None
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.

AHR 160 Refrigerant Certification 1 0 1
Prerequisites: None
Corequisites: None
This course covers the requirements for the EPA certification examinations. Topics include small appliances, high pressure systems, and low pressure systems. Upon completion, students should be able to demonstrate knowledge of refrigerants and be prepared for the EPA certification examinations.

ANTHROPOLOGY

ANT 210 General Anthropology 3 0 3
Prerequisites:
Corequisites: None
This course introduces the physical, archaeological, linguistic, and ethnological fields of anthropology. Topics include human origins, genetic variations, archaeology, linguistics, primatology, and contemporary cultures. Upon completion, students should be able to demonstrate an understanding of the four major fields of anthropology. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

ANT 220 Cultural Anthropology 3 0 3
Prerequisites:
Corequisites: None
This course introduces the nature of human culture. Emphasis is placed on cultural theory, methods of fieldwork, and cross-cultural comparisons in the areas of ethnology, language, and the cultural past. Upon completion, students should be able to demonstrate an understanding of basic cultural processes and how cultural data are collected and analyzed. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

ART

ART 111 Art Appreciation 3 0 3
Prerequisites: RED 090, ENG 090 or satisfactory placement test scores
Corequisites: None
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 121 Design I 1 4 3
Prerequisites
Corequisites: None
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.

ART 131 Drawing I 0 6 3
Prerequisites:
Corequisites: None
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.

ART 132 Drawing II 0 6 3
Prerequisites: ART 131
Corequisites: None
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.

ART 140 Basic Painting 0 4 2
Prerequisites:
Corequisites: None
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.

ART 240 Painting I 0 6 3
Prerequisites: None
Corequisites: None
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.

ASTRONOMY

AST 111 Descriptive Astronomy 3 0 3
Prerequisites: None
Corequisites: AST 111A
This course introduces an overall view of modern astronomy. Topics include an overview of the solar system, the sun, stars, galaxies, and the larger universe. Upon completion, students should be able to demonstrate an understanding of the universe around them. This course has been approved to satisfy the comprehensive Articulation Agreement general education core requirement in natural sciences/ mathematics.

AST 111A Descriptive Astronomy Lab 0 2 1
Prerequisites: None
Corequisites: AST 111
This course is a laboratory to accompany AST 111. Emphasis is placed on laboratory experiences which enhance the materials presented in AST 111 and which provide practical experience. Upon completion, students should be able to demonstrate an understanding of the universe around them. This course has been approved to satisfy the comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

AST 151 General Astronomy I 3 0 3
Prerequisites: None
Corequisites: 151A
This course introduces the science of modern astronomy with a concentration on the solar system. Emphasis is placed on the history and physics of astronomy and an introduction to the solar system, including the planets, comets, and meteors. Upon completion, students should be able to demonstrate a general understanding of the solar system. This course has been approved to satisfy the comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

AST 151A General Astronomy I Lab 3 0 3
Prerequisites: None
Corequisites: AST 151
The course is a laboratory to accompany AST 151. Emphasis is placed on laboratory experiences which enhance the materials presented in AST 151 and which provide practical experience. Upon completion, students should be able to demonstrate a general understanding of the solar system. This course has been approved to satisfy the comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

AST 152 General Astronomy II 3 0 3
Prerequisites: AST 151/151A
Corequisites AST 152A
This course is a continuation of AST 151 with primary emphasis beyond the solar system. Topics include the sun, stars, galaxies, and the larger universe, including cosmology. Upon completion, students should be able to demonstrate a working knowledge of astronomy. This course has been approved to satisfy the comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

AST 152A General Astronomy II Lab
Prerequisites: AST 151/151A
Corequisites: AST 152
The course is a laboratory to accompany AST 152. Emphasis is placed on laboratory experiences which enhance the materials presented in AST 152 and which provide practical experience. Upon completion, students should be able to demonstrate a working knowledge of astronomy. This course has been approved to satisfy the comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

AUTOMOTIVE BODY REPAIR

AUB 111 Painting & Refinishing I 2 6 4
Prerequisites:
Corequisites: None
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.

AUB 112 Painting & Refinishing II 2 6 4
Prerequisites: AUB 111
Corequisites: None
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.

AUB 114 Special Finishes 1 2 2
Prerequisites: AUB 111
Corequisites: None
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.

AUB 121 Non-Structural Damage I 1 4 3
Prerequisites:
Corequisites: None
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/ replacing of body panels to accepted standards.

AUB 122 Non-Structural Damage II 2 6 4
Prerequisites:
Corequisites: None
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.

AUB 131 Structural Damage I 2 4 4
Prerequisites:
Corequisites: None
This course introduces safety, equipment, structural damage analysis, and damage repairs. Topics include shop safety, design and construction, structural analysis and measurement, equipment, structural glass, repair techniques, and other related topics. Upon completion, students should be able to analyze and perform repairs to a vehicle which has received light/moderate structural damage.

AUB 132 Structural Damage II 2 6 4
Prerequisites: AUB 131
Corequisites: None
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.

AUB 134 Autobody MIG Welding 1 4 3
Prerequisites:
Corequisites: None
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.

AUB 136 Plastics & Adhesives 1 4 3
Prerequisites:
Corequisites: None
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.

AUB 141 Mech & Elec Components I 2 2 3
Prerequisites:
Corequisites: None
This course covers the basic principles of automotive mechanical and electrical components. Topics include personal and environmental safety and suspension and steering, electrical, brake, heating and air-conditioning, cooling, drive train, and restraint systems. Upon completion, students should be able to identify system components and perform basic system diagnostic checks and/or repairs according to industry standards.

AUB 150 Automotive Detailing 1 3 2
Prerequisites:
Corequisites: None
This course covers the methods and procedures used in automotive detailing facilities. Topics include safety, engine, interior and trunk compartment detailing, buffing/polishing exterior surfaces, and cleaning and reconditioning exterior trim, fabrics, and surfaces. Upon completion, students should be able to improve the overall appearance of a vehicle.

AUB 160 Body Shop Operations 1 0 1
Prerequisites:
Corequisites: None
This course introduces the day-to-day operations of autobody repair facilities. Topics include work habits and ethics, customer relations, equipment types, materials cost and control, policies and procedures, shop safety and liabilities, and other related topics. Upon completion, students should be able to understand the general operating policies and procedures associated with an autobody repair facility.

AUB 162 Autobody Estimating 1 2 2
Prerequisites:
Corequisites: None
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.

BANKING AND FINANCE

BAF 110 Principles of Banking 3 0 3
Prerequisites:
Corequisites: None
This course covers the fundamentals of bank functions in a descriptive fashion. Topics include banks and the monetary system, the relationship of banks to depositors, the payment functions, bank loans and accounting, regulations, and examinations. Upon completion, students should be able to demonstrate an understanding of the business of banking from a broad perspective.

BAF 131 Fund of Bank Lending 3 0 3
Prerequisites: ACC 120
Corequisites: None
This course introduces the basic knowledge and skills needed to be an effective lender. Topics include the functions of the loan interview and credit investigation, the "C"s of credit, elements of loan documentation, and warning signs of problem loans. Upon completion, students should be able to demonstrate an understanding of the credit functions and regulatory issues affecting this key banking function. This course is a unique concentration requirement of the Banking and Finance concentration in the Business Administration program.

BAF 141 Law & Banking: Principles 3 0 3
Prerequisites:
Corequisites: None
This course provides an overview of the legal aspects of banking and the legal framework within which banks function. Topics include the court system, consumer protection, tangible and intangible property ownership, and the legalities and regulations of bank transactions. Upon completion, students should be able to discuss the non-technical aspects of the legal system and how these affect the bank's organization and operation. This course is a unique concentration requirement of the Banking and Finance concentration in the Business Administration program.

BAF 222 Money and Banking 3 0 3

Prerequisites:

Corequisites: None

This course provides a fundamental treatment of how money and banks function in the US and world economies. Topics include the roles of money in the US economy, the functions of the Federal Reserve Board, and the workings of monetary and fiscal policies. Upon completion, students should be able to explain how the monetary economy functions, how banks are creators of money, and the impact of the Federal Reserve. This course is a unique concentration requirement of the Banking and Finance concentration in the Business Administration program.

BIOLOGY

BIO 111 General Biology I 3 3 4

Prerequisites: RED 090, ENG 090 or satisfactory placement test scores

Corequisites: None

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 3 3 4

Prerequisites: BIO 111

Corequisites: None

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 life at the organismal and ecological levels. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

BIO 120 Introductory Botany 3 3 4

Prerequisites: BIO 111

Corequisites: None

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. This course is intended for all Associate degree programs.

BIO 140 Environmental Biology 3 0 3

Prerequisites:

Corequisites: BIO 140A

This course introduces environmental processes and the influence of human activities upon them. Topics include ecological concepts, population growth, natural resources, and a focus on current environmental problems from scientific, social, political, and economic perspectives. Upon completion, students should be able to demonstrate an understanding of environmental interrelationships and of contemporary environmental issues. This course is intended for all Associate degree programs.

BIO 140A Environmental Biology Lab 0 3 1

Prerequisites:

Corequisites: BIO 140

This course provides a laboratory component to complement BIO 140. Emphasis is placed on laboratory and field experience. Upon completion, students should be able to demonstrate a practical understanding of environmental interrelationships and of contemporary environmental issues. This course is intended for all Associate degree programs.

BIO 155 Nutrition 3 0 3

Prerequisites:

Corequisites: None

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.

BIO 163 Basic Anat & Physiology 4 2 5
Prerequisites:
Corequisites: None
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. This course is designed for certificate and diploma programs.

BIO 165 Anatomy and Physiology I 3 3 4
Prerequisites:
Corequisites: None
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 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 their interrelationships.

BIO 166 Anatomy and Physiology II 3 3 4
Prerequisites: BIO 165
Corequisites: None
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.

BIO 175 General Microbiology 2 2 3
Prerequisites: BIO 111, BIO 163, BIO 166, or BIO 169
Corequisites: None
This course covers principles of microbiology with emphasis on microorganisms and human disease. Topics include an overview 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. This course is intended for AAS degree programs.

BLUEPRINT READING

BPR 111 Blueprint Reading 1 2 2
Prerequisites:
Corequisites: None
This course introduces the basic principles of blueprint reading. Topics include line 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 1 2 2
Prerequisites: BPR 111 or MAC 131
Corequisites: None
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.

BROADCAST PRODUCTION

BPT 110 Intro to Broadcasting 3 0 3
Prerequisites:
Corequisites: None
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 3 0 3
Prerequisites:
Corequisites: None
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 3 2 4
Prerequisites:
Corequisites: None
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.

BPT 113 Broadcast Sales 3 0 3
Prerequisites:
Corequisites: None
This course covers sales principles applicable to 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 3 0 3
Prerequisites:
Corequisites: None
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 2 3 3
Prerequisites:
Corequisites: None
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 122 Broadcast Speech II 2 3 3
Prerequisites: BPT 121
Corequisites: None
This course covers basic and advanced preparation and performance of on-air speech. Emphasis is placed on enhancing a pleasant, effective voice with techniques applied to impromptu speaking, radio plays, and taped presentations. Upon completion, students should be able to employ proper articulation, pronunciation, rate of delivery, phrasing, and other voice techniques in a professional manner.

BPT 131 Audio/Radio Production I 2 6 4
Prerequisites:
Corequisites: None
This course covers the creation, development, production, and presentation of audio programming elements for broadcast and/or other electronic media applications. Emphasis is placed on the proper operation of professional audio equipment and the study of basic physical behavior and perceptual effects of sound. Upon completion, students should be able to correctly operate audio recording and playback equipment and demonstrate an understanding of the basic components of sound.

BPT 132 Audio/Radio Production II 2 6 4
Prerequisites: BPT 131
Corequisites: None
This course cover 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. Upon completion, students should be able to optimize the use of professional audio equipment in the production of effective audio programming.

BPT 135 Radio Performance I 0 6 2
Prerequisites:
Corequisites: None
This course provides an opportunity to operate the college radio station as an announcer/board operator. Emphasis is placed on operating control-room equipment, logging transmitter readings, EBS tests, reading news, and broadcasting free of interruptions. Upon completion, students should be able to prepare music, public service announcements, and promos for timely broadcast; introduce songs/programs smoothly; and follow FCC rules.

BPT 136 Radio Performance II 0 6 2
Prerequisites: BPT 135
Corequisites: None
This course provides an opportunity to operate the college radio station as an announcer/board operator. Emphasis is placed on operating control-room equipment, logging transmitter readings, EBS tests, reading news, and broadcasting free of interruptions. Upon completion, students should be able to prepare music, public service announcements, and promos for timely broadcast; introduce songs/programs smoothly; and follow FCC rules.

BPT 137 Radio Performance III 0 6 2
Prerequisites: BPT 136
Corequisites: None
This course provides an opportunity to operate the college radio station as an announcer/board operator. Emphasis is placed on operating control-room equipment, logging transmitter readings, EBS tests, reading news, and broadcasting free of interruptions. Upon completion, students should be able to prepare music, public service announcements, and promos for timely broadcast; introduce songs/programs smoothly; and follow FCC rules.

BPT 138 Radio Performance IV 0 6 2
Prerequisites: BPT 137
Corequisites: None
This course provides an opportunity to operate the college radio station as an announcer/board operator. Emphasis is placed on operating control-room equipment, logging transmitter readings, EBS tests, reading news, and broadcasting free of interruptions. Upon completion, students should be able to prepare music, public service announcements, and promos for timely broadcast; introduce songs/programs smoothly; and follow FCC rules.

BPT 139 Radio Performance V 0 6 2
Prerequisites: BPT 138
Corequisites: None
This course provides an opportunity to operate the college radio station as an announcer/board operator. Emphasis is placed on operating control-room equipment, logging transmitter readings, EBS tests, reading news, and broadcasting free of interruptions. Upon completion, students should be able to prepare music, public service announcements, and promos for timely broadcast; introduce songs/programs smoothly; and follow FCC rules.

BPT 140 Intro to TV Systems 2 0 2
Prerequisites:
Corequisites: None
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 210 Broadcast Management 3 0 3
Prerequisites:
Corequisites: None
This course covers management duties within the fields of broadcasting and other electronic media. Emphasis is placed on the management of broadcast stations and cable systems, including financial, personnel, news, sales, and promotion management. Upon completion, students should be able to demonstrate knowledge of successful station operation, including key management concepts and strategies.

BPT 215 Broadcast Programming 3 0 3
Prerequisites:
Corequisites: None
This course covers programming methods, research, and resources needed to provide programs for radio, television, cable, and satellite target audiences. Topics include market research and analysis; local, network, and public station programming and program sources; and scheduling procedures for electronic media. Upon completion, students should be able to develop a programming format or schedule.

BPT 220 Broadcast Marketing 3 0 3
Prerequisites:
Corequisites: None
This course introduces broadcast marketing, including cultivating an audience, building an identity, and servicing customers. Topics include the use of effective promotional tools, marketing research, rating analysis, and the development of a unified marketing plan. Upon completion, students should be able to develop a broadcast marketing plan.

BPT 231 Video/TV Production I 2 6 4

Prerequisites:

Corequisites: None

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 2 6 4

Prerequisites: BPT 231

Corequisites: None

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.

BPT 235 TV Performance I 0 6 2

Prerequisites:

Corequisites: None

This course provides hands-on experience in the operation of television studios and/or stations. Emphasis is placed on the application of skills through direct participation in the production or distribution of television programs. Upon completion, students should be able to demonstrate competence in performing key station and/or studio duties.

BPT 236 TV Performance II 0 6 2

Prerequisites: BPT 235

Corequisites: None

This course provides hands-on experience in the operation of television studios and/or stations. Emphasis is placed on the application of skills through direct participation in the production or distribution of television programs. Upon completion, students should be able to demonstrate competence in performing key station and/or studio duties.

BPT 237 TV Performance III 0 6 2

Prerequisites: BPT 236

Corequisites: None

This course provides hands-on experience in the operation of television studios and/or stations. Emphasis is placed on the application of skills through direct participation in the production or distribution of television programs. Upon completion, students should be able to demonstrate competence in performing key station and/or studio duties.

BPT 238 TV Performance IV 0 6 2

Prerequisites: BPT 237

Corequisites: None

This course provides hands-on experience in the operation of television studios and/or stations. Emphasis is placed on the application of skills through direct participation in the production or distribution of television programs. Upon completion, students should be able to demonstrate competence in performing key station and/or studio duties.

BPT 239 TV Performance V 0 6 2

Prerequisites: BPT 238

Corequisites: None

This course provides hands-on experience in the operation of television studios and/or stations. Emphasis is placed on the application of skills through direct participation in the production or distribution of television programs. Upon completion, students should be able to demonstrate competence in performing key station and/or studio duties.

BPT 241 Broadcast Journalism I 3 2 4

Prerequisites:

Corequisites: None

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 voices and reports. Upon completion, students should be able to write broadcast news scripts and produce radio news reports and newscasts.

BPT 242 Broadcast Journalism II 3 2 4
Prerequisites: BPT 241
Corequisites: None
This course provides an opportunity to gather, write, edit, and produce broadcast news reports. Emphasis is placed on producing professional broadcast news reports, including script writing, gathering, and editing. Upon completion, students should be able to produce and record professional broadcast news stories.

BPT 250 Institutional Video 2 3 3
Prerequisites:
Corequisites: None
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 260 Multi-Track Recording 2 2 3
Prerequisites: BPT 132
Corequisites: None
This course covers the application of audio production techniques in a multi-track recording setting. Emphasis is placed on proper use of control room equipment and mix-down of multiple sound sources on both analog and digital recorders. Upon completion, students should be able to produce creative music or supplemental works using sound engineering techniques.

BUSINESS

BUS 115 Business Law I 3 0 3
Prerequisites:
Corequisites: None
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.

BUS 116 Business Law II 3 0 3
Prerequisites: BUS 115
Corequisites: None
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.

BUS 121 Business Math 2 2 3
Prerequisites: MAT 060
Corequisites: None
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 3 0 3
Prerequisites:
Corequisites: None
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 Management 3 0 3
Prerequisites:
Corequisites: None
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 2 2 3
Prerequisites: ACC 120
Corequisites: None
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.

BUS 253 Leadership and Mgt Skills 3 0 3
Prerequisites:
Corequisites: None
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 255 Org Behavior in Business 3 0 3
Prerequisites:
Corequisites: None
This course covers the impact of different management practices and leadership styles on worker satisfaction and morale, organizational effectiveness, productivity, and profitability. Topics include a discussion of formal and informal organizations, group dynamics, motivation, and managing conflict and change. Upon completion, students should be able to analyze different types of interpersonal situations and determine an appropriate course of action.

BUS 260 Business Communication 3 0 3
Prerequisites: ENG 111 and OST 131 or CIS 110
Corequisites: None
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.

COMPUTER ENGINEERING TECHNOLOGY

CET 111 Computer Upgrade/Repair I 2 3 3
Prerequisites: None
Corequisites: None
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.

CET 211 Computer Upgrade/Repair II 2 3 3
Prerequisites: CET 111
Corequisites: None
This course is the second of two courses covering repairing, servicing, and upgrading computers and peripherals in preparation for industry certification. Topics include resolving resource conflicts and system bus specifications, configuration and troubleshooting peripherals, operating system configuration and optimization, and other related topics. Upon completion, students should be able to identify and resolve system conflicts and optimize system performance.

CET 225 Digital Signal Processing 2 2 3
Prerequisites: None
Corequisites: None
This course covers the theory and use of digital signal processing techniques. Topics include Fourier analysis, digital filtering, Z transforms, IIR, FIR, convolution, pulse methods, and DSP programming. Upon completion, students should be able to implement and troubleshoot DSP systems in hardware and software.

CHEMISTRY

CHM 131 Introduction to Chemistry 3 0 3
Prerequisites: MAT 070 or satisfactory placement test scores
Corequisites: CHM 131A
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 demostrate a basic understanding of chemistry as it applies to other fields. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

CHM 131A Introduction to Chemistry Laboratory 0 3 1
Prerequisites: MAT 070 or satisfactory placement test scores
Corequisites: CHM 131
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. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

CHM 132 Organic and Biochemistry 3 3 4
Prerequisites: MAT 070 or satisfactory placement test scores
Corequisites: CHM 131
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.*

CHM 151 General Chemistry I 3 3 4
Prerequisites: CHM 131
Corequisites: None
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 demostrate 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.*

CHM 152 General Chemistry II 3 3 4
Prerequisites: CHM 151
Corequisites: None
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 complexions. 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.

CHM 251 Organic Chemistry I 3 3 4
Prerequisites: CHM 152
Corequisites: None
This course provides a systematic study of the theories, principles, and techniques of organic chemistry. Topics include nomenclature, structure, properties, reactions, and mechanisms of hydrocarbons, alkyl halides, alcohols, and ethers; further topics include isomerization, stereochemistry, and spectroscopy. Upon completion, students should be able to demonstrate an understanding of the fundamental concepts of covered organic topics as needed in CHM 252.

CHM 252 Organic Chemistry II 3 3 4
Prerequisites: CHM 251
Corequisites: None
This course provides continuation of the systematic study of the theories, principles, and techniques of organic chemistry. Topics include nomenclature, structure, properties, reactions, and mechanisms of aromatics, aldehydes, ketones, carboxylic acids and derivatives, amines and heterocyclics; multi-step synthesis will be emphasized. Upon completion, students should be able to demonstrate an understanding of organic concepts as needed to pursue further study in chemistry and related professional fields.

INFORMATION SYSTEMS

CIS 110 Introduction to Computers 2 2 3
Prerequisites: OST 131 or satisfactory keyboarding skills
Corequisites: None
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.

CIS 112 Windows TM 1 2 2
Prerequisites: CIS 110
Corequisites: None
This course includes the fundamentals of the Windows* software. Topics include graphical user interface, icons, directories, file management, accessories, and other applications. Upon completion, students should be able to use Windows* software in an office environment.

CIS 115 Intro to Prog & Logic 2 2 3
Prerequisites: MAT 070
Corequisites: None
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.

CIS 120 Spreadsheet I 2 2 3
Prerequisites: CIS 110
Corequisites: None
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.

CIS 130 Survey of Operating Sys 2 3 3
Prerequisites: None
Corequisites: None
The 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.

CIS 152 Database Concepts & Apps 2 2 3
Prerequisites: CIS 110 or CIS 115
Corequisites: None
This course introduces database design and creation using a DBMS. 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.

CIS 153 Database Applications 2 2 3
Prerequisites: CIS 152
Corequisites: None
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.

CIS 165 Desktop Publishing I 2 2 3
Prerequisites: OST 136 or proficiency in word processing
Corequisites: None
This course provides an introduction to desktop publishing software capabilities. Emphasis is placed on efficient use of a page layout software package to create, design, and print publications; hardware/software compatibility; and integration of specialized peripherals. Upon completion, students should be able to prepare publications given design specifications.

CIS 169 Business Presentations 1 2 2
Prerequisites: CIS 110
Corequisites: None
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.

CIS 172 Intro to the Internet 2 3 3
Prerequisites: Keyboarding or computer experience
Corequisites: None
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.

CIS 174 **Network System Manager I** 2 2 3
Prerequisites: NET 110
Corequisites: None
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. Students will use a current network operating system to master the above topics.

CIS 175 **Network Management I** 2 2 3
Prerequisites: NET 110
Corequisites: None
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. Students will use a current network operating system to master the above topics.

CIS 211 **AS/400 Maint & Operations** 2 3 3
Prerequisites: None
Corequisites: None
This course is designed to cover the fundamental AS/400 System operations, screens, utilities, and terminology. Topics include an introduction to the AS/400 operating system, security, backup and restore, handling spooled files, and using commands and menus to create and manipulate objects. Upon completion, students should be able to use utilities, create libraries, save and restore files, monitor and control jobs and queues, and know AS/400 operations.

CIS 215 **Hardware Install/Maint** 2 3 3
Prerequisites: CIS 110, CIS 111 or CIS 115
Corequisites: None
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 non-functioning personal computers.

CIS 217 **Computer Train & Support** 2 2 3
Prerequisites: CIS 110 or computer experience
Corequisites: None
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.

CIS 225 **Integrated Software** 1 2 2
Prerequisites: CIS 120, CIS 152, and OST 136
Corequisites: None
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.

CIS 244 **Operating System - AS/400** 2 3 3
Prerequisites:
Corequisites: None
This course includes operating systems concepts for AS/400 systems. Topics include hardware management, file and memory management, system configuration/optimization, utilities, Job Control Language, and support functions. Upon completion, students should be able to perform operating system functions in an AS/400 environment.

CIS 274 **Network System Manager II** 2 2 3
Prerequisites: CIS 174
Corequisites: None
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. Students will use a current operating system to master the above topics. This course is a unique concentration requirement in the Network Administration and Support concentration in the Information Systems program.

CIS 275 Network Management II 2 2 3
Prerequisites: CIS 175
Corequisites:
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. Students will use a current network operating system to master the above topics. This course is a unique concentration requirement in the Network Administration and Support concentration in the Information Systems program.

CIS 277 Network Design & Imp 2 2 3
Prerequisites; CIS 275
Corequisites: None
This course focuses on the design, analysis, and integration of a network operating system. Topics include determination of a directory tree structure and object placement, creation of time synchronization strategy, security, and routing services. Upon completion, students should be able to implement a network design strategy, develop a migration strategy, and create a network implementation schedule.

CIS 282 Network Technology 3 0 3
Prerequisites: NET 110
Corequisites: None
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. This course is a unique concentration requirement in the Network Administration and Support concentration in the Information
Systems program.

CIS 286 Systems Analysis & Design 3 0 3
Prerequisites: CIS 115
Corequisites: None
This course examines established and evolving methodologies for the analysis, design, and development of a business information system. Emphasis is placed on business systems characteristics, managing information systems projects, prototyping, CASE tools, and systems development life cycle phases. Upon completion, students should be able to analyze a problem and design an appropriate solution using a combination of tools and techniques.

CIS 287 Network Support 2 2 3
Prerequisites: CIS 274 or CIS 275
Corequisites: None
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.

CIS 288 Systems Project 1 4 3
Prerequisites: CIS 286
Corequisites: None
This course provides an opportunity to complete a significant systems 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.

CRIMINAL JUSTICE

CJC 100 Basic Law Enforcement Training 8 30 18
Prerequisites: None
Corequisites: None
This course covers the basic skills and knowledge needed for entry-level employment as a law enforcement officer in North Carolina. Topics are divided into general units of study: legal, patrol duties, law enforcement communications, investigations, practical application and sheriff-specific. Upon successful completion, the student will be able to demonstrate competence in topics and areas required for the state comprehensive certification examination. This is a certificate-level course.

CJC 111 Intro to Criminal Justice 3 0 3
Prerequisites: None
Corequisites: None
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 for transferability as a pre-major and/or elective course requirement.

CJC 112 Criminology 3 0 3
Prerequisites:
Corequisites: None
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 3 0 3
Prerequisites:
Corequisites: None
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 120 Interviews/Interrogations 1 2 2
Prerequisites:
Corequisites: None
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 Enforcement Operations 3 0 3
Prerequisites: None
Corequisites: None
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 for transferability as a pre-major and/or elective course requirement.

CJC 122 Community Policing 3 0 3
Prerequisites:
Corequisites: None
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 3 0 3
Prerequisites:
Corequisites: None
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 3 0 3
Prerequisites:
Corequisites: None
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 3 0 3

Prerequisites:
Corequisites: None

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 for a transferability as a pre-major and/or elective course requirement.

CJC 212 Ethics & Comm Relations 3 0 3

Prerequisites:
Corequisites: None

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 214 Victimology 3 0 3

Prerequisites:
Corequisites: None

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 & Administration 3 0 3

Prerequisites:
Corequisites: None

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 3 2 4

Prerequisites:
Corequisites: None

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 3 0 3

Prerequisites:
Corequisites: None

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 3 0 3

Prerequisites:
Corequisites: None

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 3 0 3

Prerequisites:
Corequisites: None

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 3 0 3
Prerequisites:
Corequisites: None
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 3 0 3
Prerequisites:
Corequisites: None
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.

COMPUTER SCIENCE

CSC 134 C++ Programming 2 3 3
Prerequisites: CIS 115 or prior programming experience
Corequisites: None
This course introduces object-oriented computer programming using the C++ programming language. Topics include input/output operations, iteration, arithmetic operations, arrays, pointers, filters, and other related topics. Upon completion, students should be able to design, code, test, and debug C++ language programs.

CSC 138 RPG Programming 2 3 3
Prerequisites: CIS 115 or prior programming experience
Corequisites: None
This course introduces computer programming using the RPG programming language. Topics include input/output operations, sequence, selection, iteration, arithmetic operations, arrays/tables, and other related topics. Upon completion, students should be able to design, code, test, and debug RPG language programs.

CSC 139 Visual BASIC Programming 2 3 3
Prerequisites: CIS 115 or Programming Experience
Corequisites: None
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.

CSC 144 AS/400 CL Programming 2 3 3
Prerequisites: CIS 115 and CIS 211
Corequisites; None
This course introduces computer programming using the CL programming language. Topics include CL command structure, command parameters, creating CL programs, manipulating variables, writing commands to control jobs and workflow, and other related topics. Upon completion, students should be able to design, code, test, and debug CL programs.

CSC 160 Intro to Internet Prog 2 2 3
Prerequisites: CIS 172
Corequisites: None
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.

CSC 234 Advanced C++ 2 3 3
Prerequisites: CSC 134
Corequisites: None
This course is a continuation of CSC 134 using C++ 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. This course is a unique concentration requirement in the Programming concentration in the Information Systems program.

CSC 238 **Advanced RPG** 2 3 3
Prerequisites: CSC 138
Corequisites: None
This course is a continuation of CSC 138 using RPG 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. This course is a unique concentration requirement in the Programming concentration in the Information Systems program.

COOPERATIVE EDUCATION

COE 110 **World of Work** 1 0 1
Prerequisites:
Corequisites:
This course covers basic knowledge necessary for gaining and maintaining employment. Topics include job search skills, work ethic, meeting employer expectations, workplace safety, and human relations. Upon completion, students should be able to successfully make the transition from school to work.

COE 111 **Co-op Work Experience I** 0 0 10 1
Prerequisites:
Corequisites:
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** 1 0 0 1
Prerequisites:
Corequisites: COE 111
Theories, techniques, and methods observed in the work settings will be discussed. Students will integrate ideas related in course work and practicum situations. This course is designed to coordinate the classroom and industry experience. The practicum correlating with the seminar must be taken the same term.

COE 121 **Co-op Work Experience II** 0 0 10 1
Prerequisites:
Corequisites:
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 125 **Work Exp Seminar II** 1 0 0 1
Prerequisites:
Corequisites: COE 121
Theories, techniques, and methods observed in the work settings will be discussed. Students will integrate ideas related in course work and practicum situations. This course is designed to coordinate the classroom and industry experience. The practicum correlating with the seminar must be taken the same term.

COE 131 **Co-op Work Experience III** 0 0 10 1
Prerequisites:
Corequisites:
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 135 **Work Exp Seminar III** 1 0 0 1
Prerequisites:
Corequisites: COE 131
Theories, techniques, and methods observed in the work settings will be discussed. Students will integrate ideas related in course work and practicum situations. This course is designed to coordinate the classroom and industry experience. The practicum correlating with the seminar must be taken the same term.

COMMUNICATION

COM 231 Public Speaking 3 0 3

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 4 0 4

Prerequisites:
Corequisites: COS 112

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.

COS 112 Salon I 0 24 8

Prerequisites:
Corequisites: COS 111

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.

COS 113 Cosmetology Concepts II 4 0 4

Prerequisites: None
Corequisites: COS 114

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.

COS 114 Salon II 0 24 8

Prerequisites: None
Corequisites: COS 113

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.

COS 115 Cosmetology Concepts III 4 0 4

Prerequisites: None
Corequisites: COS 116

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.

COS 116 Salon III 0 12 4

Prerequisites: None
Corequisites: COS 115

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.

COS 117 Cosmetology Concepts IV 2 0 2

Prerequisites: None
Corequisites: COS 118

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 for the licensing examination. Upon completion, students should be able to demonstrate an understanding of these cosmetology concepts and meet program completion requirements.

COS 118 Salon IV 0 21 7
Prerequisites: None
Corequisites: COS 117
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 entry-level employment requirements.

COS 119 Esthetics Concepts I 2 0 2
Prerequisites: None
Corequisites: None
This course covers the concepts of esthetics. Topics include orientation, anatomy, physiology, hygiene, sterilization, first aid, chemistry, basic dermatology, and professional ethics. Upon completion, students should be able to demonstrate an understanding of the concepts of esthetics and meet course requirements.

COS 120 Esthetics Salon I 0 18 6
Prerequisites: None
Corequisites: None

This course covers the techniques of esthetics in a comprehensive experience in a simulated salon setting. Topics include client consultation, facials, body treatments, hair removal, make-up applications, and color analysis. Upon completion, students should be able to safely and competently demonstrate esthetic services on clients in a salon setting.

COS 121 Manicure/Nail Technology I 4 6 6
Prerequisites:
Corequisites: None
This course covers techniques of nail technology, hand and arm massage, and recognition of nail diseases and disorders. Topics include OSHA/safety, sanitation, bacteriology, product knowledge, salesmanship, manicures, artificial applications, pedicures, massage, and other related topics. Upon completion, students should be able to safely and competently perform nail care, including manicures, pedicures, massage, decorating, and artificial applications in a salon setting.

COS 125 Esthetics Concepts II 2 0 2
Prerequisites: None
Corequisites: None
This course covers more comprehensive esthetics concepts. Topics include nutrition, business management, makeup, and color analysis. Upon completion students should be able to demonstrate an understanding of the advanced esthetics concepts and meet course requirements.

COS 126 Esthetics Salon II 0 18 6
Prerequisites: None
Corequisites: None
This course provides experience in a simulated esthetics setting. Topics include machine facials, aromatherapy, massage therapy, electricity, and apparatus. Upon completion, students should be able to demonstrate competence in program requirements and the areas covered on the Cosmetology licensing examination for Estheticians.

COS 222 Manicure/Nail Technology II 4 6 6
Prerequisites: COS 121
Corequisites: None
This course covers advanced techniques of nail technology and hand and arm massage. Topics include OSHA/safety, product knowledge, customer service, salesmanship, artificial applications, nail art, and other related topics. Upon completion, students should be able to demonstrate competence necessary for the licensing examination, including advanced nail care, artificial enhancements, and decorations.

COS 223 Contemp Hair Coloring 1 3 2
Prerequisites: COS 111 and COS 112
Corequisites: None
This course covers basic color concepts, hair coloring problems, and application techniques. Topics include color theory, terminology, contemporary techniques, product knowledge, and other related topics. Upon completion, students should be able to identify a client's color needs and safely and competently perform color applications and correct problems.

COS 224 Trichology & Chemistry 1 3 2

Prerequisites:
Corequisites: None

This course is a study of hair and the interaction of applied chemicals. Emphasis is placed on pH actions and the reactions and effects of chemical ingredients. Upon completion, students should be able to demonstrate an understanding of chemical terminology, pH testing, and chemical reactions on hair.

COS 240 Contemporary Design 1 3 2

Prerequisites: COS 111 and COS 112
Corequisites: None

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.

COS 251 Manicure Instr Concepts 8 0 8

Prerequisites: None
Corequisites: None

This course introduces manicuring 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 supervision techniques, and assess student classroom performance.

COS 252 Manicure Instr Practicum 0 15 5

Prerequisites: None
Corequisites: COS 251

This course covers supervisory and instructional skills for teaching manicuring students in a laboratory setting. Topics include demonstrations of services, supervision, student assessment, and other related topics. Upon completion, students should be able to demonstrate competence in the areas covered by the Manicuring Instructor Licensing Examination and meet program completion requirements.

COS 253 Esthetics Instr Concepts I 6 15 11

Prerequisites: None
Corequisites: None

This course introduces esthetic instructional concepts and skills. Topics include orientation, theories of education, unit planning, daily lesson plans, laboratory management, student assessment in a laboratory setting. Upon completion, students should be able to demonstrate esthetic services and instruct and objectively assess student performance in a classroom setting.

COS 254 Esthetics Instr Concepts II 6 15 11

Prerequisites: None
Corequisites: None

This course covers advanced esthetic instructional concepts and skills. 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 demonstrate competencies in the areas covered by the Esthetics Instructor Licensing Examination and meet program requirements.

COS 271 Instructor Concepts I 5 0 5

Prerequisites: None
Corequisites: COS 272

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.

COS 272 Instructor Practicum I 0 21 7

Prerequisites: None
Corequisites: COS 271

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.

COS 273 Instructor Concepts II 5 0 5
Prerequisites: COS 271 and COS 272
Corequisites: COS 274
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.

COS 274 Instructor Practicum II 0 21 7
Prerequisites: COS 271 and COS 272
Corequisites: COS 273
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.*

DESIGN DRAFTING

DDF 211 Design Drafting I 2 6 4
Prerequisites: DFT 112
Corequisites: None
This course emphasizes design processes for finished products. Topics include data collection from manuals and handbooks, efficient use of materials, design sketching, specifications, and vendor selection. Upon completion, students should be able to research and plan the design process for a finished product.

DDF 221 Design Drafting Project 0 4 2
Prerequisites: DFT 111, DFT 112, and DFT 151
Corequisites: None
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 work drawings and models based on physical design parameters.

DRAFTING

DFT 111 Technical Drafting I 1 3 2
Prerequisites:
Corequisites: None
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 111A Technical Drafting I Lab 0 3 1
Prerequisites: None
Corequisites DFT 111
This course provides a laboratory setting to enhance basic drafting skills. Emphasis is placed on practical experiences that enhance the topics presented in DFT 111. Upon completion, students should be able to apply the laboratory experiences to the concepts presented in DFT 111.

DFT 112 Technical Drafting II 1 3 2
Prerequisites: DFT 111
Corequisites: None
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.

DFT 112A Technical Drafting II Lab 0 3 1
Prerequisites: None
Corequisites DFT 112
This course provides a laboratory setting to enhance advanced drafting skills. Emphasis is placed on practical experiences that enhance the topics presented in DFT 112. Upon completion, students should be able to apply the laboratory experiences to the concepts presented in DFT 112.

DFT 115 Architectural Drafting 1 2 2
Prerequisites:
Corequisites: None
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 121 Intro to GD & T 1 2 2
Prerequisites:
Corequisites: None
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 2 3 3
Prerequisites:
Corequisites: None
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 2 3 3
Prerequisites: DFT 151
Corequisites: None
This course is a continuation of DFT 151. Topics include advanced two-dimensional, three-dimensional, and solid modeling and extended CAD applications. Upon completion, students should be able to generate and manage CAD drawings and models to produce engineering documents.

DFT 153 CAD III 2 3 3
Prerequisites: DFT 151
Corequisites: None
This course covers basic principles of three-dimensional CAD wireframe and surface models. Topics include user coordinate systems, three-dimensional 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 1 2 2
Prerequisites:
Corequisites: None
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.

DFT 170 Engineering Graphics 2 2 3
Prerequisites: None
Corequisites: None
This course introduces basic engineering graphics skills, equipment, and applications (manual and computer-aided). Topics include sketching, measurements, lettering, dimensioning, geometric construction, orthographic projections and pictorial drawings, and sectional and auxiliary views. Upon completion, students should be able to demonstrate an understanding of basic engineering graphics principles and practices. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

DFT 211 Gears, Cams, & Pulleys 1 3 2
Prerequisites: DFT 111 and MAT 121
Corequisites: None
This course introduces the principles of motion transfer. Topics include gears, cams, pulleys, and drive components. Upon completion, students should be able to solve problems and produce drawings dealing with ratios.

DFT 218 Industrial Sys Schematics 1 2 2
Prerequisites: DFT 111
Corequisites: None
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.

DFT 221 Electrical Drafting 2 6 4
Prerequisites: DFT 111 and DFT 151
Corequisites: None
This course covers the practices used for making electrical drawings. Emphasis is placed on symbol identification and various types of electrical diagrams. Upon completion, students should be able to properly utilize electrical symbols in the construction of various electrical diagrams.

DFT 231 Jig & Fixture Design 1 2 2
Prerequisites: DFT 112 and MEC 210 or MEC 250 or MEC 252
Corequisites: None
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 or fixture.

DRAMA

DRA 122 Oral Interpretation 3 0 3
Prerequisites: None
Corequisites: None
This course introduces the dramatic study of literature through performance. Emphasis is placed on analysis and performance of poetry, drama, and prose fiction. Upon completion, students should be able to embody and discuss critically the speakers inherent in literature.

DRA 124 Readers Theatre 3 0 3
Prerequisites: None
Corequisites: None
This course provides a theoretical and applied introduction to the medium of readers 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.

ELECTRONIC COMMERCE

ECM 168 Electronic Business 2 2 3
Prerequisites: None
Corequisites: None
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 e-commerce. 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 2 2 3
Prerequisites: ECM 168, CIS 172
Corequisites: CSC 160
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 setup a working e-commerce Internet web site.

ECM 220 E-Commerce Plan & Implem 2 2 3
Prerequisites: ECM 210, CSC 160
Corequisites:
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 1 6 3
Prerequisites: ECM 220
Corequisites: None
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 3 0 3
Prerequisites: MAT 070
Corequisites: None
This course introduces economic analysis of individuals, business, and industry choices 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 in social/behavioral sciences.

ECO 252 Prin of Macroeconomics 3 0 3
Prerequisites: MAT 060
Corequisites: None
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 in social/behavioral sciences.

EDUCATION

EDU 116 Intro to Education 3 2 4
Prerequisites:
Corequisites: None
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.

EDU 118 Teach Assoc Princ & Prac 3 0 3
Prerequisites:
Corequisites: None
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 Association concentration in the Early Childhood Associate program.

EDU 119 Early Childhood Ed 4 0 4
Prerequisites: None
Corequisites: None
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 3 0 3
Prerequisites:
Corequisites: None
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 3 0 3
Prerequisites:
Corequisites: None
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 3 0 3

Prerequisites:

Corequisites: None

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 3 0 3

Prerequisites:

Corequisites: None

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 151 Creative Activities 3 0 3

Prerequisites:

Corequisites: None

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 175 Intro to Trade & Industrial Ed 3 0 3

Prerequisites:

Corequisites: None

This course introduces the philosophy, scope, and objectives of industrial education. Topics include the development of industrial education, employment opportunities, current events, current practices, and emerging trends. Upon completion, students should be able to describe the history, identify current practices, and describe current trends in industrial education.

EDU 176 OCC Analysis & Course Dev 3 0 3

Prerequisites:

Corequisites: None

This course covers the principles and techniques of analyzing occupations to select suitable competencies and teaching methods for learning activities. Topics include occupational analysis, instructional methods, competency identification, and curriculum writing. Upon completion, students should be able to identify competencies, organize instructional materials, and select appropriate instructional methods.

EDU 177 Instructional Methods 2 2 3

Prerequisites:

Corequisites: None

This course covers instructional methods in technical education with emphasis on competency-based instruction. Topics include writing objectives, industrial methods, and determining learning styles. Upon completion, students should be able to select and demonstrate the use of a variety of instructional methods.

EDU 178 Facilities Org & Planning 2 2 3

Prerequisites:

Corequisites: None

This course is a study of the problems related to educational facilities planning, layout, and management. Emphasis is placed on applying basic principles to actual projects relating to specific occupational areas. Upon completion, students should be able to lay out an educational facility for an occupational area and develop a plan for the facilities use.

EDU 179 Vocational Student Organizations 3 0 3

Prerequisites: None

Corequisites: None

This course covers planning and organizing vocational youth clubs by understanding the structure and operating procedures to use club activities for personal and professional growth. Topics include self-assessment to set goals, club structure, election and installation of officers, club activities, function of committees, running meetings, contest preparation, and leadership skills. Upon completion students should be able to set personal goals, outline club structure, elect and install offices.

EDU 185 **Cognitive & Lang Act** 3 0 3
Prerequisites:
Corequisites: None
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** 3 0 3
Prerequisites:
Corequisites: None
This course covers concepts, resources, and methods for teaching reading and writing to school-age 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 221 **Children with Sp Needs** 3 0 3
Prerequisites: EDU 144 and EDU 145 or PSY 244 and PSY 245
Corequisites: None
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.

EDU 235 **School-Age Dev & Program** 2 0 2
Prerequisites: None
Corequisites: None
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 240 **Work-Based Learning Practices and Techniques** 3 0 3
Prerequisites: None
Corequisites: None
This course covers definitions and implementation strategies for various work-place learning programs including apprenticeship, cooperative education, entrepreneurship, field trip, internship, mentorship, school-based enterprise, service learning and shadowing. Topics include preparing vocational teachers to guide and involve students in work-based learning programs to help prepare for entry into the workforce. Upon completion, students should be able to work with students to assist with selection and involvement in work-based learning programs for career development.

EDU 251 **Exploration Activities** 3 0 3
Prerequisites:
Corequisites: None
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 251A **Exploration Act Lab** 0 2 1
Prerequisites:
Corequisites: EDU 251
This course provides a laboratory component to complement EDU 251. Emphasis is placed on practical experiences that enhance concepts introduced in the classroom. Upon completion, students should be able to demonstrate a practical understanding of the development and implementation of appropriate science, math, and social studies activities for children.

EDU 259 **Curriculum Planning** 3 0 3
Prerequisites: EDU 112 or EDU 113 or EDU 119
Corequisites: None
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.

EDU 261 **Early Childhood Admin I** 2 0 2
Prerequisites:
Corequisites: None
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** 3 0 3
Prerequisites: EDU 261
Corequisites: None
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.

EDU 271 **Media Tech for Teachers** 2 2 3
Prerequisites:
Corequisites: None
This course covers the operation and maintenance of recording and projection equipment, the creation of classroom materials, and the application of new technologies in schools. Topics include audiovisual equipment and production, electronic and on-line information, instructional materials construction, and use of educational software. Upon completion, students should be able to use and maintain audiovisual equipment, develop instructional materials, and implement technologies for clerical management and instruction.

EDU 275 **Effective Teach Train** 2 0 2
Prerequisites:
Corequisites: None
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** 3 0 3
Prerequisites:
Corequisites: None
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** 1 0 1
Prerequisites: ENG 111
Corequisites: COE 121 or COE 122
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 in the Teacher Associate concentration in the Early Childhood Associate program.

ENGINEERING

EGR 110 **Intro to Engineering Tech** 2 0 2
Prerequisites:
Corequisites: None
This course introduces general topics relevant to engineering technology. Topics include the role of the technician, careers in technology, applied mathematics, and programmable calculators. Upon completion, students should be able to choose a career option in engineering technology and use a programmable calculator to solve technical mathematics problems.

EGR 285 **Design Project** 0 4 2
Prerequisites: None
Corequisites: None
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 2 2 3
Prerequisites:
Corequisites: None
This course introduces the fundamental concepts of electricity and test equipment to non-electrical/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.

ELC 112 DC/AC Electricity 3 6 5
Prerequisites:
Corequisites: None
This course introduces the fundamental concepts of 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 2 6 4
Prerequisites:
Corequisites: None
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 2 6 4
Prerequisites: ELC 113 or Instructor Permission
Corequisites: None
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.

ELC 115 Industrial Wiring 2 6 4
Prerequisites: ELC 113 or Instructor Permission
Corequisites: None
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.

ELC 117 Motors and Controls 2 6 4
Prerequisites: ELC 111 or ELC 112 or ELC 131 or Instructor Permission
Corequisites: None
This course introduces the fundamental concepts of motors and motor controls. Topics include ladder diagrams, pilot devices, contactors, motor starters, motors, and other control devices. Upon completion, students should be able to properly select, connect, and troubleshoot motors and control circuits.

ELC 118 National Electrical Code 1 2 2
Prerequisites:
Corequisites: None
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 1 2 2
Prerequisites:
Corequisites: None
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 127 Software for Technicians 1 2 2
Prerequisites:
Corequisites: None
This course introduces computer software which can be used to solve electrical/electronics problems. Topics include electrical/electronics calculations, applications, and controls. Upon completion, students should be able to utilize a personal computer for electrical/electronics - related applications.

ELC 128 Intro to PLC 2 3 3
Prerequisites:
Corequisites: None
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 4 3 5
Prerequisites: ELC 112
Corequisites: MAT 121 or MAT 161 or MAT 162
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.

ELC 132 Electrical Drawings 1 3 2
Prerequisites:
Corequisites: None
This course introduces the technical documentation that is typically found or used in the industrial environment. Topics include interpretation of service manuals, freehand sketching of lines, orthographic views and dimensions, and blueprint reading. Upon completion, students should be able to interpret technical documents and blueprints and use basic drafting skills to prepare usable field drawings.

ELC 135 Electrical Machines I 2 2 3
Prerequisites: ELC 131 or ELC 112 or ELC 140
Corequisites: None
This course covers magnetic circuits, transformers, DC/AC generators, and a review of the three-phase circuit fundamentals including power factor. Topics include magnetic terms and calculations, transformer calculations based on primary or secondary equivalent circuits, and generator regulation and efficiency calculations. Upon completion, students should be able to perform regulation and efficiency calculations for DC/AC single- and three-phase transformer and generator circuits.

ELC 228 PLC Applications 2 6 4
Prerequisites: ELC 128
Corequisites: None
This course continues the study of the programming and applications of programmable logic controllers. Emphasis is placed on advanced programming, networking, advanced I/O modules, reading and interpreting error codes, and troubleshooting. Upon completion, students should be able to program and troubleshoot programmable logic controllers.

ELC 229 Applications Project 1 3 2
Prerequisites: ELC 112 or ELC 113 or ELC 140
Corequisites: None
This course provides an individual and/or integrated team approach to a practical project as approved by the instructor. Topics include project selection and planning, implementation and testing, and a final presentation. Upon completion, students should be able to plan and implement an applications-oriented project.

ELECTRONICS

ELN 131 Electronic Devices 3 3 4
Prerequisites:
Corequisites: ELC 112 or ELC 131 or ELC 140
This course includes semiconductor-based devices such as diodes, bipolar transistors, FETs, thermistors, 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.

ELN 132 **Linear IC Applications** 3 3 4
Prerequisites: ELN 131 or BMT 113
Corequisites: None
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.

ELN 133 **Digital Electronics** 3 3 4
Prerequisites:
Corequisites: None
This course covers combinational and sequential logic circuits. Topics include number systems, Boolean algebra, logic families, MSI and LSI circuits, AD/DA conversion, 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 152 **Fabrication Techniques** 1 3 2
Prerequisites:
Corequisites: None
This course covers the fabrication methods required to create a prototype product from the initial circuit design. Topics include CAD, layout, sheet metal working, component selection, wire wrapping, PC board layout and construction, reverse engineering, soldering, and other related topics. Upon completion, students should be able to design and construct an electronic product with all its associated documentation.

ELN 229 **Industrial Electronics** 2 4 4
Prerequisites: ELC 112 or ELC 131 or ELC 140
Corequisites: None
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.

ELN 231 **Industrial Controls** 2 3 3
Prerequisites: ELC 112 or ELC 131 or ELC 140
Corequisites: None
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.

ELN 232 **Intro to Microprocessors** 3 3 4
Prerequisites: ELN 133
Corequisites: None
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.

ELN 233 **Microprocessor Systems** 3 3 4
Prerequisites: ELN 232
Corequisites: None
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 circuits using related equipment.

ELN 234 **Communication Systems** 3 3 4
Prerequisites: ELN 132 or ELN 140
Corequisites: None
This course introduces the fundamentals of electronic communication systems. Topics include the frequency spectrum, electrical noise, modulation techniques, characteristics of transmitters and receivers, and digital communications. Upon completion, students should be able to interpret analog and digital communication circuit diagrams, analyze transmitter and receiver circuits, and use appropriate communication test equipment.

ELN 235 Data Communication System 3 3 4
Prerequisites: ELN 133
Corequisites: None
This course covers data communication systems and the transmission of digital information from source to destination. Topics include data transmission systems, serial interfaces and modems, protocols, networks, and other related topics. Upon completion, students should be able to demonstrate knowledge of the concepts associated with data communication systems.

ELN 236 Fiber Optics and Lasers 3 2 4
Prerequisites: ELN 234
Corequisites: None
This course introduces the fundamentals of fiber optics and lasers. Topics include the transmission of light; characteristics of fiber optic and lasers and their systems; fiber optic production; types of lasers; and laser safety. Upon completion, students should be able to understand fiber optic communications and basic laser fundamentals.

ELN 237 Local Area Networks 2 3 3
Prerequisites: CIS 110 or CIS 111 or CET 111 or ELC 127
Corequisites: None
This course introduces the fundamentals of local area networks and their operation in business and computer environments. Topics include the characteristics of network topologies, system hardware (repeaters, bridges, routers, gateways), system configuration, and installation and administration of the LAN. Upon completion, students should be able to install, maintain, and manage a local area network.

ELN 248 Analog Communication 2 3 3
Prerequisites: ELN 234
Corequisites: None
This course covers the core processes and applications associated with analog communication techniques. Topics include the characteristics of RF circuits, modulation, transmitters and receivers, electromagnetic transmission, antennas, and related applications. Upon completion, students should be able to demonstrate knowledge of the concepts associated with analog communication systems.

ENGLISH

Initial student placement in developmental courses is based on the Developmental Placement Policy on page 15 Students should begin developmental course work at the appropriate level indicated by placement test scores.

ENG 080 Writing Foundations 3 2 4
Prerequisites: ENG 070 or ENG 075
Corequisites: None
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. This course does not satisfy the developmental reading and writing prerequisite for ENG 111 or ENG 111A.

ENG 085 Reading & Writing Found. 5 0 *5
Prerequisites: Placement Score
Corequisites: None
This course uses whole language to develop proficiency in reading and writing for college. Emphasis is placed on applying analytical and critical reading skills to a variety of texts and on introducing the writing process. Upon completion, students should be able to recognize and use various patterns of text organization and compose effective paragraphs. This course integrates ENG 080 and RED 080 and satisfies the developmental reading prerequisites for RED 090. This course does not satisfy the developmental prerequisites for ENG 111.

ENG 090 Composition Strategies 3 0 *3
Prerequisites: Placement Score
Corequisites: None
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. This course satisfies the developmental writing for ENG 111.

ENG 090A Comp Strategies Lab 0 2 1*
Prerequisites: Placement Score
Corequisites: ENG 090
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.

ENG 095 Reading and Composition Strategies 5 0 5*
Prerequisites: ASSET Placement Score 36 to 39 in both reading & writing skills
Corequisites: None
This course uses whole language to strengthen proficiency in reading and writing for college. Emphasis is placed on applying critical reading skills to narrative and expository texts and on using the writing process. Upon completion, students should be able to comprehend, analyze, and evaluate college texts and to compose paragraphs and an essay in preparation for college writing. This course integrates ENG 090 and RED 090. This course satisfies the developmental reading and writing prerequisites for ENG 111.

*These credits are institutional credits only and cannot be used for graduation. They are used for determining hour load for payment, eligibility for financial aid, or classification for a full-time student.

ENG 101 Applied Communications I 3 0 3
Prerequisites:
Corequisites: None
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 111 Expository Writing 3 0 3
Prerequisites: ENG 090 and RED 090 or ENG 095; or satisfactory placement test scores
Corequisites: None
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. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in English composition.

ENG 113 Literature-Based Research 3 0 3
Prerequisites: ENG 111
Corequisites: None
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. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in English composition.

ENG 114 Prof Research & Reporting 3 0 3
Prerequisites: ENG 111
Corequisites: None
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 well-designed business and professional written and oral presentations. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in English composition.

ENG 115 Oral Communication 3 0 3
Prerequisites: None
Corequisites: None
This course introduces the basic principles of oral communication in both small group and public settings. Emphasis is placed on the components of the communication process, group decision-making, and public address. Upon completion, students should be able to demonstrate the principles of effective oral communication in small group and public settings.

ENG 125 Creative Writing I 3 0 3
Prerequisites: ENG 111
Corequisites: None
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.

ENG 126 Creative Writing II 3 0 3
Prerequisites: ENG 125
Corequisites: None
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.

ENG 231 American Literature I 3 0 3
Prerequisites: ENG 112, ENG 113, or ENG 114
Corequisites: None
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. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

ENG 232 American Literature II 3 0 3
Prerequisites: ENG 112, ENG 113, or ENG 114
Corequisites: None
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. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

ENG 241 British Literature I 3 0 3
Prerequisites: ENG 112, ENG 113, or ENG 114
Corequisites: None
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. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

ENG 242 British Literature II 3 0 3
Prerequisites: ENG 112, ENG 113, or ENG 114
Corequisites: None
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. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

ENG 261 World Literature I 3 0 3
Prerequisites: ENG 112, ENG 113, or ENG 114
Corequisites: None
This course introduces selected works from 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. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

ENG 262 World Literature II 3 0 3
Prerequisites: ENG 112, ENG 113, or ENG 114
Corequisites: None
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. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

ENG 272 Southern Literature 3 0 3
Prerequisites: ENG 112, ENG 113, or ENG 114
Corequisites: None
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.

FRENCH

FRE 111 Elementary French I 3 0 3
Prerequisites:
Corequisites: None
This course introduces the fundamental elements of the French 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 French and demonstrate cultural awareness. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

FRE 112 Elementary French II 3 0 3
Prerequisites: FRE 111
Corequisites: None
This course is a continuation of FRE 111 focusing on the fundamental elements of the French 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 French and demonstrate further cultural awareness. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

FRE 181 French Lab 1 0 2 1
Prerequisites:
Corequisites: None
This course provides an opportunity to enhance acquisition of the fundamental elements of the French language. Emphasis is placed on the progressive development of basic listening, speaking, reading, and writing skills through the use of supplementary learning media and materials. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written French and demonstrate cultural awareness.

FRE 182 French Lab 2 0 2 1
Prerequisites: FRE 181
Corequisites: None
This course provides an opportunity to enhance acquisition of the fundamental elements of the French language. Emphasis is placed on the progressive development of basic listening, speaking, reading, and writing skills through the use of supplementary learning media and materials. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written French and demonstrate cultural awareness.

FILM AND VIDEO PRODUCTION

FVP 227 Multimedia Production 2 3 3
Prerequisites:
Corequisites: None
This course covers technical terms used in the multimedia industry and introduces skills related to digital manipulation of audio and video materials. Emphasis is placed on technical terms used in multimedia work and integration of sound, video, graphics, and text into a single production. Upon completion, students should be able to define technical terms in multimedia work and work with a variety of computer hardware and software.

GEOLOGY

GEL 111 Introductory Geology 3 2 4
Prerequisites
Corequisites: None
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 113 Historical Geology 3 2 4
Prerequisites: GEL 111
Corequisites: None
This course covers the geological history of the earth and its life forms. Emphasis is placed on the study of rock strata, fossil groups, and geological time. Upon completion, students should be able to identify major fossil groups and associated rock strata and approximate ages of geological formations. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

GEOGRAPHY

GEO 111 World Regional Geography 3 0 3

Prerequisites:
Corequisites: None

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 113 Economic Geography 3 0 3

Prerequisites:
Corequisites: None

This course covers the patterns and networks of economic interdependence and how they affect human populations. Emphasis is placed on the economic aspects of the production and distribution of goods and services and their impact on the quality of human life. Upon completion, students should be able to describe different economic systems and demonstrate an understanding of the variables that influence economic development. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

GEO 130 General Physical Geography 3 0 3

Prerequisites:
Corequisites: None

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.

GRAPHIC ARTS

GRA 110 Graphic Arts Orientation 2 0 2

Prerequisites:
Corequisites: None

This course covers the history, development, and commercial applications of the major printing processes. Topics include offset lithography, screen printing, intaglio, relief printing, and emerging technologies. Upon completion, students should be able to demonstrate an understanding of the major characteristics, advantages, and disadvantages of each process.

GRA 121 Graphic Arts I 2 4 4

Prerequisites:
Corequisites: None

This course introduces terminology, tools and materials, procedures, and equipment used in graphic arts production. Topics include copy preparation and pre-press production relative to printing. Upon completion, students should be able to demonstrate an understanding of graphic arts production.

GRAPHIC DESIGN

GRD 110 Typography I 2 2 3

Prerequisites:
Corequisites: None

This course introduces the history and mechanics of type and its application to layout and design. Topics include typographic fundamentals, anatomy, measurements, composition, identification, and terminology. Upon completion, students should be able to demonstrate proficiency in design application, analysis, specification, and creation of typographic elements.

GRD 111 Typography II 2 2 3

Prerequisites: GRD 110
Corequisites: None

This course is a continuation of GRD 110. Emphasis is placed on solving challenging typographic problems. Upon completion, students should be able to understand and demonstrate advanced typographic applications.

GRD 131 Illustration I 1 3 2
Prerequisites: ART 131 or DES 125 or GRD 121
Corequisites: None
This course introduces the application of rendering techniques to create illustrations. Emphasis is placed on controlling various media, methods, surfaces, design problems, and the appropriate media selection process. Upon completion, students should be able to produce quality illustrations from conception through finished artwork.

GRD 132 Illustration II 1 3 2
Prerequisites: GRD 131
Corequisites: None
This course is a continuation of GRD 131. Topics include editorial, product, fashion, and advertising illustrations. Upon completion, students should be able to demonstrate increased proficiency in creating quality illustrations from conceptualization through finished artwork.

GRD 133 Illustration III 1 3 2
Prerequisites: GRD 132
Corequisites: None
This course is designed to strengthen visual techniques and conceptual approaches to illustration. Emphasis is placed on advanced rendering techniques, requirements, and limitations. Upon completion, students should be able to create comprehensive illustrations that meet client/printer requirements.

GRD 141 Graphic Design I 2 4 4
Prerequisites:
Corequisites: None
This course introduces the conceptualization process used in visual problem solving. Emphasis is placed on learning the principles of design and on the manipulation and organization of elements. Upon completion, students should be able to apply design principles and visual elements to projects.

GRD 142 Graphic Design II 2 4 4
Prerequisites: DES 135 or GRD 141 or ART 121
Corequisites: None
This course covers the application of visual elements and design principles in advertising and graphic design. Topics include creation of various designs, such as logos, advertisements, posters, outdoor advertising, and publication design. Upon completion, students should be able to effectively apply design principles and visual elements to projects.

GRD 151 Computer Design Basics 1 4 3
Prerequisites: None
Corequisites: None
This course covers designing and drawing with various types of software applications for advertising and graphic design. Emphasis is placed on creative and imaginative use of space, shapes, value, texture, color, and typography to provide effective solutions to advertising and graphic design problems. Upon completion, students should be able to use the computer as a creative tool.

GRD 152 Computer Design Tech I 1 4 3
Prerequisites: GRD 151
Corequisites: None
This course covers complex design problems utilizing various design and drawing software applications. Topics include the expressive use of typography, image, and organization to communicate a message. Upon completion, students should be able to use appropriate computer software to professionally present their work.

GRD 153 Computer Design Tech II 1 4 3
Prerequisites: GRD 152
Corequisites: None
This course covers advanced theories and practices in the field of computer design. Emphasis is placed on advanced use of color palettes, layers, and paths. Upon completion, students should be able to creatively produce designs and articulate their rationale.

GRD 160 Photo Fundamentals I 1 4 3
Prerequisites:
Corequisites: None
This course introduces basic camera operations, roll film processing, and photographic print production. Topics include contrast, depth-of-field, subject composition, enlarger operation, and density control. Upon completion, students should be able to produce photographic prints with acceptable density values and quality.

GRD 161 Photo Fundamentals II 1 4 3
Prerequisites: GRD 160
Corequisites: None
This course is a continuation of GRD 160. Topics include conversions, toning, color, specialized equipment, lighting, processing, and other methods and materials. Upon completion, students should be able to demonstrate proficiency in producing photographic prints.

GRD 162 Photography Portfolio 1 4 3
Prerequisites: GRD 161
Corequisites: None
This course provides an opportunity to develop a portfolio through research and review of previous photographic works. Topics include visual communication skills and presentation of works. Upon completion, students should be able to prepare and present a portfolio of their photographic works.

GRD 210 Airbrush I 1 2 2
Prerequisites:
Corequisites: None
This course covers the mechanics of airbrushing. Topics include care and maintenance of equipment, spraying techniques and surfaces, and selection of materials. Upon completion, students should be able to produce work demonstrating competent use of an airbrush.

GRD 241 Graphic Design III 2 4 4
Prerequisites: DES 136 or GRD 142
Corequisites: None
This course is an advanced exploration of various techniques and media for advertising and graphic design. Emphasis is placed on advanced concepts and solutions to complex and challenging graphic design problems. Upon completion, students should be able to demonstrate competence and professionalism in visual problem solving.

GRD 242 Graphic Design IV 2 4 4
Prerequisites: GRD 241
Corequisites: None
This course is a continuation of GRD 241. Emphasis is placed on using advanced media techniques, concepts, strategies, and professionalism in all aspects of design. Upon completion, students should be able to conceptualize, create, and produce designs for reproduction.

GRD 263 Illustrative Imaging 1 4 3
Prerequisites: GRD 151 or GRA 151
Corequisites: None
This course covers the creative manipulation of images utilizing digital techniques of masking, layering, airbrushing, and painting. Topics include the aesthetic analysis of visual imagery as well as the legalities of manipulating images. Upon completion, students should be able to utilize software applications to creatively manipulate and illustratively build digital images which accomplish design objectives.

GRD 280 Portfolio Design 2 4 4
Prerequisites: GRD 142 and GRD 152 or GRA 152
Corequisites: None
This course covers the organization and presentation of a design/advertising or graphic art portfolio and appropriate related materials. Emphasis is placed on development and evaluation of the portfolio, design and production of a résumé and self-promotional materials, and interview techniques. Upon completion, students should be able to prepare and professionally present an effective portfolio and related self-promotional materials.

GRD 281 Design of Advertising 2 0 2
Prerequisites:
Corequisites: None
This course explores the origins, roles, scope, forms, and development of advertising. Emphasis is placed on advertising development from idea through production and the interrelationship of marketing to types of advertising, media, and organizational structure. Upon completion, students should be able to demonstrate an understanding of the complexities and relationships involved in advertising design.

HEALTH

HEA 110 Personal Health/Wellness 3 0 3
Prerequisites:
Corequisites: None
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.

HEA 112 First Aid & CPR 1 2 2
Prerequisites:
Corequisites: None
This course introduces the basics of emergency first aid treatment. Topics include rescue breathing, CPR, first aid for choking and bleeding, and other first aid procedures. Upon completion, students should be able to demonstrate skills in providing emergency care for the sick and injured until medical help can be obtained.

HEA 120 Community Health 3 0 3
Prerequisites:
Corequisites: None
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.

HISTORY

HIS 111 World Civilizations I 3 0 3
Prerequisites: RED 090 or satisfactory placement test scores
Corequisites: None
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 3 0 3
Prerequisites: RED 090 or satisfactory placement test scores
Corequisites: None
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 131 American History I 3 0 3
Prerequisites: RED 090 or satisfactory placement test scores
Corequisites: None
This course is a survey of American history from pre-history through the Civil War era. Topics include the 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 3 0 3
Prerequisites: RED 090 or satisfactory placement test scores
Corequisites: None
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 226 The Civil War 3 0 3
Prerequisites: None
Corequisites: None
This course examines the social, political, economic, and ideological forces that led to the Civil War and Reconstruction. Topics include regional conflicts and sectionalism, dissolution of the Union, military campaigns, and the War's socioeconomic impact, aftermath, and consequences. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in the United States during the era of the Civil War.

HIS 236 North Carolina History 3 0 3
Prerequisites: RED 090 or satisfactory placement test scores
Corequisites: None
This course is a study of geographical, political, economic, and social conditions existing in North Carolina from America's discovery to the present. Topics include native and immigrant backgrounds; colonial, antebellum, and Reconstruction periods; party politics; race relations; and the transition from an agrarian to an industrial economy. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in North Carolina.

HUMANITIES

HUM 211 Humanities I 3 0 3
Prerequisites: ENG 111
Corequisites: None
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 of the periods studied. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

HUM 220 Human Values and Meaning 3 0 3
Prerequisites: ENG 111
Corequisites: None
This course presents some major dimensions of human experience as reflected in art, music, literature, philosophy, and history. Topics include the search for identity, the quest for knowledge, the need for love, the individual and society, and the meaning of life. Upon completion, students should be able to recognize interdisciplinary connections and distinguish between open and closed questions and between narrative and scientific models of understanding. This course is intended for all Associate degree programs. This course may satisfy the SACS humanities requirement.

HYDRAULICS & PNEUMATICS

HYD 110 Hydraulics/Pneumatics I 2 3 3
Prerequisites:
Corequisites: None
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.

INSURANCE

INS 101 Life/Accident/Health Ins 4 0 4
Prerequisites:
Corequisites: None
This course provides basic instruction in life and health insurance. Topics include life, accident, and health agent regulations, comparison of policies, and individual and group policy provisions. Upon completion, students should be able to demonstrate knowledge of life, health, and accident insurance required for the NC Agents' Life and Health Licensure Exam.

INS 102 Medicare Supp/L-T Care 1 0 1
Prerequisites:
Corequisites: None
This course covers the types of Medicare coverage, long-term care coverage, Medicaid, policy provisions, applicable laws and regulations, and buying practices. Topics include hospital insurance, supplementary medical insurance, Medicare supplement insurance, Medicaid assistance, and long-term care. Upon completion, students should be able to discuss long-term care coverage, Medicaid, appropriate policy provisions, legal principles, and their applicable use.

INS 103 Property & Casualty Ins 4 0 4
Prerequisites:
Corequisites: None
This course covers types of property and casualty coverage, policy provisions, applicable laws and regulations, buying procedures, government property, and casualty coverage. Topics include general liability insurance, automobile insurance, homeowner's insurance, commercial, fire and extended coverage, worker's compensation, and various policy provisions. Upon completion, students should be able to discuss types of property and casualty coverage, appropriate policy provisions, and appropriate legal principles and their applicable uses.

INS 105 Risk Management 3 0 3

Prerequisites:

Corequisites: None

This course introduces the fundamentals of risk management. Topics include risk and hazard recognition and measurement, risk handling methods, steps of the risk management process, and design of a risk management plan. Upon completion, students should be able to recognize risks and hazards and develop a plan for managing them by retention, avoidance, reduction, and transfer methods.

INDUSTRIAL SCIENCE

ISC 110 Workplace Safety 1 0 1

Prerequisites:

Corequisites: None

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 111 Quality Control 2 0 2

Prerequisites:

Corequisites: None

This course provides training in inspection and gaging methods. Topics include special gage design, production gaging, and statistical process control concepts. Upon completion, students should be able to design and use custom gaging and apply statistical process control concepts.

ISC 112 Industrial Safety 2 0 2

Prerequisites:

Corequisites: None

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.

ISC 121 Envir Health & Safety 3 0 3

Prerequisites:

Corequisites: None

This course covers workplace environmental, health, and safety issues. Emphasis is placed on managing the implementation and enforcement of environmental health and safety regulations and on preventing accidents, injuries, and illnesses. Upon completion, students should be able to demonstrate an understanding of basic concepts of environmental, health, and safety issues.

ISC 132 Mfg Quality Control 2 3 3

Prerequisites:

Corequisites: None

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.

ISC 133 Mfg Management Practices 2 0 2

Prerequisites:

Corequisites: None

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 210 Oper & Prod Planning 3 0 3

Prerequisites: Completion of curriculum mathematics requirement

Corequisites: None

This course includes the fundamentals of operations and production planning, forecasting, and scheduling. Topics include demand management, production planning and control, scheduling, and budgeting. Upon completion, students should be able to demonstrate an understanding of the concepts and techniques involved in operations and production planning. This course is a unique concentration requirement of the Operations Management concentration in the Business Administration program.

ISC 221 **Statistical Qual Control** 3 0 3
Prerequisites: Completion of curriculum mathematics requirement
Corequisites: None
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.

JOURNALISM

JOU 110 **Intro to Journalism** 3 0 3
Prerequisites:
Corequisites: None
This course presents a study of journalistic news, feature, and sports writing. Emphasis is placed on basic news writing techniques and on related legal and ethical issues. Upon completion, students should be able to gather, write, and edit news, feature, and sports articles.

JOU 111 **Publication Workshop I** 1 3 2
Prerequisites: JOU 110
Corequisites: None
This course introduces the basic techniques of producing a publication. Emphasis is placed on writing, editing, layout, design, and printing. Upon completion, students should be able to demonstrate competence in the various phases of publication production.

JOU 112 **Publication Workshop II** 1 3 2
Prerequisites: JOU 111
Corequisites: None
This course is a continuation of the basic techniques of producing a publication. Emphasis is placed on writing, editing, layout, design, and printing. Upon completion, students should be able to demonstrate competence in the various phases of publication production.

JOU 120 **JOU/Theory & Production** 2 2 3
Prerequisites: ENG 111
Corequisites: None
This course provides a study of basic journalistic writing and production techniques. Emphasis is placed on interviewing, drafting, editing, layout, design, and printing. Upon completion, students should be able to demonstrate competence in the various phases of writing and producing a publication.

MACHINING

MAC 111 **Machining Technology I** 2 12 6
Prerequisites:
Corequisites: None
This course introduces machining operations as they relate to the metalworking industry. Topics include machine shop safety, measuring tools, lathes, drilling machines, 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.

MAC 112 **Machining Technology II** 2 12 6
Prerequisites: MAC 111
Corequisites: None
This course provides additional instruction and 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.

MAC 113 **Machining Technology III** 2 12 6
Prerequisites: MAC 112
Corequisites: None
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.

MAC 121 Intro to CNC 2 0 2
Prerequisites:
Corequisites: None
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 1 3 2
Prerequisites:
Corequisites: None
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.

MAC 124 CNC Milling 1 3 2
Prerequisites:
Corequisites: None
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.

MAC 151 Machining Calculations 1 2 2
Prerequisites:
Corequisites: None
This course introduces basic calculations as they relate to machining occupations. Emphasis is placed on basic calculations and their applications in the machine shop. Upon completion, students should be able to perform basic shop calculations.

MATHEMATICS

Initial student placement in developmental courses is based on the Developmental Placement Policy on page 15. Students should begin developmental course work at the appropriate level indicated by placement test scores.

MAT 060 Essential Mathematics 3 2 *4
Prerequisites: Placement score
Corequisites: None
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.

MAT 070 Introductory Algebra 3 2 4*
Prerequisites: MAT 060 or satisfactory placement test score
Corequisites: Placement score
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.

MAT 080 Intermediate Algebra 3 2 4*
Prerequisites: MAT 070 or satisfactory placement test score
Corequisites: Placement score
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.

*These credits are institutional credits only and cannot be used for graduation. They are used for determining hour load for payment, eligibility for financial aid, or classification for a full-time student.

MAT 101 Applied Mathematics I 2 2 3
Prerequisites: MAT 060 or satisfactory placement test scores
Corequisites: None
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. This course is intended for certificate and diploma programs.

MAT 102 Applied Mathematics II 2 2 3
Prerequisites: MAT 101
Corequisites: None
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. This course is intended for certificate and diploma programs.

MAT 115 Mathematical Models 2 2 3
Prerequisites: MAT 070
Corequisites: None
This course develops the ability to utilize mathematical skills and technology to solve problems at a level found in non-mathematics-intensive programs. Topics include applications to percent, ratio and proportion, formulas, statistics, functional notation, linear functions and their group, probability, sampling techniques, scatter plots, and modeling.

MAT 151 Statistics I 3 0 3
Prerequisites: MAT 080, RED 090 or satisfactory placement test scores
Corequisites: None
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. Additional topics will include standardization, the central limit theorem, and confidence intervals. Upon completion, students should be able to describe important characteristics of a set of data and draw inferences about a population from sample data. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

MAT 161 College Algebra 3 0 3
Prerequisites: MAT 080. RED 090 or satisfactory placement test scores
Corequisites: None
This course provides an integrated technological approach to algebraic topics used in problem solving. Emphasis is placed on equations and inequalities; polynomials, rational, exponential and logarithmic functions; and graphing and data analysis/modeling. Additional topics may include conic sections, sequences and series, and counting techniques. Upon completion, students should be able to choose an appropriate model to fit a data set and use the model for analysis and prediction. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

MAT 162 College Trigonometry 3 0 3
Prerequisites: MAT 161
Corequisites: None
This course provides an integrated technological approach to trigonometry and its applications. Topics include 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. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

MAT 171 Precalculus Algebra 3 0 3
Prerequisites: MAT 080, RED 090 or satisfactory placement test scores
Corequisites: MAT 171A
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. This course is intended for AS degree programs.

MAT 171A Precalculus Algebra Lab 0 2 1
Prerequisites: MAT 080, RED 090 or satisfactory placement test scores
Corequisites: MAT 171
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. This course is intended for AS degree programs.

MAT 172 Precalculus Trigonometry 3 0 3
Prerequisites: MAT 171
Corequisites: MAT 172A
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. Upon completion, students should be able to solve practical problems and use appropriate models for analysis and prediction. This course is intended for AS degree programs.

MAT 172A Precalculus Trig Lab 0 2 1
Prerequisites: MAT 171
Corequisites: MAT 172
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. This course is intended for AS degree programs.

MAT 175 Precalculus 4 0 4
Prerequisites: High School Algebra III/Trigonometry and satisfactory placement test scores
Corequisites: None
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. Sequences and series may also be discussed. Upon completion, students should be able to solve practical problems and use appropriate models for analysis and prediction. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

MAT 263 Brief Calculus 3 0 3
Prerequisites: MAT 161
Corequisites: MAT 263A
This course introduces concepts of differentiation and integration and their applications to solving problems; the course is designed for students needing one semester of calculus. Topics include functions, graphing, differentiation, and integration with emphasis on applications drawn from business, economics, and biological and behavioral sciences. Upon completion, students should be able to demonstrate and understanding of the use of basic calculus and technology to solve problems and to analyze and communicate results. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirements in natural sciences/mathematics.

MAT 263A Brief Calculus Lab 0 2 1
Prerequisites: MAT 161
Corequisites: MAT 263
This course is a laboratory for MAT 263. 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. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

MAT 271 Calculus I 3 2 4
Prerequisites: MAT 175 or satisfactory placement test scores
Corequisites: None
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. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

MAT 272 Calculus II 3 2 4
Prerequisites: MAT 271
Corequisites: None
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. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

MAT 273 Calculus III 3 2 4
Prerequisites: MAT 272
Corequisites: None
This course covers the calculus of several variables and is 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. Also covered will be differential equations of several variables. Upon completion, students should be able to solve problems involving vectors and functions of several variables. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

MAT 280 Linear Algebra 3 0 3
Prerequisites: MAT 271
Corequisites: None
This course provides a study of linear algebra topics with emphasis on the development of both abstract concepts and applications. Topics include vectors, systems of equations, matrices, determinants, vector spaces, linear transformations in two or three dimensions, eigenvectors, eigenvalues, diagonalization and orthogonality. Upon completion, students should be able to demonstrate both an understanding of the theoretical concepts and appropriate use of linear algebra models to solve application problems.

MAT 285 Differential Equations 3 0 3
Prerequisites: MAT 272
Corequisites: None
This course provides an introduction to ordinary differential equations with an emphasis on applications. Topics include first-order, linear higher-order, 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.

MECHANICAL

MEC 111 Machine Processes I 1 4 3
Prerequisites:
Corequisites: None
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 2 3 3
Prerequisites: MEC 111
Corequisites: None
This course covers advanced use of milling machines and lathes. Emphasis is placed on safety and compound setup 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.

MEC 128 CNC Machining Processes 2 4 4
Prerequisites: MAC 121
Corequisites: None
This course covers programming, setup, and operations of CNC turning, milling, and other CNC machines. Topics include programming formats, control functions, program editing, and part production and inspection. Upon completion, students should be able to manufacture simple parts using CNC turning and milling centers.

MEC 145 Mfg Materials I 2 3 3
Prerequisites:
Corequisites: None
This course introduces a variety of manufacturing materials and common processing techniques. Emphasis is placed on the processing, testing, and application of materials such as wood, metals, plastics, ceramics, and composites. Upon completion, students should be able to demonstrate an understanding of fundamental engineering applications for a variety of materials, including their process capabilities and limitations.

MEC 172 Intro to Metallurgy 2 2 3
Prerequisites:
Corequisites: None
This course covers the production, properties, testing, classification, microstructure, and heat-treating 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.

MEC 180 Engineering Materials 2 3 3

Prerequisites:

Corequisites: None

This course covers the physical and mechanical properties of materials. Topics include testing, heat treating, ferrous and non-ferrous metals, plastics, composites, and material selection. Upon completion, students should be able to specify basic tests and properties and select appropriate materials on the basis of specific properties.

MEC 181 Introduction to CIM 2 0 2

Prerequisites:

Corequisites: None

This course introduces the elements of computer-integrated manufacturing(CIM). Topics include statistical process control, computer-aided design and manufacturing, numeric control, and flexible systems. Upon completion, students should be able to explain the major components of computer-integrated manufacturing.

MEC 187 Composite Materials 2 3 3

Prerequisites: None

Corequisites: None

This course introduces composite engineering materials. Topics include selection and processing of composites. Upon completion, students should be able to select appropriate materials and demonstrate knowledge in processing and curing of composites.

MEC 188 Processing Composites I 2 3 3

Prerequisites: None

Corequisites: None

This course covers the properties and forms of various resins used in manufacturing commercial bag and vacuum composites and the processes for commercial application. Emphasis is placed on materials used, including polyester and/or vinyl ester resins, and processes of hand lay-up, vacuum bag and vacuum assisted resin transfer molding. Upon completion, students should be able to produce composite materials suitable for mechanical testing. *This course is a unique concentration requirement in the Composites concentration in the Manufacturing Technology program.*

MEC 189 Processing Composites II 2 3 3

Prerequisites: None

Corequisites: None

This course covers the resins and fibers used in high performance aircraft type composites and processes for advanced composite application. Emphasis is placed on materials used such as epoxy and carbon and the processes of compression molding, vacuum assisted resin transfer molding, and resin transfer molding. Upon completion, students should be able to produce composites suitable for mechanical testing. *This course is a unique concentration requirement in the Composites concentration in the Manufacturing Technology program.*

MEC 212 Composites Materials Test 2 3 3

Prerequisites: None

Corequisites: None

This course introduces different composite tests and testing procedures. Topics include data analysis, report writing, test machines, and test procedures. Upon completion, students should be able to perform and report results using impact, shear, compressions, flexure, and tension tests. *This course is a unique concentration requirement in the Composites concentration in the Manufacturing Technology program.*

MEC 215 Design of Composite Struc 2 3 3

Prerequisites: None

Corequisites: None

This course introduces the basics of fiber reinforced composites materials, anisotropic theory, stress analysis, and test methods for composites. Topics include anisotropic constitutive equations and associated elastic constants, micromechanics models, theory of failures, classical laminate theory, laminate design, and special laminates. Upon completion, students should be able to apply concepts to the design of simple composite structural components. *This course is a unique concentration requirement in the Composites concentration in the Manufacturing Technology program.*

MEC 231 Comp-Aided Manufact I 1 4 3

Prerequisites:

Corequisites: None

This course introduces computer-aided manufacturing (CAM) applications and concepts. Emphasis is placed on developing/defining part geometry and the processing of information needed to manufacture parts. Upon completion, students should be able to demonstrate skills in defining part geometry, program development, and code generation using CAM software.

MEC 232 **Comp-Aided Manufact II** 1 4 3
Prerequisites: MEC 231
Corequisites: None
This course provides an in-depth study of CAM applications and concepts. Emphasis is placed on the manufacturing of complex parts using computer-aided manufacturing software. Upon completion, students should be able to manufacture complex parts using CAM software.

MEC 236 **Regional Mfg** 1 4 3
Prerequisites:
Corequisites: None
This course introduces the regional manufacturing facilities. Emphasis is placed on on-site tours and interaction with local regional manufacturing personnel. Upon completion, students should be able to identify regional manufacturers, their products, basic methods, personnel, and hiring standards.

MEC 251 **Statics** 2 2 3
Prerequisites: PHY 131 or PHY 151
Corequisites: None
This course covers the concepts and principles of statics. Topics include systems of forces and moments on structures in two- and three-dimensions in equilibrium. Upon completion, students should be able to analyze forces and moments on structures.

MEC 252 **Strength of Materials** 2 2 3
Prerequisites: MEC 251
Corequisites: None
This course covers the principles and concepts of stress analysis. Topics include centroids, moments of inertia, shear/moment diagrams, and stress and strain. Upon completion, students should be able to perform a stress and strain analysis on structural components.

MEC 270 **Machine Design** 3 3 4
Prerequisites: DFT 151 and MEC 180, and MEC 250 or MEC 251 and MEC 252
Corequisites: None
This course covers the basic principles underlying design and selection of machine elements. Topics include stress analysis, selection of components, power transmission, and other design considerations. Upon completion, students should be able to identify and solve mechanical design problems by applying basic engineering principles.

MEC 271 **Machine Design Project** 0 3 1
Prerequisites:
Corequisites: MEC 270
This course provides an opportunity for involvement in the practical application of machine design by development of a project. Emphasis is placed on the design and engineering processes required to complete an approved project. Upon completion, students should be able to demonstrate the ability to progress from conceptual design to completed project.

MEDICAL ASSISTING

MED 121 **Medical Terminology I** 3 0 3
Prerequisites: None
Corequisites: None
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 treatments 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** 3 0 3
Prerequisites: MED 121
Corequisites: None
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 treatments 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.

MEDIA INTEGRATION

MIT 115 Intro to Video Concepts 2 2 3
Prerequisites:
Corequisites: None
This course provides an opportunity to gain a basic level of competence in integration of digital and analog video. Emphasis is placed on understanding integration of basic video resources such as AVI, FLI, MPEG, M-JPEG, and digital/analog video. Upon completion, students should be able to use basic video integration techniques and applications for stand-alone personal computers, networks, and integrated room systems.

MIT 120 Intro to Audio Concepts 2 2 3
Prerequisites:
Corequisites: None
This course provides an opportunity to gain a basic level of competence in the integration of digital and analog audio. Emphasis is placed on understanding integration of audio resources such as MIDI, WAV, Real-audio, and Redbook Resources. Upon completion, students should be able to demonstrate familiarity with basic audio integration techniques and applications for stand-alone personal computers, networks, and integrated room systems.

MARKETING AND RETAILING

MKT 120 Principles of Marketing 3 0 3
Prerequisites:
Corequisites: None
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 3 0 3
Prerequisites:
Corequisites: None
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 3 0 3
Prerequisites:
Corequisites: None
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 3 0 3
Prerequisites:
Corequisites: None
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 Advertising and Sales Promotion 3 0 3
Prerequisites:
Corequisites: None
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 through application.

MKT 225 Marketing Research 3 0 3
Prerequisites: MKT 120
Corequisites: None
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. This course is a unique concentration requirement of the Marketing and Retailing concentration in the Business Administration program.

MKT 226 **Retail Applications** 3 0 3
Prerequisites:
Corequisites: None
This course is designed to develop occupational competence through participation in case studies, group work, and simulations. Emphasis is placed on all 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.

MAINTENANCE

MNT 110 **Intro to Maint Procedures** 1 3 2
Prerequisites: None
Corequisites: None
This course covers basic maintenance fundamentals for power transmission equipment. Topics include equipment inspection, lubrication, alignment, and other scheduled maintenance procedures. Upon completion, students should be able to demonstrate knowledge of accepted maintenance procedures and practices according to current industry standards.

MUSIC

MUS 110 **Music Appreciation** 3 0 3
Prerequisites: RED 090, ENG 090 or satisfactory placement test scores
Corequisites: None
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.

MUS 121 **Music Theory I** 3 2 4
Prerequisites: None
Corequisites: None
This course provides an in-depth introduction to melody, rhythm, and harmony. Emphasis is placed on fundamental melodic, rhythmic, and harmonic analysis, introduction to part writing, rear-training, and sight-singing. Upon completion, students should be able to demonstrate proficiency in the recognition and application of the above.

MUS 122 **Music Theory II** 3 2 4
Prerequisites: MUS 121
Corequisites: None
This course is a continuation of studies begun in MUS 121. Emphasis is placed on advanced melodic, rhythmic, and harmonic analysis and continued studies in part-writing, ear-training, and sight-singing. Upon completion, students should be able to demonstrate proficiency in the recognition and application of the above.

MUS 131 **Chorus I** 0 2 1
Prerequisites: Appropriate vocal proficiency
Corequisites: None
This course provides an opportunity to gain experience singing in a chorus. Emphasis is placed on vocal techniques and the study and performance of a variety of styles and periods of choral literature. Upon completion, students should be able to demonstrate skills needed to participate in choral singing leading to performance.

MUS 132 **Chorus II** 0 2 1
Prerequisites: MUS 131
Corequisites: None
This course provides a continuation of studies begun in MUS 131. Emphasis is placed on vocal techniques and the study and performance of a variety of styles and periods of choral literature. Upon completion, students should be able to demonstrate skills needed to participate in choral singing leading to performance.

MUS 141 **Ensemble I** 0 2 1
Prerequisites: Audition
Corequisites: None
This course provides an opportunity to perform in any combination of instrumental, vocal, or keyboard groups of two or more. Emphasis is placed on the development of performance skills and the study of a variety of styles and periods of ensemble literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance. The ensemble courses will feature show choir literature.

MUS 142 Ensemble II 0 2 1
Prerequisites: MUS 141
Corequisites: None
This course is a continuation of MUS 141. Emphasis is placed on the development of performance skills and the study of a variety of styles and periods of ensemble literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance.

MUS 151P Class Music I 0 2 1
Prerequisites:
Corequisites: None
This course provides group instruction in skills and techniques of the particular instrument or voice for those with little or no previous experience. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance. MUS 151P is the first level of a class piano program.

MUS 151V Class Music I 0 2 1
Prerequisites:
Corequisites: None
This course provides group instruction in skills and techniques of the particular instrument or voice for those with little or no previous experience. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance. MUS 151V is the first of two class voice courses.

MUS 152P Class Music II 0 2 1
Prerequisites: MUS 151
Corequisites: None
This course is a continuation of MUS 151. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance. MUS 152P is the second level of a class piano program.

MUS 152V Class Music II 0 2 1
Prerequisites: MUS 151
Corequisites: None
This course is a continuation of MUS 151. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance. MUS 152V is a continuation of class voice 1.

MUS 161 Applied Music I 0 2 1
Prerequisites: Audition
Corequisites: None
This course provides individual instruction in the skills and techniques of the particular instrument or voice. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance.

MUS 162 Applied Music II 0 2 1
Prerequisites: MUS 161
Corequisites: None
This course is a continuation of MUS 161. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance.

MUS 231 Chorus III 0 2 1
Prerequisites: MUS 132
Corequisites: None
This course is a continuation of MUS 132. Emphasis is placed on vocal techniques and the study and performance of a variety of styles and periods of choral literature. Upon completion, students should be able to demonstrate skills needed to participate in choral singing leading to performance.

MUS 232 Chorus IV 0 2 1
Prerequisites: MUS 231
Corequisites: None
This course is a continuation of MUS 231. Emphasis is placed on vocal techniques and the study of styles and periods of choral literature. Upon completion, students should be able to demonstrate skills needed to participate in choral singing leading to performance.

MUS 241 Ensemble III 0 2 1
Prerequisites: MUS 142
Corequisites: None
This course is a continuation of MUS 142. Emphasis is placed on the development of performance skills and the study of a variety of styles and periods of ensemble literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance.

MUS 242 Ensemble IV 0 2 1
Prerequisites: MUS 241
Corequisites: None
This course is a continuation of MUS 241. Emphasis is placed on the development of performance skills and the study of styles of ensemble literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance.

MUS 251P Class Music III 0 2 1
Prerequisites: MUS 152
Corequisites: None
This course is a continuation of MUS 152. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance. MUS 251P is the third level of a class piano program.

MUS 252P Class Music IV 0 2 1
Prerequisites: MUS 251
Corequisites: None
This course is a continuation of MUS 251. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance. MUS 252P is the fourth level of a class piano program.

MUS 261 Applied Music III 0 2 1
Prerequisites: MUS 162
Corequisites: None
This course is a continuation of MUS 162. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance.

MUS 262 Applied Music IV 0 2 1
Prerequisites: MUS 261
Corequisites: None
This course is a continuation of MUS 261. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance.

NETWORKING TECHNOLOGY

NET 110 Data Comm/Networking 2 2 3
Prerequisites:
Corequisites: None
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.

NURSING

NUR 101 Practical Nursing I 7 6 6 11
Prerequisites: Enrollment in the Practical Nursing program
Corequisites: None
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.

NUR 102 Practical Nursing II 8 0 12 12

Prerequisites: None
Corequisites: None

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.

NUR 103 Practical Nursing III 6 0 12 10

Prerequisites: None
Corequisites: None

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, entry-level 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.

NUR 107 LPN Refresher 9 0 9 12

Prerequisite:
Correquisite: None

This refresher course is designed to provide an independent didactic review for the previously licensed practical nurse whose license has lapsed. Emphasis is placed on common medical-surgical conditions and nursing interventions, including mental health principles, pharmacological concepts, and safe clinical practice. Upon completion, students will be eligible to apply for reinstatement of licensure.

NUR 115 Fundamentals of Nursing 2 3 6 5

Prerequisites: pre-admission to program
Corequisites: NUR 117, BIO 155, and BIO 165

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.

NUR 117 Pharmacology 1 3 0 2

Prerequisites: pre-admission to program
Corequisites: NUR 115

This course introduces information concerning sources, effects, legalities, and the safe use of medications as therapeutic agents. Emphasis is placed on nursing responsibility, accountability pharmocokinetics, routes of medication administration, contraindications and side effects. Upon completion, students should be able to compute dosages and administer medication safely.

NUR 118 Nutrition/Diet Therapy 2 0 0 2

Prerequisites:
Corequisites: None

This course covers the six nutrient categories and provides an overview of diet recommendations for promotion and maintenance of health. Topics include the food pyramid recommendations for individuals across the life span, energy balance, and special dietary modifications for common alterations in health. Upon completion, students should be able to complete a nutritional assessment, analyze diets, and recommend dietary adaptations to meet individual health needs.

NUR 125 Maternal-Child Nursing 5 3 6 8

Prerequisites: NUR 115 and NUR 135
Corequisites: NUR 233

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.

NUR 133 Nursing Assessment 2 3 0 3

Prerequisites: NUR 115
Corequisites: BIO 166

This course provides theory and application experience for performing nursing assessment of individuals. 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.

NUR 135 Adult Nursing I 5 3 9 9
Prerequisites: NUR 115
Corequisites: BIO 166
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.

NUR 185 Mental Health Nursing 3 0 6 5
Prerequisites: NUR 115 and NUR 135
Corequisites: NUR 133
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.

NUR 189 Nursing Transition 1 3 0 2
Prerequisites:
Corequisites: None
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 ADN program at the level of the generic student.

NUR 233 Leadership in Nursing 2 0 0 2
Prerequisites: NUR 135
Corequisites: NUR 125
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.

NUR 235 Adult Nursing II 4 3 15 10
Prerequisites: NUR 135, NUR 125, and NUR 185
Corequisites: NUR 244, NUR 233
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.

NUR 244 Issues and Trends 2 0 0 2
Prerequisites: NUR 135
Corequisites: NUR 125
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.

OPERATIONS MANAGEMENT

OMT 112 Materials Management 3 0 3
Prerequisites:
Corequisites: None
This course covers the basic principles of materials management. Emphasis is placed on the planning, procurement, movement, and storage of materials. Upon completion, students should be able to demonstrate an understanding of the concepts and techniques related to materials management. This course is a unique concentration requirement of the Operations Management concentration in the Business Administration program.

OMT 260 Issues in Operations Mgt. 3 0 3
Prerequisites: ISC 121, ISC 210, OMT 112, and ISC 132 or ISC 221
Corequisites: None
This course presents a variety of topics that highlight contemporary problems and issues related to operations management. Emphasis is placed on production and operations planning, environmental health and safety, materials management, and quality systems. Upon completion, students should be able to demonstrate the ability to make decisions and resolve problems in an operations management environment. This course is a unique concentration requirement of the Operations Management concentration in the Business Administration program.

OFFICE SYSTEMS TECHNOLOGY

OST 131 Keyboarding 1 2 2
Prerequisites:
Corequisites: None
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 format business correspondence, tables and reports.

OST 134 Text Entry & Formatting 2 2 3
Prerequisites: OST 131
Corequisites: None
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 136 Word Processing 1 2 2
Prerequisites: OST 131 or Satisfactory Keyboarding Skills
Corequisites: None
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.

OST 148 Med Coding Billing & Insu 3 0 3
Prerequisites:
Corequisites: None
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 Systems Technology concentration in the Office Systems Technology program.

OST 149 Med Legal Issues 3 0 3
Prerequisites:
Corequisites: None
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 Systems Technology concentration in the Office Systems Technology program.

OST 164 Text Editing Applications 3 0 3
Prerequisites:
Corequisites: None
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 184 Records Management 1 2 2
Prerequisites:
Corequisites: None
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 223 Machine Transcription I 1 2 2
Prerequisites: OST 134, OST 136, and OST 164
Corequisites: None
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.

OST 241 **Med Ofc Transcription I** 1 2 2
Prequisites: OST 134, OST 136, MED 121, and OST 164
Corequisites: None
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 specialities. 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** 2 2 3
Prerequisites: OST 131 and OST 148
Corequisites: None
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. This course is a unique concentration requirement in the Medical Office Systems Technology concentration in the Office Systems Technology program.

OST 286 **Professional Development** 3 0 3
Prerequisites:
Corequisites: None
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** 2 2 3
Prerequisites: OST 134 or OST 136, and OST 164
Corequisites: None
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.

PHYSICAL EDUCATION

PED 111 **Physical Fitness I** 0 3 1
Prerequisites:
Corequisites: None
This course provides an individualized approach to physical fitness utilizing the five major components. Emphasis is placed on the scientific basis for setting up and engaging in personalized physical fitness programs. The course includes a study of the role of physical fitness in the development of optimum health and wellness. Upon completion, students should be able to set up and implement an individualized physical fitness program.

PED 113 **Aerobics I** 0 3 1
Prerequisites:
Corequisites: None
This course introduces a program of cardiovascular fitness involving continuous, rhythmic exercise. 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.

PED 117 **Weight Training I** 0 3 1
Prerequisites:
Corequisites: None
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 eight training program.

PED 127 **Karate** 0 3 1
Prerequisites:
Corequisites: None
This course introduces the martial arts using the Japanese Shotokan form. Topics include proper conditioning exercise, book control, proper terminology, historical foundations, and etiquette relating to karate. Upon completion, students should be able to perform line drill techniques and Kata for various ranks.

PED 128 Golf-Beginning 0 2 1
Prerequisites:
Corequisites: None
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.

PED 130 Tennis-Beginning 0 2 1
Prerequisites:
Corequisites: None
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.

PED 137 Badminton 0 2 1
Prerequisites:
Corequisites: None
This course covers the fundamentals of badminton. Emphasis is placed on the basics of serving, clears, drops, drives, smashes, and the rules and strategies of singles and doubles. Upon completion, students should be able to apply these skills in playing situations.

PED 138 Archery 0 2 1
Prerequisites:
Corequisites: None
This course introduces basic archery safety and skills. Topics include proper techniques of stance, bracing, drawing, and releasing as well as terminology and scoring. Upon completion, students should be able to participate safely in target archery.

PED 139 Bowling-Beginning 0 2 1
Prerequisites:
Corequisites: None
This course introduces the fundamentals of bowling. Emphasis is placed on ball selection, grips, stance, and delivery along with rules and etiquette. Upon completion, students should be able to participate in recreational bowling.

PED 143 Volleyball-Beginning 0 2 1
Prerequisites:
Corequisites: None
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.

PED 152 Swimming-Beginning 0 2 1
Prerequisites:
Corequisites: None
This course is designed for non-swimmers and beginners. Emphasis is placed on developing confidence in the water, learning water safety, acquiring skills in floating, and learning elementary strokes. Upon completion, students should be able to demonstrate safety skills and be able to tread water, back float, and use the crawl stroke for 20 yards.

PED 153 Swimming-Intermediate 0 2 1
Prerequisites: PED 152
Corequisites: None
This course is designed for those who have mastered basic swimming skills. Emphasis is placed on refining basic skills and learning new swim strokes. Upon completion, students should be able to demonstrate the four basic strokes, the scissors kick, the underwater swim, and other related skills.

PED 154 Swimming for Fitness 0 3 1
Prerequisites: PED 152
Corequisites: None
This course introduces lap swimming, aquacises, water activities, and games. Emphasis is placed on increasing cardiovascular efficiency through aquatic exercise. Upon completion, students should be able to develop an individualized aquatic fitness program.

PED 155 Water Aerobics 0 3 1
Prerequisites:
Corequisites: None
This course introduces rhythmic aerobic activities performed in water. Emphasis is placed on increasing cardiovascular fitness levels, muscular strength, muscular endurance, and flexibility. Upon completion, students should be able to participate in an individually-paced exercise program.

PED 156 Scuba Diving 0 2 1
Prerequisites: PED 153
Corequisites: None
This course provides basic instruction in fundamental skills and safety procedures for scuba diving. Emphasis is placed on the history, theory, and principles of diving; development of diving skills; safety; and care and maintenance of equipment. Upon completion, students should be able to demonstrate skills, knowledge, and techniques of scuba diving in preparation for diver certification.

PED 160 Canoeing-Basic 0 2 1
Prerequisites: PED 152
Corequisites: None
This course provides basic instruction for the beginning canoeist. Emphasis is placed on safe and correct handling of the canoe and rescue skills. Upon completion, students should be able to demonstrate basic canoeing, safe-handling, and self-rescue skills.

PED 174 Wilderness Pursuits 0 2 1
Prerequisites:
Corequisites: None
This course covers the skills necessary to prepare for and participate in a wilderness trip. Emphasis is placed on planning, preparing, and participating in a wilderness pack trip. Upon completion, students should be able to safely participate in overnight wilderness pack trips.

PED 260 Lifeguard Training 1 2 2
Prerequisites: PED 153
Corequisites: None
This course covers the skills, knowledge, and techniques of lifesaving and lifeguarding. Topics include identifying and minimizing aquatic hazards, recognizing and effectively rescuing people in distress, and developing safety skills. Upon completion, students should be able to demonstrate skills, knowledge, and techniques of lifesaving and lifeguarding to pass American Red Cross lifeguarding certification.

PED 262 Water Safety Instructor 1 2 2
Prerequisites: PED 153
Corequisites: None
This course covers the knowledge and skills necessary to teach and certify others in the American Red Cross certification swimming programs. Emphasis is placed on teaching basic rescue skills, strengthening swimming strokes, and rescue and safety procedures. Upon completion, students should be able to demonstrate skills, knowledge, and techniques to pass the American Red Cross Water Safety Instructor's certification.

PHILOSOPHY

PHI 215 Philosophical Issues 3 0 3
Prerequisites: ENG 111
Corequisites: None
This course introduces fundamental issues in philosophy considering the views of classical and contemporary philosophers. Emphasis is placed on knowledge and belief, appearance and reality, determinism and free will, faith and reason, and justice and inequality. Upon completion, students should be able to identify, analyze, and critique the philosophical components of an issue. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

PHI 240 Introduction to Ethics 3 0 3
Prerequisites: ENG 111
Corequisites: None
This course introduces theories about the nature and foundations of moral judgments 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. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

PHYSICS

PHY 131 Physics-Mechanics 3 2 4
Prerequisites: MAT 121 or MAT 161
Corequisites: None
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.

PHY 132 Physics-Elec & Magnetism 3 2 4
Prerequisites: PHY 131
Corequisites: None
This algebra/trigonometry-based course is a study of fundamental physical concepts as applied to engineering technology fields. Topics include systems of units, problem-solving methods, graphical analysis, waves, electricity, magnetism, circuits, transformers, motors, and generators. Upon completion, students should be able to apply the principles studied to applications in engineering technology fields.

PHY 151 College Physics I 3 2 4
Prerequisites: MAT 162, MAT 172, or MAT 175
Corequisites: None
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. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

PHY 152 College Physics II 3 2 4
Prerequisites: PHY 151
Corequisites: None
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. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

PHY 251 General Physics I 3 3 4
Prerequisites: MAT 271
Corequisites: MAT 272
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. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

PHY 252 General Physics II 3 3 4
Prerequisites: MAT 272 and PHY 251
Corequisites: None
This course uses calculus-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. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

PLASTICS

PLA 110 Introduction to Plastics 2 0 2
Prerequisites:
Corequisites: None
This course introduces the plastics processing industry, including thermoplastics and thermosets. Emphasis is placed on the description, classification, and properties of common plastics and processes and current trends in the industry. Upon completion, students should be able to describe the differences between thermoplastics and thermosets and recognize the basics of the different plastic processes.

PLA 115 Polymer Processing 2 3 3

Prerequisites:
Corequisites: None

This course introduces theory and hands-on experience in common polymer processing techniques. Topics include injection molding, extrusion, thermoforming, blow molding, casting, roll forming, thermofusion, and other processes. Upon completion, students should be able to understand the setup, operation, and troubleshooting of common plastic processing equipment. This course is a unique concentration requirement in the Plastics concentration in the Manufacturing Technology program.

PLA 120 Injection Molding 2 3 3

Prerequisites:
Corequisites: None

This course provides theory and processing experience with the injection molding process. Topics include machine type, molds, controls, machine-polymer part relationship, molding factors, troubleshooting, and molding problems/solutions. Upon completion, students should be able to demonstrate an understanding of machine setup and operation and be able to optimize common injection molding machines.

PLA 162 Plastics Manuf Processes 2 3 3

Prerequisites:
Corequisites: None

This course covers manufacturing processes including machining, sawing, routing, milling, drilling, taping, turning, thermoforming, molding, extrusion, laminating, reinforcing, expansion, casting, coasting, assembly, and finishing. Emphasis is placed on the process and equipment requirements, special operational concerns, setup, operation, tooling, capability limitations, maintenance, and safety. Upon completion, students should be able to select the correct process for the material required and discuss machine operation, setup, tooling, safety, and scrap recycling.

PLA 210 Mold Maintenance/Design 2 3 3

Prerequisites:
Corequisites: None

This course provides an in-depth study of the design, maintenance, and repair of molds used in the plastics industry. Topics include mold/die components, materials, types, functions, heating/cooling, designs, cleaning, and repair. Upon completion, students should be able to describe and utilize various types and functions of molds and gates and understand typical plastic design rules. This course is a unique concentration requirement in the Plastics concentration in the Manufacturing Technology program.

PLA 215 Polymeric Materials 2 3 3

Prerequisites:
Corequisites: None

This course provides an overview of polymeric materials, from commodity grade to advanced/specialty resins. Topics include chemistry, properties, material characterization, testing, and toxicity. Upon completion, students should be able to demonstrate an understanding of the hierarchy of plastics and how it affects material selection, testing, and safety. This course is a unique concentration requirement in the Plastics concentration in the Manufacturing Technology program.

PLA 220 Moldflow 2 3 3

Prerequisites:
Corequisites: None

This course introduces flow analysis software. Topics include mold flow design principles, concepts, material databases, model construction, and interpretation of results. Upon completion, students should be able to model a part/runner system, optimize gate location, analyze and interpret fill, and recommend design changes.

PLA 225 Extrusion 2 3 3

Prerequisites:
Corequisites: None

This course provides theory and processing experience with the extrusion molding process. Topics include safe start-up, operation, and shutdown of machines, machine components, blown film, sheet, coating, pipe/profiles, wire coating, and fibers. Upon completion, students should be able to setup, operate, and troubleshoot the extrusion process and its variations.

PLA 230 Adv Plastics Manufacturing 3 3 4

Prerequisites:
Corequisites: None

This course covers advanced plastics manufacturing processes. Topics include hands-on experience, material selection, manufacturing cost, process optimization, troubleshooting, and project management. Upon completion, students should be able to understand, perform, and troubleshoot advanced processes in a manufacturing environment.

RLS 113 Real Estate Mathematics 2 0 2
Prerequisites:
Corequisites: None
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 117 Real Estate Broker 4 0 4
Prerequisites: RLS 112
Corequisites: None
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 N.C. Real Estate License Law and N.C. Real Estate Commission Rule issues. Upon completion students should be able to demonstrate a knowledge of real estate brokerage, law and finance.

SOCIOLOGY

SOC 210 Introduction to Sociology 3 0 3
Prerequisites: RED 090 or satisfactory placement test scores
Corequisites: None
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 social/behavioral sciences.

SOC 213 Sociology of the Family 3 0 3
Prerequisites: RED 090, ENG 090 or satisfactory placement test scores
Corequisites: None
This course covers the institution of the family and 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 3 0 3
Prerequisites: RED 090, ENG 090 or satisfactory placement test scores
Corequisites: None
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.

SPANISH

SPA 111 Elementary Spanish I 3 0 3
Prerequisites: RED 090, ENG 090 or satisfactory placement test scores
Corequisites: SPA 181
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 3 0 3
Prerequisites: SPA 111
Corequisites: SPA 182
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. 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 3 0 3
Prerequisites: None
Corequisites: None
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, the students should be able to communicate at a functional level with native speakers and demonstrate cultural sensitivity.

SPA 181 Spanish Lab I 0 2 1
Prerequisites:
Corequisites: SPA 111
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 demonstrate cultural awareness.

SPA 182 Spanish Lab 2 0 2 1
Prerequisites: SPA 181
Corequisites: SPA 112
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 demonstrate cultural awareness.

SPA 211 Intermediate Spanish I 3 0 3
Prerequisites: SPA 112
Corequisites: SPA 281
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. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

SPA 212 Intermediate Spanish II 3 0 3
Prerequisites: SPA 211
Corequisites: SPA 282
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. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

SPA 281 Spanish Lab 3 0 2 1
Prerequisites: SPA 182
Corequisites: SPA 211
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.

SPA 282 Spanish Lab 4 0 2 1
Prerequisites: SPA 281
Corequisites: SPA 212
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 media and materials. Upon completion, students should be able to communicate spontaneously and accurately with increasing complexity and sophistication.

TEXTILES

TEX 110 Fundamentals of Textiles 3 0 3
Prerequisites:
Corequisites: None
This course introduces the basics of the textile industry. Topics include history, textile materials, textile products, utilization, and basic textile manufacturing systems. Upon completion, students should be able to explain the uses of textiles and describe the textile manufacturing processes.

WELDING

WLD 110 Cutting Processes 1 3 2
Prerequisites:
Corequisites: None
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 cut metals of varying thickness.

WLD 112 Basic Welding Processes 1 3 2
Prerequisites:
Corequisites: None
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 2 9 5
Prerequisites:
Corequisites: None
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 116 SMAW (Stick) Plate/Pipe 1 9 4
Prerequisites: WLD 115
Corequisites: None
This course is designed to enhance skills with the shielded metal arc (stick) welding process. Emphasis is placed on advancing manipulative skills with SMAW electrodes on varying joint geometry. Upon completion, students should be able to perform groove welds on carbon steel with prescribed electrodes in the flat, horizontal, vertical, and overhead positions.

WLD 121 GMAW (MIG) FCAW/Plate 2 6 4
Prerequisites:
Corequisites: None
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 1 6 3
Prerequisites: WLD 121
Corequisites: None
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.

WLD 131 GTAW (TIG) Plate 2 6 4
Prerequisites:
Corequisites: None
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 1 6 3
Prerequisites: WLD 131
Corequisites: None
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.

WLD 141 Symbols & Specifications 2 2 3
Prerequisites:
Corequisites: None
This course introduces the basic symbols and specifications used in 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 143 Welding Metallurgy 1 2 2

Prerequisites:
Corequisites: None

This course introduces the concepts of welding metallurgy. Emphasis is placed on basic metallurgy, effects of welding on various metals, and metal classification and identification. Upon completion, students should be able to understand basic metallurgy, materials designation, and classification systems used in welding.

WLD 145 Thermoplastic Welding 1 3 2

Prerequisites:
Corequisites: None

This course introduces the thermoplastic welding processes and materials identification. Topics include filler material selection, identification, joint design, and equipment setup with emphasis on bead types and applications. Upon completion, students should be able to perform fillet and groove welds using thermoplastic materials.

WLD 151 Fabrication I 2 6 4

Prerequisites: WLD 110 and WLD 115 and WLD 116 and WLD 131
Corequisites: None

This course introduces the basic principles of fabrication. Emphasis is placed on safety, measurement, layout techniques, and the use of fabrication tools and equipment. Upon completion, students should be able to perform layout activities and operate various fabrication and material handling equipment.

WLD 251 Fabrication II 1 6 3

Prerequisites: WLD 151
Corequisites: None

This course covers advanced fabrication skills. Topics include advanced layout and assembly methods with emphasis on the safe and correct use of fabrication tools and equipment. Upon completion, students should be able to fabricate projects from working drawings.

WLD 261 Certification Practices 1 3 2

Prerequisites: WLD 115 and WLD 121 and WLD 131
Corequisites: None

This course covers certification requirements for industrial welding processes. Topics include techniques and certification requirements for prequalified joint geometry. Upon completion, students should be able to perform welds on carbon steel plate and/or pipe according to applicable codes.

WLD 262 Inspection and Testing 2 2 3

Prerequisites:
Corequisites: None

This course introduces destructive and non-destructive testing methods. Emphasis is placed on safety, types and methods of testing, and the use of testing equipment and materials. Upon completion, students should be able to understand and/or perform a variety of destructive and non-destructive testing processes.

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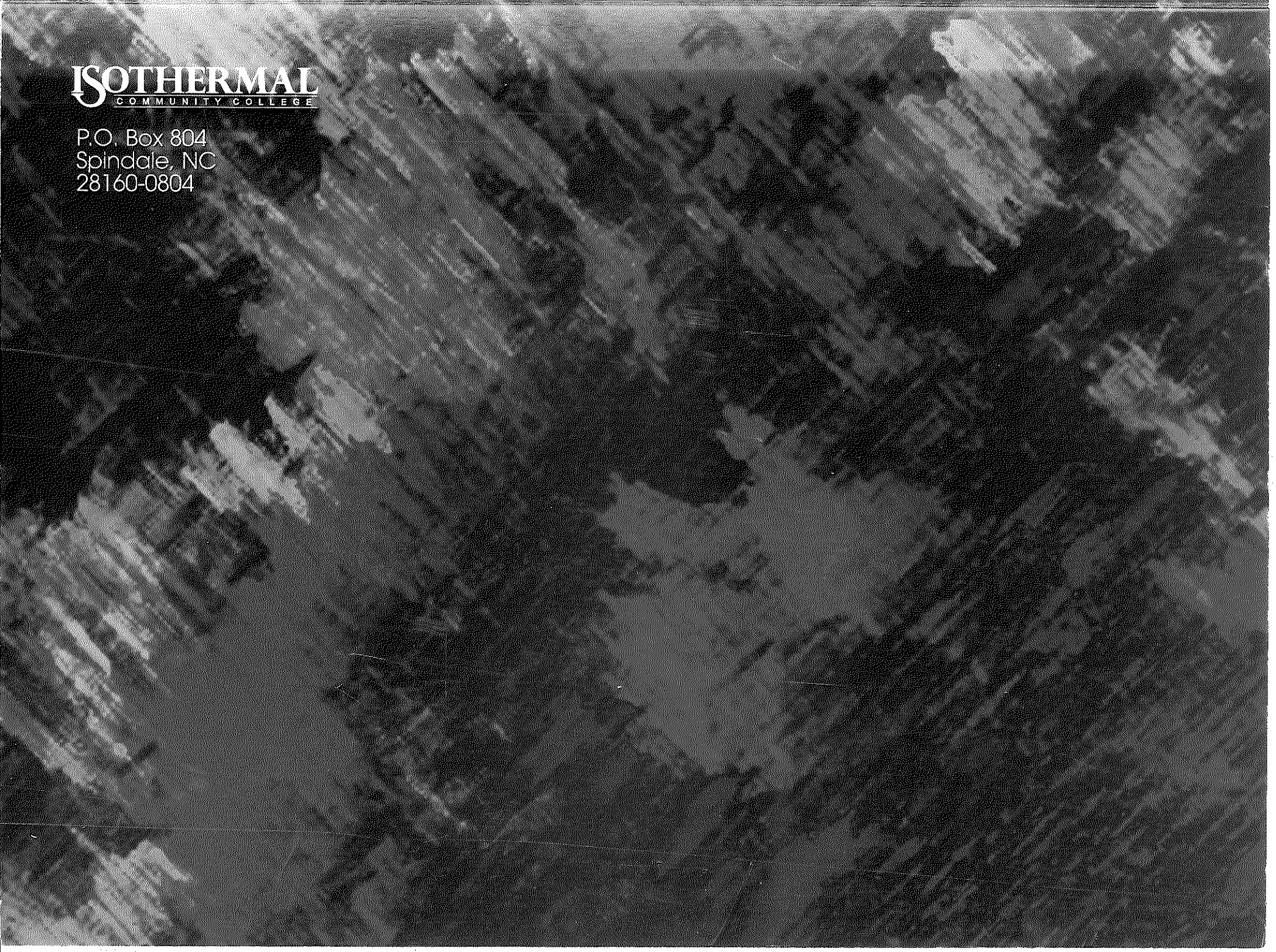
Index



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