

Please call us with your questions.

| | |
|--|----------|
| Admissions | 678-8473 |
| Academic Program Areas | |
| Business | 678-8466 |
| General Education and Public Service | 678-8467 |
| Health | 678-8264 |
| Technical and Vocational | 678-8338 |
| Co-op Education | 678-8453 |
| Counseling | 678-8419 |
| Financial Aid | 678-8242 |
| Health Services | 678-8450 |
| Information | |
| Student Services | 678-8419 |
| Continuing Education | 678-8386 |
| Job Placement | 678-8418 |
| Learning Resources Center | 678-8305 |
| Library | 678-8247 |
| Registrar | 678-8252 |
| Switchboard | 678-8400 |
| Veterans' Services | 678-8395 |

FAYETTEVILLE TECHNICAL COMMUNITY COLLEGE

BOARD OF TRUSTEES

Harry F. Shaw, Chairman

Thornton W. Rose, Vice Chairman

Dr. Marye Jeffries, Secretary

| <u>Name</u> | <u>Expiration Date</u> | <u>Appointed By</u> |
|---------------------------|------------------------|----------------------------------|
| Harry F. Shaw | June 30, 1997 | Governor |
| Thomas R. McLean | June 30, 1998 | Governor |
| Brenda Tinney | June 30, 1999 | Governor |
| James L. Yates | June 30, 2000 | Governor |
| Dr. Marye Jeffries | June 30, 2000 | Board of County Commissioners |
| Maxine G. McCoy | June 30, 1999 | Board of County Commissioners |
| Stephen R. Satsky | June 30, 1998 | Board of County Commissioners |
| Wilson F. Yarborough, Jr. | June 30, 1997 | Board of County Commissioners |
| Michael C. Boose | June 30, 1999 | School Board |
| Artheneus Dew | June 30, 1997 | School Board |
| Thornton W. Rose | June 30, 2000 | School Board |
| Lura S. Tally | June 30, 1998 | School Board |

ATTORNEY

L. Stacy Weaver, Jr.

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PURPOSE OF THE CATALOG

Fayetteville Technical Community College publishes this catalog to provide students and other interested persons with the information about the college and its programs. The information provided is up-to-date as of May 1, 1997. For information about changes after this date, please contact the Student Development Office at FTCC.

The provisions of this catalog are not to be regarded as an irrevocable contract between students and Fayetteville Technical Community College. The college is currently undergoing a major transition to a semester system format and reserves the right to change any provisions, requirements, or schedules at any time or to add or withdraw courses or program offerings. Every effort will be made to minimize the inconvenience such changes create for students.

Students having questions not answered by this catalog may receive additional information from their department chair or academic advisor. Applicants are encouraged to contact the Admissions Office, Fayetteville Technical Community College, PO Box 35236, Fayetteville, NC 28303-0236; telephone (910)678-8473.

NONDISCRIMINATION STATEMENT

The Board of Trustees and the administration of Fayetteville Technical Community College are fully committed to the principles and practice of equal employment and educational opportunities. Accordingly, Fayetteville Technical Community College does not practice nor condone discrimination, in any form, against students, employees, or applicants on the grounds of race, color, national origin, religion, sex, age, handicap, or political affiliation. Fayetteville Technical Community College commits itself to positive action to secure equal opportunity regardless of those characteristics.

Fayetteville Technical Community College supports the protection available to members of its community under all applicable Federal Laws, including Title VI and VII of the Civil Rights Act of 1964 and 1991, Title IX of the Education Amendments of 1972, Sections 799A and 845 of the Public Health Service Act, the Equal Pay and Age Discrimination Acts, the Rehabilitation Act of 1973, the Americans with Disabilities Act of 1990, and Executive Order 11375.

For information concerning these provisions, contact:

Vice President for Personnel
Fayetteville Technical Community College
P.O. Box 35236
Fayetteville, NC 28303-0236

1997-98 ACADEMIC CALENDAR

| Updated 5/28/97 | CURRICULUM ON-CAMPUS | CURRICULUM ACCELERATED SESSIONS | | | CONTINUING EDUCATION | | CONTINUING EDUCATION ACCELERATED SESSIONS | |
|--|--|------------------------------------|---------------------------------------|--|-------------------------|-------------------|--|--------------|
| Summer Semester 1997-98 | 8-Week | | | | Centers | Ft Bragg Night | Ft Bragg 6-5 | |
| Early Registration Registration | 5/5-7/97 5/15/97 | | | | 5/12-23; 6/2-13 | 5/12-6/13 | 5/12-7/3 | |
| Schedule Correction Orientation | 5/29/97 | | | | | | | |
| Classes Begin | 5/29/97 | | | | 6/2 | 6/2 | 7/7 | |
| Last Day to Add | 6/2/97 | | | | | | | |
| Spring Inc Grades Due | 7/8/97 | | | | | | | |
| Last Day for Refund | 6/9/97 | | | | 7/4 | 7/4 | | |
| Student/Faculty Holidays | 7/4/97 | | | | | 7/4 | | |
| Staff Holidays | 7/4/97 | | | | | | | |
| Summer Semester Exams | 7/23/97 | | | | | | | |
| Summer Grds Due Registrar | 7/24/97 | | | | 8/21 | 8/29 | 8/15 | |
| Last Day of Term | 7/24/97 | | | | | | | |
| Graduation | 7/25/97 | | | | | | | |
| | CURRICULUM ON-CAMPUS | CURRICULUM ACCELERATED SESSIONS | | | CONTINUING EDUCATION | | CONTINUING EDUCATION ACCELERATED SESSIONS | |
| Fall Semester 1997-98 | 16-Week | Session 8-1 | Session 8-2 | | Centers | Ft Bragg Night | Ft Bragg 6-6 | Ft Bragg 6-7 |
| Faculty Return Faculty/Staff Prof. Dev. Early Registration Registration | 8/18/97 8/18-20/97 7/9-17;8/1-10/97 8/12-14,16/97 | 8/12, 20/97 | 10/14,21/97 | | 8/11-22; 9/8-19/97 | 8/18-29/97 | 7/7-8/15/97 | |
| Schedule Correction | 8/20/97 | 8/21/97 | 10/22/97 | | | | | |
| Classes Begin | 8/21/97 | 8/21/97 | 10/22/97 | | 9/8/97 | 9/2/97 | 8/18/97 | 9/29/97 |
| Last Day to Add | 8/27/97 | 8/25/97 | 10/24/97 | | | | | |
| Summer Inc Grades Due | 12/18/97 | | | | | | | |
| Last Day for Refund | 9/12/97 | 9/2/97 | 11/3/97 | | | | | |
| Student Holidays/Breaks | 9/1;10/17,20,21; 11/27-28;12/19- 31;1/1-2/98 | 9/1;10/17, 20-21/97 | 11/27-28/97; 12/19-31; 1/1-2/98 | | | 9/1;11/27-28/97 | 9/1;10/13/97 | 10/13/97 |
| Faculty Holidays/Leave | 9/1;10/17,20,21; 11/27-28;12/22- 31;1/1-2/98 | 9/1/97 | 11/27-28/97 | | | 9/1;11/27-28/97 | 9/1/97 | |
| Staff Holidays | 9/1;11/27-28; 12/22-26;1/1/98 | 9/1/97 | 11/27-28/97 | | | 9/1;11/27-28/97 | | |
| Staff Required Leave Days | 12/29-30/97 | | | | | | | |
| Fall Semester Exams | 12/16-18/97 | 10/16/97 | 12/18/97 | | | | | |
| Fall Grades Due Registrar | 12/19/97 | 10/17/97 | 12/19/97 | | | | | |
| Last Day of Term | 12/18/97 | 10/16/97 | 12/18/97 | | 11/20/97 | 11/26/97 | 9/26/97 | 11/7/97 |

1997-98 ACADEMIC CALENDAR

| Updated 5/28/97 | CURRICULUM ON-CAMPUS | CURRICULUM ACCELERATED SESSIONS | | | CONTINUING EDUCATION | CONTINUING EDUCATION ACCELERATED SESSIONS | | |
|-----------------------------|------------------------------|------------------------------------|-------------|--|--------------------------|---|----------------|----------------|
| Spring Semester 1997-98 | 16-Week | Session 8-3 | Session 8-4 | | Centers | Ft Bragg Night | Ft Bragg 6-1 | Ft Bragg 6-2 |
| Faculty Return | 1/5/98 | | | | | | | |
| Faculty/Staff Prof. Dev. | 1/5-7/98 | | | | | | | |
| Early Registration | 11/17-19/97 | | | | | | | |
| Registration | 12/3-4/97 | 12/6-7/97 | 3/3, 10/98 | | 12/1-12/97; 1/5-16/98 | 11/17-26/97 | 9/29-11/7/97 | 11/10-12/19/97 |
| Schedule Correction | 1/7/98 | 1/8/98 | 3/11/98 | | | | | |
| Orientation | | | | | | | | |
| Classes Begin | 1/8/98 | 1/8/98 | 3/11/98 | | | 12/1/97 | 11/10/97 | 1/5/98 |
| Last Day to Add | 1/14/98 | 1/12/98 | 3/13/98 | | | | | |
| Fall Inc Grades Due | 5/7/98 | | | | | | | |
| Last Day for Refund | 1/30/98 | 1/19/98 | 3/20/98 | | | | | |
| Student Holidays/Breaks | 1/19;3/6,9,10; 4/10-13/98 | 1/19/98 | 4/10-13/98 | | 1/19/98 | 12/22/97- 1/3/98;1/19; 2/16/98 12/24- 1/1,19/98 | 11/12,27-28/97 | 1/19/98 |
| Faculty Holidays/Leave | 1/19;3/6,9,10; 4/10-13/98 | 1/19/98 | 4/10-13/98 | | 1/19/98 | | 11/11,27-28/97 | 1/19/98 |
| Staff Holidays | 1/19;4/13/98 | 1/19/98 | 4/13/98 | | 1/19/98 | | | |
| Spring Semester Exams | 5/5-7/98 | 3/5/98 | 5/7/98 | | | | | |
| Spring Grades Due Registrar | 5/8/98 | 3/6/98 | 5/8/98 | | | | | |
| Last Day of Term | 5/7/98 | 3/5/98 | 5/7/98 | | 1/26/98 | 2/27/98 | 12/19/97 | 2/13/98 |
| Graduation | 5/14/98 | | | | | | | |

1998-99 ACADEMIC CALENDAR

| Updated 5/28/97 | CURRICULUM ON-CAMPUS | CURRICULUM ACCELERATED SESSIONS | | | CONTINUING EDUCATION | | | |
|-----------------------------|---|------------------------------------|--------------|--|-------------------------|-------------------|--------------|--------------|
| Summer Semester 1998-99 | 8-Week | Session 8-5 | | | Centers | Ft Bragg Night | | |
| Early Registration | 4/27-28/98 | | | | | | | |
| Registration | 5/11/98 | 5/5, 11/98 | | | | | | |
| Schedule Correction | 5/12/98 | 5/12/98 | | | | | | |
| Orientation | TBA | | | | | | | |
| Classes Begin | 5/12/98 | 5/12/98 | | | | | | |
| Last Day to Add | 5/14/98 | 5/14/98 | | | | | | |
| Spring Inc Grades Due | 7/8/98 | | | | | | | |
| Last Day for Refund | 5/21/98 | 5/21/98 | | | | | | |
| Student Holidays | 5/25;7/3/98 | 5/25;7/3/98 | | | | | | |
| Faculty Holidays/Leave | 5/25;7/3/98 | 5/25;7/3/98 | | | | | | |
| Staff Holidays | 5/25;7/3/98 | 7/3/98 | | | | | | |
| Summer Semester Exams | 7/8/98 | 7/8/98 | | | | | | |
| Summer Grades Due Registrar | 7/9/98 | 7/9/98 | | | | | | |
| Last Day of Term | 7/8/98 | 7/8/98 | | | | | | |
| Graduation | 7/10/98 | | | | | | | |
| | CURRICULUM ON-CAMPUS | CURRICULUM ACCELERATED SESSIONS | | | CONTINUING EDUCATION | | | |
| Fall Semester 1998-99 | 16-Week | Session 8-1 | Session 8-2 | | Centers | Ft Bragg Night | Ft Bragg 6-7 | Ft Bragg 6-8 |
| Faculty Return | 8/10/98 | | | | | | | |
| Faculty/Staff Prof. Dev. | 8/10-14/98 | | | | | | | |
| Early Registration | 8/3-4/98 | | | | | | | |
| Registration | 8/17-18/98 | 8/11, 19/98 | 10/13, 20/98 | | | | | |
| Schedule Correction | 8/19/98 | 8/20/98 | 10/21/98 | | | | | |
| Orientation | TBA | | | | | | | |
| Classes Begin | 8/20/98 | 8/20/98 | 10/21/98 | | | | | |
| Last Day to Add | 8/26/98 | 8/24/98 | 10/23/98 | | | | | |
| Summer Inc Grades Due | 12/18/98 | | | | | | | |
| Last Day for Refund | 9/11/98 | 8/31/98 | 10/30/98 | | | | | |
| Student Holidays/Breaks | 9/7;10/16,19,20; 11/26-27; 12/18-1/1/99 | 9/7/98 | 11/26-27/98 | | | | | |
| Faculty Holidays/Leave | 9/7;10/16,19,20; 11/26-27; 12/21-1/1/99 | 9/7/98 | 11/26-27/98 | | | | | |
| Staff Holidays | 9/7;11/26-27; 12/21-25;1/1/99 | 9/7/98 | 11/26-27/98 | | | | | |
| Staff Required Leave Days | 12/28-29/98 | | | | | | | |
| Fall Semester Exams | 12/15-17/98 | 10/15/98 | 12/17/98 | | | | | |
| Fall Grades Due Registrar | 12/18/98 | 10/16/98 | 12/18/98 | | | | | |
| Last Day of Term | 12/17/98 | 10/15/98 | 12/17/98 | | | | | |

1998-99 ACADEMIC CALENDAR

| Updated 5/28/97 | CURRICULUM ON-CAMPUS | CURRICULUM ACCELERATED SESSIONS | | | CONTINUING EDUCATION | | CONTINUING EDUCATION ACCELERATED SESSIONS | |
|-----------------------------|---------------------------|------------------------------------|-------------|-------------|-------------------------|-------------------|--|--------------|
| Spring Semester 1998-99 | 16-Week | Session 8-3 | Session 8-4 | Session 8-5 | Centers | Ft Bragg Night | Ft Bragg 6-1 | Ft Bragg 6-2 |
| Faculty Return | 1/4/99 | | | | | | | |
| Faculty/Staff Prof. Dev | 1/4-6/99 | | | | | | | |
| Early Registration | 11/16-18/98 | | | | | | | |
| Registration | 12/2-3/98 | 12/5-6/98; | 3/2,9/98 | 5/4,10/99 | | | | |
| Schedule Correction | 1/6/99 | 1/7/98 | 3/10/99 | 5/11/99 | | | | |
| Orientation | | | | | | | | |
| Classes Begin | 1/7/99 | 1/7/99 | 3/10/99 | 5/11/99 | | | | |
| Last Day to Add | 1/13/99 | 1/11/99 | 3/12/99 | 5/13/99 | | | | |
| Fall Inc Grades Due | 5/6/99 | | | | | | | |
| Last Day for Refund | 1/29/99 | 1/19/99 | 3/19/99 | 5/20/99 | | | | |
| Student Holidays/Breaks | 1/18;3/5,8,9; 4/2-5/99 | 1/18;3/5,8,9/99 | 4/2-5/99 | 5/31;7/5/99 | | | | |
| Faculty Holidays/Leave | 1/18;3/5,8,9; 4/2-5/99 | 1/18/99 | 4/2-5/99 | 5/31;7/5/99 | | | | |
| Staff Holidays | 1/18;4/5/99 | 1/18/99 | 4/5/99 | 7/5/99 | | | | |
| Spring Semester Exams | 5/4-6/99 | 3/4/99 | 5/6/99 | 7/7/99 | | | | |
| Spring Grades Due Registrar | 5/7/99 | 3/5/99 | 5/7/99 | 7/8/99 | | | | |
| Last Day of Term | 5/6/99 | 3/4/99 | 5/6/99 | 7/7/99 | | | | |
| Graduation | 5/13/99 | | | | | | | |

GENERAL INFORMATION

Fayetteville Technical Community College, as a comprehensive community college, adheres to an "Open Door" admissions policy. High school graduates, persons achieving a North Carolina equivalency certificate (GED), and adults who show potential for post high school education may be admitted to courses which are appropriate to their educational potential. Successful implementation of an "Open Door" admissions policy requires an emphasis on admissions counseling services. As part of the admissions counseling process, Fayetteville Technical Community College utilizes an initial placement test, an interview, and an evaluation of the applicant's prior school record to determine potential for success. When the admissions counseling process indicates that an applicant lacks sufficient academic background to pursue credit courses, he/she will be directed to the Developmental Studies program prior to entry into a diploma or degree curriculum. If the applicant lacks a high school diploma, he/she will be given the opportunity to pursue studies to achieve an Adult High School Diploma or a North Carolina equivalency certificate (GED) prior to entering a regular curriculum. Admissions to curricula are open to applicants without regard to race, color, national origin, religion, age, sex, handicap, or political affiliation.

HISTORY OF FTCC

From a building of 38,000 square feet, a faculty and staff of nine people, and an enrollment of 50 students, Fayetteville Technical Community College has experienced phenomenal growth from 1961 to the present. Now in its third decade, FTCC provides programs to meet the vocational, technical, and adult education needs of Fayetteville, Cumberland County, and surrounding counties. FTCC currently is housed on a 111.6-acre campus with a physical plant of over 500,000 square feet and has a full-time faculty of 218 people, an enrollment of over 12,000 curriculum students, and a total operating budget of over 40 million dollars.

FTCC originated in 1961 as the Fayetteville Area Industrial Education Center under the auspices of the City Board of Education and operated in the old senior high school while facilities in the Honeycutt area were being finished. In 1963, the North Carolina General Assembly created the Department of Community Colleges for the expressed purpose of providing for the establishment, organization, and administration of a system of educational institutions. Located throughout the state, these institutions offered courses of instruction in one or more of the general areas of two-year college parallel, technical, vocational, and adult education programs. The authority for this newly-created department was vested in the North Carolina State Board of Education. The center became a part of this system at that time.

The center's progress in providing quality educational programs resulted in the Board of Trustees requesting that the status "Technical Institute" be given the center. This request was granted by the State Board of Education in September 1963, and the name Fayetteville Technical Institute was adopted. With the status of "Technical Institute," the Board of Trustees was granted authority to award the Associate in Applied Science Degree and Associate Degree in General Education in addition to the diplomas offered in numerous programs.

From its beginning in 1961 to the present, FTCC has seen the construction of a number of buildings such as Lafayette Hall, Cumberland Hall, the Paul H. Thompson Library, the Administration Building, the Student Center, Center for Business and Industry, and the Advanced Technology Center. In November 1992, Cumberland County voters passed an FTCC bond referendum which provided funds for construction of the Continuing Education Center. North Carolinians passed a community college bond in November of 1993, which provided construction funds for the Health Technologies Center. These buildings are part of the continuous effort to provide state-of-the-art facilities and equipment to train FTCC students for a broad range of job opportunities.

Effective January 1, 1981, the North Carolina Community College System was transferred from under the control of the State Board of Education to the newly-created State Board of Community Colleges. This Board is leading the North Carolina Community College System into the third decade of educational challenge and beyond.

In January 1988, Fayetteville Technical Institute became Fayetteville Technical Community College when the North Carolina Department of Community Colleges and the North Carolina State Legislature allowed all the technical colleges and institutes in the state to refer to themselves as community colleges. The change was in name only as the purpose and mission of Fayetteville Technical Community College remain intact.

FTCC PURPOSE STATEMENT

The purpose of Fayetteville Technical Community College is to provide low-cost technical/vocational, general education, college transfer, and continuing education programs which meet the needs and desires of its students and community. To improve the educational base of society, FTCC encourages life-long learning and strives to prepare students for further educational experiences.

FTCC identifies the educational needs of applicants and assists students in satisfying these needs at a minimal expense. Each adult who applies will be admitted to a program appropriate to his/her abilities and interests. The college is in partnership with the public school system through the Tech Prep program. Further, agreements with four-year colleges and universities for transfer of technical courses and FTCC's College Transfer program support the educational continuum from high school through the baccalaureate degree.

Curricular programs reflect the changing technical, commercial, industrial, and health needs of Fayetteville, Cumberland County, and surrounding areas. Various curricula offer certificates, diplomas, and associate degrees. FTCC offers courses and programs at times and places convenient to prospective students. Courses are also available for high school graduates who need additional academic preparation before attempting college work.

FTCC provides instruction in the basic life skills needed to contribute effectively to society. Continuing Education programs are designed to meet specific needs in basic educational competencies, high school completion, upgrading occupational skills, and other avocational or practical skills required for the rapidly changing technological advances in the community.

Adopted: April 27, 1992
 FTCC Board of Trustees

ACCREDITATIONS AND ASSOCIATIONS

ACCREDITATION BOARD FOR ENGINEERING AND TECHNOLOGY, INC. (ABET)

The following curricula offered by Fayetteville Technical Community College are accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology, Inc.

1. Civil Engineering Technology
2. Electronics Engineering Technology

AIR CONDITIONING CONTRACTORS OF AMERICA

The Air Conditioning, Heating, and Refrigeration Technology program at Fayetteville Technical Community College is a member of the Air Conditioning Contractors of America.

AMERICAN BAR ASSOCIATION

Fayetteville Technical Community College's Paralegal Technology program is approved by the American Bar Association.

AMERICAN BOARD OF FUNERAL SERVICE EDUCATION

Fayetteville Technical Community College's Department of Funeral Service Education is approved by the North Carolina State Board of Mortuary Science and the American Board of Funeral Service Education.

AMERICAN DENTAL ASSOCIATION

Fayetteville Technical Community College's Dental Hygiene and Dental Assisting programs are accredited by the American Dental Association. The American Dental Association is directly concerned with dental and dental auxiliary education. Through this council, the Association accredits all auxiliary dental programs to ensure quality educational training for auxiliary personnel who will provide dental health care to people.

AMERICAN PHYSICAL THERAPY ASSOCIATION

The Physical Therapist Assistant program at Fayetteville Technical Community College is accredited by the Commission on Accreditation in Physical Therapy Education.

AMERICAN SOCIETY FOR ENGINEERING EDUCATION (SOUTHEASTERN SECTION)

Fayetteville Technical Community College's Civil and Electronics Engineering Technology programs are assisted through institutional membership in the American Society for Engineering Education, Southeastern Section.

JOINT REVIEW COMMITTEE ON EDUCATION IN RADIOLOGIC TECHNOLOGY

Fayetteville Technical Community College's Radiography program is accredited by the Joint Review Committee on Education in Radiologic Technology.

JOINT REVIEW COMMITTEE FOR RESPIRATORY THERAPY EDUCATION

Fayetteville Technical Community College's Respiratory Care program is accredited by the Joint Review Committee for Respiratory Therapy Education.

JOINT REVIEW COMMITTEE ON EDUCATION FOR THE SURGICAL TECHNOLOGIST

The Surgical Technology program at Fayetteville Technical Community College is accredited by the Committee on Allied Health Education and Accreditation. This accreditation decision was made upon the recommendation of the Joint Review Committee on Education for the Surgical Technologist (JRC/ST), which is sponsored by the American College of Surgeons, the American Hospital Association, and the Association of Surgical Technologists.

NATIONAL LEAGUE FOR NURSING (NLN)

The Associate Degree Nursing program of Fayetteville Technical Community College is accredited by the National League for Nursing. This type of approval is national in scope and voluntary rather than required by law. The standards set by the accrediting body are uniform throughout the United States. The achievement of NLN accreditation by a program signifies that it has met the national standards of excellence for programs in nursing of its type.

NORTH CAROLINA BOARD OF NURSING

Fayetteville Technical Community College is approved to offer a two-year associate degree program with a major in nursing and a one-year practical nursing education program. Both programs qualify the graduates to write the National Council Licensure Examination for the respective levels of preparation. Candidates who successfully complete these examinations are licensed to practice nursing.

NORTH CAROLINA COMMUNITY COLLEGE SYSTEM

Fayetteville Technical Community College is chartered by the North Carolina State Department of Community Colleges, as specified in Chapter 115D of the General Statutes of North Carolina.

NORTH CAROLINA DEPARTMENT OF INSURANCE

Fayetteville Technical Community College is approved by the North Carolina Department of Insurance for the purpose of pre-licensing education.

NORTH CAROLINA DEPARTMENT OF PUBLIC INSTRUCTION

Fayetteville Technical Community College's High School Diploma program meets the standards required by the North Carolina Department of Public Instruction for the purpose of awarding high school diplomas.

NORTH CAROLINA REAL ESTATE LICENSING COMMISSION

The North Carolina Real Estate Licensing Commission approves and certifies all fundamental and advanced real estate instructors and approves the following courses:

1. Fundamentals of Real Estate
2. Real Estate Law
3. Real Estate Finance
4. Real Estate Brokerage
5. Introduction to Real Estate Appraisal
6. Valuation Principles and Procedures
7. Application of Residential Property Valuation
8. Introduction to Income Property Appraisal
9. Advanced Income Capitalization Procedures
10. Application of Income Property Valuation

NORTH CAROLINA STATE BOARD OF CERTIFIED PUBLIC ACCOUNTANT EXAMINERS

Fayetteville Technical Community College is approved by the North Carolina State Board of Certified Public Accountant Examiners for the purpose of mandatory Certified Professional Education credits.

SOUTHERN ASSOCIATION OF COLLEGES AND SCHOOLS

Fayetteville Technical Community College is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, Georgia 30033-4097, telephone 404-679-4501) to award associate degrees, diplomas, and certificates.

UNITED STATES DEPARTMENT OF EDUCATION

Fayetteville Technical Community College is recognized by the U.S. Department of Education as being an institution of higher learning and is qualified to receive federal assistance in its higher education programs.

ADMISSIONS POLICIES AND PROCEDURES

Fayetteville Technical Community College adheres to an "Open Door" admissions policy for general admission to the college; however, various curricular programs have their own specific requirements for admission beyond the regular requirements to enter FTCC.

ADMISSIONS REQUIREMENTS

Associate Degree, Diploma, and Certificate Admission Requirements:

1. Applicants must submit an application form, including a residency statement.
2. Applicants must be high school graduates. A state equivalency certificate or GED test results which meet North Carolina equivalency standards are acceptable in lieu of a high school diploma. Official transcripts (those accepted by the Director of Admissions) verifying secondary school completion must be sent to the Director of Admissions, FTCC, P.O. Box 35236, Fayetteville, NC 28303-0236.
3. Applicants who have previously attended any other college or post-secondary institution must request that official transcripts of all work attempted be sent to the Admissions Office.
4. Each applicant is scheduled for the FTCC placement test. Previous school records and placement test results will be used in conjunction with the student's personal aspirations to help plan a workable educational program.
5. The placement test requirements for admission to other than health areas may be waived by the Director of Admissions upon receipt of official transcripts if the applicant:
 - a. has completed 24 hours of transferable college-level course work.
 - b. has taken the SAT with verbal and math scores at or above 450 each or ACT composite score of 18 or higher.
 - c. has earned an Associate Degree or higher from a regionally accredited college and has completed the required prerequisite courses.
6. Certain programs have prerequisite course requirements. In addition to published program requirements, the college reserves the right to identify and require specific prerequisites before allowing students into certain courses. The identification of prerequisite requirements will be through test results and/or transcript evaluation.
7. Students requesting approval for certification of VA educational benefits must provide copies of form DD 214 for evaluation of military experience.

Program Prerequisites

| | High school courses* | | | | Dept. Interview** | Medical Exam*** |
|---|----------------------|---------|---------|-----------|----------------------|--------------------|
| | Alg. I | Alg. II | Biology | Chemistry | | |
| Accounting | X | X | | | | |
| Associate Degree Nursing | X | | X | X | X | X |
| Architectural Technology | X | | | | | |
| Civil Engineering Technology | X | X | | | | |
| College Transfer (Associate in Arts or Associate in Science) | X | X | | | | |
| Dental Assisting | | | X | | X | X |
| Dental Hygiene | X | | X | X | X | X |
| Electronics Engineering Technology | X | X | | | | |
| Emergency Medical Science | X | | X | X | X | X |
| Funeral Service Education | | | | | X | X |
| General Education | X | X | | | | |
| Industrial Management Technology | X | X | | | | |
| Information Systems | X | X | | | | |
| Information Systems/Program | X | X | | | | |
| Machining Technology | X | | | | | |
| Media Integration Technology | X | X | | | | |
| Nursing Assistant | | | X | | | X |
| Paralegal Technology | | | | | X | |
| Pharmacy Technology | X | | X | | X | X |
| Physical Therapist Assistant | X | X | X | X | X | X |
| Practical Nursing | X | | X | X | X | X |
| Radiography | X | X | X | X | X | X |
| Respiratory Care | X | X | X | X | X | X |
| Speech-Language Path. Asst. | X | X | X | X | X | X |
| Surgical Technology | X | | X | X | X | X |
| Surveying Technology | X | X | | | | |

* Grade of "C" or better

** Qualified applicants will be scheduled for a departmental interview.

*** Approved students must provide a completed medical examination form.

8. Health Division Admission Requirements

Persons desiring to enroll in a health program must complete the following prior to January 30th to be considered for admission to the fall class.

- a. Submit a completed "Application for Admissions" to the Admissions Office.
- b. Request official transcripts be sent to the Admissions Office from each high school and college previously attended. It is the responsibility of the applicant to ensure the transcripts are received by the Admissions Office before the deadline.
- c. Complete all program prerequisites.
- d. Complete the COMPASS Placement Test (Reading, Writing, Algebra, Pre-Algebra as appropriate) with the required minimum scores.

All applicants satisfying the above requirements must complete a departmental interview which will be scheduled by the college.

All applicants completing the departmental interview will be notified of their status by letter on or about May 1, whether selected or not.

Selection Criteria

Applicants will be ranked and selected on a competitive basis. Ranking will be determined by the number of points awarded in the following areas.

- a. Grade points based on the transfer credits applicable to the program. A minimum GPA of 2.5 is required on all related work for Associate Degree Nursing, Dental Hygiene, Physical Therapist Assistant, Radiography, and Respiratory Care.*
- b. Rank in high school graduating class. Seniors in the top 15% of their class will be awarded 60 points.
- c. Department interview. 60 points may be awarded.

Applicants selected for admission will be notified by letter from the Admissions Office on or about May 1.

*Science courses must have been completed within five (5) years.

NOTE: Applicants applying for more than one program must indicate their order of choice on the application. Upon approval for admission to a program, an applicant's name will be removed from the applicant pool for all other programs. Applicants not selected for admission and those processed after published deadlines may reapply for the following year and be considered with all other applicants for the next class.

9. ADN Advanced Placement Program

Licensed Practical Nurses may be granted advanced placement into the Associate Degree Nursing Program under the conditions set forth below. Candidates will be admitted based on space availability. The criteria for advanced placement include the following:

- a. Be a currently licensed LPN.
- b. Meet the requirements for admission into the FTCC's ADN Program.
- c. Complete all first year related courses for ADN with an overall GPA of 2.50 or better. A grade of "C" or better is required in related courses.
- d. Pass the National League for Nursing Mobility Profile I, which consists of two tests with passing scores of 70. (Costs of \$37.50 per test must be paid by the student.) Two opportunities will be permitted to pass the tests with a score of 70. Failure to pass the Mobility Profile I automatically excludes the applicant from advanced placement.
- e. Attend an interview with the chairperson of the nursing department.

The candidate's score on the NLN Mobility Profile Test and the overall GPA will be used for selection.

Prior to beginning the second year courses, the candidates must successfully complete a "Nursing Transition" course. This course will facilitate the LPN's transition to the role of the registered nurse and will focus on professional issues, role of the registered nurse, application of the nursing process including assessment skills, and evaluation of nursing skills in the nursing laboratory.

The following nursing skills must be passed with 100 percent mastery:

- a. Vital signs (temperature, pulse, respiration, and blood pressure).
 - b. Urinary catheterization.
 - c. Charting (standard and problem oriented medical records).
 - d. Medications (oral and parenteral).
 - e. Intravenous management.
 - f. Sterile dressing change.
 - g. Sterile gloving.
10. Special Credit (non-matriculating) students may take 16 semester hours prior to taking the placement test. Special credit students must comply with the regular Admissions policy when they decide to pursue a degree, certificate, or diploma. Adults (18 years of age and older) who are not high school graduates may take developmental and professional development courses as special credit students.
11. International students must complete the Admission Application and the International Student Application. Official transcripts, official results of the Test of English as a Foreign Language, a completed pre-entrance medical record, and a completed financial certificate must be submitted to the Admissions Office.

All prospective non-immigrant students will be required to deposit funds equal to the first year expenses prior to approval and issuance of the form I-20.

COMMUNICABLE DISEASE POLICY

Under the FTCC Communicable Disease policy, students who enter a health program or other program with potential exposure to blood or other body fluids will be required to have begun or completed all immunizations as specified in the pre-entrance medical record prior to admission. Those students who do not receive immunizations could jeopardize their ability to fulfill clinical requirements. The prospective student will also be required to sign a statement releasing FTCC from any liability related to the failure to have the immunizations.

ADMISSION OF TRANSFER STUDENTS

Students who have attempted course work at other colleges and universities must submit official transcripts of all post-secondary work. Transcripts will be reviewed during the admissions interview and transfer credit awarded according to the following criteria:

1. Prior course work must be equivalent to FTCC courses required in the degree or diploma program being sought.
2. Course work must have been completed at a regional association accredited college (i.e., Southern Association of Colleges and Schools or regional counterpart) or an institution holding professional area accreditation status (ABET, ABA, ADA, AMA, etc...).
3. Course work must have been completed with a grade of "C" or better.
4. Major subject area transfer credit must be approved by the departmental chairperson.
5. Transfer students must complete a minimum of 25 percent of resident credit at FTCC to be eligible to receive an associate degree, unless he or she is a SOCAD participant.
6. A record of transfer credit awarded is available on the FTCC student educational plan provided at the time of approval. Official FTCC transcripts will not be provided until the student has completed the first term of enrollment at the college.

CREDIT FOR NON-TRADITIONAL LEARNING

FTCC will evaluate non-traditional educational records for the possible transfer of credits. Full documentation must be provided, and transfer of credit for non-traditional work is limited to no more than 75 percent of the AAS degree or diploma requirements. Non-traditional learning may include advanced placement examinations, military service training, industrial and professional training, or proficiency tests (see "Grading System" for more details).

Students who change curriculums transfer credit for applicable courses taken and passed in the previous curriculum; all credits considered must be applicable to the instructional field and approved by the department chair and appropriate academic dean.

1. Advanced Placement Examinations

Applicants to the college may request transfer credit for subjects covered under advanced placement examinations. CLEP and DANTES General Exams and Subject Area Exams are evaluated for transfer credit. Test scores must meet ACE (American Council on Education) recommendations. Advanced credit awarded at prior colleges must be supported by official test score reports to be considered for transfer credit.

2. Experiential Learning

FTCC does not consider experiential or life experiences for transfer credit evaluation.

3. Proficiency Tests

FTCC students who plan to challenge* a curriculum level course must contact the department chairperson of the appropriate department to request a proficiency examination. Proficiency tests are given under the following conditions:

- a. Students who have passed a preliminary screening test given by the department chairperson may take a proficiency exam.
- b. Students must be registered for the course in order to take a proficiency exam.
- c. Proficiency exams must be taken within the first four class days of the term.
- d. Students who pass a proficiency exam at the "C" grade level or above will be assigned a "P" grade and will not be required to attend further class sessions.
- e. Veteran students and other third party recipients may not use courses passed by proficiency for the purposes of educational entitlement. Students who pass a proficiency test are encouraged to add additional courses in order to maintain full-time status.

*CLEP examinations will be the required proficiency test where available. Students will be referred to area CLEP examination sites for testing when appropriate.

4. Tech Prep Advanced Placement

Cumberland County high school graduates who participated in the Tech Prep program will be awarded proficiency credit based upon the recommendations of the Cumberland County Tech Prep Curriculum Development Committee. Credit for FTCC course work will require completion of the designated high school course(s) with a minimum grade of "C."

5. SOCAD

Fayetteville Technical Community College is a Serviceman's Opportunity College (SOC) and supports the concept that military personnel should be encouraged to begin their post-secondary education while serving their country. FTCC also participates in the SOCAD network with degree completion programs available to the serviceman in Accounting; Air Conditioning, Heating, and Refrigeration Technology; Associate in Arts; Associate in Science; Business Administration; Criminal Justice Technology; Information Systems/Programming; Culinary Technology; General Education; General Occupational Technology; Industrial Management Technology; and Paralegal Technology.

RE-ADMISSION OF FORMER STUDENTS

Any student who withdraws from the college and wishes to return must contact the Admissions Office to reactivate his/her application for admission.

1. A student who withdrew for unavoidable reasons may be eligible for re-admission at the beginning of the next term.
2. A student who was suspended for unsatisfactory academic progress is required to re-apply for re-entrance through the Admissions Office. Re-admissions decisions will then be made by the Admissions Office based upon a review of previous grades, consultation with instructors and department chairpersons involved, additional achievement and/or interest testing, and interviews to determine the reasons for unsatisfactory progress. In cases where the probable causes of unsatisfactory progress while previously enrolled have not been removed, re-entry to curricular studies may be denied or re-entry approved under specific conditions which can include change of curriculum, remedial course work, and probationary status.
3. A student who was dismissed from the college by disciplinary action may re-enter only upon approval by the program area dean.
4. A student who withdraws from the institution and re-enters at a later term, including students who have completed at least one or more terms, will be subject to curricular requirements in effect for the following fall term. In cases where students re-enter at the beginning of fall term, they are subject to the requirements of the curriculum at the fall term re-entry.
5. Any student indebted to the institution is ineligible to re-enter until all financial obligations to the institution have been satisfied.

COLLEGE EXPENSES

Tuition and fees are assessed on a semester basis and are due at registration. Payments may be made by cash, personal check, VISA, or MasterCard. Second party checks, counter checks, checks without printed name and address, and checks in excess of actual costs are not accepted. A student is not considered as registered until fees are paid.

Estimated costs* for an academic year (9 months) are shown below. Estimates are based on 97-98 tuition costs and a course load of 14 credit hours. A student is considered full-time if he/she is taking 12 or more credit hours.

All students will be charged a student fee.

In-state tuition: \$280.00 per term or \$560.00 (2 terms)

Under 14 hours: \$20.00 per credit hour

Out-of-state tuition: \$163.00 per credit hour, through 13 hours
\$2282.00 for 14 or more credit hours

Books (estimated): \$300.00 per term

Tuition and fees may change because of legislative or institutional policy subsequent to publication of the Catalog.

*Estimates exclude board and room, child care, and transportation costs, if any.

Other fees:

1. Additional expenses required to cover uniforms, instruments, tools, malpractice insurance, and dues to student associations are detailed in the institution's recruitment brochures.
2. Parking stickers are issued upon payment of tuition and fees. Students are held responsible for all parking regulations as stated in the Rules and Regulations Bulletin.
3. All students are charged a student fee of \$9.25 per semester. This fee covers the cost of student accident insurance, health services, student government activities, and other student-related activities.
4. All prospective graduates will be charged a graduation fee of \$25.00.
5. A replacement fee of \$5.00 will be charged for lost or stolen ID cards.

FINANCIAL AID

Fayetteville Technical Community College operates with the assumption that no student should be denied a college education due to lack of financial resources. As far as possible, students are aided in meeting college costs through careful planning and various forms of financial aid and other third-party support.

The Financial Aid Office at FTCC administers the various Title IV financial aid programs under policies established by the college and guidelines provided by the U.S. Department of Education. The College Financial Aid and Scholarship Committee recommends policy changes and awards a variety of scholarships.

Financial aid at Fayetteville Technical Community College is offered to all students enrolled in eligible curricula who meet eligibility requirements. Most aid is granted on the basis of need rather than scholastic ability. The Financial Aid Office utilizes the Free Application for Federal Student Aid (FAFSA) to analyze applicant data and determine student eligibility for financial aid.

All applicants and FTCC students are urged to apply for financial aid. The FAFSA application package is available in the FTCC Financial Aid Office and should be completed as early as possible. Applicants are urged to read the directions carefully and fill out the form completely and accurately. The FAFSA form covers all forms of financial aid offered at the college with the exception of scholarships.

Various resources are available through the Financial Aid Office located in Room 130 of the Student Center.

RESIDENCY CLASSIFICATION FOR TUITION PURPOSES

Every applicant is required to provide information regarding his or her length of residency in North Carolina. The tuition charge for legal residents of North Carolina is less than for non-residents attending Fayetteville Technical Community College. To qualify for in-state tuition, a legal resident must have maintained his or her domicile in North Carolina for at least twelve months prior to his or her classification as a resident for tuition purposes. Copies of the applicable law (G.S. 116-143.1) and implementing regulation are available in the Admissions Office. Initial classification of residency for tuition purposes is made in the Admissions Office. Appeals and requests for re-classification should be addressed to the Director of Admissions.

Responsibilities of the Student Relative to Residency Classification:

1. If you currently are classified as a nonresident for tuition purposes, it is your right to petition for a change in classification to that of resident if you claim that you are now and, for at least the twelve-month period immediately preceding the date of such petition, have been a legal resident of the State of North Carolina. The fact that you have resided in the state for twelve months does not in itself constitute in-state residency. You must be able to show proof that you have indeed taken steps to become a legal resident. Examples are: filing income tax in North Carolina, registering for voting, listing personal property taxes, automobile registration, etc.
2. If you currently are classified as a resident for tuition purposes, it is your obligation to petition for a change in classification to that of a nonresident if you have reasonable basis for believing that change in facts requires such a change in classification. Failure to fulfill this obligation may result in appropriate disciplinary action including, but not necessarily limited to, cancellation of enrollment. If it is determined that, in fact, you have become a nonresident, the effective date of change in applicable tuition rates shall be the next term following the date of change in facts which required the change in classification, unless you are deemed eligible to further enjoy the in-state tuition rate under the statutory twelve-month grace period. If you claim eligibility as a member of the Armed Forces or a dependent relative of such a member to be charged the in-state tuition rate under G.S. 116-143.3, you must submit the appropriate application prior to initial enrollment or re-enrollment for which

you claim the tuition benefit. You must submit the application prior to each successive academic year of enrollment.

3. North Carolina laws require that each student supply all information requested relative to residency classification for tuition purposes. Failure to do so would result in classification as a nonresident for tuition purposes.

STUDENT INSURANCE

All students, either full- or part-time, who are charged a student fee are covered by a master student accident insurance plan carried by the college. Students are insured while attending school during the hours that school is in regular session or participating in or attending an activity (other than an athletic activity) exclusively sponsored and supervised by the college, and traveling directly to or from such activity (other than an athletic activity) in a vehicle furnished and supervised by the college.

Students participating in athletic activities which are a part of their regularly scheduled instruction are covered by this insurance. Students participating in organized intramural sports are also covered.

The student accident insurance plan does not guarantee payment of all medical costs, and the student is responsible for the payment of all costs in excess of those paid by the insurance policy. A copy of the student accident insurance plan for the college is available in the Health Services Office.

TUITION WAIVERS

1. Senior citizens aged 65 or over are entitled to free tuition.
2. High school students enrolled in a community college curriculum class under Huskins Bill Programs or concurrent enrollment provisions are exempt from tuition.
3. When an employer, other than the armed services, pays tuition for an employee to attend a community college and when the employee works at a North Carolina business location, the employer is charged the in-state tuition rate.
4. Out-of-state service members and their family members stationed at a North Carolina base are eligible to be charged the in-state tuition rate. This waiver is for the academic year. Continuing students must re-apply each fall term.
5. Certain out-of-state students who are members of families that were transferred to North Carolina by businesses or industries, or civilian families transferred to this state by employment, may be eligible for in-state tuition rates.

REFUND POLICIES

Tuition Refunds

A 75 percent refund may be made upon request of the student if the student officially withdraws from the class(es) prior to or on the official 20 percent point of the class(es) or the 20 percent point of the term if the student officially withdraws from the college.

To comply with applicable federal regulations regarding refunds to individuals or groups, federal regulations will supersede the state refund regulations stated in this rule.

Bookstore Refunds

Bookstore refunds are made under the following conditions:

1. Students are allowed ten (10) calendar days beginning with the first day of the term to return textbooks for refund or credit.
2. Books which have not been used, damaged, or marked in will be accepted for 100 percent refund or credit toward the purchase of additional items. Proof of purchase (cash register receipt) must be shown.
3. All refunds will be made by check mailed to the individual student. No cash refunds will be made.

ALUMNI ASSOCIATION

The Alumni Association of Fayetteville Technical Community College was officially founded in November 1984. The purpose of the organization is to foster a mutually beneficial relationship between the college and its graduates.

Each member enjoys the benefits of continued use of campus resources such as the library and job placement, the receipt of a newsletter, and involvement in cultural and social activities on campus. There are no membership dues assessed.

The activities and growth of the Alumni Association are guided by a 12-member Board of Directors who are elected from within the membership.

The members of the Alumni Association are dedicated to advancing the growth and development of their alma mater and to helping each other become better, more productive people. They share a pride in the past with a focus on the future.

STUDENT ACTIVITIES

Student activities are an integral part of the total development of students at Fayetteville Technical Community College. Through participation in these activities, students receive practical experience in the responsibility of citizenship. All students are encouraged to participate. Intramurals, club membership, educational, cultural, and social events are provided. Activities are open to all students without regard to race, color, national origin, religion, sex, age, handicap, or political affiliation.

STUDENT GOVERNMENT ASSOCIATION

The Student Government Association represents the student body in institutional affairs at Fayetteville Technical Community College. Members of the Student Government Association are assigned to serve as members of an institutional standing committee. The president of the Student Government Association serves on the FTCC Steering Committee. The president, as head of the student body, also serves as an ex-officio member of the FTCC Board of Trustees.

STUDENT DEVELOPMENT

The Office of Student Development at Fayetteville Technical Community College is located in the Student Center. Counselors are available to assist students from 8:00 a.m. to 7:00 p.m. each day, Monday through Friday.

Students, faculty, and staff who need assistance should feel free to contact staff personnel in the Student Development Office.

Students are urged to come to the Student Development Office any time during school hours. A counselor will be available to assist all students with career plans, personal concerns, or educational counseling.

The Student Development Staff is responsible for the following functions:

- | | |
|-------------------------------------|----------------------------|
| 1. admissions | 7. health services |
| 2. alumni or follow-up coordination | 8. new student orientation |
| 3. career development | 9. recruitment |
| 4. counseling | 10. registration |
| 5. financial aid | 11. student activities |
| 6. graduate job placement | 12. student housing |
| | 13. testing |

The foregoing services are provided to assist students in achieving their educational goals as quickly as possible. Students should feel free to come in any time for assistance.

CAREER DEVELOPMENT

Assistance with the development of realistic career goals and plans is available through the Career Center. Through the Career Center an individual can talk with a trained counselor and work jointly in solving problems associated with career choices, daily choices, and educational planning. The Career Center offers information on career-related topics, including job descriptions, duties, working environments, earnings, minimum entry skills, and the education and training required for entry into the job market. Special testing, including aptitude and achievement tests, is utilized to aid the career development process. Career Center services are available to students, staff and faculty, and members of the community.

COOPERATIVE EDUCATION

Cooperative Education offers an extension and application of classroom instruction through a supervised work experience that is related to the student's educational goals. It is an educational plan designed to use the "laboratories of the community" in business, industry, and civic agencies to the best advantage of the students, the college, and the employers.

The principle of this concept is that classroom instruction along with practical experience is the most effective way to obtain a balanced education. The program is designed to provide the necessary tools to prepare the student for the transition from school to work.

COUNSELING SERVICES

Counseling Services, located in the Student Center, offers a variety of services free to all students, Monday through Friday, from 8:00 a.m. to 7:00 p.m. Students are seen on a walk-in basis, or appointments may be made in person or by calling 678-8419.

Staff: The counseling staff is composed of competent professionals with extensive training in counseling and guidance, who are experienced in assisting students in developing skills and attitudes needed to deal effectively with their surroundings. Responsibilities of counseling are shared equally between counselor and student, and the counselor respects the ability of the individual to make realistic choices among options presented.

Admissions Counseling: Counselors interpret test data, review transcripts, make course recommendations, and assist students in viewing alternatives as they prepare to enter Fayetteville Technical Community College. This process may involve career counseling. In such cases,

counselors assist students in making a thorough self-appraisal of interests, abilities, and personality traits so that they may utilize this information in making a wise career choice. Additional career/vocational counseling services are available through the Career Center, Room 113, Student Center.

Educational Counseling: Students who are uncertain regarding their major course of study or who are experiencing academic difficulty are aided in making more meaningful academic choices.

Personal Counseling: Many students have personal concerns which may interfere with their academic success. The counseling staff provides an atmosphere in which students may discuss problems with the assurance that all counseling information is confidential and would be released only with the student's written consent.

Group Counseling: Counseling Services provides a variety of small group experiences ranging from personal growth groups, to study skills groups, to career decision-making workshops. Students who wish to improve communication or interpersonal skills may participate in growth groups where they can experiment with new types of behavior in a safe and accepting environment. For those students experiencing academic difficulty, study skills groups provide instruction and supervised activity designed to improve study skills and habits. Students can gain insight regarding their interests, abilities, and decision-making styles, as well as the world of work, while participating in career decision-making workshops.

Referrals: Those students with long-term counseling needs or serious problems, such as personality disorders which require special treatment, are referred to appropriate agencies.

FACULTY ADVISEMENT

The Faculty Advisory System at Fayetteville Technical Community College is an integral part of the instructional and student development programs of the college. The system is designed to provide the student with current and complete information, assistance with procedural tasks, and educational program planning. Advising is done in a caring and compassionate manner by willing and able faculty. For this system to work best, you must establish a mutual relationship with your advisor that will help you increase your chances for academic success.

HEALTH SERVICES

Health services at FTCC are handled by the Health Services Coordinator. Basic first aid is available and students are referred to an area health care facility when treatment is required. Health counseling is provided by a trained staff member. The Health Services Coordinator will act as a referral agent as necessary. Each shop and lab is equipped with first-aid kits.

JOB PLACEMENT

The Placement Office is available year round to assist graduates entering the job market. The Placement Office maintains placement records on students, initiates contacts with prospective employers, arranges and coordinates job interviews between students and employer representatives, and maintains current information on employment opportunities including salaries. Follow-up studies of FTCC graduates are conducted yearly in order to provide current information on graduate placement, including type of employment, geographic location, and salary scale.

A list of part-time jobs available locally is posted on the Placement Office bulletin board for student use.

STUDENTS WITH DISABILITIES

The college recognizes its responsibility under Section 504 of the Rehabilitation Act of 1973 to provide equal access to education for students with disabilities. Support services are available to the hearing impaired, visually impaired, orthopedically handicapped, learning disabled, and other health impaired individuals.

1. Students who feel that they need accommodations due to a disability or handicap must complete a "Special Populations Student Intake" form indicating the nature of their disability.
2. Students who have identified themselves as having special needs may make a request for special accommodations to the Coordinator for Special Populations or the Director of Counseling. This must be done at least 30 days prior to the first day of the term.
3. Students must arrange to provide supporting documentation upon request. Federal regulations obligate the student to provide information on identifying appropriate and effective auxiliary aids.
4. Each request will be evaluated by the Coordinator for Special Populations and/or the Director of Counseling, who will recommend any modifications to the educational plan that are essential to satisfactory completion of course requirements by the student according to the ADA guidelines.
5. The Coordinator for Special Populations and/or the Director of Counseling will provide the student with a "Disabled Student Enrollment" form which lists recommended services and/or accommodations. This document is to be used to inform college faculty and staff of authorized accommodations.

For further information and assistance, contact the Counselor for Students with Disabilities.

STUDENT HOUSING

As a member of the North Carolina Department of Community College System, FTCC does not provide student housing. Assistance is available in locating living arrangements in the community. Students in need of housing should contact the Director of Admissions. Financial arrangements for rooms are on an individual basis between the student and the landlord.

LEARNING RESOURCES CENTER

The Learning Resources Center contains a collection of carefully selected printed and nonprinted materials to support and enrich instruction. Components of the Learning Resources Center are the Library, the Learning Laboratory, and Media Services.

The Library provides excellent facilities for study, research, browsing, self-improvement, and enjoyment. The Library houses over 50,000 volumes of books and subscribes to several electronic indexes as well as 300 current magazines and newspapers. Back issues of periodicals are available in bound volumes, unbound issues, and on microfilm. Audiovisual software, such as films, filmstrips, records, cassette tapes, slides, and microfilms are available in the Library, as is the space and equipment necessary to use these materials. The Library also has available for students use electric typewriters and copying machines. The Library has the capacity to provide computerized literature searches of the Dialog data bases. The staff is always ready to instruct students in the use of the automated catalog and to assist them in finding information here or at other institutions through interlibrary loans.

The Learning Lab/Skills Lab is a service facility available to the student body and any adult in the community. The Lab offers a wide selection of subjects and materials in a variety of formats including computer software, cassettes, filmstrips, and texts. The Learning Lab/Skills Lab supports courses and programs on campus and in the community. It is an excellent place to prepare for any academic endeavor or to get assistance in current studies. The Learning Lab offers several state approved courses for teacher renewal credit. This comprehensive facility specializes in individualized teaching at the level of need.

Media Services provides a qualified staff and excellent facilities to support the instructional programs with materials production and equipment. Equipment that circulates is controlled through Media Services. Students in need of assistance for class assignments, projects, or presentations should contact Media Services through an instructor.

The Learning Resources Center has a seating capacity of over 300 with study arrangements to meet student needs. The Learning Resources Center strives to make available all types of media for enjoyment, enrichment, and instructional purposes for the student body, the faculty, the staff of Fayetteville Technical Community College, and the community.

ACADEMIC POLICIES

Credits

1. All curricular students receive semester-hour credit for courses which they successfully complete.
2. The Board of Trustees of Fayetteville Technical Community College has been authorized by the North Carolina Board of Community Colleges to award the Associate in Arts, Associate in Science, Associate in Applied Science Degree, Associate Degree in General Education, the Diploma, and the Certificate upon successful completion of curricular requirements.
3. Fayetteville Technical Community College has structured its curricula, of both one and two years' duration, on a post-secondary level and grants credit on a semester-hour basis. Instruction in all curricula is post-secondary and requires students to be capable of study beyond the high school equivalency level for success. The curricula are designed on a semester-hour basis to include general education areas which require extra out-of-class preparation each term. Each class, lab, and shop session is of 50 minutes duration and requires a minimum of outside preparation of two hours for each classroom session, one hour for each lab session, and additional outside preparation for shop sessions. Semester-hour credit is granted on a basis of one credit to three sessions of shop, one credit to two sessions of lab, one credit to each classroom session of weekly attendance, and one credit to ten hours of cooperative work experience or practicum.
4. Students with academic deficiencies who require remedial work as background preparation may enroll in Developmental Studies. These Developmental Studies courses carry credit hours for institutional accounting purposes only and are not counted as credit hours toward graduation in any of the curricula.

Class Repeat Rules

Students should not repeat courses previously passed with a "C" or better. Students who fail a required course will be required to repeat the course. Both grades made on a given course will be counted on the student's total quality point average.

Veterans should be aware that they cannot receive VA benefits for duplication of courses previously passed with a grade of "D" or higher with the exception of remedial/deficiency course(s) or program requirements as currently published.

Classification of Students

Full-time student: A student enrolled for 12 or more semester hours.

Part-time student: A student enrolled for fewer than 12 semester hours.

Freshman: A student who has fewer than the number of semester hours required for the first two terms.

Sophomore: A student who has accumulated credits of 30 or more total credit hours.

Independent Study

Independent Study may be conducted through (1) regularly scheduled TV transmissions/cable educational programming and/or (2) modem-based instruction.

A student who wishes to enroll in an approved Independent Study course(s) must: (1) be an approved curriculum student, (2) have a cumulative grade point average of 2.00 or higher, (3) need the requested course for graduation, and (4) submit a "Request for Independent Study" to the office of the appropriate academic dean.

Students participating in Independent Study course work will be evaluated by the assigned faculty member in accordance with established grading policies. Students will be required to maintain satisfactory progress and to maintain regular contact with the instructor. Students who withdraw or otherwise fail to complete an independent study course within the scheduled term will be dropped as of the last date of contact with the instructor.

A list of courses approved for Independent Study through television programming is printed in the current class schedule(s).

Schedule Adjustments

1. Students may add a class within the first five school days (two days for summer terms) of any term if the class has not met.
2. A student may drop a class as late as the 30 percent date of the class without penalty. The transcript will indicate a "WD." Students who drop after the 30 percent point of the class will be assigned a grade of "WF" unless they withdrew due to "extenuating circumstances" as determined by the appropriate program area dean.
3. All students who drop must follow the instructions listed in the current *Student Handbook* under "withdrawals."

Withdrawals

Once a student has duly enrolled in a class and paid the registration fee, the student shall maintain membership in said class, until one of the following occurs:

1. Student Withdrawal - He/she officially withdraws. This constitutes student withdrawal and is effective as of that date.
2. Administrative Withdrawal
 - a. He/she ceases attending class. Students who are absent for more than 20% of scheduled class sessions may be dropped from the class rolls.
 - b. The responsible instructional personnel are reasonably assured that the student does not intend to pursue the learning activities of the class. This constitutes administrative withdrawal and is effective as of that date.
 - c. He/she completes the minimum objectives stated for the class or transfers to another class.

A student who wishes to withdraw must complete a "Registration Change" form, have it initialed by the faculty member, and present it to the Registrar before an official withdrawal can be recorded. Failure to comply with this procedure will result in a grade of "WF."

Students who are dropped for excessive absences prior to the 30 percent point of the class will be assigned a grade of "WD."

Failure to withdraw properly will jeopardize the student's right to re-enroll at a later date.

GRADING PROCEDURES

FTCC grades are based on a 4.0 grading system. Each grade is assigned a "grade-point equivalent" in quality points for each term credit hour scheduled. The scholastic point average is determined by dividing the total of quality points earned by the number of term hours scheduled.

| Numerical Grade | Grade | | Grade Point Equivalent |
|-----------------|-------|---------------------|---------------------------------------|
| 93 - 100 | A | - Excellent | 4 quality points for ea. credit hr. |
| 85 - 92 | B | - Good | 3 quality points for ea. credit hr. |
| 77 - 84 | C | - Average | 2 quality points for ea. credit hr. |
| 70 - 76 | D | - Below Avg. | 1 quality point for each credit hr. |
| 0 - 69 | F | - Failure | 0 quality point |
| | I | - Incomplete | After six weeks becomes an F |
| | AU | - Audit (No Credit) | 0 quality point (not computed in GPA) |
| | P | - Proficiency | |
| | T | - Transfer | 0 grade point |
| | W/D | - Withdrew | No effect on grade point average |
| | W | - Withdrew | No effect on grade point average |
| | W/F | - Withdrew Failing | 0 quality point |

All final course grades will be letter grades in accordance with the adopted grading system. Student grade reports are mailed at the end of each term.

All students must have at least a 2.0 grade point average (major GPA) and have passed all curricular subjects as listed in the course outline under which they entered to be eligible for graduation. They must also meet the grade level needed in major subjects required to take licensure examinations.

Health occupations curricula, Funeral Service Education, and Paralegal Technology require course grades of C or better in order to progress to the next course/term. Each department area will issue to the student, in written form, the necessary information to cover such grading policies.

HONORS AND AWARDS

Any student who has earned a quality point average of 4.0 at Fayetteville Technical Community College will be granted a diploma or degree with highest honors. Any student who has earned a quality point average of 3.5 will be granted a diploma or degree with honors. A seal of recognition will be placed on the student's degree or diploma, and the student's transcript will be noted to reflect this achievement.

President's List

The President's List is published at the end of each term to honor students with a perfect grade point average.

1. Students must be approved for a curriculum, excluding Developmental Studies.
2. Students must make a final grade of "A" on a minimum of 12 credit hours of curricular work.
3. Students must earn a 4.00 GPA on a minimum of 12 credit hours. The formula used to calculate this 4.00 GPA excludes the following grades: P, AU, WD, WP.
4. Students are NOT eligible for consideration until all course work is completed for the term.

Dean's List

The Dean's List is published each term to honor those students with an outstanding grade point average.

1. Students must be approved for a curriculum, excluding Developmental Studies.
2. Students must make a final grade of "A" or "B" on a minimum of 12 credit hours of curricular work.
3. Students must earn at least a 3.5 GPA on a minimum of 12 credit hours. The formula used to calculate this minimum 3.5 GPA excludes the following grades: P, AU, WD, WP.
4. Students are NOT eligible for consideration until all course work is completed for the term.

Ambassadors

Each academic year, Fayetteville Technical Community College chooses eight students to serve as ambassadors. The ambassadors act as official hosts and hostesses for various campus events. All ambassador candidates must:

- have completed 12 hours at FTCC.
- have a minimum 2.5 GPA.
- be recommended by three members of the college community.

Marshals

Marshals are selected and given the privilege to lead the academic procession during graduation exercises. The selection of marshals is a competitive process based on academic averages. Marshals must be second-semester freshmen in a two-year curriculum.

Trox Poland Memorial Award

The Trox Poland Memorial Award is presented to an outstanding student at the spring graduation exercises. The criteria set forth for this award are as follows:

1. Student must have a minimum overall grade point average of 3.00.
2. Student must have been in continuous enrollment on a full-time basis at FTCC during the year of nomination.
3. Student will be selected during the spring term of his/her year of graduation at FTCC.
4. Student will be judged on “attributes” and “contributions” while attending FTCC.
5. Student should demonstrate a genuine concern for FTCC and its role in the community. In addition, he/she should exhibit and promote good student morale.

Outstanding Student Award

Each year an outstanding student is honored at the summer graduation with a special award. The criteria for this award are:

1. Student must have a minimum 3.00 overall grade point average.
2. Student must be in continuous enrollment during the year of nomination.
3. Student must be nominated by a faculty member from his/her curricular area.
4. Student will be selected during the summer term of his/her year of graduation.
5. Student will be judged on “attributes” and “contributions” while attending FTCC.

REQUIREMENTS FOR GRADUATION

To be eligible for graduation, the student must:

- successfully complete the curricular requirements in effect at the time the student entered the curriculum.
- have sufficient quality points to average 2.0 (major GPA).
- have passing grades in all required courses.
- have paid ALL financial indebtedness to Fayetteville Technical Community College, including a graduation fee.

- fill out an application to graduate at a time designated. Failure to do so may result in diplomas not being available at the time of graduation. The college assumes no responsibility for making special adjustments for students who fail to file applications by the designated time. A candidate who fails to file an application for graduation or meet graduation requirements by the designated date automatically voids his candidacy for that particular graduation.

Substitution of courses for graduation purposes is limited to 10 percent of the total credit hours required to graduate and must be approved by the department chairperson and the program area dean. All exceptions to the 10 percent limit must be approved by the Associate Vice President for Student Services.

Electives taken by students under VA educational benefits may exceed the total required hours of a curriculum only by the hours of the last elective taken to fulfill those requirements.

STANDARDS OF PROGRESS

Academic Standards

The college requires that students maintain a grade point average of 2.0 or better in order to meet institutional standards of progress and be eligible for graduation.

Academic Probation

Students enrolled in a curriculum program will be placed on Academic Probation if any of the following conditions occur:

1. Cumulative major GPA is below 2.0, or
2. Failure to successfully complete 50% of credit hours attempted for two consecutive terms.

Note: All students are responsible for being aware of any additional departmental requirements.

To be removed from Academic Probation, a student must attend mandatory counseling sessions and achieve a cumulative major GPA of 2.0 while completing 50% of credit hours attempted. Students on probation should not enroll in accelerated sessions (8-week cycles, etc.) without advisor approval. A student on academic probation would be eligible to continue enrollment for no more than 24 semester hours.

A student simultaneously enrolled in developmental coursework and major courses will be placed on Academic Probation if either condition above occurs or if the student fails to complete a required developmental course with a grade of "C" or better.

To be removed from Academic Probation, a student enrolled in developmental course work must attend mandatory counseling sessions and successfully complete required developmental

courses with a grade of “C” or better. Students on Academic Probation may not enroll in any course requiring a developmental prerequisite without first completing the developmental course(s).

Academic Suspension

Students failing to remove themselves from Academic Probation after attempting 24 semester hours will be placed on Academic Suspension for a minimum of one semester. Academic Suspension means a student may not enroll in any credit courses offered by FTCC during the suspension period.

Appeal of Academic Probation and Suspension

To be removed from Academic Suspension and continue in the same program, a student must apply for readmission through the Director of Admissions and be approved by the department chairperson in order to re-enroll. When readmitted to the same program, a student will be placed on Academic Probation and must achieve a 2.0 GPA for the course work attempted while successfully completing at least 50% of the credit attempted. Students who do not achieve these requirements will be dismissed from the college as ineligible to re-enter that same curriculum program. Students may also be readmitted to the college by redirection of program through counseling.

Appeals of the decision of the department chair or Director of Admissions may be made to the appropriate program area dean. All appeals must be in writing and received no later than five days from the time of notification of the readmission decision. Students placed on Academic Suspension may be allowed to continue attending class until the appeal has been resolved. The decision of the dean in matters of academic probation and academic suspension is final and not subject to further appeal.

GENERAL COMPETENCIES FOR FTCC GRADUATES

The following competencies were developed within the framework of Fayetteville Technical Community College’s purpose statement, which reflects the institution’s desire to meet the needs of its students and the surrounding community. Students who graduate from FTCC’s degree and diploma programs should be able to:

- communicate effectively in speaking, writing, reading, and listening.
- perform technical skills in their chosen occupation.
- use information to analyze problems and make logical decisions.
- demonstrate positive interpersonal skills in various aspects of life.
- demonstrate quantitative competencies.
- demonstrate basic skills in using a personal computer.

STUDENT OBLIGATIONS

Attendance Policy

Regular class attendance is an essential part of the education process; therefore, absences must be kept to a minimum. While stressing regular attendance, FTCC simultaneously desires to allow students to develop a real sense of personal responsibility toward their studies. This policy has been established for the benefit of students who are forced, because of reasons beyond their control, to miss classes.

1. Instructors will make every effort to advise students who have missed more than 10 percent of a course that their standing in class is in jeopardy. **Students who add a course after the first day of the class are responsible for all materials covered from the beginning of the course.**
2. Instructors are encouraged to refer students with excessive absences to the Counseling Office.
3. Each student is expected to attend class regularly--at least 80 percent of all scheduled contact hours.
4. If absences exceed 20 percent, the faculty member may drop the student from the course, or if the student is performing acceptably, he or she may be allowed to continue in the course under conditions set by the instructor.
5. Tardy students interrupt the beginning of a class meeting. If a student enters the class after the faculty member has started the class, the student shall be recorded as being tardy. Three tardies shall be counted as one absence.
6. No absence, for any reason, shall excuse a student from an announced test or other assigned activity. Make-up of any tests or work missed shall be at the discretion of the faculty member.
7. Each student dropped may submit a request through the Director of Counseling for review by the Student Appeals Committee.
8. The following programs and departments have special attendance policies which will be distributed to the students during the first week of classes: Associate Degree Nursing, BLET, Dental Assisting, Dental Hygiene, Emergency Medical Science, Emergency Medical Technician (Continuing Education), Fire Academy (Continuing Education), Nursing Assistant, Pharmacy Technology, Phlebotomy Training (Continuing Education), Physical Therapist Assistant, Practical Nursing, Radiography, Respiratory Care, Speech-Language Pathology Assistant, and Surgical Technology.
9. The following programs require that a student complete the stated course work with a grade of "C" or better in order to progress to the next course/term:
Associate Degree Nursing - C or better in all major and science courses. Satisfactory grade in clinical.
Emergency Medical Science - C or better in all major and science courses. Satisfactory grade in clinical.
Funeral Service Education - C or better in all FSE courses and ACC 170, BUS 115, and PSY 141.

Nursing Assistant - C or better in all major courses.
Paralegal Technology - C or better in all LEX courses.
Pharmacy Technology - C or better in all major and science courses.
Physical Therapist Assistant - C or better in all major and science courses.
Practical Nursing - C or better in all major and science courses.
Radiography - C or better in all major and science courses.
Respiratory Care - C or better in all major and science courses.
Speech-Language Pathology Assistant - C or better in all major and science courses.
Surgical Technology - C or better in all major and science courses.

GENERAL STUDENT REGULATIONS

The total educational program of the college is designed to assist the student to reach his/her highest level of potential in personal development. Each curriculum is designed as a vital part of that development, and the successful completion of all course work will enhance the probability of good job placement. Each out-of-class activity is designed to provide the best opportunity for social development as a part of overall training.

In order to maintain a climate supportive of learning, adherence to certain rules and regulations is expected of students. The program area deans are responsible for administrative discipline of students.

Students are required to have in their possession at all times an FTCC ID card and to display such card upon request.

Student Code of Conduct

The college reserves the right to maintain a safe and orderly educational environment for students and staff. Therefore, when, in the judgment of college officials, a student's conduct disrupts or threatens to disrupt the college community, appropriate disciplinary action will be taken to restore and protect the orderliness of the FTCC community.

Students are expected to conduct themselves in accordance with generally accepted standards of scholarship and conduct. The purpose of this code is not to restrict student rights but to protect the rights of individuals in their academic pursuits.

The following regulations set forth rules of conduct which prohibit certain types of student behavior. Violation of one or more of the following regulations may result in one of the sanctions.

1. Academic Dishonesty - taking or acquiring possession of any academic material (test information, research papers, notes, etc.) from a member of the college staff or student body without permission; receiving or giving help during tests; submitting papers or reports (that

are supposed to be original work) that are not entirely the student's own, except in cases of group assignments; not giving credit for others' work (plagiarism).

2. Theft of, misuse of, or damage to college property, or theft of or damage to property of a member of the college community or a campus visitor on college premises or at college functions; unauthorized entry upon the property of the college or into a college facility or a portion thereof which has been restricted in use and thereby placed off limits; unauthorized presence in a college facility after closing hours.
3. Possession of or use of alcoholic beverages or being in a state of intoxication on the college campus or a college-sponsored or supervised functions off campus or in college-owned vehicles. Possession, use, or distribution of any illegal drugs, except as expressly permitted by law. Any influence which may be attributed to the use of drugs or of alcoholic beverages shall not in any way limit the responsibility of the individual for the consequences of his/her actions.
4. Lewd or indecent conduct, including public, physical, or verbal action or distribution of obscene or libelous written material on the FTCC campus.
5. Mental or physical abuse of any person on college premises or at college-sponsored or college-supervised functions, including verbal or physical actions which threaten or endanger the health or safety of any such persons.
6. Any unwelcome verbal or physical act or behavior which is of a sexually suggestive or harassing nature and which in any way interferes with the student's or an employee's performance or creates an intimidating, hostile, or offensive environment.
7. Intentional obstruction or disruption of teaching, research, administration or disciplinary proceedings, or other college activities, including public service functions and other duly authorized activities on college premises.
8. Occupation or seizure in any manner of college property, a college facility, or any portion thereof for a use inconsistent with prescribed, customary, or authorized use.
9. Participating in or conducting an assembly, demonstration, or gathering in a manner which threatens or causes injury to person or property; which interferes with free access to ingress or egress of college facilities; which is obstructive or disruptive to the education process or institutional functions of the college; remaining at the scene of such an assembly after being asked to leave by a representative of the college staff.
10. Possession or use of a firearm, or other deadly weapon, incendiary device or explosive, except in connection with a college-approved activity. Policy is published in the current *Student Handbook*.

11. Setting off a fire alarm, using, or tampering with any fire safety equipment, except with reasonable belief in the need for such alarm or equipment.
12. Gambling.
13. Smoking and/or using other forms of tobacco products in classrooms, shops and labs, or other unauthorized areas.
14. Violation of college regulations regarding the operation and parking of motor vehicles.
15. Forgery, alteration, or misuse of college documents, records, or instruments of identification with intent to deceive.
16. Failure to comply with instructions of college officials acting in performance of their duties.
17. Violation of the terms of disciplinary probation or any college regulation during the period of probation.
18. Fiscal irresponsibility such as failure to pay college-levied fines, failure to repay college-funded loans, or the passing of worthless checks to college officials.
19. Violation of a local, state, or federal criminal law on college premises adversely affecting the college community's pursuit of its proper educational purposes.
20. This Student Code of Conduct is not inclusive. Other conduct which is disruptive may be subject to appropriate sanctions.

Disciplinary Action

Immediate Suspension

If an act of misconduct threatens the health or safety of any member of the academic community or seriously disrupts the function and good order of the college, an instructor or administrative officer may direct the student(s) involved to cease and desist such conduct and advise them that failing to cease and desist, the instructor may suspend the student(s) from that class until further notice. An administrative officer may suspend the student(s) from either the class or the college until a resolution of the matter can be made. Disruptive behavior may include, but not be limited to, obscene and/or disruptive language, threatening actions, and blocking or restricting access to college classes, offices, and programs.

The instructor or administrative officer invoking such suspension shall notify the program area dean in writing of the individual(s) involved and the nature of the infraction as soon as possible but no more than two days following the incident. The dean shall resolve the matter in a timely fashion utilizing the following steps.

Responsibility for Implementation

The program area dean is responsible for implementing student discipline procedures.

Disciplinary Procedures

In order to provide an orderly procedure for handling student disciplinary cases in accordance with due process and justice, the following procedures will be followed:

1. Charges: Any administrative official, faculty/staff member, or student may file charges with the FTCC Security Office against any student or student organization for violations of college regulations. The individual(s) making the charge must complete a charge form stating:
 - a. name(s) of the student(s) involved,
 - b. the alleged violation of the specific Code of Conduct,
 - c. the time, place, and date of the incident,
 - d. name(s) of person(s) directly involved or witnesses to the infractions,
 - e. any action taken that relates to the matter, and
 - f. desired solution(s).

The completed charge form should be forwarded directly to the appropriate dean.

2. Investigation and Decision: Within five (5) working days after the charge is filed, Security shall complete a preliminary investigation of the charge, and the program area dean shall schedule a meeting with the student. After discussing the alleged infraction with the student, the dean may act as follows:
 - a. drop the charges,
 - b. impose a sanction consistent with those shown below, and/or
 - c. refer the student to a college office or community agency for services.
3. Notification: The decision of the dean shall be presented to the student in writing or mailed within five (5) working days. In instances where the student cannot be reached to schedule an appointment with the dean or where the student refuses to cooperate, the dean shall send a certified letter to the student's last known address providing the student with a list of charges, the dean's decision, and instructions governing the appeal process.

Sanctions

1. Reprimand: A written communication which gives official notice to the student that any subsequent offense against the Student Code of Conduct will carry heavier penalties because of this prior infraction.
2. General Probation: An individual may be placed on General Probation when involved in a minor disciplinary offense. General Probation has two (2) important implications: the

individual is given a chance to show capability and willingness to observe the Student Code of Conduct without further penalty; secondly, if the individual errs again, further action will be taken. This probation will be in effect for no more than two (2) terms.

3. **Restrictive Probation:** Restrictive Probation results in loss of good standing and becomes a matter of record. Restrictive conditions may limit activity in the college community. Generally, the individual will not be eligible for initiation into any local or national organization and may not receive any college award or other honorary recognition. The individual may not occupy a position of leadership with any college or student organization or activity. This probation will be in effect for not less than two (2) terms. Any violation of Restrictive Probation may result in immediate **SUSPENSION**.
4. **Restitution:** Paying for the damage, misuse, destruction, or loss of property belonging to the college, college personnel, or students.
5. **Interim Suspension:** Exclusion from class and/or other privileges or activities as set forth in the notice, until a final decision has been made concerning the alleged violation.
6. **Loss of Academic Credit or Grade:** Imposed as a result of academic dishonesty.
7. **Withholding grade reports, diploma, or right to register or participate in graduation ceremonies:** Imposed when financial obligations are not met.
8. **Suspension:** Exclusion from class(es) and/or all other privileges or activities of the college for a specified period of time. This sanction is reserved for those offenses warranting discipline more severe than probation or for repeated misconduct. Students who receive this sanction must get specific written permission from the appropriate dean before returning to campus.
9. **Expulsion:** Dismissing a student from campus for an indefinite period losing student status. The student may be readmitted to the college only with the approval of the Vice President for Academic Affairs.
10. **Group Probation:** This is given to a college club or other organized group for a specified period of time. If group violations are repeated during the term of the sentence, the charter may be revoked or activities restricted.
11. **Group Restriction:** Removing college recognition during the term in which the offense occurred or for a longer period (usually not more than one other term). While under restriction, the group may not seek or add members, hold or sponsor events in the college community, or engage in other activities as specified.
12. **Group Charter Revocation:** Removal of college recognition for a group, club, society, or other organizations for a minimum of two years. Recharter after that time must be approved by the President.

APPEALS AND DUE PROCESS

Students subject to administrative decisions affecting their right to attend classes are entitled to due process. Due process includes, but is not limited to, the following considerations:

1. The student must be informed of any charges made against him/her that may result in administrative action.
2. The student must be advised in writing of the administrative action taken.
3. The student will be advised of corrective action required.
4. The student is entitled to an appeal as herein provided. The appeals process described in the following paragraphs must be followed.
5. The student is entitled to appear and present testimony at any committee meeting scheduled to hear an appeal from said student.

Admissions Decisions

Initial decisions to approve a student or potential student to enter a program or a student re-entering a program are made by the counselor conducting the admissions interview. Appeals of admissions decisions are referred to the Director of Admissions. Decisions of the Director of Admissions may be appealed to the Associate Vice President for Student Services in writing no later than ten (10) college days after the date of the Director of Admissions' letter. The Associate Vice President for Student Services will confer with the department chairperson and respond to the student within five (5) working days. Decisions of the Associate Vice President for Student Services are final.

Attendance Problems

Students with excessive absences are dropped from class by the instructor according to guidelines published in the *Student Handbook*. They should be referred to the curriculum program counselor.

Appeals of attendance decisions should be made first to the department chairperson and then to the program area dean. Further appeals of administrative withdrawal from class for attendance will be made in writing no later than five (5) college days to the FTCC Student Appeals Committee through the Director of Counseling. Further appeals must be accomplished pursuant to due process published in the *Student Handbook*.

Students placed on suspension for attendance problems may be allowed to continue attending class until the appeal has been resolved.

Grades

Grading is the prerogative of the faculty member. Appeals concerning grades must be directed to that faculty member. Failing to reach a satisfactory solution, the student may appeal in accordance with the outline below. The appeal of a grade must be initiated prior to the end of the next regular term.

1. The student shall present the appeal to the chairperson of the department within which the protested grade was awarded. The chairperson shall, by conferring with the student and the faculty member, seek resolution by mutual agreement.
2. Failing to reach a resolution, the department chairperson will transmit the appeal to the appropriate program area dean who may convene the Academic Review Committee.
3. The Academic Review Committee will consist of the convening dean and four faculty members appointed by the dean. If the committee affirms the faculty member's decision, the dean will notify in writing the faculty member, the student, and the department chairperson. If the committee supports the student's appeal, it shall prescribe the method by which the student will be re-evaluated. The resulting grade must be submitted within college guidelines and may not be further appealed.

Academic Probation and Suspension

Students who fail to meet requirements of academic progress according to guidelines published in the *Student Handbook* will be placed on academic probation or academic suspension. These students should be referred to their academic advisor or counselor. The college will assist the student in identifying the probable causes of academic difficulty and will attempt to recommend strategies for change.

Any consideration of academic standing or reinstatement must be approved by the appropriate department chairperson and would require assurances that the reasons for academic difficulties have been removed.

Appeals of decisions of the department chairperson may be made to the appropriate program area dean. All appeals must be in writing and received no later than five days from the time of notification of the department chairperson's decision. Students placed on academic suspension may be allowed to continue attending class until the appeal has been resolved. The decision of the dean in matters of probation and academic suspension is final and not subject to further appeal.

Financial Obligations

Initial telephone contacts and certified letters of advisement from the Business Office at FTCC regarding delinquent loans and returned checks are mailed to the student. Unpaid indebtedness to the college will result in suspension from the class(es). Student will not be allowed to register for the next term until the debt is cleared with the Business Office.

For returned checks, students are given 15 days from the date of the certified letter to clear the debt before legal action is taken by FTCC. If after 15 days the debt is not cleared, a warrant is issued by the Cumberland County Magistrates' Office. After this time, the student must make payment of the returned check plus court costs to the Clerk of Superior Court.

For student loans, the promissory note states that payment in full becomes due immediately upon default of any installment or termination of at least half-time study. If payment is not made, the student's account is submitted to the Attorney General's Office for collection. Upon notification of disposition by the Attorney General, the student's unpaid account is submitted to an outside collection agency.

Monthly, any unpaid student accounts are submitted to the North Carolina Department of Revenue under the Set-Off Debt Collection Act. This entitles FTCC to claim a part or all of the student's income tax refund to apply against the debt.

Financial indebtedness to FTCC can only be appealed through the Business Office until the matter is submitted to local and state legal authorities.

Further Appeal Procedures

The decisions of the FTCC Student Appeals Committee are referred to the Associate Vice President for Curriculum Programs as recommendations. The Associate Vice President for Curriculum Programs will confer with the Associate Vice President for Student Services, reach a decision, and notify the student involved of the resulting decision as soon as possible, but no later than three work days from the receipt of the recommendation of the Student Appeals Committee by the Associate Vice President.

Further appeals must be in writing and addressed to the Vice President for Academic Affairs. The chain of appeal goes then from the Vice President for Academic Affairs to the President to the Board of Trustees. Decisions of the Board of Trustees are final.

Dismissal

Fayetteville Technical Community College reserves the right to dismiss any student when it believes such action is in the best interest of the college, the students, the faculty, the staff, or the student him/herself. In all cases, the right of due process is the student's prerogative.

STUDENT RECORDS

Records of progress are kept by this institution on all current and former students. Progress records are furnished to the students, veterans, and non-veterans alike, at the end of the scheduled school term.

1. The Registrar is responsible for student records. The following documents will be maintained as a part of the student's institutional records and will be subject to all state and federal regulations governing the safety and confidentiality of those records: completed application; completed medical form; veterans' records; statement of residency; transcripts; any statement of waiver by the student concerning student records; and a list of persons, firms, or other institutions to which a copy of the institutional records have been sent.
2. A student may receive a copy of his/her transcript upon written request. Official transcripts will be mailed as requested.
3. When a student has a name change or change of address, he/she is responsible for contacting the Registrar's Office in person to fill out the necessary forms.
4. Transcripts and other information on students will not be released until all financial obligations to the institution have been satisfied.
5. Any student with outstanding (unpaid) fines at the end of an academic term may not be permitted to re-register, nor have his/her grades released, nor have course completion certificates released until payment of such debts has been accomplished.

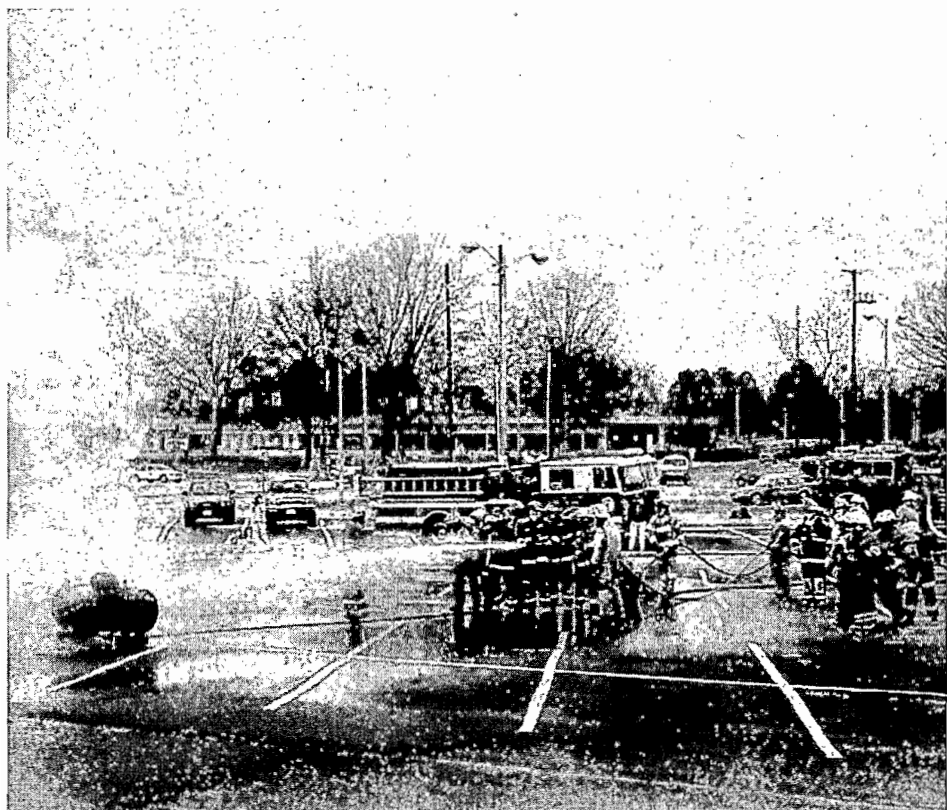
TO ALL PARENTS OF STUDENTS CURRENTLY ATTENDING FAYETTEVILLE TECHNICAL COMMUNITY COLLEGE AND ALL STUDENTS CURRENTLY ATTENDING WHO HAVE REACHED THE AGE OF 18:

The Family Educational Rights and Privacy Acts (FERPA) is a federal law that governs the maintenance of students' records. Under the law, parents of students or students, if they are at least 18, have both the right to inspect records kept by the school about the student and the right to correct inaccuracies in the records. Access to the records by persons other than the parents or the student is limited and generally requires prior consent by the parents or the student. The Board of Trustees has adopted a written policy governing all the rights of parents and students under FERPA. Copies of this policy may be found in the Registrar's Office.

Fayetteville Technical Community College classifies the following as directory information: name and enrollment status, including curriculum and dates of enrollment. The student's address, telephone number, and location on campus may also be released if the request is legitimate and a need for emergency access exists as determined by the Registrar or staff. School officials may release this information to any person without the consent of the parents or the student.

Any parent or eligible student who objects to the release of any or all of this information without his/her consent must notify the Registrar in writing by a date which is five (5) college days from the date that the student receives his/her *Student Handbook*. The objection must state what information the parent or student does not want to be classified as directory information. If no objection is received by the aforesaid date, the information will be classified as directory information until the beginning of the next school year.

Complaints about failures of Fayetteville Technical Community College to comply with the Family Educational Rights and Privacy Act may be made in writing to the FERPA Office, Department of Health, Education, and Welfare, 330 Independence Avenue, S.W., Washington, D.C. 20201.



CONTINUING EDUCATION

**Fayetteville Technical
Community College**

CONTINUING EDUCATION

General

The Continuing Education Division is responsible for non-curriculum, non-credit educational programs for adults 18 years of age or older. Due to ongoing changes in technology, career and job requirements, as well as revised life styles, needs are being created for continuing education in most occupational and avocational areas. The Continuing Education Division is responsible for responding to these needs by providing services to individuals, organizations, businesses, and industries within the Fayetteville-Cumberland County area. Requests for continuing education programs range from courses in basic reading and writing to advanced courses in technical fields. These courses are made available whenever there is a sufficient number of students interested in the same subject area and a qualified instructor is available. Adults may also attend continuing education courses to improve vocational, avocational, and practical skills.

Directory of Services

Areas

Continuing Education is divided into the following areas:

- Basic Skills Education
- Occupational Extension Education
- Industry Services
- Fire/Rescue Training
- Law Enforcement Training
- Community Services and Extension Education
- Business Services
- Small Business Center

Purposes

1. to provide educational opportunities for interested adults.
2. to provide an innovative Basic Skills Education Program (ABE, GED, ESL, AHS, and CED) in locations easily accessible to interested adults throughout Cumberland County.
3. to provide a community-wide program of adult education which includes instruction to prepare adults for better job opportunities, promotion in present employment, civic and community leadership, and family living.
4. to provide a centralized assessment and retention program for Basic Skills Education.
5. to offer special training programs for new and expanding industry in the county, which provide a labor force possessing necessary skills to make the industry immediately productive.
6. to provide for the educational needs of the military and family members at Ft. Bragg and Pope Air Force Base; and to expand in-service staff development programs for civil service employees.

7. to provide training for local law enforcement agencies, fire departments, rescue services, and to offer lifesaving programs such as CPR and first aid to all citizens in Cumberland County.
8. to provide educational services to special populations in the Cumberland County area where opportunities beyond the traditional school setting are required (e.g., ABE and GED Correspondence).
9. to conduct instructor training programs for instructors of Continuing Education.
10. to continue to be the educational organization recognized by the community as receptive to special interest programs.

Basic Skills Education

The Basic Skills Program includes the areas of Adult Basic Education (ABE), Adult High School Diploma (AHS), Compensatory Education (CED), English as a Second Language (ESL), General Educational Development (GED), Human Resources Development (HRD), Workforce Preparedness Center, and Basic Skills Student Services.

Adult Skills Program

The Adult Basic Education Program at FTCC is the cornerstone upon which the overall Basic Skills Program is built. ABE is a dynamic outreach program specifically targeting non-readers and other under educated adults. A variety of traditional and non-traditional, innovative curricula have been implemented to upgrade the academic skills of this population. Special programs often offered through formal partnerships with other agencies have promoted program accessibility.

Adult High School Diploma Program (AHS)

The Adult High School diploma is a course of studies in 14 core and 6 elective subjects. This program is designed to give eligible adults in Cumberland County an opportunity to earn a high school diploma. A student must be 18 years of age or older to enter the program. A student less than 18 years of age must be screened through Basic Skills Student Services to determine eligibility.

Each of the subjects offers a concentrated study of approximately sixty (60) hours. Following assessment and evaluation of student academic transcripts, students are informed as to the number of courses needed to complete requirements for their adult high school diploma. These requirements include each student passing the N.C. Competency Test. These requirements must be met regardless of any program interruptions (class cancellations, etc.). The diploma is issued by Fayetteville Technical Community College in cooperation with the Cumberland County Board of Education.

Each course is taught by a qualified instructor who possesses at least a four-year degree. The instructor uses modern classroom techniques, which include current textbooks, audiovisual aids, community resources, computer-assisted learning, and a variety of other teaching methods.

ABE & GED Correspondence

ABE & GED Correspondence provides an additional opportunity for adults who are unable to attend regular classes. Completion of each lesson helps prepare the participant for further educational opportunities which may include successful completion of the official GED test.

Basic Skills Resource Center

The Basic Skills Resource Center offers individualized instruction and study opportunities, including employment readiness and advancement training, in all areas of Basic Skills Education. Computer-assisted instruction, along with a variety of other materials, allows students to learn at their own pace and enables them to reach their goals.

U.S. Citizenship Test Preparation Project

FTCC is one of only two community colleges in North Carolina which offers special classes in civics and English for eligible aliens who desire to obtain United States citizenship. In addition, citizenship testing will also be offered on campus.

Compensatory Education (CED)

Compensatory Education is designed to provide remedial academics to adults who have been diagnosed as being a delayed learner and who can provide documentation of mental retardation. The program includes task-analyzed lessons in language arts, math, social sciences, consumer education, health, and community living skills.

English as a Second Language (ESL)

English as a Second Language classes are designed for adults who are not native English speakers. Because individuals needs vary considerably, instruction in reading, writing, speaking, and listening is tailored to meet individual needs. Three distinct levels are offered: Beginning, Intermediate, and Advanced to help students acquire functional English competence.

Family Literacy Program (FLP)

Family Literacy is designed to break the discouraging cycle of under education, poverty, and dependence of parents whose educational level is below that of a high school graduate. The goal of Family Literacy is to provide, in one location, a positive educational setting that will allow a parent the chance to enhance his/her skill level or to earn a GED Diploma while providing their young children with constructive preschool or elementary school activities.

General Educational Development (GED)

General Educational Development courses are designed for adults who have not received a high school diploma. Courses prepare students for the five official GED tests: writing, social studies, science, literature and the arts, and mathematics. The GED diploma certifies that the graduate has achieved a level of general educational development equivalent to that of high school diploma recipients.

Homeless Project

FTCC extends a helping hand by providing Cumberland County's adult homeless population a chance at a new beginning. Education, survival needs, and a unique 12-step curriculum are offered at sites which include halfway houses, shelters, and a short-term detox facility.

Human Resources Development (HRD)

Human Resources Development provides short-term pre-vocational training and counseling to help unemployed and under employed adults successfully enter the work force or further training. The curriculum focuses on training which helps students learn how to find and keep a job. This includes teaching students how to assess their assets and limitations, develop their problem-solving and communication skills, develop a positive self-image, improve academic skills, and understand the dynamics of interpersonal relationships.

Workforce Program

Workforce Basic Skills classes are the result of partnerships between FTCC and local businesses and industries in Cumberland County. Basic Skills, as well as specific job related employability skills, are taught to employees on the job site or an FTCC site. Whether working toward a high school equivalency diploma or improvement in specific work skills, the result of the program is a more capable, confident, and efficient employee. The focus of this program is to improve skills that will lead to enhanced competitiveness for business and industry.

Workforce Preparedness Center

The Workforce Preparedness Center, located in the Continuing Education Center, is designated to serve adults who plan to reenter the workforce, who want to prepare for and pass employment tests, or who want to improve their basic work skills. Students may work to improve their reading, business writing, mathematics, problem-solving, and critical thinking skills, as well as learn to work as part of a team.

OCCUPATIONAL EXTENSION EDUCATION

Extension Education offers a wide variety of courses in aviation (private pilot and instrument ground school), business, computer education, automotive mechanics, auto body repair, general contractor's license preparation, vocational shop, and general interest programs (including such courses as bartending, travel agent, and effective teaching training). These courses are intended to provide training to upgrade a person's skills or qualifications and assist in preparing an individual for a new career.

Fayetteville Technical Community College, in cooperation with the Cumberland County schools, utilizes the facilities at a number of local public school campuses to make these courses more accessible to the residents of the greater Fayetteville area.

A variety of occupational courses are offered at Ft. Bragg for the purpose of enhancing/updating individual skills. Additionally, the courses provide family members an opportunity to acquire new skills, hence making themselves marketable to the local economy and increasing the North Carolina tax base.

INDUSTRY SERVICES

The Industry Services area of Continuing Education, located in the Center for Business and Industry helps industries by customizing educational programs and training courses for employees. The staff is available to assess, design, and implement appropriate courses to meet the needs of industry in the following.

In-Plant Training Skills Programs

These programs develop entry-level skills for new employees or retrain employees whose jobs have changed due to new equipment, processes, or products.

New and Expanding Industry Programs

These programs develop the potential and improve the performance of managers through skills training.

Seminars

FTCC can arrange for guest lecturers and consultants to address the latest topics in business and industry, such as ISO 9000, TQM, OSHA updates and training, or Contracting with the Federal Government.

FIRE/RESCUE TRAINING

Fire/Rescue Training consists of education in the area of Emergency Medical, Rescue Technician and Fire Service Training. Courses offered include Basic and Advanced Rescue Technician, Emergency Medical Technician, Paramedic, Fire Fighter I & II Certification, Driver Operator Certification, Hazardous Material, Nursing Assistant, Cardiopulmonary Resuscitation, National Fire Academy courses, and numerous other programs in the Fire, Rescue, and Emergency Medical areas. Courses are offered on campus, at local fire departments, rescue facilities, the airport training facility, churches, schools, businesses, industries, or other locations where there is community interest. A number of courses are open to the public while some are limited to in-service training. Although the state prescribed registration fee is required, exceptions are recognized for fire service, police, and life saving personnel. Descriptive course information follows.

Fire Service

The Fire Services courses prepare firefighters and potential firefighters with both entry level skills and specific area skills in fire related subjects. The Firefighters Certification Program includes 22 classes that are required for certification as Firefighter I and II. These courses are taught individually or in a 12-week academy. Specialty areas for firefighters include Driver Operator, Emergency Vehicle Operator, Aerial Operator, Hazardous Materials, and many other related courses. National Fire Academy course graduates are also presented with both FTCC certificates and National Fire Academy certificates. There are no expenses incurred for these courses as long as the student is affiliated with a fire department. A high school diploma or GED certificate is required for certification.

Rescue Technician

Basic and Advanced Rescue Technician certification classes are presented to fire departments, rescue squads, and ambulance services. Each level of certification contains several individual classes dealing with various areas of situational rescues. Areas of emphasis include vehicle extrication, raises and lowers, rappelling, confined space, trench, search management, and several other similar areas. There are no expenses incurred for these classes if the student is affiliated with a fire department, rescue squad, or other emergency service provider. A high school diploma or GED certificate is required for certification.

Airport Firefighting Training Facility

The Fayetteville Regional Airport Firefighters' Training Facility has been designed and built to provide state-of-the-art training for airport firefighters in accordance with the Federal Aviation Regulations Part 139, National Fire Protection Association Standard 1003, and the United States Air Force Regulation 92-1. The facility is operated by Fayetteville Technical Community College and the City of Fayetteville. The facility contains the most modern fire service training mockups in the country to date. All of the live-fire simulators utilize propane fuel, which provide airport managers and fire chiefs the opportunity to meet the requirements of FAR 139 pertaining to airport fire services. More programs will be added in the future. All live-fire simulations will utilize water during the attack.

Emergency Medical Technician

This course provides training in the first phase of the EMT career structure. The student will be provided knowledge and training in skills to control bleeding, application of splints, prevention of shock, childbirth, and other basic life support techniques. This course will also include instruction on oxygen therapy, respiratory emergency, major trauma, and advanced CPR techniques. At the completion of this course, the student will be qualified to take the Office of EMS NC State EMT Basic Exam. The course requires the student to comply with FTCC Hepatitis B Immunization policy. The policy states that the student must have a Hepatitis B vaccination (which they can obtain at the Cumberland County Health Department at an estimated cost of \$123.00) or proof thereof, or sign a waiver of refusal prior to clinical sessions of class. There may be other expenses incurred during this course. Prerequisite for this course is a high school diploma or GED.

Nursing Assistant I

The Nursing Assistant I course prepares graduates to provide personal care and perform basic nursing skills for the elderly and other adults. Emphasis is on the process of aging including mental, social, and physical needs of the elderly; patients' rights; nutrition management; disease/disorders; human body structure and function, etc. The course includes class, laboratory, and clinical learning experiences. This course requires the student to have no less than a tenth grade education and to receive a Hepatitis B vaccination (which can be obtained at the Cumberland County Health Department at an estimated cost of \$123.00) or proof thereof, or sign a waiver of refusal prior to clinical sessions of class. There may be other expenses incurred during this course.

Paramedic

Certification as a Basic Emergency Medical Technician is a prerequisite for this course, which details more advanced medical procedures. Students will be trained in the use of advanced airway devices, intravenous lines, pharmacology, the cardiovascular system, principles of electrocardiography, dysrhythmia recognition, defibrillation/pacing, management of cardiac dysrhythmias, respiratory/cardiac emergencies, communication skills, and a review of basic and advanced life support.

LAW ENFORCEMENT TRAINING

The Law Enforcement Training department offers comprehensive programs designed to enhance the performances of certified law enforcement officers, providing quality up-to-date training for law enforcement officers, law enforcement supervisors and chief executives, basic security officers, security guard supervisors, communications dispatchers, jail officers, and jail administrators. The department is committed to offering the law enforcement community timely, relevant, and professional training commensurate with established mandates of the Sheriff's Commission, the North Carolina Training and Standards Commission and/or the Private Protective Services Board. Course offerings are conducted by staff and a carefully selected group of experienced police and security officer trainers who constitute the adjunct faculty.

Quality service and professionalism earmark the relationship between the law enforcement department and its broad law enforcement and security client base.

The objective of the program is to offer the latest and most effective training available. The department continually updates and revises existing programs and actively seeks to add new course offerings in response to contemporary training demands. Input from local, state, and federal agencies, changes in crime trend, and the request for specialized programs are significant in course development and offerings.

The program is designed to enable students to do the best possible job of protecting the citizens of this county, their fellow officers, and themselves.

The Basic Law Enforcement Training Academy (BLET) program allows the admission of students who are interested in pursuing law enforcement careers as police officers and deputy sheriffs in the State of North Carolina. Students must pass a comprehensive written examination offered by the North Carolina Training and Standards Commission prior to course completion.

Courses are offered on campus, at Ft. Bragg and Pope Air Force Base, at Fayetteville State University, Methodist College, and other selected locations or at municipal police departments within Cumberland County and the Cumberland County Sheriff's Department.

The majority of the course offerings are restricted to law enforcement or emergency services personnel. Some security course offerings are open to the general public, with the state prescribed registration fee required. Law enforcement officers and other emergency services personnel who are training to enhance their performance are exempt from tuition.

A comprehensive introductory law enforcement training program (non-certified) and other law enforcement programs are offered at Ft. Bragg and Pope Air Force Base. The introductory course is designed primarily to prepare the prospective law enforcement officer for entry into and successful completion of the Basic Law Enforcement Training Academy.

COMMUNITY SERVICE

Community Service programs are an integral part of continuing education. Classes such as art, home economics, foreign languages, sign language, test preparation for the SAT and GRE, and general interest are offered mornings, afternoons, and evenings. These serve approximately 7,500 students in more than 500 classes per year. Classes are conducted at various locations throughout Fayetteville, Ft. Bragg, Pope Air Force Base, Spring Lake, Hope Mills, Stedman, and other areas. Classes are also coordinated with local community centers, senior citizens' centers, and the Fayetteville Museum of Art. Likewise, businesses, churches, schools as well as public and military facilities are utilized.

Courses are frequently designed to meet specific requests, therefore, this area is expected to grow and change with the interests and needs of the community. Students are regularly surveyed for comments and suggestions.

Training sessions are co-sponsored with county volunteer agencies such as Rape Crisis Volunteers of Cumberland County and the Cumberland County Dispute Resolution Center. Courses are offered in seven senior citizens centers for the convenience of Cumberland County's senior citizens. These classes serve approximately 2,000 citizens during the year. Courses are also provided for the Cumberland County Association for the Blind.

BUSINESS SERVICES

The Business Services area of FTCC Continuing Education, located in the Center for Business and Industry, helps businesses, governmental agencies, and medical organizations by customizing educational programs and training courses for employees. The staff is available to assess, design, and implement appropriate courses to meet the needs of business in the following areas.

Supervisory Skills

Improved supervisory skills can contribute in a significant manner to employee productivity. The Center's staff can assist business and industry in developing and evaluating training programs to meet staff members' needs ranging from general management skills, finance, and marketing to manufacturing management.

FTCC offers the American Management Association Certificate in Management program that provides 126 hours of supervisory and management training for businesses and professionals.

Communication

Good verbal and written communication in an organization are essential. The Center's staff has developed seminars ranging from proper telephone usage for the secretarial staff to effective business letter writing for managers.

Computer Training

Specialized classes can be designed to provide training on software programs such as Windows, Word, Excel, WordPerfect, Lotus, and other business oriented software.

Instructor Training

Workshops are available to assist personnel in becoming more proficient instructors; for example "Training the Trainer" and "Team Development."

License Support Training

Classes are designed for various professional groups, such as Real Estate, Insurance, Day Care, Funeral Service, and the National Executive Housekeeping Association to assist in maintaining existing licenses.

FTCC SMALL BUSINESS CENTER

The mission of the Fayetteville Technical Community College Small Business Center is to improve the success rate of small businesses throughout the service area.

Are you considering a new business venture? Expansion? Perhaps you just need help with an existing business plan. Have you developed a business plan? What about market research? Do you understand cashflow, break-even analysis, finance, record keeping and taxes? Is it necessary for you to use a CPA and/or an attorney? What form of business entity will best suit you? We are in the business of helping businesses succeed. Whether it is through additional training, one-on-one counseling or providing the contacts and information you need, we are here to assist you.

Our services include:

Specialized Business Seminars

Each term specialized seminars are offered which are designed to improve your management or technical skills from the basics of how to start your own business to the complexities of record keeping and taxes.

Resource Room

Literature and audiovisual materials are available for your use. Handouts from The Small Business Administration (SBA) are available for you. Come by and ask about our services.

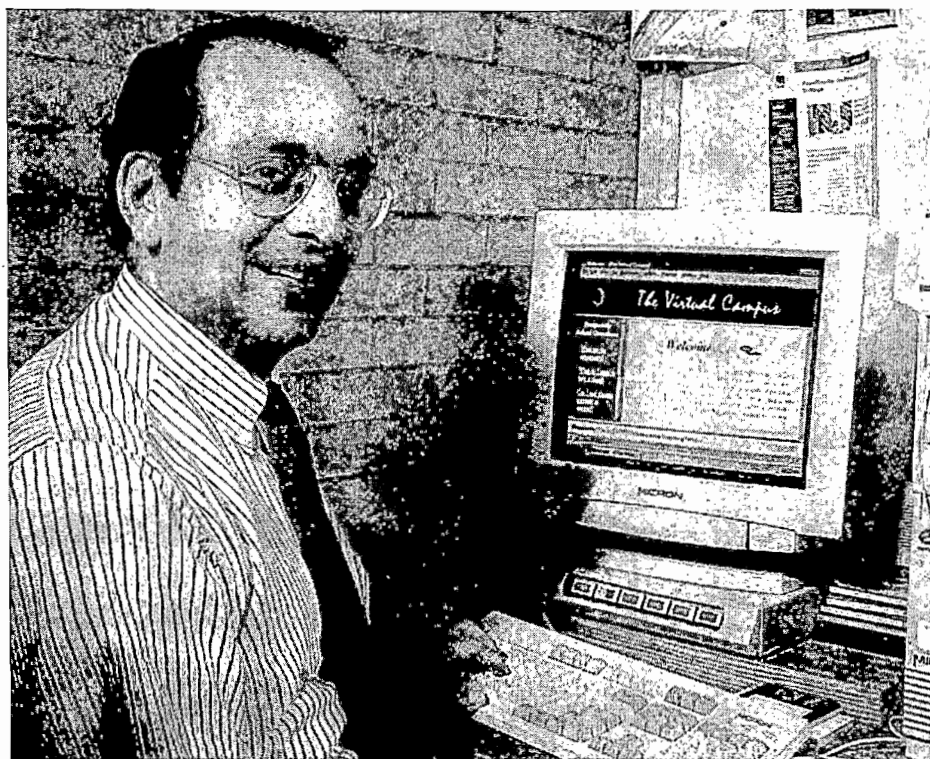
Small Business Counselor

A counselor is available on Tuesdays to provide you with advice on starting and operating a new business or to refer you to a number of local, state, or federal agencies that can answer your questions.

REAL

REAL stands for "Rural Entrepreneurship through Action Learning." NC REAL Enterprises, a nonprofit organization based in Durham, NC, works with selected community colleges across North Carolina to provide adults of all ages with the opportunity to become entrepreneurs. This program is now available at Fayetteville Technical Community College.

FTCC's REAL program is designed to assist and empower a person with entrepreneurial interests and abilities to plan and start a business or trade. Prior business experience and/or courses are not required. If you would like to create a business from a talent, skill or idea you have, and you are willing to work to make it a reality, REAL is for you!



**Fayetteville Technical
Community College**

CURRICULUM PROGRAMS

ASSOCIATE DEGREE PROGRAMS

A/C, Heating & Refrigeration Technology
Accounting
Advertising and Graphic Design
Architectural Technology
Associate Degree Nursing (Integrated)
Associate in Arts
Associate in Science
Associate in General Education
Automotive Systems Technology
Business Administration
 Banking and Finance
 Marketing and Retailing
 Public Administration
Civil Engineering Technology
Criminal Justice Technology
Culinary Technology
Dental Hygiene
Early Childhood Associate
Electronics Engineering Technology
Emergency Medical Science
Funeral Service Education
General Occupational Technology
Horticulture Technology/Management
Industrial Management Technology
Information Systems
Information Systems/Programming
Machining Technology
Media Integration Technology
Office Systems Technology
Paralegal Technology
Physical Therapist Assistant
Postal Service Technology
Radiography
Recreation and Leisure Studies
Respiratory Care
Speech-Language Pathology Assistant
Surveying Technology

DIPLOMA PROGRAMS

Autobody Repair
Cabinetmaking
Carpentry
Cosmetology
Dental Assisting
Electrical/Electronics Technology
Electronic Servicing Technology
Industrial Maintenance Technology
Masonry
Mechanical Drafting Technology
Pharmacy Technology
Plumbing
Practical Nursing
Surgical Technology
Welding Technology

CERTIFICATE PROGRAMS

Basic Law Enforcement Training
Insurance
Nursing Assistant
Real Estate
Real Estate Appraisal

NOTE:

All displays in schedules for Curriculum Programs show contact hours and total credit hours for classes in the following order:

Example:

| | | Class Hours | Lab Hours | Clinic Hours | Credit Hours |
|---------|--------------------|------------------------|----------------------|-------------------------|-------------------------|
| ENG-111 | Expository Writing | 3 | 0 | 0 | 3 |

ACCOUNTING

A25100

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

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

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

Upon completion of the program, the student will receive an **associate in applied science degree**.

ACCOUNTING (A25100)

Effective: Summer 1997-98

Revised: 1/21/97

Length: 5 Semesters

Prerequisite: 2 Units of Algebra

Award: Associate in Applied Science

| FALL SEMESTER 1 | | Class | Lab | Clinical | Credit |
|-----------------|---------------------------|-------|-----|----------|--------|
| ACC 120 | Prin of Accounting I | 3 | 2 | 0 | 4 |
| BUS 115 | Business Law I | 3 | 0 | 0 | 3 |
| CIS 110 | Introduction to Computers | 2 | 2 | 0 | 3 |
| ENG 111 | Expository Writing | 3 | 0 | 0 | 3 |
| ENG 111A | Expository Writing Lab | 0 | 2 | 0 | 1 |
| MAT 161 | College Algebra | 3 | 0 | 0 | 3 |
| | | 14 | 6 | 0 | 17 |

SPRING SEMESTER 1

| | | | | | |
|---------|------------------------|----|---|---|----|
| ACC 121 | Prin of Accounting II | 3 | 2 | 0 | 4 |
| ACC 131 | Federal Income Taxes | 2 | 2 | 0 | 3 |
| BUS 116 | Business Law II | 3 | 0 | 0 | 3 |
| CIS 120 | Spreadsheets I | 2 | 2 | 0 | 3 |
| ECO 251 | Prin of Microeconomics | 3 | 0 | 0 | 3 |
| OST 122 | Office Computations | 1 | 2 | 0 | 2 |
| | | 14 | 8 | 0 | 18 |

SUMMER SEMESTER 1

| | | | | | |
|---------|---------------------------|---|---|---|---|
| ACC 220 | Intermediate Accounting I | 3 | 2 | 0 | 4 |
| CIS 220 | Spreadsheets II | 1 | 2 | 0 | 2 |
| | | 4 | 4 | 0 | 6 |

FALL SEMESTER 2

| | | Class | Lab | Clinical | Credit |
|---------|----------------------------|--------------|------------|-----------------|---------------|
| ACC 150 | Computerized Gen Ledger | 1 | 2 | 0 | 2 |
| ACC 221 | Intermediate Acct II | 3 | 2 | 0 | 4 |
| ACC 225 | Cost Accounting | 3 | 0 | 0 | 3 |
| ECO 252 | Prin of Macroeconomics | 3 | 0 | 0 | 3 |
| ENG 114 | Prof Research & Reporting | 3 | 0 | 0 | 3 |
| | Humanities/Fine Arts Elect | 3 | 0 | 0 | 3 |
| | | <hr/> | <hr/> | <hr/> | <hr/> |
| | | 16 | 4 | 0 | 18 |

SPRING SEMESTER 2

| | | | | | |
|---------|-----------------------|-------|-------|-------|-------|
| ACC 226 | Managerial Accounting | 3 | 0 | 0 | 3 |
| BUS 225 | Business Finance | 2 | 2 | 0 | 3 |
| BUS 228 | Business Statistics | 2 | 2 | 0 | 3 |
| ENG 115 | Oral Communication | 3 | 0 | 0 | 3 |
| | *Major Elective | 3 | 0 | 0 | 3 |
| | | <hr/> | <hr/> | <hr/> | <hr/> |
| | | 13 | 4 | 0 | 15 |

TOTAL REQUIRED CREDITS.... 73/75**Co-op Option: NA**

* See the Student Educational Plan for the list of approved electives.

ADVERTISING AND GRAPHIC DESIGN

A30100

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.

Upon completion of the program, the student will receive an **associate in applied science degree**.

ADVERTISING & GRAPHIC DESIGN (A30100)

Effective: Summer 1997-98

Revised: 2/14/97

Length: 5 Semesters

Prerequisite: High School Diploma

Award: Associate in Applied Science

| FALL SEMESTER 1 | | Class | Lab | Clinical | Credit |
|-----------------|---------------------------|-------|-----|----------|--------|
| ART 111 | Art Appreciation | 3 | 0 | 0 | 3 |
| GRD 110 | Typography I | 2 | 2 | 0 | 3 |
| GRD 117 | Design Career Exploration | 2 | 0 | 0 | 2 |
| GRD 121 | Drawing Fundamentals I | 1 | 3 | 0 | 2 |
| GRD 141 | Graphic Design I | 2 | 4 | 0 | 4 |
| GRD 151 | Computer Design Basics | 1 | 4 | 0 | 3 |
| | | — | — | — | — |
| | | 11 | 13 | 0 | 17 |

SPRING SEMESTER 1

| | | | | | |
|----------|-------------------------------|----|----|---|----|
| ENG 111 | Expository Writing | 3 | 0 | 0 | 3 |
| ENG 111A | Expository Writing Lab | 0 | 2 | 0 | 1 |
| GRA 121 | Graphics Arts I | 2 | 4 | 0 | 4 |
| GRD 152 | Computer Design Tech I | 1 | 4 | 0 | 3 |
| GRD 160 | Photo Fundamentals I | 1 | 4 | 0 | 3 |
| MKT 220 | Advertising & Sales Promotion | 3 | 0 | 0 | 3 |
| | | — | — | — | — |
| | | 10 | 14 | 0 | 17 |

SUMMER SEMESTER 1

| | | | | | |
|---------|-------------------------|---|---|---|---|
| GRD 131 | Illustration I | 1 | 3 | 0 | 2 |
| GRD 231 | Marker Illustration | 1 | 3 | 0 | 2 |
| GRD 282 | Advertising Copywriting | 1 | 2 | 0 | 2 |
| | | — | — | — | — |
| | | 3 | 8 | 0 | 6 |

| FALL SEMESTER 2 | | Class | Lab | Clinical | Credit |
|-----------------|-------------------------|-------|-----|----------|--------|
| ENG 115 | Oral Communication | 3 | 0 | 0 | 3 |
| GRD 142 | Graphic Design II | 2 | 4 | 0 | 4 |
| GRD 153 | Computer Design Tech II | 1 | 4 | 0 | 3 |
| MAT 115 | Mathematical Models | 2 | 2 | 0 | 3 |
| | *Major Elective | 3 | 0 | 0 | 3 |
| | | — | — | — | — |
| | | 11 | 10 | 0 | 16 |

SPRING SEMESTER 2

| | | | | | |
|---------|--------------------------|----|----|---|----|
| GRD 241 | Graphic Design III | 2 | 4 | 0 | 4 |
| GRD 280 | Portfolio Design | 2 | 4 | 0 | 4 |
| GRD 285 | Client/Media Relations | 1 | 2 | 0 | 2 |
| PSY 118 | Interpersonal Psychology | 3 | 0 | 0 | 3 |
| | *Major Elective | 3 | 0 | 0 | 3 |
| | | — | — | — | — |
| | | 11 | 10 | 0 | 16 |

TOTAL REQUIRED CREDITS.... 72

Co-op Option: Qualified students may elect to take up to six (6) credit hours of Cooperative Education provided they acquire approval from the Co-op Director and the Department Chairperson.

* See the Student Educational Plan for the list of approved electives.

AIR CONDITIONING, HEATING, & REFRIGERATION TECHNOLOGY

A35100

The Air Conditioning, Heating, and Refrigeration Technology curriculum provides the basic knowledge to develop skills necessary to work with residential and light commercial systems.

Topics include mechanical refrigeration, heating and cooling theory, electricity, controls, and safety. The diploma program covers air conditioning, furnaces, heat pumps, tools, and instruments. In addition, the AAS degree covers residential building codes, residential system sizing, and advanced comfort systems.

Diploma graduates should be able to assist in the start up, preventive maintenance, service, repair, and/or installation of residential and light commercial systems. Graduates should be able to demonstrate an understanding of system selection and balance and advanced systems.

Upon completion of the program, the student will receive an **associate in applied science degree**.

AC, HEATING & REFRIGERATION TECHNOLOGY (A35100)

Effective: Summer 1997-98

Revised: 2/14/97

Length: 5 Semesters

Prerequisite: High School Diploma

Award: Associate in Applied Science

| FALL SEMESTER 1 | | Class | Lab | Clinical | Credit |
|-----------------|--------------------------|-------|-----|----------|--------|
| AHR 110 | Intro to Refrigeration | 2 | 6 | 0 | 5 |
| AHR 111 | HVACR Electricity | 2 | 2 | 0 | 3 |
| AHR 113 | Comfort Cooling | 2 | 4 | 0 | 4 |
| CIS 113 | Computer Basics | 0 | 2 | 0 | 1 |
| PSY 118 | Interpersonal Psychology | 3 | 0 | 0 | 3 |
| | | 9 | 14 | 0 | 16 |

SPRING SEMESTER 1

| | | | | | |
|---------|-----------------------------|----|----|---|----|
| AHR 112 | Heating Technology | 2 | 4 | 0 | 4 |
| AHR 114 | Heat Pump Technology | 2 | 4 | 0 | 4 |
| AHR 130 | HVAC Controls | 2 | 2 | 0 | 3 |
| AHR 160 | Refrigeration Certification | 1 | 0 | 0 | 1 |
| PHY 121 | Applied Physics I | 3 | 2 | 0 | 4 |
| | | 10 | 12 | 0 | 16 |

| SUMMER SEMESTER 1 | | Class | Lab | Clinical | Credit |
|-------------------|--------------------------|-------|-------|----------|--------|
| AHR 115 | Refrigeration Systems | 1 | 3 | 0 | 2 |
| AHR 151 | HVAC Duct Systems I | 1 | 3 | 0 | 2 |
| AHR 180 | HVACR Customer Relations | 1 | 0 | 0 | 1 |
| | Elective | 3 | 0 | 0 | 3 |
| | | <hr/> | <hr/> | <hr/> | <hr/> |
| | | 6 | 6 | 0 | 8 |

FALL SEMESTER 2

| | | | | | |
|----------|---------------------------|-------|-------|-------|-------|
| AHR 210 | Residential Building Code | 1 | 2 | 0 | 2 |
| AHR 211 | Residential System Design | 2 | 2 | 0 | 3 |
| AHR 212 | Advance Comfort Systems | 2 | 6 | 0 | 4 |
| AHR 240 | Hydronic Heating | 1 | 3 | 0 | 2 |
| ENG 111 | Expository Writing | 3 | 0 | 0 | 3 |
| ENG 111A | Expository Writing Lab | 0 | 2 | 0 | 1 |
| ISC 115 | Construction Safety | 2 | 0 | 0 | 2 |
| | | <hr/> | <hr/> | <hr/> | <hr/> |
| | | 11 | 15 | 0 | 17 |

SPRING SEMESTER 2

| | | | | | |
|---------|-------------------------------|-------|-------|-------|-------|
| AHR 133 | HVAC Servicing | 2 | 6 | 0 | 4 |
| AHR 215 | Commercial HVAC Controls | 1 | 3 | 0 | 2 |
| AHR 245 | Chiller Systems | 1 | 3 | 0 | 2 |
| AHR 250 | HVAC System Diagnostics | 0 | 4 | 0 | 2 |
| ENG 115 | Oral Communication | 3 | 0 | 0 | 3 |
| | Humanities/Fine Arts Elective | 3 | 0 | 0 | 3 |
| | | <hr/> | <hr/> | <hr/> | <hr/> |
| | | 10 | 16 | 0 | 16 |

TOTAL REQUIRED CREDITS.....73

Co-op Option: Qualified students may elect to take up to three (3) hours of Cooperative Education provided they acquire approval from the Co-op Director and the Department Chairperson.

ARCHITECTURAL TECHNOLOGY

A40100

The Architectural Technology curriculum provides individuals with knowledge and skills that can lead to employment in the field of architecture or one of the associated professions.

Students receive instruction in construction document preparation, materials and methods, environmental and structural systems, building codes and specifications, and computer applications. The students will also complete a design project. Optional courses may be provided to suit specific career needs.

Upon completion, graduates have career opportunities within the architectural, engineering, and construction professions as well as positions in industry and government.

Upon completion of the program, a student will receive an **associate in applied science degree**.

ARCHITECTURAL TECHNOLOGY (A40100)

Effective: Summer 1997-98

Revised: 3/17/97

Length: 5 Semesters

Prerequisite: 1 Unit of Algebra

Award: Associate in Applied Science

| FALL SEMESTER 1 | | Class | Lab | Clinical | Credit |
|-------------------|-------------------------------|----------|----------|----------|----------|
| ARC 111 | Intro to Arch Technology | 1 | 6 | 0 | 3 |
| ARC 112 | Constr Matls & Methods | 3 | 2 | 0 | 4 |
| ENG 111 | Expository Writing | 3 | 0 | 0 | 3 |
| ENG 111A | Expository Writing Lab | 0 | 2 | 0 | 1 |
| MAT 120 | Geometry and Trigonometry | 2 | 2 | 0 | 3 |
| | Humanities/Fine Arts Elective | <u>3</u> | <u>0</u> | <u>0</u> | <u>3</u> |
| | | 12 | 12 | 0 | 17 |
| SPRING SEMESTER 1 | | | | | |
| ARC 113 | Residential Arch Tech | 1 | 6 | 0 | 3 |
| ARC 114 | Architectural CAD | 1 | 3 | 0 | 2 |
| ARC 114A | Architectural CAD Lab | 0 | 3 | 0 | 1 |
| ARC 131 | Building Codes | 2 | 2 | 0 | 3 |
| PHY 121 | Applied Physics I | 3 | 2 | 0 | 4 |
| PSY 118 | Interpersonal Psychology | <u>3</u> | <u>0</u> | <u>0</u> | <u>3</u> |
| | | 10 | 16 | 0 | 16 |
| SUMMER SEMESTER 1 | | | | | |
| ARC 220 | Adv Architect CAD | 1 | 3 | 0 | 2 |
| ARC 240 | Site Planning | <u>3</u> | <u>0</u> | <u>0</u> | <u>3</u> |
| | | 4 | 3 | 0 | 5 |

| FALL SEMESTER 2 | | Class | Lab | Clinical | Credit |
|-----------------|-------------------------|----------|----------|----------|----------|
| ARC 211 | Light Constr Technology | 1 | 6 | 0 | 3 |
| ARC 221 | Architectural 3-D CAD | 1 | 4 | 0 | 3 |
| ARC 230 | Environmental Systems | 3 | 3 | 0 | 4 |
| ARC 231 | Arch Presentations | 2 | 4 | 0 | 4 |
| | Elective | <u>3</u> | <u>0</u> | <u>0</u> | <u>3</u> |
| | | 10 | 17 | 0 | 17 |

SPRING SEMESTER 2

| | | | | | |
|---------|-------------------------|----------|----------|----------|----------|
| ARC 213 | Design Project | 2 | 6 | 0 | 4 |
| ARC 235 | Architectural Portfolio | 2 | 3 | 0 | 3 |
| ARC 241 | Contract Administration | 1 | 2 | 0 | 2 |
| ARC 264 | Digital Architecture | 1 | 3 | 0 | 2 |
| ENG 115 | Oral Communication | <u>3</u> | <u>0</u> | <u>0</u> | <u>3</u> |
| | | 9 | 14 | 0 | 14 |

TOTAL REQUIRED CREDITS.....69

Co-op Option: Qualified students may elect to take up to three (3) credit hours of Cooperative Education provided they acquire approval from the Co-op Director and the Department Chairperson.

ASSOCIATE DEGREE NURSING (INTEGRATED)

A45100

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 a member of the discipline of nursing, and as a member of the interdisciplinary team.

Graduates of this program are eligible to apply to take the National Council Licensure Examination (NCLEX-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.

Upon completion of the program, graduates will receive an **associate in applied science degree**.

ASSOCIATE DEGREE NURSING (INTEGRATED) (A45100)

Effective: Summer 1997-98

Revised: 4/29/97

Length: 5 Semesters

Prerequisites: 1 Unit of Biology, Algebra & Chemistry

Award: Associate in Applied Science

FALL SEMESTER 1

| | | Class | Lab | Clinical | Credit |
|---------|--------------------------|-------|-----|----------|--------|
| BIO 168 | Anatomy and Physiology I | 3 | 3 | 0 | 4 |
| NUR 110 | Nursing I | 5 | 3 | 6 | 8 |
| PSY 150 | General Psychology | 3 | 0 | 0 | 3 |
| | | — | — | — | — |
| | | 11 | 6 | 6 | 15 |

SPRING SEMESTER 1

| | | | | | |
|---------|---------------------------|----|---|---|----|
| BIO 169 | Anatomy and Physiology II | 3 | 3 | 0 | 4 |
| NUR 120 | Nursing II | 5 | 3 | 6 | 8 |
| PSY 241 | Developmental Psych | 3 | 0 | 0 | 3 |
| | | — | — | — | — |
| | | 11 | 6 | 6 | 15 |

SUMMER SEMESTER 1

| | | | | | |
|---------|-----------------|---|---|---|---|
| CIS 113 | Computer Basics | 0 | 2 | 0 | 1 |
| NUR 130 | Nursing III | 4 | 3 | 6 | 7 |
| | | — | — | — | — |
| | | 4 | 5 | 6 | 8 |

FALL SEMESTER 2

| | | Class | Lab | Clinical | Credit |
|----------|------------------------|--------------|------------|-----------------|---------------|
| BIO 275 | Microbiology | 3 | 3 | 0 | 4 |
| ENG 111 | Expository Writing | 3 | 0 | 0 | 3 |
| ENG 111A | Expository Writing Lab | 0 | 2 | 0 | 1 |
| NUR 210 | Nursing IV | 5 | 3 | 12 | 10 |
| | | <hr/> 11 | <hr/> 8 | <hr/> 12 | <hr/> 18 |

SPRING SEMESTER 2

| | | | | | |
|---------|---------------------------|----------|---------|----------|----------|
| ENG 115 | Oral Communication | 3 | 0 | 0 | 3 |
| NUR 220 | Nursing V | 4 | 3 | 15 | 10 |
| | Humanities/Fine Arts Elec | 3 | 0 | 0 | 3 |
| | | <hr/> 10 | <hr/> 3 | <hr/> 15 | <hr/> 16 |

TOTAL REQUIRED CREDITS.... 72

NUR-189 Nursing Transition for LPN's—approved for advanced placement

Students with a felony conviction may have limited licensure and employment opportunities.

ASSOCIATE IN ARTS

A10100

The College Transfer program is designed for students who intend to transfer to a four-year college or university to pursue a baccalaureate degree. Students in this program are responsible for examining the requirements of the four-year college or university to which they plan to transfer for completion of their degree. Counselors and advisors are available to assist students in planning their program.

The course work in the program includes literature, humanities, mathematics, physical education, and the sciences. The Associate in Arts program concentrates heavily on the humanities and social sciences and is recommended for those who plan to continue in a Bachelor of Arts degree program. The Associate in Science program leans more toward mathematics and the physical and life sciences and is intended for those pursuing the Bachelor of Science degree.

Upon completion of the program, the student will receive an **associate in arts degree**.

ASSOCIATE IN ARTS (A10100)

Effective: Summer 1997-98

Revised: 1/28/97

Length: 4 Semesters

Prerequisites: High School Diploma, Algebra I, Algebra II

Award: Associate in Arts

| FALL SEMESTER I | | Class | Lab | Clinical | Credit |
|-----------------|-------------------------------|-------|-----|----------|--------|
| ENG 111 | Expository Writing | 3 | 0 | 0 | 3 |
| ENG 111A | Expository Writing Lab | 0 | 2 | 0 | 1 |
| CIS 110 | Introduction to Computers | 2 | 2 | 0 | 3 |
| | Mathematics Sequence I | 3 | 0 | 0 | 3 |
| | History Elective | 3 | 0 | 0 | 3 |
| | Humanities/Fine Arts Elective | 3 | 0 | 0 | 3 |
| | Physical Education | 0 | 2 | 0 | 1 |
| | | 14 | 6 | 0 | 17 |

SPRING SEMESTER I

| | | | | | |
|---------|------------------------------------|----|---|---|----|
| ENG 113 | Literature-Based Research | 3 | 0 | 0 | 3 |
| | Mathematics Sequence II | 3 | 0 | 0 | 3 |
| | Humanities/Fine Arts Elective | 3 | 0 | 0 | 3 |
| | Physical Education | 0 | 2 | 0 | 1 |
| | Social/Behavioral Science Elective | 3 | 0 | 0 | 3 |
| | Science Elective | 3 | 2 | 0 | 4 |
| | | 15 | 5 | 0 | 17 |

| FALL SEMESTER 2 | Class | Lab | Clinical | Credit |
|------------------------------------|--------------|------------|-----------------|---------------|
| Humanities/Fine Arts Elective | 3 | 0 | 0 | 3 |
| Social/Behavioral Science Elective | 3 | 0 | 0 | 3 |
| *Major Electives | <u>8</u> | <u>0</u> | <u>0</u> | <u>8</u> |
| | 14 | 0 | 0 | 14 |

SPRING SEMESTER 2

| | | | | |
|------------------------------------|----------|----------|----------|----------|
| Humanities/Fine Arts Elective | 6 | 0 | 0 | 6 |
| Science Elective | 3 | 3 | 0 | 4 |
| Social/Behavioral Science Elective | 3 | 0 | 0 | 3 |
| *Major Elective | <u>4</u> | <u>0</u> | <u>0</u> | <u>4</u> |
| | 16 | 3 | 0 | 17 |

TOTAL REQUIRED CREDITS.....65

Co-op Option: NA

* See the Student Educational Plan for the list of approved major electives.

ASSOCIATE IN SCIENCE

A10400

The College Transfer program is designed for students who intend to transfer to a four-year college or university to pursue a baccalaureate degree. Students in this program are responsible for examining the requirements of the four-year college or university to which they plan to transfer for completion of their degree. Counselors and advisors are available to assist students in planning their program.

The course work in the program includes literature, humanities, mathematics, physical education and the sciences. The Associate in Science program leans more toward mathematics and the physical and life sciences and is intended for those pursuing the Bachelor of Science degree. The Associate in Arts program concentrates heavily on the humanities and social sciences and is recommended for those who plan to continue in a Bachelor of Arts degree program.

Upon completion of the program, the student will receive an **associate in science degree**.

ASSOCIATE IN SCIENCE (A10400)

Effective: Summer 1997-98

Revised: 4/11/97

Length: 4 Semesters

Prerequisites: High School Diploma, Algebra I, Algebra II

Award: Associate in Science

| FALL SEMESTER 1 | | Class | Lab | Clinical | Credit |
|-----------------|-------------------------------|----------|----------|----------|----------|
| ENG 111 | Expository Writing | 3 | 0 | 0 | 3 |
| ENG 111A | Expository Writing Lab | 0 | 2 | 0 | 1 |
| CIS 110 | Introduction to Computers | 2 | 2 | 0 | 3 |
| | Mathematics Sequence I | 3 | 0 | 0 | 3 |
| | Humanities/Fine Arts Elective | 3 | 0 | 0 | 3 |
| | Science Elective | <u>2</u> | <u>3</u> | <u>0</u> | <u>4</u> |
| | | 14 | 7 | 0 | 17 |

SPRING SEMESTER 1

| | | | | | |
|---------|------------------------------------|----------|----------|----------|----------|
| ENG 113 | Literature-Based Research | 3 | 0 | 0 | 3 |
| | Mathematics Elective | 3 | 0 | 0 | 3 |
| | History Elective | 3 | 0 | 0 | 3 |
| | Science Elective | 3 | 3 | 0 | 4 |
| | Physical Education Elective | 0 | 2 | 0 | 1 |
| | Social/Behavioral Science Elective | <u>2</u> | <u>0</u> | <u>0</u> | <u>2</u> |
| | | 15 | 5 | 0 | 17 |

| FALL SEMESTER 2 | Class | Lab | Clinical | Credit |
|------------------------------------|--------------|------------|-----------------|---------------|
| *Major Elective | 3 | 0 | 0 | 3 |
| Humanities/Fine Arts Elective | 6 | 0 | 0 | 6 |
| Social/Behavioral Science Elective | 3 | 0 | 0 | 3 |
| Mathematics or Science Elective | 3 | 0 | 0 | 3 |
| Physical Education Elective | <u>0</u> | <u>2</u> | <u>0</u> | <u>1</u> |
| | 15 | 2 | 0 | 16 |

SPRING SEMESTER 2

| | | | | |
|------------------------------------|----------|----------|----------|----------|
| Humanities/Fine Arts Elective | 3 | 0 | 0 | 3 |
| Mathematics or Science Electives | 9 | 0 | 0 | 6 |
| Social/Behavioral Science Elective | 3 | 0 | 0 | 3 |
| *Major Elective | <u>3</u> | <u>0</u> | <u>0</u> | <u>3</u> |
| | 15 | 0 | 0 | 15 |

TOTAL REQUIRED CREDITS....65

Co-op Option: NA

* See the Student Educational Plan for the list of approved major electives.

ASSOCIATE IN GENERAL EDUCATION

A10300

The General Education curriculum program consists of basic course work in English, literature, fine arts, philosophy, social science, science, and mathematics, leading to an Associate Degree in General Education (ADGE). It is designed principally for students who desire two years of general education beyond the high school level.

Upon completion of the program, the student will receive an **associate in general education**.

ASSOCIATE IN GENERAL EDUCATION (A10300)

Effective: Summer 1997-98

Length: 4 Semesters

Prerequisites: High School Diploma, Algebra I, Algebra II

Award: Associate in General Education

| FALL SEMESTER 1 | | | Class | Lab | Clinical | Work Experience | Credit |
|-------------------|------|------------------------------|-----------|----------|----------|--------------------|-----------|
| ENG | 111 | Expository Writing | 3 | 0 | 0 | 0 | 3 |
| ENG | 111A | Expository Writing Lab | 0 | 2 | 0 | 0 | 1 |
| CIS | 110 | Introduction to Computers | 2 | 2 | 0 | 0 | 3 |
| | | Humanities/Fine Arts | 3 | 0 | 0 | 0 | 3 |
| | | Social/Behavioral Sciences | 3 | 0 | 0 | 0 | 3 |
| | | Natural Sciences/Mathematics | <u>3</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>3</u> |
| | | | 14 | 4 | 0 | 0 | 16 |
| | | | | | | | |
| SPRING SEMESTER 1 | | | | | | | |
| ENG | 114 | Prof Research & Reporting | 3 | 0 | 0 | 0 | 3 |
| | | Major Electives | <u>14</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>14</u> |
| | | | 17 | 0 | 0 | 0 | 17 |
| | | | | | | | |
| FALL SEMESTER 2 | | | | | | | |
| | | Major Electives | <u>17</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>17</u> |
| | | | 17 | 0 | 0 | 0 | 17 |
| | | | | | | | |
| SPRING SEMESTER 2 | | | | | | | |
| | | Major Electives | <u>15</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>15</u> |
| | | | 15 | 0 | 0 | 0 | 15 |

TOTAL REQUIRED CREDITS.... 65

Co-op Option: Qualified students may elect to take up to eight (8) credit hours of Cooperative Education provided they acquire approval from the Co-op Director and the Department Chairperson.

AUTOBODY REPAIR

D60100

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.

Upon completion of the program, graduates will be awarded a **diploma**.

AUTOBODY REPAIR (D60100)

Effective: Summer 1997-98

Revised: 2/5/97

Length: 3 Semesters

Prerequisite: High School Diploma

Award: Diploma

FALL SEMESTER 1

| | | Class | Lab | Clinical | Credit |
|---------|--------------------------|-------|-----|----------|--------|
| AUB 111 | Painting & Refinishing I | 2 | 6 | 0 | 4 |
| AUB 121 | Non-Structural Damage I | 1 | 4 | 0 | 3 |
| AUB 131 | Structural Damage I | 2 | 4 | 0 | 4 |
| AUB 134 | Autobody MIG Welding | 1 | 4 | 0 | 3 |
| CIS 113 | Computer Basics | 0 | 2 | 0 | 1 |
| ISC 112 | Industrial Safety | 2 | 0 | 0 | 2 |
| | | 8 | 20 | 0 | 17 |

SPRING SEMESTER 1

| | | | | | |
|---------|---------------------------|----|----|---|----|
| AUB 112 | Painting & Refinishing II | 2 | 6 | 0 | 4 |
| AUB 122 | Non-Structural Damage II | 2 | 6 | 0 | 4 |
| AUB 132 | Structural Damage II | 2 | 6 | 0 | 4 |
| ENG 101 | Applied Communications I | 3 | 0 | 0 | 3 |
| PSY 101 | Applied Psychology | 3 | 0 | 0 | 3 |
| | | 12 | 18 | 0 | 18 |

SUMMER SEMESTER 1

| | | | | | |
|---------|----------------------|---|---|---|---|
| AUB 114 | Special Finishes | 1 | 2 | 0 | 2 |
| AUB 136 | Plastics & Adhesives | 1 | 4 | 0 | 3 |
| AUB 162 | Autobody Estimating | 1 | 2 | 0 | 2 |
| | | 3 | 8 | 0 | 7 |

TOTAL REQUIRED CREDITS.... 42

Co-op Option: NA

AUTOMOTIVE SYSTEMS TECHNOLOGY

A60160

The Automotive Systems Technology curriculum prepares individuals for employment as Automotive Service Technicians. It provides an introduction to automotive careers and increases student awareness of the challenges associated with this fast and ever-changing field.

Classroom and lab experiences integrate technical and academic course work. Emphasis is placed on theory, servicing and operation of brakes, electrical/electronic systems, engine performance, steering/suspension, automatic transmission/transaxles, engine repair, climate control, and manual drive trains.

Upon completion of this curriculum, students should be prepared to take the ASE exam and be ready for full-time employment in dealerships and repair shops in the automotive service industry.

Upon completion of the program, graduates will be awarded an **associate in applied science degree**.

AUTOMOTIVE SYSTEMS TECHNOLOGY (A60160)

Effective: Summer 1997-98

Revised: 3/6/97

Length: 5 Semesters

Prerequisite: High School Diploma

Award: Associate in Applied Science

| FALL SEMESTER 1 | | Class | Lab | Clinical | Credit |
|-----------------|---------------------|----------|----------|----------|----------|
| AUT 115 | Engine Fundamentals | 2 | 3 | 0 | 3 |
| AUT 116 | Engine Repair | 1 | 3 | 0 | 2 |
| AUT 151 | Brake Systems | 2 | 2 | 0 | 3 |
| AUT 152 | Brake Systems Lab | 0 | 2 | 0 | 1 |
| AUT 161 | Electrical Systems | <u>2</u> | <u>6</u> | <u>0</u> | <u>4</u> |
| | | 7 | 16 | 0 | 13 |

SPRING SEMESTER 1

| | | | | | |
|-------------|-------------------------------|----------|----------|----------|----------|
| AUT 164 | Automotive Electronics | 2 | 2 | 0 | 3 |
| AUT 183 | Engine Performance Fuels | 2 | 3 | 0 | 3 |
| AUT 184 | Engine Perf - Fuels Lab | 0 | 3 | 0 | 1 |
| | OR | | | | |
| COE 111-212 | Co-op Work Experience | 0 | 0 | 10 | 1 |
| AUT 231 | Manual Drive Trains/Axles | 2 | 3 | 0 | 3 |
| AUT 232 | Manual Drive Trains/Axles Lab | 0 | 3 | 0 | 1 |
| | OR | | | | |
| COE 111-212 | Co-op Work Experience | 0 | 0 | 10 | 1 |
| PHY 122 | Applied Physics II | 3 | 2 | 0 | 4 |
| | Humanities/Fine Arts Elective | <u>3</u> | <u>0</u> | <u>0</u> | <u>3</u> |
| | | 12 | 16 | 0 | 18 |

SUMMER SEMESTER 1

| | | | | | |
|-------------|-------------------------------|----------|----------|----------|----------|
| AUT 181 | Engine Performance-Electrical | 2 | 3 | 0 | 3 |
| AUT 182 | Engine Perf - Elc Lab | 0 | 3 | 0 | 1 |
| | OR | | | | |
| COE 111-212 | Co-op Work Experience | 0 | 0 | 10 | 1 |
| AUT 185 | Emissions Controls | 1 | 2 | 0 | 2 |
| CIS 113 | Computer Basics | <u>0</u> | <u>2</u> | <u>0</u> | <u>1</u> |
| | | 3 | 10 | 0 | 7 |

FALL SEMESTER 2

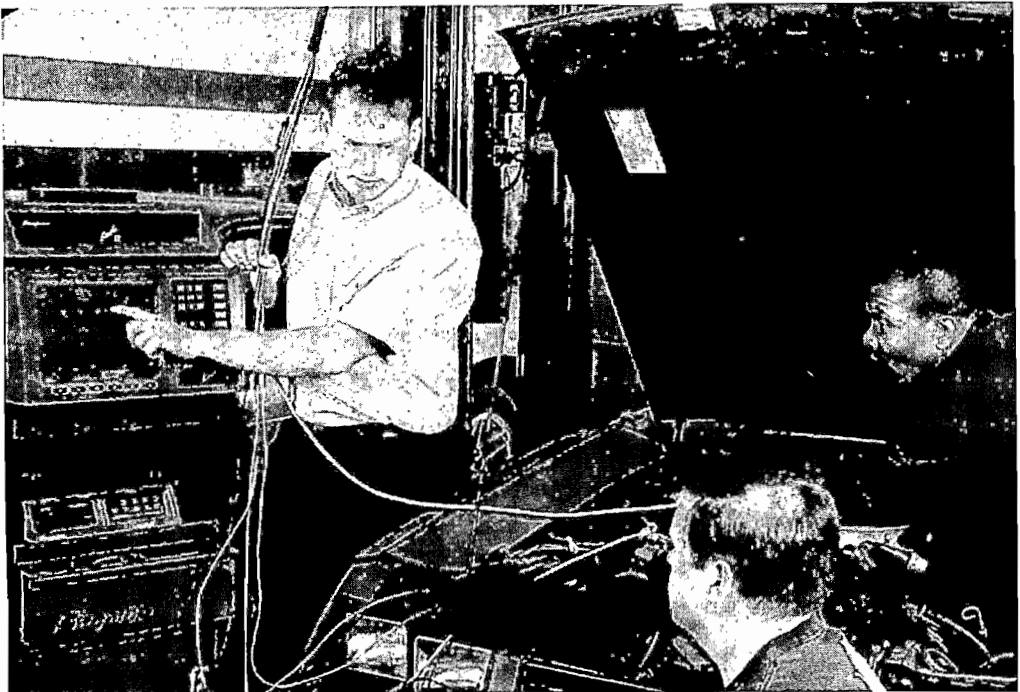
| | | Class | Lab | Clinical | Credit |
|-------------|-----------------------------|----------|----------|----------|----------|
| AUT 141 | Suspension & Steering Sys | 2 | 4 | 0 | 4 |
| AUT 162 | Chassis Elect & Electronics | 2 | 2 | 0 | 3 |
| AUT 163 | Chassis Elec & Elect Lab | 0 | 2 | 0 | 1 |
| OR | | | | | |
| COE 111-212 | Co-op Work Experience | 0 | 0 | 10 | 1 |
| AUT 211 | Automotive Machining | 2 | 6 | 0 | 4 |
| ENG 111 | Expository Writing | 3 | 0 | 0 | 3 |
| ENG 111A | Expository Writing Lab | 0 | 2 | 0 | 1 |
| PSY 118 | Interpersonal Psychology | <u>3</u> | <u>0</u> | <u>0</u> | <u>3</u> |
| | | 12 | 16 | 0 | 19 |

SPRING SEMESTER 2

| | | | | | |
|---------|----------------------------|----------|----------|----------|----------|
| AUT 113 | Automotive Servicing | 2 | 6 | 0 | 4 |
| AUT 171 | Heating & Air Conditioning | 2 | 3 | 0 | 3 |
| AUT 221 | Automatic Transmissions | 2 | 6 | 0 | 4 |
| ENG 115 | Oral Communication | <u>3</u> | <u>0</u> | <u>0</u> | <u>3</u> |
| | | 9 | 15 | 0 | 14 |

TOTAL REQUIRED CREDITS.....71

Co-op Option: Qualified students may elect to take up to four (4) credit hours of Cooperative Education provided they acquire approval from the Co-op Director and the Department Chairperson.



BASIC LAW ENFORCEMENT TRAINING

C55120

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.

Successful graduates receive a curriculum certificate and are qualified to take certification examinations mandated by the North Carolina Criminal Justice Education and Training Standards Commission and/or the North Carolina Sheriffs' Education and Training Standards Commission.

Upon completion of the program, a student will receive a **certificate**.

BASIC LAW ENFORCEMENT TRAINING (C55120)

Effective: Summer 1997-98

Revised: 1/21/97

Length: 1 Semester

Prerequisite: High School Diploma

Award: Certificate

| FALL SEMESTER 1 | | Class | Lab | Clinical | Work Experience | Credit |
|-----------------|---------------------------|-------|-----|----------|--------------------|--------|
| CJC 100 | Basic Law Enforcement Trn | 9 | 27 | 0 | 0 | 18 |

TOTAL REQUIRED CREDITS..... 18

Co-op Option: NA

BUSINESS ADMINISTRATION

A25120

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 businesses or industries.

Upon completion of the program, graduates will receive an **associate in applied science degree**.

BUSINESS ADMINISTRATION (A25120)

Effective: Summer 1997-98

Revised: 3/3/97

Length: 5 Semesters

Prerequisite: High School Diploma

Award: Associate in Applied Science

FALL SEMESTER 1

| | | Class | Lab | Clinical | Credit |
|----------|---------------------------|-------|-----|----------|--------|
| BUS 110 | Introduction to Business | 3 | 0 | 0 | 3 |
| BUS 115 | Business Law I | 3 | 0 | 0 | 3 |
| BUS 121 | Business Math | 2 | 2 | 0 | 3 |
| CIS 110 | Introduction to Computers | 2 | 2 | 0 | 3 |
| ENG 111 | Expository Writing | 3 | 0 | 0 | 3 |
| ENG 111A | Expository Writing Lab | 0 | 2 | 0 | 1 |
| | | 13 | 6 | 0 | 16 |

SPRING SEMESTER 1

| | | | | | |
|---------|-------------------------------|----|---|---|----|
| ACC 120 | Prin of Accounting I | 3 | 2 | 0 | 4 |
| BUS 116 | Business Law II | 3 | 0 | 0 | 3 |
| CIS 120 | Spreadsheet I | 2 | 2 | 0 | 3 |
| ENG 114 | Prof Research & Reporting | 3 | 0 | 0 | 3 |
| MAT 115 | Mathematical Models | 2 | 2 | 0 | 3 |
| | Humanities/Fine Arts Elective | 3 | 0 | 0 | 3 |
| | | 16 | 6 | 0 | 19 |

SUMMER SEMESTER 1

| | | | | | |
|---------|-------------------------|---|---|---|---|
| ECO 252 | Prin of Macroeconomics | 3 | 0 | 0 | 3 |
| MKT 120 | Principles of Marketing | 3 | 0 | 0 | 3 |
| | | 6 | 0 | 0 | 6 |

FALL SEMESTER 2

| | | Class | Lab | Clinical | Credit |
|---------|--------------------------|-------|-----|----------|--------|
| ACC 121 | Prin of Accounting II | 3 | 2 | 0 | 4 |
| BUS 137 | Principles of Management | 3 | 0 | 0 | 3 |
| BUS 225 | Business Finance | 2 | 2 | 0 | 3 |
| ECO 251 | Prin of Microeconomics | 3 | 0 | 0 | 3 |
| | *Major Elective | 3 | 0 | 0 | 3 |
| | | — | — | — | — |
| | | 14 | 4 | 0 | 16 |

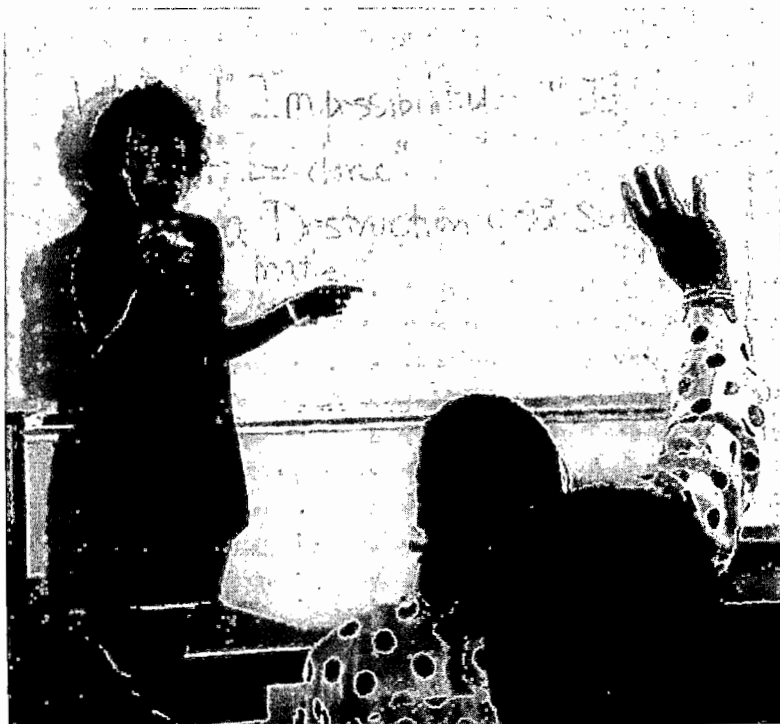
SPRING SEMESTER 2

| | | | | | |
|---------|---------------------------|----|---|---|----|
| BUS 135 | Principles of Supervision | 3 | 0 | 0 | 3 |
| BUS 153 | Human Resource Management | 3 | 0 | 0 | 3 |
| BUS 239 | Bus Application Seminar | 1 | 2 | 0 | 2 |
| ENG 115 | Oral Communication | 3 | 0 | 0 | 3 |
| MKT 123 | Fundamentals of Selling | 3 | 0 | 0 | 3 |
| | *Major Elective | 3 | 0 | 0 | 3 |
| | | — | — | — | — |
| | | 16 | 2 | 0 | 17 |

TOTAL REQUIRED CREDITS.... 74

Co-op Option: Qualified students may elect to take up to three (3) credit hours of Cooperative Education provided they acquire approval from the Co-op Director and the Department Chairperson.

* See the Student Educational Plan for the list of approved major electives.



BUSINESS ADMINISTRATION/BANKING AND FINANCE**A2512A**

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.

Upon completion of the program, graduates will receive an **associate in applied science degree**.

BUSINESS ADMINISTRATION/BANKING AND FINANCE (A2512A)

Effective: Summer 1997-98

Revised: 3/3/97

Length: 4 Semesters

Prerequisite: High School Diploma

Award: Associate in Applied Science

| FALL SEMESTER 1 | | Class | Lab | Clinical | Credit |
|------------------------|---------------------------|--------------|------------|-----------------|---------------|
| BAF 110 | Principles of Banking | 3 | 0 | 0 | 3 |
| BUS 115 | Business Law I | 3 | 0 | 0 | 3 |
| MAT 115 | Mathematical Models | 2 | 2 | 0 | 3 |
| ENG 111 | Expository Writing | 3 | 0 | 0 | 3 |
| ENG 111A | Expository Writing Lab | 0 | 2 | 0 | 1 |
| CIS 110 | Introduction to Computers | 2 | 2 | 0 | 3 |
| | | <hr/> | <hr/> | <hr/> | <hr/> |
| | | 13 | 6 | 0 | 16 |

SPRING SEMESTER 1

| | | | | | |
|---------|---------------------------|-------|-------|-------|-------|
| BAF 141 | Law & Banking: Principles | 3 | 0 | 0 | 3 |
| ACC 120 | Prin of Accounting I | 3 | 2 | 0 | 4 |
| BUS 137 | Principles of Management | 3 | 0 | 0 | 3 |
| ECO 251 | Prin of Microeconomics | 3 | 0 | 0 | 3 |
| BAF 131 | Fund of Bank Lending | 3 | 0 | 0 | 3 |
| | | <hr/> | <hr/> | <hr/> | <hr/> |
| | | 15 | 2 | 0 | 16 |

FALL SEMESTER 2

| | | | | | |
|---------|-------------------------|-------|-------|-------|-------|
| BAF 222 | Money and Banking | 3 | 0 | 0 | 3 |
| MKT 120 | Principles of Marketing | 3 | 0 | 0 | 3 |
| BUS 225 | Business Finance | 2 | 2 | 0 | 3 |
| ENG 115 | Oral Communication | 3 | 0 | 0 | 3 |
| | Social/Behavioral | | | | |
| | Science Elective | 3 | 0 | 0 | 3 |
| | *Major Elective | 3 | 0 | 0 | 3 |
| | | <hr/> | <hr/> | <hr/> | <hr/> |
| | | 17 | 2 | 0 | 18 |

| SPRING SEMESTER 2 | | Class | Lab | Clinical | Credit |
|-------------------|---------------------------|-------|-------|----------|--------|
| ENG 114 | Prof Research & Reporting | 3 | 0 | 0 | 3 |
| BAF 234 | Residential Mort Lending | 3 | 0 | 0 | 3 |
| BAF 235 | Analyzing Fin Statements | 3 | 0 | 0 | 3 |
| BAF 232 | Consumer Lending | 3 | 0 | 0 | 3 |
| | *Major Elective | 3 | 0 | 0 | 3 |
| | Humanities/Fine Arts Elec | 3 | 0 | 0 | 3 |
| | | <hr/> | <hr/> | <hr/> | <hr/> |
| | | 18 | 0 | 0 | 18 |

TOTAL REQUIRED CREDITS.... 68

Co-op Option: Qualified students may elect to take up to three (3) credit hours of Cooperative Education provided they acquire approval from the Co-op Director and the Department Chairperson.

* See the Student Educational Plan for the list of approved major electives.

FAYETTEVILLE TECHNICAL COMMUNITY COLLEGE

1997-1999

CATALOG

VOLUME XIV

P.O. BOX 35236, FAYETTEVILLE, NORTH CAROLINA 28303-0236

PHONE (910) 678-8400

Web site: <http://www.faytech.cc.nc.us>

WELCOME

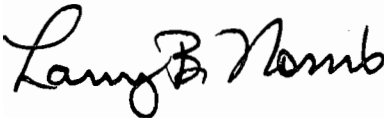
MESSAGE FROM THE PRESIDENT

Welcome to Fayetteville Technical Community College. Our goal is to assist you in achieving success in your educational program. Whether you plan to enter directly into the workforce after completing your educational program or transfer to a four-year college, you will find that FTCC will prepare you well for the future. I encourage you to stay focused, work hard, and take advantage of the many support services here at the College.

As we stand at the dawn of the twenty-first century with the explosion of information technology, it is more apparent than ever that education is the key to success. Increasingly, the minimum requirement for entry-level employment will be education beyond high school, most requiring the associate degree. Continuous learning, likewise, is essential because of the impact of technology on the workforce. FTCC's comprehensive educational programs provide the opportunities for your success. Sixty certificate, diploma, or associate degree curricula are offered. Students may choose from numerous associate in applied science programs, the associate in arts, or the associate in science. The College also has an extensive occupational extension program designed to meet immediate, short-term employment training needs of business and industry. In addition, FTCC has a highly effective basic skills program to assist individuals in completing their adult high school diploma or its equivalent.

In selecting FTCC, you have taken the first step to a successful future. Whatever your educational goal, our faculty and staff pledge to assist you.

Sincerely,

A handwritten signature in black ink, reading "Larry B. Norris". The signature is written in a cursive, flowing style.

Larry B. Norris
President

BUSINESS ADMINISTRATION/MARKETING AND RETAILING A2512F

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.

Upon completion of the program, graduates will receive an **associate in applied science degree**.

BUSINESS ADMINISTRATION/MARKETING AND RETAILING (A2512F)

Effective: Summer 1997-98

Revised: 2/27/97

Length: 4 Semesters

Prerequisite: High School Diploma

Award: Associate in Applied Science

| FALL SEMESTER 1 | | Class | Lab | Clinical | Credit |
|-----------------|---------------------------|-------|-----|----------|--------|
| BUS 115 | Business Law I | 3 | 0 | 0 | 3 |
| CIS 110 | Introduction to Computers | 2 | 2 | 0 | 3 |
| ENG 111 | Expository Writing | 3 | 0 | 0 | 3 |
| ENG 111A | Expository Writing Lab | 0 | 2 | 0 | 1 |
| MKT 120 | Principles of Marketing | 3 | 0 | 0 | 3 |
| MKT 230 | Public Relations | 3 | 0 | 0 | 3 |
| | | 14 | 4 | 0 | 16 |

SPRING SEMESTER 1

| | | | | | |
|---------|---------------------------|----|---|---|----|
| ENG 115 | Oral Communication | 3 | 0 | 0 | 3 |
| ECO 251 | Prin of Microeconomics | 3 | 0 | 0 | 3 |
| MAT 115 | Mathematical Models | 3 | 0 | 0 | 3 |
| MKT 121 | Retailing | 3 | 0 | 0 | 3 |
| MKT 123 | Fundamentals of Selling | 3 | 0 | 0 | 3 |
| | Humanities/Fine Arts Elec | 3 | 0 | 0 | 3 |
| | | 18 | 0 | 0 | 18 |

FALL SEMESTER 2

| | | | | | |
|---------|-------------------------------|----|---|---|----|
| ACC 120 | Prin of Accounting I | 3 | 2 | 0 | 4 |
| ENG 114 | Prof Research & Reporting | 3 | 0 | 0 | 3 |
| MKT 220 | Advertising & Sales Promotion | 3 | 0 | 0 | 3 |
| MKT 221 | Consumer Behavior | 3 | 0 | 0 | 3 |
| MKT 228 | Service Marketing | 3 | 0 | 0 | 3 |
| | | 15 | 2 | 0 | 16 |

| SPRING SEMESTER 2 | | Class | Lab | Clinical | Credit |
|-------------------|--------------------------|-------|-------|----------|--------|
| BUS 137 | Principles of Management | 3 | 0 | 0 | 3 |
| ECO 252 | Prin of Macroeconomics | 3 | 0 | 0 | 3 |
| MKT 122 | Visual Merchandising | 3 | 0 | 0 | 3 |
| MKT 222 | Credit Procedures | 3 | 0 | 0 | 3 |
| OR | | | | | |
| COE | Co-op Work Experience | | | | |
| MKT 225 | Marketing Research | 3 | 0 | 0 | 3 |
| MKT 227 | Marketing Applications | 3 | 0 | 0 | 3 |
| | | <hr/> | <hr/> | <hr/> | <hr/> |
| | | 18 | 0 | 0 | 18 |

TOTAL REQUIRED CREDITS.... 68

Co-op Option: Qualified students may elect to take up to three (3) hours of Cooperative Education in place of MKT-222 provided they acquire approval from the Co-op Director and the Department Chairperson.



BUSINESS ADMINISTRATION/PUBLIC ADMINISTRATION

A2512H

Public Administration is a concentration under the curriculum title of Business Administration. This curriculum prepares students for entry into management positions in state/local governments and not-for-profit organizations, provides education for current employees, and informs citizens of governmental functions.

Course work includes studies and practical application in personnel administration, decision making, ethics, organizational theories, budgetary, and other governmental issues. Emphasis is placed on building analytical skills, stimulating moral imagination, and recognizing the discretionary power of the administrator's role.

Through acquisition of knowledge and skills, individuals should be able to perform governmental activities. By developing personal competencies and qualities, graduates will be eligible for employment in the public administration profession.

Upon completion of the program, graduates will receive an associate in applied science degree.

BUSINESS ADMINISTRATION/PUBLIC ADMINISTRATION (A2512H)

Effective: Summer 1997-98

Revised: 3/3/97

Length: 4 Semesters

Prerequisite: High School Diploma

Award: Associate in Applied Science

| FALL SEMESTER 1 | | Class | Lab | Clinical | Credit |
|-----------------|--------------------------|-------|-----|----------|--------|
| BUS 137 | Principles of Management | 3 | 0 | 0 | 3 |
| CIS 110 | Introduction to Computer | 2 | 2 | 0 | 3 |
| ENG 111 | Expository Writing | 3 | 0 | 0 | 3 |
| ENG 111A | Expository Writing Lab | 0 | 2 | 0 | 1 |
| PAD 151 | Intro to Public Admin | 3 | 0 | 0 | 3 |
| POL 120 | American Government | 3 | 0 | 0 | 3 |
| | *Major Elective | 3 | 0 | 0 | 3 |
| | | 17 | 4 | 0 | 19 |

SPRING SEMESTER 1

| | | | | | |
|---------|---------------------------|----|---|---|----|
| BUS 115 | Business Law I | 3 | 0 | 0 | 3 |
| BUS 153 | Human Resource Management | 3 | 0 | 0 | 3 |
| ENG 114 | Prof Research & Reporting | 3 | 0 | 0 | 3 |
| MAT 115 | Mathematical Models | 2 | 2 | 0 | 3 |
| PAD 152 | Ethics in Government | 3 | 0 | 0 | 3 |
| POL 130 | State & Local Government | 3 | 0 | 0 | 3 |
| | | 17 | 2 | 0 | 18 |

FALL SEMESTER 2

| | | | | | |
|---------|----------------------------|----|---|---|----|
| ACC 120 | Prin of Accounting I | 3 | 2 | 0 | 4 |
| ECO 252 | Prin of Macroeconomic | 3 | 0 | 0 | 3 |
| ENG 115 | Oral Communication | 3 | 0 | 0 | 3 |
| PAD 251 | Public Finance & Budgeting | 3 | 0 | 0 | 3 |
| PAD 252 | Public Policy Analysis | 3 | 0 | 0 | 3 |
| | | 15 | 2 | 0 | 16 |

| SPRING SEMESTER 2 | | Class | Lab | Clinical | Credit |
|-------------------|-------------------------------|-------|-------|----------|--------|
| MKT 120 | Principles of Marketing | 3 | 0 | 0 | 3 |
| PAD 253 | Intro to Urban Planning | 3 | 0 | 0 | 3 |
| SOC 210 | Introduction to Sociology | 3 | 0 | 0 | 3 |
| | Humanities/Fine Arts Elective | 3 | 0 | 0 | 3 |
| | *Major Elective | 3 | 0 | 0 | 3 |
| | | <hr/> | <hr/> | <hr/> | <hr/> |
| | | 15 | 0 | 0 | 15 |

TOTAL REQUIRED CREDITS.... 68

Co-op Option: Qualified students may elect to take up to three (3) credit hours of Cooperative Education provided they acquire approval from the Co-op Director and the Department Chairperson.

* See the Student Educational Plan for the list of approved major electives.

CABINETMAKING

D35160

The Cabinetmaking curriculum prepares students for employment in the woodworking industry. Kitchen cabinet and bathroom vanity design and constructions are studied prior to practical application. This curriculum also provides students the opportunity to plan and construct furniture products.

Students will read blueprints, plan, construct, finish, and install kitchen cabinets and bathroom vanities. Safe operation of hand tools and machinery will be emphasized while studying purchasing principles, building considerations, and related subjects required for construction of cabinets and furniture.

Graduates should qualify for employment in a facility that manufactures cabinets, furniture, or other wood products. Students will understand plant organization and operations for possible self-employment.

Upon completion of the program, students will receive a diploma.

CABINETMAKING (D35160)

Effective: Summer 1997-98

Revised: 1/21/97

Length: 3 Semesters

Prerequisite: High School Diploma

Award: Diploma

| FALL SEMESTER 1 | | Class | Lab | Clinical | Credit |
|-----------------|-----------------------|-------|-----|----------|--------|
| CAB 110 | Shop Operations | 3 | 3 | 0 | 4 |
| CAB 111 | Cabinetmaking I | 4 | 9 | 0 | 7 |
| DFT 117 | Technical Drafting | 1 | 2 | 0 | 2 |
| MAT 101 | Applied Mathematics I | 2 | 2 | 0 | 3 |
| | | — | — | — | — |
| | | 10 | 16 | 0 | 16 |

SPRING SEMESTER 1

| | | | | | |
|---------|--------------------------|----|----|---|----|
| CAB 112 | Cabinetmaking II | 5 | 12 | 0 | 9 |
| CIS 113 | Computer Basics | 0 | 2 | 0 | 1 |
| DDF 110 | Cabinet Design/Drafting | 1 | 2 | 0 | 2 |
| ENG 101 | Applied Communications I | 3 | 0 | 0 | 3 |
| ISC 115 | Construction Safety | 2 | 0 | 0 | 2 |
| | | — | — | — | — |
| | | 11 | 16 | 0 | 17 |

SUMMER SEMESTER 1

| | | | | | |
|---------|-------------------|---|---|---|---|
| CAB 113 | Cabinetmaking III | 4 | 6 | 0 | 6 |
| | Elective | 3 | 0 | 0 | 3 |
| | | — | — | — | — |
| | | 7 | 6 | 0 | 9 |

TOTAL REQUIRED CREDITS... 42

Co-op Option: Qualified students may elect to take up to three (3) credit hours of Cooperative Education provided they acquire approval from the Co-op Director and the Department Chairperson.

CARPENTRY

D35180

The Carpentry curriculum is designed to train students to construct residential structures using standard building materials and hand and power tools. Carpentry skills and a general knowledge of residential construction will also be taught.

Course work includes footings and foundations, framing, interior and exterior trim, cabinetry, blueprint reading, residential planning and estimating, and other related topics. Students will develop skills through hands-on participation.

Graduates should qualify for employment in the residential building construction field as rough carpenters, framing carpenters, roofers, maintenance carpenters, and other related job titles.

Upon completion of the program, the student will receive a **diploma**.

CARPENTRY (D35180)

Effective: Summer 1997-98

Revised: 2/5/97

Length: 3 Semesters

Prerequisite: High School Diploma

Award: Diploma

| FALL SEMESTER 1 | | Class | Lab | Clinical | Credit |
|-----------------|--------------------------------|-------|-----|----------|--------|
| BPR 130 | Blueprint Reading/Construction | 1 | 2 | 0 | 2 |
| CAR 111 | Carpentry I | 4 | 15 | 0 | 9 |
| CAR 114 | Residential Bldg Codes | 3 | 0 | 0 | 3 |
| MAT 101 | Applied Mathematics I | 2 | 2 | 0 | 3 |
| | | — | — | — | — |
| | | 10 | 19 | 0 | 17 |

SPRING SEMESTER 1

| | | | | | |
|---------|--------------------------|----|----|---|----|
| CAR 112 | Carpentry I | 4 | 15 | 0 | 9 |
| CAR 115 | Res Planning/Estimating | 3 | 0 | 0 | 3 |
| CIS 113 | Computer Basics | 0 | 2 | 0 | 1 |
| ENG 101 | Applied Communications I | 3 | 0 | 0 | 3 |
| ISC 115 | Construction Safety | 2 | 0 | 0 | 2 |
| | | — | — | — | — |
| | | 12 | 17 | 0 | 18 |

SUMMER SEMESTER 1

| | | | | | |
|---------|---------------|---|---|---|---|
| CAR 113 | Carpentry III | 3 | 9 | 0 | 6 |
| | Elective | 3 | 0 | 0 | 3 |
| | | — | — | — | — |
| | | 6 | 9 | 0 | 9 |

TOTAL REQUIRED CREDITS.... 44

Co-op Option: Qualified students may elect to take up to three (3) credit hours of Cooperative Education provided they acquire approval from the Co-op Director and the Department Chairperson.

CIVIL ENGINEERING TECHNOLOGY

A40140

The Civil Engineering Technology curriculum provides the application of relevant theory of engineering needed by technicians to carry out planning and supervisory tasks in the construction of transportation systems, residential and commercial buildings, bridges, dams, and water and wastewater treatment systems.

Course work includes the communication and computational skills required to support the fields such as materials testing, structures, estimating, project management, hydraulics, environmental technology, and surveying. Additional course work will cover the operation of computers and application software including computer-aided drafting.

Graduates should qualify for technician level jobs with both public and private engineering, construction, and surveying agencies.

Upon completion of the program, the student will receive an **associate in applied science degree**.

CIVIL ENGINEERING TECHNOLOGY (A40140)

Effective: Summer 1997-98

Revised: 1/21/97

Length: 5 Semesters

Prerequisite: 2 Units of Algebra

Award: Associate in Applied Science

FALL SEMESTER 1

| | | Class | Lab | Clinical | Credit |
|----------|--------------------------|-------|-----|----------|--------|
| CIS 111 | Basic PC Literacy | 1 | 2 | 0 | 2 |
| EGR 115 | Intro to Technology | 2 | 6 | 0 | 4 |
| ENG 111 | Expository Writing | 3 | 0 | 0 | 3 |
| ENG 111A | Expository Writing Lab | 0 | 2 | 0 | 1 |
| MAT 121 | Algebra/Trigonometry I | 2 | 2 | 0 | 3 |
| PSY 118 | Interpersonal Psychology | 3 | 0 | 0 | 3 |
| | | — | — | — | — |
| | | 11 | 12 | 0 | 16 |

SPRING SEMESTER 1

| | | | | | |
|---------|-------------------------------|----|----|---|----|
| CIV 110 | Statics/Strength of Materials | 2 | 6 | 0 | 4 |
| CIV 125 | Civil/Surveying CAD | 1 | 6 | 0 | 3 |
| ENG 114 | Prof Research & Reporting | 3 | 0 | 0 | 3 |
| MAT 122 | Algebra/Trigonometry II | 2 | 2 | 0 | 3 |
| SRV 110 | Surveying I | 2 | 6 | 0 | 4 |
| | | — | — | — | — |
| | | 10 | 20 | 0 | 17 |

SUMMER SEMESTER 1

| | | | | | |
|---------|-------------------|---|---|---|---|
| PHY 131 | Physics-Mechanics | 3 | 2 | 0 | 4 |
| SRV 111 | Surveying II | 2 | 6 | 0 | 4 |
| | | — | — | — | — |
| | | 5 | 8 | 0 | 8 |

| FALL SEMESTER 2 | | Class | Lab | Clinical | Credit |
|-----------------|--------------------------|-------|-----|----------|--------|
| CIV 111 | Soils and Foundations | 2 | 3 | 0 | 3 |
| CIV 210 | Engineering Materials | 1 | 3 | 0 | 2 |
| CIV 211 | Hydraulics and Hydrology | 2 | 3 | 0 | 3 |
| CIV 230 | Construction Estimating | 2 | 3 | 0 | 3 |
| ENG 115 | Oral Communication | 3 | 0 | 0 | 3 |
| PHY 132 | Physics-Elec & Magnetism | 3 | 2 | 0 | 4 |
| | | — | — | — | — |
| | | 13 | 14 | 0 | 18 |

SPRING SEMESTER 2

| | | | | | |
|---------|-------------------------------|----|----|---|----|
| CIV 212 | Environmental Planning | 2 | 3 | 0 | 3 |
| CIV 222 | Reinforced Concrete | 2 | 3 | 0 | 3 |
| CIV 240 | Project Management | 2 | 3 | 0 | 3 |
| CIV 250 | Civil Eng Tech Project | 1 | 3 | 0 | 2 |
| MAT 223 | Applied Calculus | 3 | 0 | 0 | 3 |
| | Humanities/Fine Arts Elective | 3 | 0 | 0 | 3 |
| | | — | — | — | — |
| | | 13 | 12 | 0 | 17 |

TOTAL REQUIRED CREDITS.... 76

Co-op Option: NA



COSMETOLOGY

D55140

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, multi-cultural practices, business/computer principles, product knowledge, and other selected topics.

Graduates should qualify to sit for the North Carolina State Board of Cosmetic Arts examination. Upon successfully passing the State Board exam, graduates will be issued a license. Employment is available in beauty salons and as skin specialists, platform artists, and related businesses.

Upon completion of the program, the student will receive a **diploma**.

COSMETOLOGY (D55140)

Effective: Summer 1997-98

Revised: 1/21/97

Length: 3 Semesters

Prerequisite: High School Diploma

Award: Diploma

| FALL SEMESTER 1 | | Class | Lab | Clinical | Credit |
|-----------------|-------------------------|-------|-----|----------|--------|
| COS 111 | Cosmetology Concepts I | 4 | 0 | 0 | 4 |
| COS 112 | Salon I | 0 | 24 | 0 | 8 |
| COS 150 | Computerized Salon Ops | 1 | 0 | 0 | 1 |
| ENG 101 | Applied Communication I | 3 | 0 | 0 | 3 |
| | | 8 | 24 | 0 | 16 |

SPRING SEMESTER 1

| | | | | | |
|----------|--------------------------|---|----|---|----|
| COS 113 | Cosmetology Concepts II | 4 | 0 | 0 | 4 |
| COS 114 | Salon II | 0 | 24 | 0 | 8 |
| COS 115A | Cosmetology Concepts III | 2 | 0 | 0 | 2 |
| COS 116A | Salon III | 0 | 6 | 0 | 2 |
| | | 6 | 30 | 0 | 16 |

SUMMER SEMESTER 1

| | | | | | |
|----------|--------------------------|---|----|---|----|
| COS 115B | Cosmetology Concepts III | 2 | 0 | 0 | 2 |
| COS 116B | Salon III | 0 | 6 | 0 | 2 |
| COS 117 | Cosmetology Concepts IV | 2 | 0 | 0 | 2 |
| COS 118 | Salon IV | 0 | 21 | 0 | 7 |
| PSY 101 | Applied Psychology | 3 | 0 | 0 | 3 |
| | | 7 | 27 | 0 | 16 |

TOTAL REQUIRED CREDITS.... 48

Co-op Option: NA

This program is not approved for Veteran's Educational Benefits.

CRIMINAL JUSTICE TECHNOLOGY

A55180

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

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

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

Upon completion of the program, the student will receive an **associate in applied science degree**.

CRIMINAL JUSTICE TECHNOLOGY (A55180)

Effective: Summer 1997-98

Revised: 3/3/97

Length: 5 Semesters

Prerequisite: High School Diploma

Award: Associate in Applied Science

| FALL SEMESTER 1 | | Class | Lab | Clinical | Credit |
|-----------------|---------------------------|-------|-----|----------|--------|
| ENG 111 | Expository Writing | 3 | 0 | 0 | 3 |
| ENG 111A | Expository Writing Lab | 0 | 2 | 0 | 1 |
| CJC 111 | Intro to Criminal Justice | 3 | 0 | 0 | 3 |
| CJC 231 | Constitutional Law | 3 | 0 | 0 | 3 |
| POL 130 | State & Local Government | 3 | 0 | 0 | 3 |
| PSY 118 | Interpersonal Psychology | 3 | 0 | 0 | 3 |
| | | 15 | 2 | 0 | 16 |

SPRING SEMESTER 1

| | | | | | |
|---------|-------------------------------|----|---|---|----|
| CJC 112 | Criminology | 3 | 0 | 0 | 3 |
| CJC 113 | Juvenile Justice | 3 | 0 | 0 | 3 |
| CJC 131 | Criminal Law | 3 | 0 | 0 | 3 |
| CJC 141 | Corrections | 3 | 0 | 0 | 3 |
| ENG 114 | Prof Research & Reporting | 3 | 0 | 0 | 3 |
| | Humanities/Fine Arts Elective | 3 | 0 | 0 | 3 |
| | | 18 | 0 | 0 | 18 |

SUMMER SEMESTER 1

| | | | | | |
|---------|--------------------|---|---|---|---|
| CIS 113 | Computer Basics | 0 | 2 | 0 | 1 |
| ENG 115 | Oral Communication | 3 | 0 | 0 | 3 |
| | *Major Elective | 3 | 0 | 0 | 3 |
| | | 6 | 2 | 0 | 7 |

FALL SEMESTER 2

| | | Class | Lab | Clinical | Credit |
|---------|----------------------------|----------|---------|----------|----------|
| CJC 132 | Court Procedure & Evidence | 3 | 0 | 0 | 3 |
| CJC 151 | Intro to Loss Prevention | 3 | 0 | 0 | 3 |
| CJC 221 | Investigative Principles | 3 | 2 | 0 | 4 |
| MAT 115 | Mathematical Models | 2 | 2 | 0 | 3 |
| SOC 210 | Introduction to Sociology | 3 | 0 | 0 | 3 |
| | | <hr/> 14 | <hr/> 4 | <hr/> 0 | <hr/> 16 |

SPRING SEMESTER 2

| | | | | | |
|---------|-------------------------------|----------|---------|---------|----------|
| CJC 212 | Ethics & Comm Relations | 3 | 0 | 0 | 3 |
| CJC 213 | Substance Abuse | 3 | 0 | 0 | 3 |
| CJC 215 | Organization & Administration | 3 | 0 | 0 | 3 |
| | *Major Elective | 3 | 0 | 0 | 3 |
| | *Major Elective | 3 | 0 | 0 | 3 |
| | | <hr/> 15 | <hr/> 0 | <hr/> 0 | <hr/> 15 |

TOTAL REQUIRED CREDITS.... 72

Students with a felony conviction may have limited Criminal Justice employment opportunities.

Co-op Option: Qualified students may elect to take up to three (3) hours of Cooperative Education provided they acquire approval from the Co-op Director and the Department Chairperson.

* See the Student Educational Plan for the list of approved major electives.

CULINARY TECHNOLOGY (FORMERLY FOODSERVICE MANAGEMENT)

A55200

The Culinary Technology curriculum provides specific training required to prepare students to assume positions as trained culinary professionals in a variety of food service settings including full service restaurants, hotels, resorts, clubs, catering operations, contract food service, and health care facilities.

Course offerings emphasize practical application, a strong theoretical knowledge base, professionalism, and provide the critical competencies to successfully meet industry demands. Courses also include sanitation, food/beverage service and control, baking, garde-manger, American/international cuisines, food production, and hospitality supervision.

Graduates should qualify for entry-level positions, such as line cook, station chef, and assistant pastry chef. American Culinary Federation certification is available to graduates. With experience, graduates may advance to positions such as sous-chef, executive chef, or food service manager.

Upon completion of the program, the student will receive an **associate in applied science degree**.

CULINARY TECHNOLOGY (A55200)

Effective: Summer 1997-98

Revised: 1/21/97

Length: 5 Semesters

Prerequisite: High School Diploma

Award: Associate in Applied Science

| FALL SEMESTER 1 | | | Class | Lab | Clinical | Work Experience | Credit |
|-------------------|------|--------------------------|----------|----------|----------|--------------------|----------|
| CIS | 113 | Computer Basic | 0 | 2 | 0 | 0 | 1 |
| CUL | 110 | Sanitation and Safety | 2 | 0 | 0 | 0 | 2 |
| CUL | 135 | Food & Beverage Service | 2 | 0 | 0 | 0 | 2 |
| CUL | 135A | Food & Beverage Serv Lab | 0 | 2 | 0 | 0 | 1 |
| CUL | 140 | Basic Culinary Skills | 2 | 6 | 0 | 0 | 5 |
| CUL | 150 | Food Science | 1 | 2 | 0 | 0 | 2 |
| ENG | 111 | Expository Writing | 3 | 0 | 0 | 0 | 3 |
| ENG | 111A | Expository Writing Lab | <u>0</u> | <u>2</u> | <u>0</u> | <u>0</u> | <u>1</u> |
| | | | 10 | 14 | 0 | 0 | 17 |
| SPRING SEMESTER 1 | | | | | | | |
| CUL | 160 | Baking I | 1 | 4 | 0 | 0 | 3 |
| CUL | 170 | Garde-Manger I | 1 | 4 | 0 | 0 | 3 |
| CUL | 240 | Adv Culinary Skills | 1 | 8 | 0 | 0 | 5 |
| MAT | 115 | Mathematical Models | 2 | 2 | 0 | 0 | 3 |
| NUT | 110 | Nutrition | <u>2</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>3</u> |
| | | | 8 | 18 | 0 | 0 | 17 |
| SUMMER SEMESTER 1 | | | | | | | |
| PSY | 118 | Interpersonal Psychology | 3 | 0 | 0 | 0 | 3 |
| | | *Major Elective | <u>5</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>5</u> |
| | | | 8 | 0 | 0 | 0 | 8 |

| FALL SEMESTER 2 | | | Class | Lab | Clinical | Work Experience | Credit |
|-----------------|-----|-------------------------------|----------|----------|----------|--------------------|----------|
| CUL | 120 | Purchasing | 2 | 0 | 0 | 0 | 2 |
| CUL | 130 | Menu Design | 2 | 0 | 0 | 0 | 2 |
| CUL | 250 | Classical Cooking | 1 | 8 | 0 | 0 | 5 |
| CUL | 260 | Baking II | 1 | 4 | 0 | 0 | 3 |
| ENG | 114 | Prof Research & Reporting | 3 | 0 | 0 | 0 | 3 |
| | | Humanities/Fine Arts Elective | <u>3</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>3</u> |
| | | | 12 | 12 | 0 | 0 | 18 |

SPRING SEMESTER 2

| | | | | | | | |
|-----|------|---|----------|----------|----------|----------|----------|
| COE | 112A | Work Ex I - Culinary Technology | 0 | 0 | 0 | 20 | 2 |
| COE | 115A | Work Exp Seminar I - Culinary Technology | 1 | 0 | 0 | 0 | 1 |
| ENG | 115 | Oral Communication | 3 | 0 | 0 | 0 | 3 |
| HRM | 215 | Restaurant Management | 3 | 0 | 0 | 0 | 3 |
| | | *Major Elective | <u>5</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>5</u> |
| | | | 12 | 0 | 0 | 20 | 14 |

TOTAL REQUIRED CREDITS.....74

Co-op Option: Required

* See the Student Educational Plan for the list of approved major electives.

DENTAL ASSISTING

D45240

The Dental Assisting curriculum prepares individuals to assist the dentist in the delivery of dental treatment and to function as integral members of the dental team while performing chairside and related office and laboratory procedures.

Course work includes instruction in general studies, biomedical sciences, dental sciences, clinical sciences, and clinical practice. A combination of lecture, laboratory, and clinical experiences provides students with knowledge in infection/hazard control, radiography, dental materials, preventive dentistry, and clinical procedures.

Graduates may be eligible to take the Dental Assisting National Board Examination to become Certified Dental Assistants. As a Dental Assistant II, defined by the Dental Laws of North Carolina, graduates work in dental offices and other related areas.

Upon completion of the program, students will receive a diploma.

DENTAL ASSISTING (D45240)

Effective: Summer 1997-98

Revised: 2/14/97

Length: 3 Semesters

Prerequisite: 1 Unit Biology

Award: Diploma

| FALL SEMESTER 1 | | Class | Lab | Clinical | Credit |
|-----------------|--------------------------|-------|-----|----------|--------|
| BIO 106 | Intro to Anat/Phys/Micro | 2 | 2 | 0 | 3 |
| CIS 113 | Computer Basics | 0 | 2 | 0 | 1 |
| DEN 101 | Preclinical Procedures | 4 | 6 | 0 | 7 |
| DEN 102 | Dental Materials | 3 | 4 | 0 | 5 |
| DEN 110 | Orofacial Anatomy | 2 | 2 | 0 | 3 |
| DEN 111 | Infection/Hazard Control | 2 | 0 | 0 | 2 |
| | | — | — | — | — |
| | | 13 | 16 | 0 | 21 |

SPRING SEMESTER 1

| | | | | | |
|---------|---------------------------|----|---|----|----|
| DEN 103 | Dental Sciences | 2 | 0 | 0 | 2 |
| DEN 104 | Dental Health Education | 2 | 2 | 0 | 3 |
| DEN 105 | Practice Management | 2 | 0 | 0 | 2 |
| DEN 106 | Clinical Practice I | 1 | 0 | 12 | 5 |
| DEN 112 | Dental Radiography | 2 | 3 | 0 | 3 |
| ENG 102 | Applied Communications II | 3 | 0 | 0 | 3 |
| | | — | — | — | — |
| | | 12 | 5 | 12 | 18 |

SUMMER SEMESTER 1

| | | | | | |
|---------|----------------------|---|---|----|---|
| DEN 107 | Clinical Practice II | 1 | 0 | 12 | 5 |
| PSY 101 | Applied Psychology | 3 | 0 | 0 | 3 |
| | | — | — | — | — |
| | | 4 | 0 | 12 | 8 |

TOTAL REQUIRED CREDITS.... 47

Students with a felony conviction may have limited certification and employment opportunities.

DENTAL HYGIENE

A45260

The Dental Hygiene curriculum prepares individuals with the knowledge and skills to assess, plan, implement, and evaluate dental hygiene care for the individual and the community.

Students will learn to prepare the operatory, take patient histories, note abnormalities, plan care, teach oral hygiene, clean teeth, take x-rays, apply preventive agents, complete necessary chart entries, and perform other procedures related to dental hygiene care.

Graduates of this program may be eligible to take national and state/regional examinations for licensure which are required to practice dental hygiene. Employment opportunities include dental offices, clinics, schools, public health agencies, industry, and professional education.

Upon completion of the program, the student will receive an **associate in applied science degree**.

DENTAL HYGIENE (A45260)

Effective: Summer 1997-98

Revised: 2/10/97

Length: 5 Semesters

Prerequisites: 1 Unit Biology, Algebra & Chemistry

Award: Associate in Applied Science

| FALL SEMESTER 1 | | Class | Lab | Clinical | Credit |
|-----------------|------------------------------|-------|-----|----------|--------|
| BIO 163 | Basic Anatomy & Physiology | 4 | 2 | 0 | 5 |
| DEN 110 | Orofacial Anatomy | 2 | 2 | 0 | 3 |
| DEN 111 | Infection/Hazard Control | 2 | 0 | 0 | 2 |
| DEN 120 | Dental Hyg Preclinic Lec | 2 | 0 | 0 | 2 |
| DEN 121 | Dental Hygiene Preclinic Lab | 0 | 6 | 0 | 2 |
| ENG 111 | Expository Writing | 3 | 0 | 0 | 3 |
| ENG 111A | Expository Writing Lab | 0 | 2 | 0 | 1 |
| | | 13 | 12 | 0 | 18 |

SPRING SEMESTER 1

| | | | | | |
|---------|--------------------------|----|---|---|----|
| BIO 175 | General Microbiology | 2 | 2 | 0 | 3 |
| DEN 112 | Dental Radiography | 2 | 3 | 0 | 3 |
| DEN 123 | Nutrition/Dental Health | 2 | 0 | 0 | 2 |
| DEN 130 | Dental Hygiene Theory I | 2 | 0 | 0 | 2 |
| DEN 131 | Dental Hygiene Clinic I | 0 | 0 | 9 | 3 |
| DEN 222 | General & Oral Pathology | 2 | 0 | 0 | 2 |
| PSY 150 | General Psychology | 3 | 0 | 0 | 3 |
| | | 13 | 5 | 9 | 18 |

SUMMER SEMESTER 1

| | | | | | |
|---------|--------------------------|---|---|---|---|
| DEN 124 | Periodontology | 2 | 0 | 0 | 2 |
| DEN 140 | Dental Hygiene Theory II | 1 | 0 | 0 | 1 |
| DEN 141 | Dental Hygiene Clinic II | 0 | 0 | 6 | 2 |
| ENG 115 | Oral Communication | 3 | 0 | 0 | 3 |
| | | 6 | 0 | 6 | 8 |

FALL SEMESTER 2

| | | Class | Lab | Clinical | Credit |
|---------|---------------------------|---------|---------|----------|----------|
| CIS 113 | Computer Basics | 0 | 2 | 0 | 1 |
| BIO 180 | Biological Chemistry | 2 | 2 | 0 | 3 |
| DEN 220 | Dental Hygiene Theory III | 2 | 0 | 0 | 2 |
| DEN 221 | Dental Hygiene Clinic III | 0 | 0 | 12 | 4 |
| DEN 223 | Dental Pharmacology | 2 | 0 | 0 | 2 |
| DEN 224 | Materials and Procedures | 1 | 3 | 0 | 2 |
| | | <hr/> 7 | <hr/> 7 | <hr/> 12 | <hr/> 14 |

SPRING SEMESTER 2

| | | | | | |
|---------|---------------------------|---------|---------|----------|----------|
| DEN 230 | Dental Hygiene Theory IV | 1 | 0 | 0 | 1 |
| DEN 231 | Dental Hygiene Clinic IV | 0 | 0 | 12 | 4 |
| DEN 232 | Community Dental Health | 2 | 0 | 3 | 3 |
| DEN 233 | Professional Development | 2 | 0 | 0 | 2 |
| | Humanities/Fine Arts Elec | 3 | 0 | 0 | 3 |
| | | <hr/> 8 | <hr/> 0 | <hr/> 15 | <hr/> 13 |

TOTAL REQUIRED CREDITS.... 71

Students with a felony conviction may have limited licensure and employment opportunities.



EARLY CHILDHOOD ASSOCIATE

A55220

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.

Upon completion of the program, a student will receive an **associate in applied science degree**.

EARLY CHILDHOOD ASSOCIATE (A55220)

Effective: Summer 1997-98

Revised: 2/14/97

Length: 5 Semesters

Prerequisite: High School Diploma

Award: Associate in Applied Science

| FALL SEMESTER 1 | | | Class | Lab | Clinical | Work Experience | Credit |
|-----------------|------|-------------------------|-------|-----|----------|-----------------|--------|
| CIS | 113 | Computer Basics | 0 | 2 | 0 | 0 | 1 |
| EDU | 119 | Early Childhood Ed | 3 | 2 | 0 | 0 | 4 |
| OR | | | | | | | |
| EDU | 111 | Early Childhood Cred I | 2 | 0 | 0 | 0 | 2 |
| EDU | 131 | Child, Family, & Commun | 3 | 0 | 0 | 0 | 3 |
| EDU | 144 | Child Development I | 3 | 0 | 0 | 0 | 3 |
| ENG | 111 | Expository Writing | 3 | 0 | 0 | 0 | 3 |
| ENG | 111A | Expository Writing Lab | 0 | 2 | 0 | 0 | 1 |
| MAT | 115 | Mathematical Models | 2 | 2 | 0 | 0 | 3 |
| PSY | 150 | General Psychology | 3 | 0 | 0 | 0 | 3 |
| | | | 16-17 | 6-8 | 0 | 0 | 19-21 |

SPRING SEMESTER 1

| | | | | | | | |
|-----------|-----|---------------------------|----|---|---|---|----|
| EDU | 112 | Early Childhood Cred II | 2 | 0 | 0 | 0 | 2 |
| OR | | | | | | | |
| EDU | 113 | Family/Early Child Cred | 2 | 0 | 0 | 0 | 2 |
| EDU | 145 | Child Development II | 3 | 0 | 0 | 0 | 3 |
| EDU | 146 | Child Guidance | 3 | 0 | 0 | 0 | 3 |
| EDU | 153 | Health, Safety, & Nutrit | 3 | 0 | 0 | 0 | 3 |
| ENG | 114 | Prof Research & Reporting | 3 | 0 | 0 | 0 | 3 |
| SOC | 210 | Introduction to Sociology | 3 | 0 | 0 | 0 | 3 |
| | | | 17 | 0 | 0 | 0 | 17 |

SUMMER SEMESTER 1

| | | | | | | | |
|------------------------|-----|-----------------|---|---|---|---|---|
| HEA | 112 | First Aid & CPR | 1 | 2 | 0 | 0 | 2 |
| *Major Elective | | | 3 | 0 | 0 | 0 | 3 |
| | | | 4 | 2 | 0 | 0 | 5 |

| FALL SEMESTER 2 | | | Class | Lab | Clinical | Work Experience | Credit |
|-----------------|-----|----------------------------------|-------|-----|----------|--------------------|--------|
| EDU | 157 | Active Play | 2 | 2 | 0 | 0 | 3 |
| EDU | 188 | Issues in Early Child Ed | 2 | 0 | 0 | 0 | 2 |
| EDU | 234 | Infants, Toddlers & Twos | 3 | 0 | 0 | 0 | 3 |
| OR | | | | | | | |
| EDU | 261 | Early Childhood Admin I | 2 | 0 | 0 | 0 | 2 |
| ENG | 115 | Oral Communication | 3 | 0 | 0 | 0 | 3 |
| | | Humanities/Fine Arts Elective | 3 | 0 | 0 | 0 | 3 |
| | | Social/Behavior Science Elective | 3 | 0 | 0 | 0 | 3 |
| | | | 15-16 | 2 | 0 | 0 | 16-17 |

SPRING SEMESTER 2

| | | | | | | | |
|------------|------|----------------------------|-------|---|---|----|-------|
| EDU | 221 | Children With Sp Needs | 3 | 0 | 0 | 0 | 3 |
| EDU | 235 | School-Age Dev & Program | 2 | 0 | 0 | 0 | 2 |
| OR | | | | | | | |
| EDU | 262 | Early Childhood Admin II | 3 | 0 | 0 | 0 | 3 |
| EDU | 251 | Exploration Activities | 3 | 0 | 0 | 0 | 3 |
| OR | | | | | | | |
| EDU | 252 | Math & Sci Activities | 3 | 0 | 0 | 0 | 3 |
| EDU | 282 | Early Childhood Lit | 3 | 0 | 0 | 0 | 3 |
| EDU | 298 | Seminar in Early Childhood | 3 | 0 | 0 | 0 | 3 |
| AND | | | | | | | |
| COE | 111B | Work Exp I - | | | | | |
| | | Early Childhood Associate | 0 | 0 | 0 | 10 | 1 |
| | | *Major Elective | 2 | 0 | 0 | 0 | 2 |
| | | | 16-17 | 0 | 0 | 10 | 17-18 |

TOTAL REQUIRED CREDITS.....75

Co-op Option: Required

Prospective child care providers must furnish a criminal record history, a health card, and physical examination prior to employment in child care.

* See the Student Educational Plan for the list of approved major electives.

ELECTRICAL/ELECTRONICS TECHNOLOGY

D35220

(FORMERLY ELECTRICAL INSTALLATION)

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.

Upon completion of the program, a student will receive a **diploma**.

ELECTRICAL/ELECTRONICS TECHNOLOGY (D35220)

Effective: Summer 1997-98

Revised: 1/21/97

Length: 3 Semesters

Prerequisite: High School Diploma

Award: Diploma

| FALL SEMESTER 1 | | Class | Lab | Clinical | Credit |
|-----------------|--------------------------|-------|-----|----------|--------|
| CIS 113 | Computer Basics | 0 | 2 | 0 | 1 |
| ELC 112 | DC/AC Electricity | 3 | 6 | 0 | 5 |
| ELC 113 | Basic Wiring I | 2 | 6 | 0 | 4 |
| ELC 118 | National Electrical Code | 1 | 2 | 0 | 2 |
| MAT 101 | Applied Mathematics I | 2 | 2 | 0 | 3 |
| | | 8 | 18 | 0 | 15 |

SPRING SEMESTER 1

| | | | | | |
|---------|--------------------------|----|----|---|----|
| ELC 114 | Basic Wiring II | 2 | 6 | 0 | 4 |
| ELC 117 | Motors and Controls | 2 | 6 | 0 | 4 |
| ELC 128 | Intro to PLC | 2 | 3 | 0 | 3 |
| ENG 101 | Applied Communications I | 3 | 0 | 0 | 3 |
| ISC 115 | Construction Safety | 2 | 0 | 0 | 2 |
| | | 11 | 15 | 0 | 16 |

SUMMER SEMESTER 1

| | | | | | |
|---------|-------------------|---|---|---|---|
| ELC 115 | Industrial Wiring | 2 | 6 | 0 | 4 |
| ELC 119 | NEC Calculations | 1 | 2 | 0 | 2 |
| | Elective | 3 | 0 | 0 | 3 |
| | | 6 | 8 | 0 | 9 |

TOTAL REQUIRED CREDITS.... 40

Co-op Option: Qualified students may elect to take up to three (3) credit hours of Cooperative Education provided they obtain approval from the Co-op Director and the Department Chairperson.

ELECTRONICS ENGINEERING TECHNOLOGY

A40200

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.

Upon completion of the program, a student will receive an **associate in applied science degree**.

ELECTRONICS ENGINEERING TECHNOLOGY (A40200)

Effective: Summer 1997-98

Revised: 2/13/97

Length: 5 Semesters

Prerequisite: 2 Units of Algebra

Award: Associate in Applied Science

| FALL SEMESTER 1 | | Class | Lab | Clinical | Credit |
|-------------------|--------------------------|-------|-----|----------|--------|
| CIS 113 | Computer Basics | 0 | 2 | 0 | 1 |
| DFT 119 | Basic CAD | 1 | 2 | 0 | 2 |
| ELC 131 | DC/AC Circuit Analysis | 4 | 3 | 0 | 5 |
| ELC 127 | Software for Technicians | 1 | 2 | 0 | 2 |
| MAT 121 | Algebra/Trigonometry I | 2 | 2 | 0 | 3 |
| PSY 118 | Interpersonal Psychology | 3 | 0 | 0 | 3 |
| | | 11 | 11 | 0 | 16 |
| SPRING SEMESTER 1 | | | | | |
| CSC 137 | Pascal Programming | 2 | 3 | 0 | 3 |
| ELN 131 | Electronic Devices | 3 | 3 | 0 | 4 |
| ELN 133 | Digital Electronics | 3 | 3 | 0 | 4 |
| ENG 111 | Expository Writing | 3 | 0 | 0 | 3 |
| ENG 111A | Expository Writing Lab | 0 | 2 | 0 | 1 |
| MAT 122 | Algebra/Trigonometry II | 2 | 2 | 0 | 3 |
| | | 13 | 13 | 0 | 18 |
| SUMMER SEMESTER 1 | | | | | |
| ELN 132 | Linear IC Applications | 3 | 3 | 0 | 4 |
| ELN 232 | Intro to Microprocessors | 3 | 3 | 0 | 4 |
| | | 6 | 6 | 0 | 8 |

FALL SEMESTER 2

| | | Class | Lab | Clinical | Credit |
|---------|------------------------|--------------|------------|-----------------|---------------|
| ELN 233 | Microprocessor Systems | 3 | 3 | 0 | 4 |
| ELN 234 | Communication Systems | 3 | 3 | 0 | 4 |
| ENG 115 | Oral Communication | 3 | 0 | 0 | 3 |
| MAT 223 | Applied Calculus | 3 | 0 | 0 | 3 |
| PHY 131 | Physics-Mechanics | 3 | 2 | 0 | 4 |
| | | — | — | — | — |
| | | 15 | 8 | 0 | 18 |

SPRING SEMESTER 2

| | | | | | |
|---------|-------------------------------|----|----|---|----|
| ATR 211 | Robot Programming | 2 | 3 | 0 | 3 |
| ELN 249 | Digital Communication | 2 | 3 | 0 | 3 |
| ELN 231 | Industrial Controls | 2 | 3 | 0 | 3 |
| PHY 133 | Physics-Sound & Light | 3 | 2 | 0 | 4 |
| | Humanities/Fine Arts Elective | 3 | 0 | 0 | 3 |
| | | — | — | — | — |
| | | 12 | 11 | 0 | 16 |

TOTAL REQUIRED CREDITS.....76**Co-op Option: NA**

ELECTRONIC SERVICING TECHNOLOGY (FORMERLY DIGITAL EQUIPMENT REPAIR)

D50120

The Electronic Servicing Technology curriculum is designed to provide basic knowledge and skills required in the installation, maintenance, and servicing of electronic components and systems. Students will gain entry-level skills necessary for success in an ever-changing high-technology world.

Students will learn to install, maintain, and service components in both consumer and industrial electronic fields. This includes but is not limited to radios, television, audio/video equipment, digital and microprocessor controlled systems, computers, and monitors.

Graduates should qualify for employment in a wide variety of businesses and industries that require electronic servicing technicians. Opportunities exist in areas such as consumer electronic repairs, business systems, and industrial electronic servicing.

Upon completion of the program, a student will receive a **diploma**.

ELECTRONIC SERVICING TECHNOLOGY (D50120)

Effective: Summer 1997-98

Revised: 1/21/97

Length: 3 Semesters

Prerequisite: High School Diploma

Award: Diploma

| FALL SEMESTER 1 | | | Class | Lab | Clinical | Credit |
|--------------------------|----------------------------|--|--------------|------------|-----------------|---------------|
| CIS 113 | Computer Basics | | 0 | 2 | 0 | 1 |
| ELC 140A | Fund of DC/AC Circuit | | 3 | 3 | 0 | 4 |
| ELC 140B | Fund of DC/AC Circuit | | 2 | 3 | 0 | 3 |
| ELN 140A | Semiconductor Devices | | 2 | 3 | 0 | 3 |
| ELN 140B | Semiconductor Devices | | 2 | 3 | 0 | 3 |
| MAT 101 | Applied Mathematics I | | 2 | 2 | 0 | 3 |
| | | | <hr/> | <hr/> | <hr/> | <hr/> |
| | | | 11 | 16 | 0 | 17 |
| SPRING SEMESTER 1 | | | | | | |
| ELN 141A | Digital Fundamentals | | 2 | 3 | 0 | 3 |
| ELN 141B | Digital Fundamentals | | 2 | 3 | 0 | 3 |
| ELN 240 | Microprocessor Fund | | 3 | 3 | 0 | 4 |
| ELN 243 | Communications Electronics | | 2 | 3 | 0 | 3 |
| ENG 101 | Applied Communications I | | 3 | 0 | 0 | 3 |
| | | | <hr/> | <hr/> | <hr/> | <hr/> |
| | | | 12 | 12 | 0 | 16 |
| SUMMER SEMESTER 1 | | | | | | |
| ELN 244 | Computer Repair | | 3 | 6 | 0 | 5 |
| PSY 118 | Interpersonal Psychology | | 3 | 0 | 0 | 3 |
| | | | <hr/> | <hr/> | <hr/> | <hr/> |
| | | | 6 | 6 | 0 | 8 |

TOTAL REQUIRED CREDITS.....41

Co-op Option: NA

EMERGENCY MEDICAL SCIENCE

A45340

The Emergency Medical Science curriculum is designed to prepare graduates to enter the workforce as paramedics. Additionally, the program can provide an Associate Degree for individuals desiring an opportunity for career enhancement.

The course of study provides the student an opportunity to acquire basic and advanced life support knowledge and skills by utilizing classroom instruction, practical laboratory sessions, hospital clinical experience, and field internships with emergency medical service agencies.

Students progressing through the program may be eligible to apply for both state and national certification exams. Employment opportunities include ambulance services, fire and rescue agencies, air medical services, specialty areas of hospitals, industry, educational institutions, and government agencies.

Upon completion of the program, a student will receive an **associate in applied science degree**.

EMERGENCY MEDICAL SCIENCE (A45340)

Effective: Summer 1997-98

Revised: 2/10/97

Length: 5 Semesters

Prerequisites: 1 Unit Biology, Algebra & Chemistry

Award: Associate in Applied Science

FALL SEMESTER 1

| | | Class | Lab | Clinical | Credit |
|----------|---------------------------|-------|-----|----------|--------|
| BIO 168 | Anatomy & Physiology I | 3 | 3 | 0 | 4 |
| EMS 110 | EMT Basic | 5 | 3 | 0 | 6 |
| EMS 111 | Prehospital Environment | 2 | 2 | 0 | 3 |
| EMS 150 | Emerg Vehicles & EMS Comm | 1 | 3 | 0 | 2 |
| ENG 111 | Expository Writing | 3 | 0 | 0 | 3 |
| ENG 111A | Expository Writing Lab | 0 | 2 | 0 | 1 |
| | | 14 | 13 | 0 | 19 |

SPRING SEMESTER 1

| | | | | | |
|---------|----------------------------|---|----|---|----|
| BIO 169 | Anatomy & Physiology II | 3 | 3 | 0 | 4 |
| EMS 120 | Intermediate Interventions | 2 | 3 | 0 | 3 |
| EMS 121 | EMS Clinical Practicum I | 0 | 0 | 6 | 2 |
| EMS 130 | Pharmacology I for EMS | 1 | 2 | 0 | 2 |
| EMS 131 | Adv Airway Management | 1 | 2 | 0 | 2 |
| EMS 140 | Rescue Scene Management | 1 | 6 | 0 | 3 |
| | | 8 | 16 | 6 | 16 |

SUMMER SEMESTER 1

| | | | | | |
|---------|---------------------------|---|---|---|----|
| EMS 210 | Adv Patient Assessment | 2 | 2 | 0 | 3 |
| EMS 220 | Cardiology | 3 | 3 | 0 | 4 |
| EMS 221 | EMS Clinical Practicum II | 0 | 0 | 2 | 3 |
| | | 5 | 5 | 9 | 10 |

| FALL SEMESTER 2 | | Class | Lab | Clinical | Credit |
|-----------------|------------------------------|-------|-----|----------|--------|
| CIS 113 | Computer Basics | 0 | 2 | 0 | 1 |
| EMS 231 | EMS Clinical Practicum III | 0 | 0 | 9 | 3 |
| EMS 235 | EMS Management | 2 | 0 | 0 | 2 |
| EMS 250 | Advanced Medical Emergencies | 2 | 2 | 0 | 3 |
| EMS 260 | Advanced Trauma Emergencies | 1 | 3 | 0 | 2 |
| ENG 115 | Oral Communication | 3 | 0 | 0 | 3 |
| PSY 150 | General Psychology | 3 | 0 | 0 | 3 |
| | | 11 | 7 | 9 | 17 |

SPRING SEMESTER 2

| | | | | | |
|---------|---------------------------|---|---|---|----|
| EMS 240 | Behavioral Emergencies | 2 | 0 | 0 | 2 |
| EMS 241 | EMS Clinical Practicum IV | 0 | 0 | 9 | 3 |
| EMS 270 | Life Span Emergencies | 2 | 2 | 0 | 3 |
| EMS 285 | EMS Capstone | 1 | 3 | 0 | 2 |
| | Humanities/Fine Arts Elec | 3 | 0 | 0 | 3 |
| | | 8 | 5 | 9 | 13 |

TOTAL REQUIRED CREDITS.... 75

Co-op Option: NA

Students with a felony conviction may have limited certification and employment opportunities.

FUNERAL SERVICE EDUCATION

A55260

The Funeral Service Education curriculum provides students with the opportunity to acquire the funeral service education necessary to become proficient in basic funeral service skills.

In addition to the general education courses offered in the curriculum, technical courses such as human anatomy, embalming theory and practice, embalming chemistry, restorative arts, funeral law, and funeral home operations are taught.

Graduates of the curriculum, upon passing the state or national exam and completing an internship in a funeral home, will be qualified for employment as embalmers and/or funeral directors.

Upon completion of the program, a student will receive an **associate in applied science degree**.

FUNERAL SERVICE EDUCATION (A55260)

Effective: Summer 1997-98

Revised: 1/21/97

Length: 5 Semesters

Prerequisite: High School Diploma

Award: Associate in Applied Science

| FALL SEMESTER 1 | | | Class | Lab | Clinical | Work Experience | Credit |
|-----------------|------|--------------------------|-------|-----|----------|-----------------|--------|
| BUS | 110 | Introduction to Business | 3 | 0 | 0 | 0 | 3 |
| CIS | 111 | Basic PC Literacy | 1 | 2 | 0 | 0 | 2 |
| ENG | 111 | Expository Writing | 3 | 0 | 0 | 0 | 3 |
| ENG | 111A | Expository Writing Lab | 0 | 2 | 0 | 0 | 1 |
| FSE | 112 | Princ of Funeral Service | 3 | 0 | 0 | 0 | 3 |
| FSE | 114 | Embalming Chemistry | 4 | 0 | 0 | 0 | 4 |
| MAT | 115 | Mathematical Models | 2 | 2 | 0 | 0 | 2 |
| | | | 16 | 6 | 0 | 0 | 19 |

SPRING SEMESTER 1

| | | | | | | | |
|-----|-----|------------------------|----|---|---|---|----|
| BUS | 115 | Business Law I | 3 | 0 | 0 | 0 | 3 |
| ENG | 115 | Oral Communication | 3 | 0 | 0 | 0 | 3 |
| FSE | 116 | Funeral Law and Ethics | 3 | 0 | 0 | 0 | 3 |
| FSE | 118 | Embalming Anatomy | 3 | 0 | 0 | 0 | 3 |
| FSE | 120 | Embalming Microbiology | 3 | 0 | 0 | 0 | 3 |
| PSY | 150 | General Psychology | 2 | 0 | 0 | 0 | 2 |
| | | | 18 | 0 | 0 | 0 | 18 |

SUMMER SEMESTER 1

| | | | | | |
|-------------------------------|---|---|---|---|---|
| Humanities/Fine Arts Elective | 2 | 0 | 0 | 0 | 2 |
| | 3 | 0 | 0 | 0 | 3 |

A55280

...or students with an opportunity to upgrade their skills and to earn an associate degree level courses offered by the College.

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

...completion of the program, a student will receive an **associate in applied science degree**.

GENERAL OCCUPATIONAL TECHNOLOGY (A55280)

Effective: Summer 1997-98

Revised: 4/29/97

Length: 4 Semesters

Prerequisite: High School Diploma

Award: Associate in Applied Science

ESTER 1

Expository Writing
Expository Writing Lab
Computer Basics
Humanities

Class

| FALL SEMESTER 2 | | | Class | Lab | Clinical | Work Experience | Credit |
|-----------------|-----|---------------------------|----------|----------|----------|-----------------|----------|
| FSE | 210 | Embalming Theory I | 3 | 0 | 0 | 0 | 3 |
| FSE | 211 | Embalming Lab I | 0 | 4 | 0 | 0 | 2 |
| OR | | | | | | | |
| COE | 112 | Co-op Work Experience I | 0 | 0 | 0 | 20 | 2 |
| FSE | 214 | Pathology | 3 | 0 | 0 | 0 | 3 |
| FSE | 216 | Restorative Arts | 2 | 4 | 0 | 0 | 4 |
| PSY | 141 | Psych of Death and Dying | 3 | 0 | 0 | 0 | 3 |
| SOC | 210 | Introduction to Sociology | <u>3</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>3</u> |
| | | | 14 | 8 | 0 | 20 | 18 |

| | | | | | | | |
|-----|-----|---------------------------|----------|----------|----------|----------|----------|
| ACC | 170 | Technical Accounting | 2 | 3 | 0 | 0 | 3 |
| BUS | 230 | Small Business Management | 3 | 0 | 0 | 0 | 3 |
| FSE | 212 | Embalming Theory II | 3 | 0 | 0 | 0 | 3 |
| FSE | 213 | Embalming Lab II | 0 | 4 | 0 | 0 | 2 |
| | | OR | | | | | |
| COE | 122 | Co-op Work Experience II | 0 | 0 | 0 | 20 | 2 |
| FSE | 215 | Funeral Home Operations | 4 | 0 | 0 | 0 | 4 |
| FSE | 217 | Funeral Service Projects | <u>1</u> | <u>2</u> | <u>0</u> | <u>0</u> | <u>2</u> |
| | | | 13 | 9 | 0 | 20 | 17 |

Co-op Option: Qualified students may elect to take up to four (4) credit hours of Cooperative Education provided approval is obtained from the Department Chairperson and Co-op Director.

HORTICULTURE TECHNOLOGY/MANAGEMENT

HORTICULTURE TECHNOLOGY/MANAGEMENT

management is a concentration for individuals for careers in various horticulture fields. Course work includes plant science, plant materials, plant propagation, and courses in principles of supervision, horticulture production and entrepreneurship. Students should qualify for employment opportunities in the management of nurseries, greenhouses, and gardens. A student will receive an associate in applied science degree.

AGRICULTURE TECHNOLOGY/MANAGEMENT

Summer 1997-98

work includes plant science, plant materials, and principles of supervision, horticulture production and entrepreneurship.

Upon completion of the program, a student will receive an associate in applied science degree.

HORTICULTURE TECHNOLOGY/MANAGEMENT (A1524A)

Effective: Summer 1997-98
Revised: 3/6/97

Effective: Summer 1997-98
Revised: 3/6/97

HORTICULTURE

Clinical

Lab

Class

| FALL SEMESTER 2 | | Class | Lab | Clinical | Credit |
|-----------------|--------------------------|-------|-----|----------|--------|
| ENG 115 | Oral Communication | 3 | 0 | 0 | 3 |
| HOR 112 | Landscape Design I | 2 | 3 | 0 | 3 |
| HOR 168 | Plant Propagation | 2 | 2 | 0 | 3 |
| HOR 215 | Landscape Irrigation | 2 | 2 | 0 | 3 |
| HOR 278 | Hor Bus Entrepreneurship | 3 | 0 | 0 | 3 |
| | *Major Elective | 2 | 0 | 0 | 2 |
| | | 14 | 7 | 0 | 17 |

SPRING SEMESTER 2

| | | | | | |
|---------|-------------------------------|----|---|---|----|
| HOR 118 | Equipment Opt & Maint | 1 | 3 | 0 | 2 |
| HOR 277 | Hor Sales & Services | 3 | 0 | 0 | 3 |
| HOR 253 | Horticulture Turfgrass | 2 | 2 | 0 | 3 |
| | Humanities/Fine Arts Elective | 3 | 0 | 0 | 3 |
| | *Major Elective | 2 | 0 | 0 | 2 |
| | | 12 | 5 | 0 | 14 |

TOTAL REQUIRED CREDITS.....69

Co-op Option: Qualified students may elect to take up to five (5) credit hours of Cooperative Education provided they acquire approval from the Co-op Director and Department Chairperson.

* See the Student Educational Plan for the list of major electives.

INDUSTRIAL MAINTENANCE TECHNOLOGY

D50240

The Industrial Maintenance Technology curriculum is designed to prepare or upgrade individuals to service, maintain, repair, or install equipment for a wide range of industries. Instruction includes theory and skill training needed for inspecting, testing, troubleshooting, and diagnosing industrial equipment and physical facilities.

Students will learn technical skills in blueprint reading, electricity, hydraulics/pneumatics, machining, welding, and various maintenance procedures. Practical application in these industrial systems will be emphasized and additional advanced course work may be offered.

Upon completion of any of the various levels of this curriculum, graduates should gain the necessary practical skills and related technical information to qualify for employment or advancement in the various areas of industrial maintenance technology.

Upon completion of the program, a student will receive a **diploma**.

INDUSTRIAL MAINTENANCE TECHNOLOGY (D50240)

Effective: Summer 1997-98

Revised: 1/21/97

Length: 3 Semesters

Prerequisite: High School Diploma

Award: Diploma

FALL SEMESTER 1

| | | Class | Lab | Clinical | Credit |
|---------|---------------------------|-------|-----|----------|--------|
| ELC 111 | Intro to Electricity | 2 | 2 | 0 | 3 |
| ELC 112 | DC/AC Electricity | 3 | 6 | 0 | 5 |
| MAT 101 | Applied Mathematics I | 2 | 2 | 0 | 3 |
| MEC 111 | Machine Processes I | 2 | 3 | 0 | 3 |
| MNT 110 | Intro to Maint Procedures | 1 | 3 | 0 | 2 |
| WLD 112 | Basic Welding Processes | 1 | 3 | 0 | 2 |
| | | 11 | 19 | 0 | 18 |

SPRING SEMESTER 1

| | | | | | |
|---------|--------------------------|----|----|---|----|
| AHR 120 | HVACR Maintenance | 1 | 3 | 0 | 2 |
| BPR 111 | Blueprint Reading | 1 | 2 | 0 | 2 |
| CIS 113 | Computer Basics | 0 | 2 | 0 | 1 |
| ELC 117 | Motors and Controls | 2 | 6 | 0 | 4 |
| ENG 101 | Applied Communications I | 3 | 0 | 0 | 3 |
| HYD 110 | Hydraulics/Pneumatics I | 2 | 2 | 0 | 3 |
| MEC 263 | Electro-Pneu Components | 2 | 4 | 0 | 4 |
| | | 11 | 19 | 0 | 19 |

SUMMER SEMESTER 1

| | | | | | |
|---------|------------------------|---|---|---|---|
| ELC 213 | Instrumentation | 3 | 2 | 0 | 4 |
| ELC 215 | Electrical Maintenance | 2 | 3 | 0 | 3 |
| | | 5 | 5 | 0 | 7 |

TOTAL REQUIRED CREDITS.....44

Co-op Option: NA

INDUSTRIAL MANAGEMENT TECHNOLOGY

(FORMERLY OPERATIONS MANAGEMENT TECHNOLOGY)

A50260

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

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

Graduates should qualify for entry-level positions such as front-line supervisor, engineering assistant, production planner, inventory supervisor, or as a quality control technician. With additional training and experience, graduates could become plant managers or production managers.

Upon successful completion of the program, a student will receive an **associate in applied science degree**.

INDUSTRIAL MANAGEMENT TECHNOLOGY (A50260)

Effective: Summer 1997-98

Revised: 3/3/97

Length: 5 Semesters

Prerequisite: 2 Units of Algebra

Award: Associate in Applied Science

| FALL SEMESTER 1 | | Class | Lab | Clinical | Credit |
|-----------------|-------------------------------|-------|-----|----------|--------|
| CIS 110 | Introduction to Computers | 2 | 2 | 0 | 3 |
| ENG 111 | Expository Writing | 3 | 0 | 0 | 3 |
| ENG 111A | Expository Writing Lab | 0 | 2 | 0 | 1 |
| ISC 135 | Principles of Industrial Mgmt | 3 | 0 | 0 | 3 |
| MAT 161 | College Algebra | 3 | 0 | 0 | 3 |
| MEC 145 | Mfg Materials I | 2 | 3 | 0 | 3 |
| | | 13 | 7 | 0 | 16 |

SPRING SEMESTER 1

| | | | | | |
|---------|--------------------------|----|---|---|----|
| ACC 111 | Financial Accounting | 3 | 0 | 0 | 3 |
| ENG 115 | Oral Communication | 3 | 0 | 0 | 3 |
| ISC 112 | Industrial Safety | 2 | 0 | 0 | 2 |
| ISC 132 | Mfg Quality Control | 2 | 3 | 0 | 3 |
| ISC 133 | Mfg Management Practices | 2 | 0 | 0 | 2 |
| ISC 170 | Problem-Solving Skills | 3 | 0 | 0 | 3 |
| | | 15 | 3 | 0 | 16 |

SUMMER SEMESTER 1

| | | | | | |
|---------|------------------------|---|---|---|---|
| ECO 252 | Prin of Macroeconomics | 3 | 0 | 0 | 3 |
| ISC 136 | Productivity Analysis | 2 | 3 | 0 | 3 |
| | | 5 | 3 | 0 | 6 |

| FALL SEMESTER 2 | | Class | Lab | Clinical | Credit |
|-----------------|---------------------------|-------|-----|----------|--------|
| ISC 233 | Industrial Org & Mgmt | 3 | 0 | 0 | 3 |
| ISC 261 | Methods Improvement | 2 | 3 | 0 | 3 |
| MEC 110 | Into to CAD/CAM | 1 | 2 | 0 | 2 |
| MEC 181 | Introduction to CIM | 2 | 0 | 0 | 2 |
| OMT 227 | Maintenance Practices | 3 | 0 | 0 | 3 |
| | Humanities/Fine Arts Elec | 3 | 0 | 0 | 3 |
| | | 14 | 5 | 0 | 16 |

SPRING SEMESTER 2

| | | | | | |
|---------|-----------------------------|----|---|---|----|
| ISC 214 | Job Analysis/Wages & Salary | 2 | 3 | 0 | 3 |
| ISC 230 | Simulation Prod Processes | 1 | 3 | 0 | 2 |
| OMT 155 | Meeting & Present Skills | 3 | 0 | 0 | 3 |
| OMT 246 | Systems and Technology | 2 | 0 | 0 | 2 |
| | *Major Elective | 3 | 0 | 0 | 3 |
| | | 11 | 6 | 0 | 13 |

TOTAL REQUIRED CREDITS..... 67

Co-op Option: Qualified students may elect to take up to three (3) credit hours of Cooperative Education provided they acquire approval from the Co-op Director and the Department Chairperson.

* See the Student Educational Plan for the list of major electives.

INFORMATION SYSTEMS

A25260

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.

INFORMATION SYSTEMS (A25260)

Effective: Summer 1997-98

Length: 5 Semesters

Prerequisite: 2 Units of Algebra

Award: Associate in Applied Science

FALL SEMESTER 1

| | | Class | Lab | Clinical | Credit |
|----------|------------------------|-------|-------|----------|--------|
| ACC 111 | Financial Accounting | 3 | 0 | 0 | 3 |
| CIS 111 | Basic PC Literacy | 1 | 2 | 0 | 2 |
| CIS 115 | Intro to Prog & Logic | 2 | 2 | 0 | 3 |
| ENG 111 | Expository Writing | 3 | 0 | 0 | 3 |
| ENG 111A | Expository Writing Lab | 0 | 2 | 0 | 1 |
| MAT 161 | College Algebra | 3 | 0 | 0 | 3 |
| | | <hr/> | <hr/> | <hr/> | <hr/> |
| | | 12 | 6 | 0 | 15 |

SPRING SEMESTER 1

| | | | | | |
|---------|-------------------------------|-------|-------|-------|-------|
| BUS 110 | Introduction to Business | 3 | 0 | 0 | 3 |
| CIS 130 | Survey of Operating Sys | 2 | 3 | 0 | 3 |
| CSC 139 | Visual BASIC Programming | 2 | 3 | 0 | 3 |
| CIS 152 | Database Concepts & Apps | 2 | 2 | 0 | 3 |
| ENG 115 | Oral Communication | 3 | 0 | 0 | 3 |
| | Humanities Fine Arts Elective | 3 | 0 | 0 | 3 |
| | | <hr/> | <hr/> | <hr/> | <hr/> |
| | | 15 | 8 | 0 | 18 |

SUMMER SEMESTER 1

| | | | | | |
|---------|------------------------|-------|-------|-------|-------|
| CIS 215 | Hardware Install/Maint | 2 | 3 | 0 | 3 |
| BUS 228 | Business Statistics | 2 | 2 | 0 | 3 |
| | | <hr/> | <hr/> | <hr/> | <hr/> |
| | | 4 | 5 | 0 | 6 |

| FALL SEMESTER 2 | | Class | Lab | Clinical | Credit |
|------------------------|------------------------|--------------|------------|-----------------|---------------|
| CIS 216 | Software Install/Maint | 1 | 2 | 0 | 2 |
| CIS 120 | Spreadsheet | 2 | 2 | 0 | 3 |
| CIS 172 | Intro to the Internet | 2 | 3 | 0 | 3 |
| CSC 239 | Advanced Visual Basic | 2 | 3 | 0 | 3 |
| NET 110 | Data Comm/Networking | 2 | 2 | 0 | 3 |
| | | <hr/> | <hr/> | <hr/> | <hr/> |
| | | 9 | 12 | 0 | 14 |

SPRING SEMESTER 2

| | | | | | |
|---------|---------------------------|-------|-------|-------|-------|
| CIS 162 | MM Presentation Software | 2 | 2 | 0 | 3 |
| CIS 157 | Database Prog Language | 2 | 3 | 0 | 3 |
| ECO 151 | Survey of Economics | 3 | 0 | 0 | 3 |
| ENG 114 | Prof Research & Reporting | 3 | 0 | 0 | 3 |
| NET 120 | Network Install/Admin I | 2 | 2 | 0 | 3 |
| | | <hr/> | <hr/> | <hr/> | <hr/> |
| | | 12 | 7 | 0 | 15 |

TOTAL REQUIRED CREDITS...68

Co-op Option: NA

INFORMATION SYSTEMS/PROGRAMMING (FORMERLY BUSINESS COMPUTER PROGRAMMING)

A2526E

Programming is a concentration under the curriculum title of Information Systems. This 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.

Upon completion of the program, a student will receive an **associate in applied science degree**.

INFORMATION SYSTEMS/PROGRAMMING (A2526E)

Effective: Summer 1997-98

Revised: 2/14/97

Length: 5 Semesters

Prerequisite: 2 Units of Algebra

Award: Associate in Applied Science

| FALL SEMESTER 1 | | Class | Lab | Clinical | Credit |
|------------------------|------------------------|--------------|------------|-----------------|---------------|
| ACC 111 | Financial Accounting | 3 | 0 | 0 | 3 |
| CIS 111 | Basic PC Literacy | 1 | 2 | 0 | 2 |
| CIS 115 | Intro to Prog & Logic | 2 | 2 | 0 | 3 |
| ENG 111 | Expository Writing | 3 | 0 | 0 | 3 |
| ENG 111A | Expository Writing Lab | 0 | 2 | 0 | 1 |
| MAT 161 | College Algebra | 3 | 0 | 0 | 3 |
| | | <hr/> | <hr/> | <hr/> | <hr/> |
| | | 12 | 6 | 0 | 15 |

SPRING SEMESTER 1

| | | | | | |
|---------|--------------------------|-------|-------|-------|-------|
| CIS 130 | Survey of Operating Sys | 2 | 3 | 0 | 3 |
| CSC 135 | COBOL Programming | 2 | 3 | 0 | 3 |
| CSC 139 | Visual BASIC Programming | 2 | 3 | 0 | 3 |
| CIS 152 | Database Concepts & Apps | 2 | 2 | 0 | 3 |
| ENG 115 | Oral Communication | 3 | 0 | 0 | 3 |
| | Social/Behavioral | | | | |
| | Science Elective | 3 | 0 | 0 | 3 |
| | | <hr/> | <hr/> | <hr/> | <hr/> |
| | | 14 | 11 | 0 | 18 |

SUMMER SEMESTER 1

| | | | | | |
|---------|-----------------|-------|-------|-------|-------|
| CSC 138 | RPG Programming | 2 | 3 | 0 | 3 |
| CSC 235 | Advanced COBOL | 2 | 3 | 0 | 3 |
| | | <hr/> | <hr/> | <hr/> | <hr/> |
| | | 4 | 6 | 0 | 6 |

FALL SEMESTER 2

| | | Class | Lab | Clinical | Credit |
|---------|-------------------------------|--------------|------------|-----------------|---------------|
| CIS 238 | Advanced RPG | 2 | 3 | 0 | 3 |
| CIS 286 | Systems Analysis & Design | 3 | 0 | 0 | 3 |
| CIS 134 | C++ Programming | 2 | 3 | 0 | 3 |
| CIS 245 | Operating System - Multi-User | 2 | 3 | 0 | 3 |
| NET 110 | Data Comm/Networking | 2 | 2 | 0 | 3 |
| | | <hr/> | <hr/> | <hr/> | <hr/> |
| | | 11 | 11 | 0 | 15 |

SPRING SEMESTER 2

| | | | | | |
|---------|-------------------------------|-------|-------|-------|-------|
| CIS 288 | Systems Project | 1 | 4 | 0 | 3 |
| CSC 143 | Object-Oriented Prog | 2 | 3 | 0 | 3 |
| NET 120 | Network Install/Admin I | 2 | 2 | 0 | 3 |
| | *Major Elective | 2 | 3 | 0 | 3 |
| | Humanities/Fine Arts Elective | 3 | 0 | 0 | 3 |
| | | <hr/> | <hr/> | <hr/> | <hr/> |
| | | 10 | 12 | 0 | 15 |

TOTAL REQUIRED CREDITS...69**Co-op Option: NA**

* See the Student Educational Plan for the list of approved major electives.

INSURANCE

C25280

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.

Upon completion of the program, a student will receive a **certificate**.

INSURANCE (C25280)

Effective: Summer 1997-98

Revised: 1/21/97

Length: 2 Semesters

Prerequisite: High School Diploma

Award: Certificate

| FALL SEMESTER 1 | | | Class | Lab | Clinical | Credit |
|-----------------|--------------------------|--|-------|-------|----------|--------|
| INS 105 | Risk Management | | 3 | 0 | 0 | 3 |
| INS 101 | Life/Accident/Health Ins | | 4 | 0 | 0 | 4 |
| INS 102 | Medicare Supp/L-T Care | | 1 | 0 | 0 | 1 |
| | | | <hr/> | <hr/> | <hr/> | <hr/> |
| | | | 8 | 0 | 0 | 8 |

SPRING SEMESTER 1

| | | | | | | |
|---------|-------------------------|--|-------|-------|-------|-------|
| INS 103 | Property & Casualty Ins | | 4 | 0 | 0 | 4 |
| | *Major Elective | | 2-3 | 0 | 0 | 2-3 |
| | | | <hr/> | <hr/> | <hr/> | <hr/> |
| | | | 6-7 | 0 | 0 | 6-7 |

TOTAL REQUIRED CREDITS...14-15

Co-op Option: NA

* See the Student Educational Plan for the list of approved major electives.

MACHINING TECHNOLOGY

A50300

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 insure 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.

Upon completion of the program, a student will receive an **associate in applied science degree**.

MACHINING TECHNOLOGY (A50300)

Effective: Summer 1997-98

Revised: 1/21/97

Length: 5 Semesters

Prerequisite: High School Diploma

Award: Associate in Applied Science

| FALL SEMESTER 1 | | Class | Lab | Clinical | Credit |
|-----------------|-------------------------------|----------|----------|----------|----------|
| BPR 111 | Blueprint Reading | 1 | 2 | 0 | 2 |
| ISC 112 | Industrial Safety | 2 | 0 | 0 | 2 |
| MAC 111 | Machining Technology I | 2 | 12 | 0 | 6 |
| MAC 114 | Intro to Metrology | 2 | 0 | 0 | 2 |
| MAC 151 | Machining Calculations | 1 | 2 | 0 | 2 |
| | Humanities/Fine Arts Elective | <u>3</u> | <u>0</u> | <u>0</u> | <u>3</u> |
| | | 11 | 16 | 0 | 17 |

SPRING SEMESTER 1

| | | | | | |
|----------|-------------------------|----------|----------|----------|----------|
| BPR 121 | Blueprint Reading: Mech | 1 | 2 | 0 | 2 |
| ENG 111 | Expository Writing | 3 | 0 | 0 | 3 |
| ENG 111A | Expository Writing Lab | 0 | 2 | 0 | 1 |
| MAC 112 | Machining Technology II | 2 | 12 | 0 | 6 |
| MAT 120 | Geometry & Trigonometry | 2 | 2 | 0 | 3 |
| MEC 142 | Physical Metallurgy | <u>1</u> | <u>2</u> | <u>0</u> | <u>2</u> |
| | | 9 | 20 | 0 | 17 |

SUMMER SEMESTER 1

| | | | | | |
|---------|-------------------|----------|----------|----------|----------|
| MAC 121 | Intro to CNC | 2 | 0 | 0 | 2 |
| MAC 241 | Jigs & Fixtures I | <u>2</u> | <u>0</u> | <u>0</u> | <u>4</u> |
| | | 4 | 6 | 0 | 6 |

FALL SEMESTER 2

| | | Class | Lab | Clinical | Credit |
|---------|--------------------------|--------------|------------|-----------------|---------------|
| MAC 113 | Machining Technology III | 2 | 12 | 0 | 6 |
| MAC 122 | CNC Turning | 1 | 3 | 0 | 2 |
| MAC 226 | CNC EDM Machining | 1 | 3 | 0 | 2 |
| PHY 121 | Applied Physics I | 3 | 2 | 0 | 4 |
| PSY 118 | Interpersonal Psychology | <u>3</u> | <u>0</u> | <u>0</u> | <u>3</u> |
| | | 10 | 20 | 0 | 17 |

SPRING SEMESTER 2

| | | | | | |
|---------|-------------------------|----------|----------|----------|----------|
| ENG 115 | Oral Communication | 3 | 0 | 0 | 3 |
| MAC 124 | CNC Milling | 1 | 3 | 0 | 2 |
| MAC 243 | Die Making I | 2 | 6 | 0 | 4 |
| MAC 245 | Mold Construction I | 2 | 6 | 0 | 4 |
| WLD 112 | Basic Welding Processes | <u>1</u> | <u>3</u> | <u>0</u> | <u>2</u> |
| | | 9 | 18 | 0 | 15 |

TOTAL REQUIRED CREDITS.....72**Co-op Option: NA**

MASONRY

D35280

The Masonry curriculum is designed to prepare individuals to work in the construction industry as masons. Masonry courses provide principles and fundamentals of masonry and experiences necessary to produce quality construction using safe, practical, and reliable work habits.

Course work includes basic mathematics, blueprint reading, and methods used in laying out masonry jobs for residential, commercial, and industrial construction. Upon completion students will be able to read blueprints, estimate structures, construct footings and walks, and lay masonry units. Graduates should qualify for employment in the masonry industry as apprentices or masons.

Upon completion students will receive a **diploma**.

MASONRY (D35280)

Effective: Summer 1997-98

Revised: 1/21/97

Length: 3 Semesters

Prerequisite: High School Diploma

Award: Diploma

| FALL SEMESTER 1 | | Class | Lab | Clinical | Credit |
|-----------------|-----------------------|-------|-------|----------|--------|
| CIS 113 | Computer Basics | 0 | 2 | 0 | 1 |
| ISC 115 | Construction Safety | 2 | 0 | 0 | 2 |
| MAS 110 | Masonry I | 4 | 18 | 0 | 10 |
| MAT 101 | Applied Mathematics I | 2 | 2 | 0 | 3 |
| | | <hr/> | <hr/> | <hr/> | <hr/> |
| | | 8 | 22 | 0 | 16 |

SPRING SEMESTER 1

| | | | | | |
|---------|--------------------------|-------|-------|-------|-------|
| BPR 130 | Blueprint Reading/Const | 1 | 2 | 0 | 2 |
| ENG 101 | Applied Communications I | 3 | 0 | 0 | 3 |
| MAS 120 | Masonry II | 4 | 18 | 0 | 10 |
| | | <hr/> | <hr/> | <hr/> | <hr/> |
| | | 8 | 20 | 0 | 15 |

SUMMER SEMESTER 1

| | | | | | |
|---------|-------------|-------|-------|-------|-------|
| MAS 130 | Masonry III | 6 | 6 | 0 | 8 |
| | Elective | 3 | 0 | 0 | 3 |
| | | <hr/> | <hr/> | <hr/> | <hr/> |
| | | 9 | 6 | 0 | 11 |

TOTAL REQUIRED CREDITS.... 42

Co-op Option: Qualified students may elect to take up to three (3) credit hours of Cooperative Education upon approval from the Co-op Director and Department Chairperson.

MECHANICAL DRAFTING TECHNOLOGY

D50340

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.

Upon completion of the program, a student will receive a diploma.

MECHANICAL DRAFTING TECHNOLOGY (D50340)

Effective: Summer 1997-98

Revised: 2/5/97

Length: 3 Semesters

Prerequisite: High School Diploma

Award: Diploma

| FALL SEMESTER 1 | | Class | Lab | Clinical | Credit |
|-----------------|-----------------------|-------|-----|----------|--------|
| DFT 111 | Technical Drafting I | 2 | 6 | 0 | 4 |
| DFT 151 | CAD I | 2 | 3 | 0 | 3 |
| MAT 101 | Applied Mathematics I | 2 | 2 | 0 | 3 |
| MEC 110 | Intro to CAD/CAM | 1 | 2 | 0 | 2 |
| MEC 111 | Machine Processes I | 2 | 3 | 0 | 3 |
| | | 9 | 16 | 0 | 15 |

SPRING SEMESTER 1

| | | | | | |
|---------|--------------------------|----|----|---|----|
| DFT 112 | Technical Drafting I | 2 | 6 | 0 | 4 |
| DFT 121 | Intro to GD & T | 1 | 2 | 0 | 2 |
| DFT 152 | CAD II | 2 | 3 | 0 | 3 |
| DFT 214 | Descriptive Geometry | 1 | 2 | 0 | 2 |
| ENG 101 | Applied Communications I | 3 | 0 | 0 | 3 |
| MEC 131 | Metalworking Processes | 2 | 3 | 0 | 3 |
| | | 11 | 16 | 0 | 17 |

SUMMER SEMESTER 1

| | | | | | |
|---------|--------------------------|---|---|---|---|
| DDF 252 | Solid Models & Rendering | 3 | 2 | 0 | 4 |
| DFT 153 | CAD III | 2 | 3 | 0 | 3 |
| | | 5 | 5 | 0 | 7 |

TOTAL REQUIRED CREDITS.... 39

Co-op Option: NA

MEDIA INTEGRATION TECHNOLOGY

A25300

The Media Integration Technology curriculum is designed to prepare individuals for gainful employment as media integrators.

Course work includes study/application in areas such as computer and system theories and concepts; audio, data, and video integration techniques; media access using outside resources; hardware/software selection; networking technology; and integrated systems in support of distance learning sites.

Entry-level jobs as media integration technician, videoconferencing technician, and distance education site facilitator are available. Graduates may find employment with universities, community colleges, public schools, businesses operating distance education facilities, telecommunications companies, libraries, and cable providers.

Upon completion of the program, a student will receive an **associate in applied science degree**.

MEDIA INTEGRATION TECHNOLOGY (A25300)

Effective: Summer 1997-98

Revised: 2/14/97

Length: 4 Semesters

Prerequisite: 2 Units of Algebra

Award: Associate in Applied Science

| FALL SEMESTER 1 | | Class | Lab | Clinical | Credit |
|-------------------|----------------------------|-------|-----|----------|--------|
| CIS 110 | Introduction to Computers | 2 | 2 | 0 | 3 |
| CIS 162 | MM Presentation Software | 2 | 2 | 0 | 3 |
| CIS 172 | Intro to the Internet | 2 | 3 | 0 | 3 |
| ENG 111 | Expository Writing | 3 | 0 | 0 | 3 |
| ENG 111A | Expository Writing Lab | 0 | 2 | 0 | 1 |
| MIT 110 | Intro to Distance Learning | 2 | 2 | 0 | 3 |
| MIT 120 | Intro to Audio Concepts | 2 | 2 | 0 | 3 |
| | | 13 | 13 | 0 | 19 |
| SPRING SEMESTER 1 | | | | | |
| CIS 130 | Survey of Operating Sys | 2 | 2 | 0 | 3 |
| CIS 215 | Hardware Install/Maint | 2 | 3 | 0 | 3 |
| ENG 114 | Prof Research & Reporting | 3 | 0 | 0 | 3 |
| MIT 115 | Intro to Video Concepts | 2 | 2 | 0 | 3 |
| MIT 220 | Audio Integration | 2 | 4 | 0 | 4 |
| | | 11 | 11 | 0 | 16 |

FALL SEMESTER 2

| | | | Class | Lab | Clinical | Credit |
|-----|-----|-------------------------|-------|-----|----------|--------|
| CIS | 216 | Software Install/Maint | 1 | 2 | 0 | 2 |
| CIS | 226 | Trends in Technology | 1 | 2 | 0 | 2 |
| MAT | 161 | College Algebra | 3 | 0 | 0 | 3 |
| MIT | 215 | Video Integration | 2 | 4 | 0 | 4 |
| MIT | 230 | Media Sys Design/Implem | 1 | 4 | 0 | 3 |
| NET | 110 | Data Comm/Networking | 2 | 2 | 0 | 3 |
| | | | 10 | 14 | 0 | 17 |

SPRING SEMESTER 2

| | | | | | | |
|-----|-----|-------------------------------|----|---|---|----|
| CIS | 115 | Intro to Prog & Logic | 2 | 2 | 0 | 3 |
| ECO | 151 | Survey of Economics | 3 | 0 | 0 | 3 |
| MIT | 250 | Tech Implementation Proj | 2 | 4 | 0 | 4 |
| | | Humanities/Fine Arts Elective | 3 | 0 | 0 | 3 |
| | | *Major Elective | 3 | 0 | 0 | 3 |
| | | | 13 | 6 | 0 | 16 |

TOTAL REQUIRED CREDITS.... 68**Co-op Option: NA**

* See the Student Educational Plan for the list of approved major electives.



NURSING ASSISTANT

C45480

The Nursing Assistant curriculum prepares individuals to work under the supervision of licensed health care professionals in performing nursing care and services for persons of all ages.

Course work emphasizes growth and development throughout the life span, personal care, vital signs, communication, nutrition, medical asepsis, therapeutic activities, accident and fire safety, household environment and equipment management; family resources and services; and employment skills.

Graduates of this curriculum may be eligible to be listed on the registry as a Nursing Assistant I and Nursing Assistant II. They may be employed in home health agencies, hospitals, clinics, nursing homes, extended care facilities, and doctors' offices.

Upon completion of the program, a student will receive a **certificate**.

NURSING ASSISTANT (C45480)

Effective: Summer 1997-98

Revised: 5/18/97

Length: 2 Semesters

Prerequisite: High School Biology

Award: Certificate

| FALL SEMESTER 1 | | Class | Lab | Clinical | Credit |
|-----------------|----------------------|-------|-------|----------|--------|
| NAS 101 | Nursing Assistant I | 3 | 2 | 3 | 5 |
| NAS 102 | Nursing Assistant II | 3 | 2 | 6 | 6 |
| NAS 103 | Home Health Care | 2 | 0 | 0 | 2 |
| | | <hr/> | <hr/> | <hr/> | <hr/> |
| | | 8 | 4 | 9 | 13 |

TOTAL REQUIRED CREDITS.... 13

Students with a felony conviction may have limited certification and employment opportunities.

OFFICE SYSTEMS TECHNOLOGY

(FORMERLY ADMINISTRATIVE OFFICE TECHNOLOGY)

A25360

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.

Upon completion of the program, a student will receive an **associate in applied science degree**.

OFFICE SYSTEMS TECHNOLOGY (A25360)

Effective: Summer 1997-98

Revised: 2/21/97

Length: 5 Semesters

Prerequisite: High School Diploma

Award: Associate in Applied Science

TRACK A

NOTE: Students passing proficiency for OST 131 should register for Track B sequence of courses.

| FALL SEMESTER 1 | | Class | Lab | Clinical | Credit |
|-----------------|------------------------|-------|-----|----------|--------|
| OST 131 | Keyboarding | 1 | 2 | 0 | 2 |
| OST 122 | Office Computations | 1 | 2 | 0 | 2 |
| ECO 151 | Survey of Economics | 3 | 0 | 0 | 3 |
| ENG 111 | Expository Writing | 3 | 0 | 0 | 3 |
| ENG 111A | Expository Writing Lab | 0 | 2 | 0 | 1 |
| MAT 115 | Mathematical Models | 2 | 2 | 0 | 3 |
| OST 162 | Executive Terminology | 3 | 0 | 0 | 3 |
| | | 13 | 8 | 0 | 17 |

SPRING SEMESTER 1

| | | | | | |
|---------|------------------------------|----|---|---|----|
| OST 132 | Keyboarding Skill Building | 1 | 2 | 0 | 2 |
| OST 136 | Word Processing | 1 | 2 | 0 | 2 |
| OST 137 | Office Software Applications | 1 | 2 | 0 | 2 |
| OST 181 | Intro to Office Systems | 3 | 0 | 0 | 3 |
| OST 184 | Records Management | 1 | 2 | 0 | 2 |
| ENG 115 | Oral Communications | 3 | 0 | 0 | 3 |
| | | 10 | 8 | 0 | 14 |

SUMMER SEMESTER 1

| | | | | | |
|---------|-------------------------|---|---|---|----|
| OST 134 | Text Entry & Formatting | 3 | 2 | 0 | 4 |
| ACC 120 | Prin of Accounting I | 3 | 2 | 0 | 4 |
| CIS 154 | Database Utilization | 1 | 2 | 0 | 2 |
| | | 7 | 6 | 0 | 10 |

FALL SEMESTER 2

| | | | | | |
|---------|-------------------------------|----|---|---|----|
| OST 133 | Adv Keyboard Skill Bldg | 1 | 2 | 0 | 2 |
| OST 164 | Text Editing Applications | 3 | 0 | 0 | 3 |
| OST 223 | Machine Transcription I | 1 | 2 | 0 | 2 |
| OST 233 | Office Publications Design | 2 | 2 | 0 | 3 |
| OST 236 | Adv Word/Information Proc | 2 | 2 | 0 | 3 |
| | Humanities/Fine Arts Elective | 3 | 0 | 0 | 3 |
| | | 12 | 8 | 0 | 16 |

| SPRING SEMESTER 2 | | Class | Lab | Clinical | Credit |
|-------------------|---|-------|-----|----------|--------|
| OST 135 | Adv Text Entry & Formatting | 3 | 2 | 0 | 4 |
| OST 224 | Machine Transcription II | 1 | 2 | 0 | 2 |
| OST 286 | Professional Development | 2 | 0 | 0 | 2 |
| OST 289 | Office Systems Management | 2 | 2 | 0 | 3 |
| BUS 260 | Business Communications | 3 | 0 | 0 | 3 |
| COE 111E | Work Experience I - Office Systems Technology | 0 | 0 | 10 | 1 |
| | | 11 | 6 | 10 | 15 |

TOTAL REQUIRED CREDITS..... 72

TRACK B

FALL SEMESTER 1

| | | | | | |
|----------|----------------------------------|----|----|---|----|
| OST 131 | Keyboarding (Advanced Placement) | 1 | 2 | 0 | 2 |
| OST 132 | Keyboarding Skill Building | 1 | 2 | 0 | 2 |
| OST 136 | Word Processing | 1 | 2 | 0 | 2 |
| OST 137 | Office Software Applications | 1 | 2 | 0 | 2 |
| ENG 111 | Expository Writing | 3 | 0 | 0 | 3 |
| ENG 111A | Expository Writing Lab | 0 | 2 | 0 | 1 |
| MAT 115 | Mathematical Models | 2 | 2 | 0 | 3 |
| OST 162 | Executive Terminology | 3 | 0 | 0 | 3 |
| | | 12 | 12 | 0 | 18 |

SPRING SEMESTER 1

| | | | | | |
|---------|-------------------------|----|---|---|----|
| OST 134 | Text Entry & Formatting | 3 | 2 | 0 | 4 |
| ACC 120 | Prin of Accounting I | 3 | 2 | 0 | 4 |
| ECO 151 | Survey of Economics | 3 | 0 | 0 | 3 |
| OST 181 | Intro to Office Systems | 3 | 0 | 0 | 3 |
| OST 184 | Records Management | 1 | 2 | 0 | 2 |
| ENG 115 | Oral Communications | 3 | 0 | 0 | 3 |
| | | 16 | 6 | 0 | 19 |

SUMMER SEMESTER 1

| | | | | | |
|---------|----------------------|---|---|---|---|
| OST 122 | Office Computations | 1 | 2 | 0 | 2 |
| CIS 154 | Database Utilization | 1 | 2 | 0 | 2 |
| | | 2 | 4 | 0 | 4 |

FALL SEMESTER 2

| | | | | | |
|---------|-------------------------------|----|---|---|----|
| OST 133 | Adv Keyboard Skill Bldg | 1 | 2 | 0 | 2 |
| OST 164 | Text Editing Applications | 3 | 0 | 0 | 3 |
| OST 223 | Machine Transcription I | 1 | 2 | 0 | 2 |
| OST 233 | Office Publications Design | 2 | 2 | 0 | 3 |
| OST 236 | Adv Word/Information Proc | 2 | 2 | 0 | 3 |
| | Humanities/Fine Arts Elective | 3 | 0 | 0 | 3 |
| | | 12 | 8 | 0 | 16 |

SPRING SEMESTER 2

| | | | | | |
|----------|---|----|---|----|----|
| OST 135 | Adv Text Entry & Formatting | 3 | 2 | 0 | 4 |
| OST 224 | Machine Transcription II | 1 | 2 | 0 | 2 |
| OST 286 | Professional Development | 2 | 0 | 0 | 2 |
| OST 289 | Office Systems Management | 2 | 2 | 0 | 3 |
| BUS 260 | Business Communications | 3 | 0 | 0 | 3 |
| COE 111E | Work Experience I - Office Systems Technology | 0 | 0 | 10 | 1 |
| | | 11 | 6 | 10 | 15 |

TOTAL REQUIRED CREDITS.....72

FALL SEMESTER 2 AND SPRING SEMESTER 2 ARE THE SAME FOR TRACK A AND TRACK B.

Co-op Option: Required

PARALEGAL TECHNOLOGY

A25380

The Paralegal Technology curriculum prepares individuals to work under the supervision of attorneys 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.

Course work 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.

Upon completion of the program, a student will receive an **associate in applied science degree**.

PARALEGAL TECHNOLOGY (A25380)

Effective: Summer 1997-98

Revised: 1/21/97

Length: 5 Semesters

Prerequisite: High School Diploma

Award: Associate in Applied Science

| FALL SEMESTER 1 | | | Class | Lab | Clinical | Work Experience | Credit |
|-----------------|------|---------------------------|-------|-----|----------|--------------------|--------|
| CIS | 110 | Introduction to Computers | 2 | 2 | 0 | 0 | 3 |
| ENG | 111 | Expository Writing | 3 | 0 | 0 | 0 | 3 |
| ENG | 111A | Expository Writing Lab | 0 | 2 | 0 | 0 | 1 |
| LEX | 110 | Intro to Paralegal Study | 2 | 0 | 0 | 0 | 2 |
| LEX | 130 | Civil Injuries | 2 | 0 | 0 | 0 | 2 |
| LEX | 140 | Civil Litigation I | 3 | 0 | 0 | 0 | 3 |
| LEX | 160 | Criminal Law & Procedure | 2 | 2 | 0 | 0 | 3 |
| LEX | 271 | Law Office Writing | 1 | 2 | 0 | 0 | 2 |
| | | | 15 | 8 | 0 | 0 | 19 |

SPRING SEMESTER 1

| | | | | | | | |
|-----|-----|---------------------------|----|----|---|---|----|
| LEX | 120 | Legal Research/Writing I | 2 | 2 | 0 | 0 | 3 |
| LEX | 141 | Civil Litigation II | 2 | 2 | 0 | 0 | 3 |
| LEX | 180 | Case Analysis & Reasoning | 1 | 2 | 0 | 0 | 2 |
| LEX | 210 | Real Property I | 2 | 0 | 0 | 0 | 2 |
| LEX | 250 | Wills, Estates & Trusts | 2 | 2 | 0 | 0 | 3 |
| OST | 136 | Word Processing | 1 | 2 | 0 | 0 | 2 |
| PHI | 230 | Introduction to Logic | 3 | 0 | 0 | 0 | 3 |
| | | | 13 | 10 | 0 | 0 | 18 |

SUMMER SEMESTER 1

| | | | | | | | |
|-----|-----|---------------------|---|---|---|---|---|
| LEX | 283 | Investigation | 1 | 2 | 0 | 0 | 2 |
| MAT | 115 | Mathematical Models | 2 | 2 | 0 | 0 | 3 |
| PSY | 150 | General Psychology | 3 | 0 | 0 | 0 | 3 |
| | | | 6 | 4 | 0 | 0 | 8 |

| FALL SEMESTER 2 | | Class | Lab | Clinical | Work Experience | Credit |
|-------------------|------|-------------------------------------|-----|----------|--------------------|--------|
| ENG | 114 | Prof Research & Reporting | 0 | 0 | 0 | 3 |
| LEX | 121 | Legal Research/Writing II | 2 | 0 | 0 | 3 |
| LEX | 150 | Commercial Law | 2 | 0 | 0 | 3 |
| LEX | 211 | Real Property II | 1 | 0 | 0 | 3 |
| LEX | 240 | Family Law | 2 | 0 | 0 | 2 |
| LEX | 260 | Bankruptcy & Collections | 2 | 0 | 0 | 2 |
| | | | 12 | 0 | 0 | 16 |
| SPRING SEMESTER 2 | | | | | | |
| COE | 112D | Work Exp I Paralegal Technology | 0 | 0 | 20 | 2 |
| COE | 115D | Work Exp Sem I Paralegal Technology | 0 | 0 | 0 | 1 |
| ENG | 115 | Oral Communication | 3 | 0 | 0 | 3 |
| LEX | 270 | Law Office Mgt/Technology | 1 | 0 | 0 | 2 |
| LEX | 285 | Workers' Comp Law | 2 | 0 | 0 | 2 |
| | | | 7 | 0 | 20 | 10 |

TOTAL CREDITS HOURS.....71

Co-op Option: Required

PHARMACY TECHNOLOGY

D45580

The Pharmacy Technology curriculum prepares individuals to assist the pharmacist in duties that a technician can legally perform and to function within the boundaries prescribed by the pharmacist and the employment agency.

Graduates will maintain patient's records; fill prescriptions; maintain inventories; set up, package, and label medication doses; prepare solutions and intravenous additives; and perform clerical duties, including insurance forms and forms required by third-party payers.

Graduates may be employed in hospitals, nursing homes, private and chain drug stores, research laboratories, wholesale drug companies, and pharmaceutical manufacturing facilities. Graduates will qualify to take the National Certification Examination developed by the Pharmacy Technician Certification Board.

Upon completion of the program, a student will receive a **diploma**.

PHARMACY TECHNOLOGY (D45580)

Effective: Summer 1997-98

Revised: 2/14/97

Length: 3 Semesters

Prerequisites: 1 Unit Biology, 1 Unit Algebra

Award: Diploma

| FALL SEMESTER 1 | | Class | Lab | Clinical | Credit |
|-----------------|---------------------------|-------|-----|----------|--------|
| BIO 106 | Intro to Anat/Phys/Micro | 2 | 2 | 0 | 3 |
| CIS 113 | Computer Basics | 0 | 2 | 0 | 1 |
| PHM 110 | Introduction to Pharmacy | 3 | 0 | 0 | 3 |
| PHM 111 | Pharmacy Practice I | 3 | 3 | 0 | 4 |
| PHM 115 | Pharmacy Calculations | 3 | 0 | 0 | 3 |
| PHM 115A | Pharmacy Calculations Lab | 0 | 2 | 0 | 1 |
| | | 11 | 9 | 0 | 15 |

SPRING SEMESTER 1

| | | | | | |
|----------|------------------------|---|---|----|----|
| ENG 111 | Expository Writing | 3 | 0 | 0 | 3 |
| ENG 111A | Expository Writing Lab | 0 | 2 | 0 | 1 |
| PHM 118 | Sterile Products | 3 | 3 | 0 | 4 |
| PHM 120 | Pharmacology I | 3 | 0 | 0 | 3 |
| PHM 138 | Pharmacy Clinical | 0 | 0 | 24 | 8 |
| | | 9 | 5 | 24 | 19 |

SUMMER SEMESTER 1

| | | | | | |
|---------|--------------------|---|---|---|----|
| PHM 125 | Pharmacology II | 3 | 0 | 0 | 3 |
| PHM 140 | Trends in Pharmacy | 2 | 0 | 0 | 2 |
| PHM 132 | Pharmacy Clinical | 0 | 0 | 6 | 2 |
| PSY 150 | General Psychology | 3 | 0 | 0 | 3 |
| | | 8 | 0 | 6 | 10 |

TOTAL REQUIRED CREDITS.... 44

Students with a felony conviction may have limited certification and employment opportunities.

PHYSICAL THERAPIST ASSISTANT

A45620

The Physical Therapist Assistant curriculum prepares graduates to work in direct patient care settings under supervision of physical therapists. Assistants work to improve or restore function by alleviation or prevention of physical impairment and perform other essential activities in a physical therapy department.

Course work includes normal human anatomy and physiology, the consequences of disease or injury, and physical therapy treatment of a variety of patient conditions affecting humans throughout the lifespan.

Graduates may be eligible to take the licensure examination administered by the NC Board of Physical Therapy Examiners. Employment is available in general hospitals, rehabilitation centers, extended care facilities, specialty hospitals, home health agencies, private clinics, and public school systems.

Upon completion of the program, a student will receive an **associate in applied science degree**.

PHYSICAL THERAPIST ASSISTANT (A45620)

Effective: Summer 1997-98

Revised: 2/14/97

Length: 5 Semesters

Prerequisites: 2 Units of Algebra, 1 Unit Biology & Chemistry

Award: Associate in Applied Science

| FALL SEMESTER 1 | | | Class | Lab | Clinical | Credit |
|-----------------|---------------------------|----|-------|-----|----------|--------|
| BIO 168 | Anatomy & Physiology I | 3 | 3 | 0 | 4 | |
| CIS 113 | Computer Basics | 0 | 2 | 0 | 1 | |
| ENG 111 | Expository Writing | 3 | 0 | 0 | 3 | |
| ENG 111A | Expository Writing Lab | 0 | 2 | 0 | 1 | |
| PHY 125 | Health Sciences Physics | 3 | 2 | 0 | 4 | |
| PTA 110 | Intro to Physical Therapy | 2 | 3 | 0 | 3 | |
| PTA 130 | Physical Therapy Proc I | 1 | 6 | 0 | 3 | |
| | | 12 | 18 | 0 | 19 | |

SPRING SEMESTER 1

| | | | | | |
|---------|--------------------------|----|----|---|----|
| BIO 169 | Anatomy & Physiology II | 3 | 3 | 0 | 4 |
| BIO 175 | General Microbiology | 2 | 2 | 0 | 3 |
| PSY 150 | General Psychology | 3 | 0 | 0 | 3 |
| PTA 120 | Functional Anatomy | 1 | 6 | 0 | 3 |
| PTA 150 | Physical Therapy Proc II | 1 | 6 | 0 | 3 |
| PTA 140 | Therapeutic Exercise | 2 | 6 | 0 | 4 |
| | | 12 | 23 | 0 | 20 |

SUMMER SEMESTER 1

| | | | | | |
|----------|---------------------------|---|---|---|---|
| PTA 160 | Physical Therapy Proc III | 2 | 3 | 0 | 3 |
| PTA 170 | Pathophysiology | 3 | 0 | 0 | 3 |
| PTA 180A | PTA Clinical Ed Intro | 0 | 0 | 3 | 1 |
| | | 5 | 3 | 3 | 7 |

| FALL SEMESTER 2 | | Class | Lab | Clinical | Credit |
|-----------------|---------------------------|----------|---------|----------|----------|
| ENG 115 | Oral Communication | 3 | 0 | 0 | 3 |
| PSY 241 | Developmental Psych | 3 | 0 | 0 | 3 |
| PTA 180B | PTA Clinical Ed Intro | 0 | 0 | 6 | 2 |
| PTA 222 | Professional Interactions | 2 | 0 | 0 | 2 |
| PTA 240 | Physical Therapy Proc IV | 3 | 6 | 0 | 5 |
| | Humanities/Fine Arts Elec | 3 | 0 | 0 | 3 |
| | | <hr/> 14 | <hr/> 6 | <hr/> 6 | <hr/> 18 |

SPRING SEMESTER 2

| | | | | | |
|---------|-----------------------|---------|---------|----------|----------|
| PTA 212 | Health Care/Resources | 2 | 0 | 0 | 2 |
| PTA 260 | Adv PTA Clinical Ed | 0 | 0 | 30 | 10 |
| | | <hr/> 2 | <hr/> 0 | <hr/> 30 | <hr/> 12 |

TOTAL REQUIRED CREDITS..... 76

Students with a felony conviction may have limited licensure and employment opportunities.

PLUMBING

D35300

The Plumbing curriculum is designed to give individuals the opportunity to acquire basic skills to assist with the installation and repairs of plumbing systems in residential and small buildings.

Course work includes sketching diagrams, interpretation of blueprints, and practices in plumbing assembly. Students will gain knowledge of state codes and requirements.

Graduates should qualify for employment at parts supply houses, maintenance companies, and plumbing contractors to assist with various plumbing applications.

Upon completion of the program, a student will receive a **diploma**.

PLUMBING (D35300)

Effective: Summer 1997-98

Revised: 1/21/97

Length: 3 Semesters

Prerequisite: High School Diploma

Award: Diploma

| FALL SEMESTER 1 | | Class | Lab | Clinical | Credit |
|-------------------|--------------------------------|----------|----------|----------|----------|
| BPR 130 | Blueprint Reading/Construction | 1 | 2 | 0 | 2 |
| MAT 101 | Applied Mathematics I | 2 | 2 | 0 | 3 |
| PLU 110 | Modern Plumbing | 4 | 15 | 0 | 9 |
| PLU 140 | Intro to Plumbing Codes | <u>1</u> | <u>2</u> | <u>0</u> | <u>2</u> |
| | | 8 | 21 | 0 | 16 |
| SPRING SEMESTER 1 | | | | | |
| CIS 113 | Computer Basics | 0 | 2 | 0 | 1 |
| ENG 101 | Applied Communications I | 3 | 0 | 0 | 3 |
| PLU 120 | Plumbing Applications | 4 | 15 | 0 | 9 |
| PLU 150 | Plumbing Diagrams | 1 | 2 | 0 | 2 |
| WLD 112 | Basic Welding Processes | <u>1</u> | <u>3</u> | <u>0</u> | <u>2</u> |
| | | 9 | 22 | 0 | 17 |
| SUMMER SEMESTER 1 | | | | | |
| PLU 130 | Plumbing Systems | 3 | 9 | 0 | 6 |
| | Elective | <u>3</u> | <u>0</u> | <u>0</u> | <u>3</u> |
| | | 6 | 9 | 0 | 9 |

TOTAL REQUIRED CREDITS.....42

Co-op Option: Qualified students may elect to take up to three (3) credit hours of Cooperative Education provided they acquire approval from the Co-op Director and the Department Chairperson.

POSTAL SERVICE TECHNOLOGY

A55340

The Postal Service Technology curriculum is designed to provide opportunities for advancement for present and future employees of the US Postal Service.

Students will study postal organization, mail processing, operations, employee and customer services, mail delivery and collection, problem analysis, related business and management subjects, and general education courses.

Graduates of the program will be prepared to work in a variety of postal positions.

Upon completion of the program, a student will receive an **associate in applied science degree**.

POSTAL SERVICE TECHNOLOGY (A55340)

Effective: Summer 1997-98

Revised: 1/21/97

Length: 4 Semesters

Prerequisite: High School Diploma

Award: Associate in Applied Science

FALL SEMESTER 1

| | | Class | Lab | Clinical | Credit |
|----------|---------------------------------|-------|-----|----------|--------|
| BUS 110 | Introduction to Business | 3 | 0 | 0 | 3 |
| CIS 110 | Introduction to Computers | 2 | 2 | 0 | 3 |
| ENG 111 | Expository Writing | 3 | 0 | 0 | 3 |
| ENG 111A | Expository Writing Lab | 0 | 2 | 0 | 1 |
| MAT 115 | Mathematical Models | 2 | 2 | 0 | 3 |
| POS 110 | POS History and Organization | 3 | 0 | 0 | 3 |
| | | 13 | 6 | 0 | 16 |

SPRING SEMESTER 1

| | | | | | |
|---------|-----------------------------|----|---|---|----|
| BUS 121 | Business Math | 2 | 2 | 0 | 3 |
| BUS 135 | Principles of Supervision | 3 | 0 | 0 | 3 |
| POS 115 | Processing and Distribution | 3 | 0 | 0 | 3 |
| POS 120 | Postal Operations Support | 3 | 0 | 0 | 3 |
| | Humanities/Fine Art Elec | 3 | 0 | 0 | 3 |
| | | 14 | 2 | 0 | 15 |

FALL SEMESTER 2

| | | | | | |
|---------|----------------------------|----|---|---|----|
| ACC 120 | Prin of Accounting I | 3 | 2 | 0 | 4 |
| BUS 115 | Business Law I | 3 | 0 | 0 | 3 |
| ECO 251 | Prin of Microeconomics | 3 | 0 | 0 | 3 |
| POS 125 | Postal Delivery/Collection | 3 | 0 | 0 | 3 |
| POS 130 | Postal Support & Finance | 3 | 0 | 0 | 3 |
| | | 15 | 2 | 0 | 16 |

SPRING SEMESTER 2

| | | | | | |
|---------|----------------------------|----|---|---|----|
| BUS 116 | Business Law II | 3 | 0 | 0 | 3 |
| BUS 137 | Principles of Management | 3 | 0 | 0 | 3 |
| BUS 153 | Human Resource Management | 3 | 0 | 0 | 3 |
| ECO 252 | Prin of Macroeconomics | 3 | 0 | 0 | 3 |
| ENG 115 | Oral Communication | 3 | 0 | 0 | 3 |
| POS 135 | Officer-in-Charge Training | 3 | 0 | 0 | 3 |
| | | 18 | 0 | 0 | 18 |

TOTAL REQUIRED CREDITS.... 65

Co-op Option: NA

PRACTICAL NURSING

D45660

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.

Upon completion of the program, a student will receive a **diploma**.

PRACTICAL NURSING (D45660)

Effective: Summer 1997-98

Revised: 1/21/97

Length: 3 Semesters

Prerequisite: 1 Unit Biology, Algebra & Chemistry

Award: Diploma

| FALL SEMESTER 1 | | | Class | Lab | Clinical | Credit |
|-------------------|---------------------------|--|-------|-------|----------|--------|
| BIO 163 | Basic Anat & Physiology | | 4 | 2 | 0 | 5 |
| NUR 101 | Practical Nursing I | | 7 | 6 | 6 | 11 |
| NUR 102A | Practical Nursing II | | 2 | 0 | 0 | 2 |
| | | | <hr/> | <hr/> | <hr/> | <hr/> |
| | | | 13 | 8 | 6 | 18 |
| | | | | | | |
| SPRING SEMESTER 1 | | | | | | |
| CIS 113 | Computer Basics | | 0 | 2 | 0 | 1 |
| NUR 102B | Practical Nursing II | | 6 | 0 | 12 | 10 |
| NUR 103A | Practical Nursing III | | 2 | 0 | 3 | 3 |
| PSY 110 | Life Span Development | | 3 | 0 | 0 | 3 |
| | | | <hr/> | <hr/> | <hr/> | <hr/> |
| | | | 11 | 2 | 15 | 17 |
| | | | | | | |
| SUMMER SEMESTER 1 | | | | | | |
| ENG 102 | Applied Communications II | | 3 | 0 | 0 | 3 |
| NUR 103B | Practical Nursing III | | 4 | 0 | 9 | 7 |
| | | | <hr/> | <hr/> | <hr/> | <hr/> |
| | | | 7 | 0 | 9 | 10 |

TOTAL REQUIRED CREDITS.... 45

Students with a felony conviction may have limited licensure and employment opportunities.

RADIOGRAPHY

A45700

The Radiography curriculum prepares the graduate to be a radiographer, a skilled health care professional who uses radiation to produce images of the human body.

Course work includes clinical rotations to area health care facilities, radiographic exposure, image processing, radiographic procedures, physics, pathology, patient care and management, radiation protection, quality assurance, anatomy and physiology, and radiobiology.

Graduates of accredited programs are eligible to apply to take the American Registry of Radiologic Technologists' national examination for certification and registration as medical radiographers. Graduates may be employed in hospitals, clinics, physicians' offices, medical laboratories, government agencies, and industry.

Upon completion of the program, a student will receive an **associate in applied science degree**.

RADIOGRAPHY (A45700)

Effective: Summer 1997-98

Revised: 2/14/97

Length: 5 Semesters

Prerequisites: 2 Units Algebra, 1 Unit Biology, Chemistry

Award: Associate in Applied Science

| FALL SEMESTER 1 | | Class | Lab | Clinical | Credit |
|-----------------|--------------------------|-------|-----|----------|--------|
| BIO 163 | Basic Anat & Physiology | 4 | 2 | 0 | 5 |
| ENG 111 | Expository Writing | 3 | 0 | 0 | 3 |
| ENG 111A | Expository Writing Lab | 0 | 2 | 0 | 1 |
| RAD 110 | RAD Intro & Patient Care | 2 | 3 | 0 | 3 |
| RAD 111 | RAD Procedures I | 3 | 3 | 0 | 4 |
| RAD 151 | RAD Clinical Ed I | 0 | 0 | 6 | 2 |
| RAD 183 | RAD Clinical Elective | 0 | 0 | 9 | 3 |
| | | — | — | — | — |
| | | 12 | 10 | 15 | 21 |

SPRING SEMESTER 1

| | | | | | |
|---------|-------------------------------|----|---|----|----|
| CIS 113 | Computer Basics | 0 | 2 | 0 | 1 |
| ENG 115 | Oral Communication | 3 | 0 | 0 | 3 |
| RAD 112 | RAD Procedures II | 3 | 3 | 0 | 4 |
| RAD 121 | Radiographic Imaging I | 2 | 3 | 0 | 3 |
| RAD 161 | RAD Clinical Ed II | 0 | 0 | 15 | 5 |
| | Humanities/Fine Arts Elective | 3 | 0 | 0 | 3 |
| | | — | — | — | — |
| | | 11 | 8 | 15 | 19 |

SUMMER SEMESTER 1

| | | | | | |
|---------|-------------------------|---|---|----|---|
| RAD 122 | Radiographic Imaging II | 1 | 3 | 0 | 2 |
| RAD 131 | Radiographic Physics I | 1 | 3 | 0 | 2 |
| RAD 171 | RAD Clinical Ed III | 0 | 0 | 12 | 4 |
| | | — | — | — | — |
| | | 2 | 6 | 12 | 8 |

| FALL SEMESTER 2 | | Class | Lab | Clinical | Credit |
|------------------------|-------------------------|--------------|------------|-----------------|---------------|
| PSY 150 | General Psychology | 3 | 0 | 0 | 3 |
| RAD 211 | RAD Procedures III | 2 | 3 | 0 | 3 |
| RAD 231 | Radiographic Physics II | 1 | 3 | 0 | 2 |
| RAD 241 | Radiation Protection | 2 | 0 | 0 | 2 |
| RAD 251 | RAD Clinical Ed IV | 0 | 0 | 21 | 7 |
| | | <hr/> | <hr/> | <hr/> | <hr/> |
| | | 8 | 6 | 21 | 17 |

SPRING SEMESTER 2

| | | | | | |
|---------|-----------------------|-------|-------|-------|-------|
| RAD 245 | Radiographic Analysis | 2 | 3 | 0 | 3 |
| RAD 261 | RAD Clinical Ed V | 0 | 0 | 21 | 7 |
| RAD 281 | RAD Clinical Elective | 0 | 0 | 3 | 1 |
| | | <hr/> | <hr/> | <hr/> | <hr/> |
| | | 2 | 3 | 24 | 11 |

TOTAL REQUIRED CREDITS.... 76

Students with a felony conviction may have limited licensure and employment opportunities.

REAL ESTATE

C25400

The Real Estate curriculum provides the precicensing 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.

Upon completion of the program, a student will receive a **certificate**.

REAL ESTATE (C25400)

Effective: Summer 1997-98

Revised: 1/21/97

Length: 3 Semesters

Prerequisite: High School Diploma

Award: Certificate

FALL SEMESTER 1

| | | Class | Lab | Clinical | Credit |
|---------|--------------------------|-----------|---------|----------|-----------|
| RLS 112 | Real Estate Fundamentals | 4 | 0 | 0 | 4 |
| | Major Elective | 2/3 | 0 | 0 | 2/3 |
| | | <hr/> 6/7 | <hr/> 0 | <hr/> 0 | <hr/> 6/7 |

SPRING SEMESTER 1

| | | | | | |
|---------|---------------------|---------|---------|---------|---------|
| RLS 115 | Real Estate Finance | 2 | 0 | 0 | 2 |
| RLS 116 | Real Estate Law | 2 | 0 | 0 | 2 |
| | | <hr/> 4 | <hr/> 0 | <hr/> 0 | <hr/> 4 |

SUMMER SEMESTER 1

| | | | | | |
|---------|-------------------------|---------|---------|---------|---------|
| RLS 113 | Real Estate Mathematics | 2 | 0 | 0 | 2 |
| RLS 114 | Real Estate Brokerage | 2 | 0 | 0 | 2 |
| | | <hr/> 4 | <hr/> 0 | <hr/> 0 | <hr/> 4 |

TOTAL REQUIRED CREDITS 14/15

Co-op Option: NA

REAL ESTATE APPRAISAL

C25420

The Real Estate Appraisal curriculum is designed to prepare individuals to enter the appraisal profession as a registered trainee and advance to licensed or certified appraiser levels.

Course work includes appraisal theory and concepts with applications, the North Carolina Appraisers Act, North Carolina Appraisal Board rules, and the Uniform Standards of Professional Appraisal Practice.

Graduates should be prepared to complete the North Carolina Registered Trainee Examinations and advance to licensure or certification levels as requirements are met.

Upon completion of the program, a student will receive a **certificate**.

REAL ESTATE APPRAISAL (C25420)

Effective: Summer 1997-99

Revised: 1/21/97

Length: 6 Semesters

Prerequisite: High School Diploma

Award: Certificate

| FALL SEMESTER 1 | | Class | Lab | Clinical | Credit |
|-------------------------------|---------------------------|-------|-------|----------|--------|
| REA 101 | Intro Real Est App R-1 | 2 | 0 | 0 | 2 |
| | | <hr/> | <hr/> | <hr/> | <hr/> |
| | | 2 | 0 | 0 | 2 |
| SPRING SEMESTER 1 | | | | | |
| REA 102 | Valuation Prin & Prac R-2 | 2 | 0 | 0 | 2 |
| | | <hr/> | <hr/> | <hr/> | <hr/> |
| | | 2 | 0 | 0 | 2 |
| SUMMER SEMESTER 1 | | | | | |
| REA 103 | Applied Res Prop Val R-3 | 2 | 0 | 0 | 2 |
| | | <hr/> | <hr/> | <hr/> | <hr/> |
| | | 2 | 0 | 0 | 2 |
| FALL SEMESTER 2 | | | | | |
| REA 201 | Intro Income Prop App G-1 | 2 | 0 | 0 | 2 |
| | | <hr/> | <hr/> | <hr/> | <hr/> |
| | | 2 | 0 | 0 | 2 |
| SPRING SEMESTER 2 | | | | | |
| REA 202 | Adv Inc Capital Proc G-2 | 2 | 0 | 0 | 2 |
| | | <hr/> | <hr/> | <hr/> | <hr/> |
| | | 2 | 0 | 0 | 2 |
| SUMMER SEMESTER 2 | | | | | |
| REA 203 | Applied Inc Prop Val G-3 | 2 | 0 | 0 | 2 |
| | | <hr/> | <hr/> | <hr/> | <hr/> |
| | | 2 | 0 | 0 | 2 |
| TOTAL REQUIRED CREDITS.... 12 | | | | | |

Co-op Option: NA

RECREATION AND LEISURE STUDIES

A55360

The Recreation and Leisure Studies curriculum prepares individuals to plan, direct, and implement recreation activities in diverse environments for all age groups. The program is designed to meet the needs of students interested in the private, public, commercial, or therapeutic environment.

Course work includes introductory courses concerning history, terminology, programming and general information concerning the recreation profession. Students learn recreation programs and activities in the following areas: cultural arts, team sports, outdoor education, wellness, individual activities, and adapted activities.

Upon completion graduates should qualify for a variety of assistant level positions at recreation centers, schools, hospitals, nursing facilities, parks, and commercial recreation establishments. They will be an asset in designing and implementing recreation programs and activities.

Upon completion, a student will receive an **associate in applied science degree**.

RECREATION & LEISURE STUDIES (A55360)

Effective: Summer 1997-98

Revised: 3/11/97

Length: 5 Semesters

Prerequisite: High School Diploma

Award: Associate in Applied Science

| FALL SEMESTER 1 | | | Class | Lab | Clinical | Work Experience | Credit |
|-----------------|------|---------------------------|----------|----------|----------|--------------------|----------|
| ENG | 111 | Expository Writing | 3 | 0 | 0 | 0 | 3 |
| ENG | 111A | Expository Writing Lab | 0 | 2 | 0 | 0 | 1 |
| HEA | 112 | First Aid & CPR | 1 | 2 | 0 | 0 | 2 |
| REC | 110 | Intro to Leisure Services | 3 | 0 | 0 | 0 | 3 |
| REC | 127 | Team Sports & Games | 1 | 2 | 0 | 0 | 2 |
| REC | 216 | Rec Arts & Crafts | 1 | 3 | 0 | 0 | 2 |
| REC | 226 | Pathways to Wellness | <u>3</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>3</u> |
| | | | 12 | 9 | 0 | 0 | 16 |

SPRING SEMESTER 1

| | | | | | | | |
|-----|-----|-------------------------------|----------|----------|----------|----------|----------|
| ENG | 114 | Prof Research & Reporting | 3 | 0 | 0 | 0 | 3 |
| REC | 120 | Intro Special Populations | 3 | 0 | 0 | 0 | 3 |
| REC | 124 | Social Rec Activities | 1 | 2 | 0 | 0 | 2 |
| REC | 126 | Outdoor Recreation | 1 | 2 | 0 | 0 | 2 |
| REC | 128 | Individual Sports & Games | 1 | 2 | 0 | 0 | 2 |
| REC | 224 | Leisure & the Aging | 2 | 2 | 0 | 0 | 3 |
| | | Humanities/Fine Arts Elective | <u>3</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>3</u> |
| | | | 14 | 8 | 0 | 0 | 18 |

SUMMER SEMESTER 1

| | | | | | | | |
|-----|-----|-----------------|----------|----------|----------|----------|----------|
| CIS | 113 | Computer Basics | 0 | 2 | 0 | 0 | 1 |
| | | *Major Elective | <u>3</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>3</u> |
| | | | 3 | 2 | 0 | 0 | 4 |

| FALL SEMESTER 2 | | | Class | Lab | Clinical | Work Experience | Credit |
|-----------------|-----|--------------------------|-------|-----|----------|--------------------|--------|
| MAT | 115 | Mathematical Models | 2 | 2 | 0 | 0 | 3 |
| REC | 125 | Public Relations | 1 | 3 | 0 | 0 | 2 |
| REC | 129 | Fitness Management | 2 | 3 | 0 | 0 | 3 |
| REC | 214 | Camp Administration | 3 | 2 | 0 | 0 | 4 |
| REC | 222 | Commercial Rec & Tourism | 3 | 0 | 0 | 0 | 3 |
| TRE | 120 | Adapted Activities | 1 | 2 | 0 | 0 | 2 |
| | | | 12 | 12 | 0 | 0 | 17 |

SPRING SEMESTER 2

| | | | | | | | |
|-----|-----|--------------------------|----|---|---|---|----|
| ENG | 115 | Oral Communication | 3 | 0 | 0 | 0 | 3 |
| PSY | 118 | Interpersonal Psychology | 3 | 0 | 0 | 0 | 3 |
| REC | 122 | Program Administration | 3 | 0 | 0 | 0 | 3 |
| REC | 123 | Intramural Management | 1 | 3 | 0 | 0 | 2 |
| REC | 217 | Maintenance/Facility Mgt | 2 | 2 | 0 | 0 | 3 |
| REC | 218 | Cultural Programs | 1 | 3 | 0 | 0 | 2 |
| | | | 13 | 8 | 0 | 0 | 16 |

TOTAL CREDIT HOURS.....71

Co-op Option: Qualified students may elect to take up to three (3) credit hours of Cooperative Education provided they acquire approval from the Co-op Director and the Department Chairperson.

* See the Student Educational Plan for the list of approved major electives.

RESPIRATORY CARE

A45720

The Respiratory Care curriculum prepares individuals to function as Respiratory Care Technicians and/or Respiratory Care Therapists. In these roles, individuals perform diagnostic testing, treatments, and management of patients with heart and lung diseases.

Students will master skills in patient assessment and treatment of cardiopulmonary diseases. These skills include life support, monitoring, drug administration, and treatment of patients of all ages in a variety of settings.

Graduates of accredited programs may be eligible to take entry level examinations from the National Board of Respiratory Care. Therapy graduates may also take the Advanced Practitioner examination. Graduates may be employed in hospitals, clinics, nursing homes, education, industry, and home care.

Upon completion of the program, a student will receive an **associate in applied science degree**.

RESPIRATORY CARE (A45720)

Effective: Summer 1997-98

Revised: 2/10/97

Length: 5 Semesters

Prerequisites: 2 Units Algebra, 1 Unit Biology, Chemistry

Award: Associate in Applied Science

| FALL SEMESTER 1 | | Class | Lab | Clinical | Credit |
|-----------------|---------------------------|-------|-----|----------|--------|
| BIO 168 | Anatomy and Physiology I | 3 | 3 | 0 | 4 |
| CHM 135 | Survey of Chemistry I | 3 | 2 | 0 | 4 |
| CIS 113 | Computer Basics | 0 | 3 | 0 | 1 |
| MAT 115 | Mathematical Models | 2 | 2 | 0 | 3 |
| RCP 110 | Intro to Respiratory Care | 3 | 3 | 0 | 4 |
| | | 11 | 13 | 0 | 16 |

SPRING SEMESTER 1

| | | | | | |
|----------|---------------------------|----|---|---|----|
| BIO 169 | Anatomy and Physiology II | 3 | 3 | 0 | 4 |
| ENG 111 | Expository Writing | 3 | 0 | 0 | 3 |
| ENG 111A | Expository Writing Lab | 0 | 2 | 0 | 1 |
| RCP 111 | Therapeutics/Diagnostics | 4 | 3 | 0 | 5 |
| RCP 115 | C-P Pathophysiology | 2 | 0 | 0 | 2 |
| RCP 133 | RCP Clinical Practice I | 0 | 0 | 9 | 3 |
| | | 12 | 8 | 9 | 18 |

SUMMER SEMESTER 1

| | | | | | |
|---------|--------------------------|---|---|---|---|
| ENG 115 | Oral Communication | 3 | 0 | 0 | 3 |
| RCP 142 | RCP Clinical Practice II | 0 | 0 | 6 | 2 |
| RCP 210 | Critical Care Concepts | 3 | 3 | 0 | 4 |
| | | 6 | 3 | 6 | 9 |

FALL SEMESTER 2

| | | Class | Lab | Clinical | Credit |
|---------|----------------------------|---------|---------|----------|----------|
| BIO 275 | Microbiology | 3 | 3 | 0 | 4 |
| RCP 156 | RCP Clinical Practice III | 0 | 0 | 18 | 6 |
| RCP 211 | Adv. Monitoring/Procedures | 3 | 3 | 0 | 4 |
| RCP 214 | Neonatal/Ped's RC | 1 | 3 | 0 | 2 |
| | | <hr/> 7 | <hr/> 9 | <hr/> 18 | <hr/> 16 |

SPRING SEMESTER 2

| | | | | | |
|---------|-------------------------------|---------|---------|----------|----------|
| PSY 150 | General Psychology | 3 | 0 | 0 | 3 |
| RCP 114 | C-P Anatomy and Physiology | 3 | 0 | 0 | 3 |
| RCP 223 | Special Practice Lab | 0 | 3 | 0 | 1 |
| RCP 237 | RCP Clinical Practice IV | 0 | 0 | 21 | 7 |
| | Humanities/Fine Arts Elective | 3 | 0 | 0 | 3 |
| | | <hr/> 9 | <hr/> 3 | <hr/> 21 | <hr/> 17 |

TOTAL REQUIRED CREDITS.... 76

Students with a felony conviction may have limited licensure and employment opportunities.



SPEECH-LANGUAGE PATHOLOGY ASSISTANT

A45730

The Speech-Language Pathology Assistant curriculum prepares graduates to work under the supervision of a licensed Speech-Language Pathologist who evaluates, diagnoses, and treats individuals with various communication disorders.

Courses provide instruction in methods of screening for speech, language, and hearing disorders and in following written protocols designed to remediate individual communication problems. Supervised field experiences include working with patients of various ages and with various disorders.

Graduates may be eligible for registration with the North Carolina Board of Examiners for Speech-Language Pathologists and Audiologists and must be supervised by a licensed Speech-Language Pathologist. They may be employed in healthcare or education settings.

Upon completion a student will receive an associate in applied science degree.

SPEECH-LANGUAGE PATHOLOGY ASSISTANT (A45730)

Effective: Summer 1997-98

Revised: 4/15/97

Length: 5 Semesters

Prerequisites: Algebra I & II, Biology, Chemistry

Award: Associate in Applied Science

FALL SEMESTER 1

| | | Class | Lab | Clinical | Credit |
|----------|------------------------|--------------|------------|-----------------|---------------|
| BIO 163 | Anatomy and Physiology | 4 | 2 | 0 | 5 |
| CIS 113 | Computer Basics | 0 | 2 | 0 | 1 |
| ENG 111 | Expository Writing | 3 | 0 | 0 | 3 |
| ENG 111A | Expository Writing Lab | 0 | 2 | 0 | 1 |
| ENG 115 | Oral Communication | 3 | 0 | 0 | 3 |
| MAT 161 | College Algebra | 3 | 0 | 0 | 3 |
| PSY 150 | General Psychology | 3 | 0 | 0 | 3 |
| | | <hr/> 16 | <hr/> 6 | <hr/> 0 | <hr/> 19 |

SPRING SEMESTER 1

| | | | | | |
|---------|--------------------------------|----------|---------|---------|----------|
| PSY 241 | Developmental Psychology | 3 | 0 | 0 | 3 |
| PSY 255 | Introduction to Exceptionality | 3 | 0 | 0 | 3 |
| SLP 111 | Intro to S/L Pathology | 3 | 0 | 0 | 3 |
| SLP 112 | SLP Pathophysiology | 3 | 0 | 0 | 3 |
| SLP 130 | Phonetics/Speech Patterns | 2 | 2 | 0 | 3 |
| SLP 140 | Normal Communication | 3 | 0 | 0 | 3 |
| | | <hr/> 17 | <hr/> 2 | <hr/> 0 | <hr/> 18 |

SUMMER SEMESTER 1

| | | | | | |
|---------|-------------------------------|---------|---------|---------|---------|
| ENG 114 | Profess. Research & Reporting | 3 | 0 | 0 | 3 |
| SLP 120 | SLP Admin. Office Procedures | 2 | 0 | 0 | 2 |
| SLP 211 | Disorders and Treatments I | 3 | 2 | 0 | 4 |
| | | <hr/> 8 | <hr/> 2 | <hr/> 0 | <hr/> 9 |

| FALL SEMESTER 2 | | Class | Lab | Clinical | Credit |
|------------------------------|-------------------------------|--------------|------------|-----------------|---------------|
| PSY 265 | Behavioral Modification | 3 | 0 | 0 | 3 |
| SLP 212 | Disorders and Treatments II | 3 | 2 | 3 | 5 |
| SLP 220 | Assistive Technology | 1 | 2 | 0 | 2 |
| | Humanities/Fine Arts Elective | 3 | 0 | 0 | 3 |
| | | <hr/> | <hr/> | <hr/> | <hr/> |
| | | 10 | 4 | 3 | 13 |
| SPRING SEMESTER 2 | | | | | |
| SLP 230 | SLP Field Work | 0 | 0 | 12 | 4 |
| SLP 231 | SLP Field Work Seminar | 3 | 0 | 0 | 3 |
| | | <hr/> | <hr/> | <hr/> | <hr/> |
| | | 3 | 0 | 12 | 7 |

TOTAL REQUIRED CREDITS.....66

Students with a felony conviction may have limited licensure and employment opportunities.

SURGICAL TECHNOLOGY

D45740

The Surgical Technology curriculum prepares individuals to assist in the care of the surgical patient in the operating room and to function as a member of the surgical team.

Students will apply theoretical knowledge to the care of patients undergoing surgery and develop skills necessary to prepare supplies, equipment, and instruments; maintain aseptic conditions; prepare patients for surgery; and assist surgeons during operations.

Graduates of this program will be eligible to apply to take the Liaison Council's Certification Examination for Surgical Technologists. Employment opportunities include labor/delivery/emergency departments, inpatient/outpatient surgery centers, dialysis units/facilities, physicians' offices, and central supply processing units.

Upon completion of the program, a student will receive a **diploma**.

SURGICAL TECHNOLOGY (D45740)

Effective: Summer 1997-98

Revised: 1/21/97

Length: 3 Semesters

Prerequisite: 1 Unit Biology

Award: Diploma

| FALL SEMESTER 1 | | Class | Lab | Clinical | Credit |
|-----------------|--------------------------|-------|-----|----------|--------|
| BIO 163 | Basic Anat & Physiology | 4 | 2 | 0 | 5 |
| ENG 101 | Applied Communications I | 3 | 0 | 0 | 3 |
| SUR 110 | Intro to Surg Tech | 2 | 0 | 0 | 2 |
| SUR 111 | Periop Patient Care | 5 | 6 | 0 | 7 |
| SUR 123A | SUR Clinical Practice I | 0 | 0 | 9 | 3 |
| | | — | — | — | — |
| | | 14 | 8 | 9 | 20 |

SPRING SEMESTER 1

| | | | | | |
|----------|--------------------------|----|---|----|----|
| BIO 175 | General Microbiology | 2 | 2 | 0 | 3 |
| CIS 113 | Computer Basics | 0 | 2 | 0 | 1 |
| PSY 150 | General Psychology | 3 | 0 | 0 | 3 |
| SUR 122 | Surgical Procedures I | 5 | 3 | 0 | 6 |
| SUR 123B | SUR Clinical Practice I | 0 | 0 | 12 | 4 |
| SUR 135A | SUR Clinical Practice II | 0 | 0 | 6 | 2 |
| | | — | — | — | — |
| | | 10 | 7 | 18 | 19 |

SUMMER SEMESTER 1

| | | | | | |
|----------|--------------------------|---|---|---|---|
| SUR 134 | Surgical Procedures II | 5 | 3 | 0 | 6 |
| SUR 135B | SUR Clinical Practice II | 0 | 0 | 6 | 2 |
| SUR 137 | Prof Success Prep | 1 | 0 | 0 | 1 |
| | | — | — | — | — |
| | | 6 | 3 | 6 | 9 |

TOTAL REQUIRED CREDITS.... 48

Students with a felony conviction may have limited certification and employment opportunities.

SURVEYING TECHNOLOGY

A40380

The Surveying Technology curriculum provides training for technicians in the many areas of surveying. Surveyors are involved in land surveying, route surveying, construction surveying, photogrammetry, mapping, global positioning systems, geographical information systems, and other areas of property description and measurements.

Course work includes the communication and computational skills required for boundary, construction, route, and control surveying, photogrammetry, topography, drainage, surveying law, and subdivision design, with emphasis upon applications of electronic data collection and related software including CAD.

Graduates should qualify for jobs as survey party chief, instrument person, surveying technician, highway surveyor, mapper, GPS technician, and CAD operator. Graduates will be prepared to pursue the requirements necessary to become a Registered Land Surveyor in North Carolina.

Upon completion of the program, a student will receive an **associate in applied science degree**.

SURVEYING TECHNOLOGY (A40380)

Effective: Summer 1997-98

Revised: 3/6/97

Length: 5 Semesters

Prerequisite: 2 Units of Algebra

Award: Associate in Applied Science

| FALL SEMESTER 1 | | Class | Lab | Clinical | Credit |
|-----------------|--------------------------|----------|----------|----------|----------|
| CIS 111 | Basic PC Literacy | 1 | 2 | 0 | 2 |
| EGR 115 | Intro to Technology | 2 | 6 | 0 | 4 |
| ENG 111 | Expository Writing | 3 | 0 | 0 | 3 |
| ENG 111A | Expository Writing Lab | 0 | 2 | 0 | 1 |
| MAT 121 | Algebra/Trigonometry I | 2 | 2 | 0 | 3 |
| PSY 118 | Interpersonal Psychology | <u>3</u> | <u>0</u> | <u>0</u> | <u>3</u> |
| | | 11 | 12 | 0 | 16 |

SPRING SEMESTER 1

| | | | | | |
|---------|-------------------------------|----------|----------|----------|----------|
| CIV 110 | Statics/Strength of Materials | 2 | 6 | 0 | 4 |
| CIV 125 | Civil/Surveying CAD | 1 | 6 | 0 | 3 |
| MAT 122 | Algebra/Trigonometry II | 2 | 2 | 0 | 3 |
| SRV 110 | Surveying I | 2 | 6 | 0 | 4 |
| | Humanities/Fine Arts Elective | <u>3</u> | <u>0</u> | <u>0</u> | <u>3</u> |
| | | 10 | 20 | 0 | 17 |

SUMMER SEMESTER 1

| | | | | | |
|---------|-------------------|----------|----------|----------|----------|
| PHY 131 | Physics-Mechanics | 3 | 2 | 0 | 4 |
| SRV 111 | Surveying II | <u>2</u> | <u>6</u> | <u>0</u> | <u>4</u> |
| | | 5 | 8 | 0 | 8 |

FALL SEMESTER 2

| | | Class | Lab | Clinical | Credit |
|---------|--------------------------|--------------|------------|-----------------|---------------|
| CIV 111 | Soils and Foundations | 2 | 3 | 0 | 3 |
| CIV 211 | Hydraulics and Hydrology | 2 | 3 | 0 | 3 |
| CIV 230 | Construction Estimating | 2 | 3 | 0 | 3 |
| SRV 210 | Surveying III | 2 | 6 | 0 | 4 |
| SRV 220 | Surveying Law | <u>2</u> | <u>2</u> | <u>0</u> | <u>3</u> |
| | | 10 | 17 | 0 | 16 |

SPRING SEMESTER 2

| | | | | | |
|---------|------------------------|----------|----------|----------|----------|
| ENG 115 | Oral Communication | 3 | 0 | 0 | 3 |
| CIV 212 | Environmental Planning | 2 | 3 | 0 | 3 |
| SRV 230 | Subdivision Planning | 1 | 6 | 0 | 3 |
| SRV 240 | Topo/Site Surveying | 2 | 6 | 0 | 4 |
| | Elective | <u>3</u> | <u>0</u> | <u>0</u> | <u>3</u> |
| | | 11 | 15 | 0 | 16 |

TOTAL REQUIRED CREDITS.....73

Co-op Option: Qualified students may elect to take up to three (3) credit hours of Cooperative Education provided they acquire approval from the Co-op Director and the Department Chairperson.

WELDING TECHNOLOGY

D50420

The Welding Technology curriculum provides students with a sound understanding of the science, technology, and applications essential for successful employment in the welding and metal industry.

Instruction includes consumable and non-consumable electrode welding and cutting processes. Courses in math, blueprint reading, metallurgy, welding inspection, and destructive and non-destructive testing provide the student with industry-standard skills developed through classroom training and practical application.

Successful graduates of the Welding Technology curriculum may be employed as entry level technicians in welding and metalworking industries. Career opportunities also exist in construction, manufacturing, fabrication, sales, quality control, supervision, and welding-related self-employment.

Upon completion of the program, a student will receive a **diploma**.

WELDING TECHNOLOGY(D50420)

Effective: Summer 1997-98

Revised: 1/21/97

Length: 3 Semesters

Prerequisite: High School Diploma

Award: Diploma

| FALL SEMESTER 1 | | Class | Lab | Clinical | Credit |
|-----------------|--------------------------|----------|----------|----------|----------|
| CIS 113 | Computer Basics | 0 | 2 | 0 | 1 |
| ISC 112 | Industrial Safety | 2 | 0 | 0 | 2 |
| MAT 101 | Applied Mathematics I | 2 | 2 | 0 | 3 |
| WLD 110 | Cutting Processes | 1 | 3 | 0 | 2 |
| WLD 115 | SMAW (Stick) Plate | 2 | 9 | 0 | 5 |
| WLD 141 | Symbols & Specifications | <u>2</u> | <u>2</u> | <u>0</u> | <u>3</u> |
| | | 9 | 18 | 0 | 16 |

SPRING SEMESTER 1

| | | | | | |
|---------|--------------------------|----------|----------|----------|----------|
| ENG 101 | Applied Communications I | 3 | 0 | 0 | 3 |
| WLD 116 | SMAW (Stick) Plate/Pipe | 1 | 9 | 0 | 4 |
| WLD 121 | GMAW (Mig) FCAW/Plate | 2 | 6 | 0 | 4 |
| WLD 131 | GTAW (Tig) Plate | <u>2</u> | <u>6</u> | <u>0</u> | <u>4</u> |
| | | 8 | 21 | 0 | 15 |

SUMMER SEMESTER 1

| | | | | | |
|---------|-------------------------|----------|----------|----------|----------|
| WLD 261 | Certification Practices | 1 | 3 | 0 | 2 |
| WLD 262 | Inspection & Testing | 2 | 2 | 0 | 3 |
| | Elective | <u>3</u> | <u>0</u> | <u>0</u> | <u>3</u> |
| | | 6 | 5 | 0 | 8 |

TOTAL REQUIRED CREDITS.....39

Co-op Option: Qualified students may elect to take up to three (3) credit hours of Cooperative Education provided they acquire approval from the Co-op Director and the Department Chairperson.



COURSE DESCRIPTIONS

**Fayetteville Technical
Community College**

| | | | | |
|----------------|-----------------------------|----------|----------|----------|
| ACC 111 | Financial Accounting | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces the basic framework of accounting. Emphasis is placed on the accounting cycle and financial statement preparation and analysis. Upon completion, students should be able to demonstrate an understanding of the principles involved and display an analytical problem-solving ability for the topics covered.

| | | | | |
|----------------|---------------------------|----------|----------|----------|
| ACC 115 | College Accounting | 3 | 2 | 4 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces basic accounting principles for a sole proprietorship. Topics include the complete accounting cycle with end-of-period statements, bank reconciliation, payrolls, and petty cash. Upon completion, students should be able to demonstrate an understanding of accounting principles and apply those skills to a business organization.

| | | | | |
|----------------|-----------------------------|----------|----------|----------|
| ACC 120 | Prin Of Accounting I | 3 | 2 | 4 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces the basic principles and procedures of accounting. Emphasis is placed on collecting, summarizing, analyzing, and reporting financial information. Upon completion, students should be able to analyze data and prepare journal entries and reports as they relate to the accounting cycle.

| | | | | |
|----------------|------------------------------|----------|----------|----------|
| ACC 121 | Prin of Accounting II | 3 | 2 | 4 |
| Prerequisites: | ACC 120 | | | |
| Corequisites: | None | | | |

This course is a continuation of ACC 120. Emphasis is placed on corporate and managerial accounting for both external and internal reporting and decision making. Upon completion, students should be able to analyze and record corporate transactions, prepare financial statements and reports, and interpret them for management.

| | | | | |
|----------------|--------------------------------|----------|----------|----------|
| ACC 129 | Individual Income Taxes | 2 | 2 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces the relevant laws governing individual income taxation. Emphasis is placed on filing status, exemptions for dependents, gross income, adjustments, deductions, and computation of tax. Upon completion, students should be able to complete various tax forms pertaining to the topics covered in the course.

| | | | | |
|----------------|------------------------------|----------|----------|----------|
| ACC 130 | Business Income Taxes | 2 | 2 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces the relevant laws governing business and fiduciary income taxes. Topics include tax depreciation, accounting periods and methods, corporations, partnerships, S corporations, estates and trusts, and gifts. Upon completion, students should be able to complete various tax forms pertaining to the topics covered in the course.

| | | | | |
|----------------|-----------------------------|---|---|---|
| ACC 131 | Federal Income Taxes | 2 | 2 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course provides an overview of federal income taxes for individuals, partnerships, and corporations. Emphasis is placed on the application of the Internal Revenue Code to preparation of tax returns for individuals, partnerships, and corporations. Upon completion, students should be able to complete federal tax returns for individuals, partnerships, and corporations.

| | | | | |
|----------------|---------------------------|---|---|---|
| ACC 140 | Payroll Accounting | 1 | 2 | 2 |
| Prerequisites: | ACC 115 or ACC 120 | | | |
| Corequisites: | None | | | |

This course covers federal and state laws pertaining to wages, payroll taxes, payroll tax forms, and journal and general ledger transactions. Emphasis is placed on computing wages; calculating social security, income, and unemployment taxes; preparing appropriate payroll tax forms; and journalizing/posting transactions. Upon completion, students should be able to analyze data, make appropriate computations, complete forms, and prepare accounting entries.

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|----------------|--------------------------------|---|---|---|
| ACC 150 | Computerized Gen Ledger | 1 | 2 | 2 |
| Prerequisites: | ACC 115 or ACC 120 | | | |
| Corequisites: | None | | | |

This course introduces microcomputer applications related to the major accounting systems. Topics include general ledger, accounts receivable, accounts payable, inventory, payroll, and correcting, adjusting, and closing entries. Upon completion, students should be able to use a computer accounting package to solve accounting problems.

| | | | | |
|----------------|--|---|---|---|
| ACC 170 | Technical Accounting | 2 | 3 | 3 |
| Prerequisites: | Completion of curriculum mathematics requirement | | | |
| Corequisites: | None | | | |

This course introduces the use of accounting for decision making and covers integration of financial accounting with managerial concepts. Topics include essentials of financial accounting and analysis, product costing, activity-based costing systems, budgeting, and financial planning. Upon completion, students should be able to understand and develop financial statements and demonstrate an understanding of accounting transactions and product costing systems.

| | | | | |
|----------------|----------------------------------|---|---|---|
| ACC 175 | Hotel and Restaurant Acct | 3 | 2 | 4 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers generally accepted accounting principles and the uniform system of accounts for small hotels and motels of the American Hotel and Motel Association. Emphasis is placed on the accounting cycle, analysis of financial statements, and payroll procedures including treatment of tips. Upon completion, students should be able to demonstrate competence in the accounting principles and procedures used in hotels and restaurants.

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|----------------|----------------------------------|---|---|---|
| ACC 220 | Intermediate Accounting I | 3 | 2 | 4 |
| Prerequisites: | ACC 121 | | | |
| Corequisites: | None | | | |

This course is a continuation of the study of accounting principles with in-depth coverage of theoretical concepts and financial statements. Topics include generally accepted accounting principles and statements and extensive analyses of balance sheet components. Upon completion, students should be able to demonstrate competence in the conceptual framework underlying financial accounting, including the application of financial standards.

| | | | | |
|----------------|-----------------------------|---|---|---|
| ACC 221 | Intermediate Acct II | 3 | 2 | 4 |
| Prerequisites: | ACC 220 | | | |
| Corequisites: | None | | | |

This course is a continuation of ACC 220. Emphasis is placed on special problems which may include leases, bonds, investments, ratio analyses, present value applications, accounting changes, and corrections. Upon completion, students should be able to demonstrate an understanding of the principles involved and display an analytical problem-solving ability for the topics covered.

| | | | | |
|----------------|------------------------|---|---|---|
| ACC 225 | Cost Accounting | 3 | 0 | 3 |
| Prerequisites: | ACC 121 | | | |
| Corequisites: | None | | | |

This course introduces the nature and purposes of cost accounting as an information system for planning and control. Topics include direct materials, direct labor, factory overhead, process, job order, and standard cost systems. Upon completion, students should be able to demonstrate an understanding of the principles involved and display an analytical problem-solving ability for the topics covered.

| | | | | |
|----------------|------------------------------|---|---|---|
| ACC 226 | Managerial Accounting | 3 | 0 | 3 |
| Prerequisites: | ACC 121 | | | |
| Corequisites: | None | | | |

This course is designed to develop an appreciation for the uses of cost information in the administration and control of business organizations. Emphasis is placed on how accounting data can be interpreted and used by management in planning and controlling business activities. Upon completion, students should be able to analyze and interpret cost information and present this information in a form that is usable by management.

| | | | | |
|----------------|--------------------------------|---|---|---|
| ACC 227 | Practices in Accounting | 3 | 0 | 3 |
| Prerequisites: | ACC 220 | | | |
| Corequisites: | None | | | |

This course provides an advanced in-depth study of selected topics in accounting using case studies and individual and group problem solving. Topics include cash flow, financial statement analysis, individual and group problem solving, practical approaches to dealing with clients, ethics, and critical thinking. Upon completion, students should be able to demonstrate competent analytical skills and effective communication of their analysis in written and/or oral presentations.

| | | | | |
|----------------|--------------------------------------|---|---|---|
| ACC 240 | Gov & Not-for-Profit Acct | 3 | 0 | 3 |
| Prerequisites: | ACC 121 | | | |
| Corequisites: | None | | | |

This course introduces principles and procedures applicable to governmental and not-for-profit organizations. Emphasis is placed on various budgetary accounting procedures and fund accounting. Upon completion, students should be able to demonstrate an understanding of the principles involved and display an analytical problem-solving ability for the topics covered.

| | | | | |
|----------------|----------------------------|---|---|---|
| ACC 250 | Advanced Accounting | 3 | 0 | 3 |
| Prerequisites: | ACC 220 | | | |
| Corequisites: | None | | | |

This course is designed to analyze the special problems in accounting for business combinations and consolidated corporate entities. Emphasis is placed on accounting for mergers and consolidations and preparing consolidated working papers and consolidated financial statements. Upon completion, students should be able to solve a wide variety of problems by advanced application of accounting principles and procedures.

| | | | | |
|----------------|-----------------|---|---|---|
| ACC 269 | Auditing | 3 | 0 | 3 |
| Prerequisites: | ACC 220 | | | |
| Corequisites: | None | | | |

This course covers the overall framework of the process of conducting audits and investigations. Emphasis is placed on collecting data from working papers, arranging and systematizing the audit, and writing the audit report. Upon completion, students should be able to demonstrate competence in applying the generally accepted auditing standards and the procedures for conducting an audit.

| | | | | |
|----------------|-------------------------------|---|---|---|
| AHR 110 | Intro to Refrigeration | 2 | 6 | 5 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces the basic refrigeration process used in mechanical refrigeration and air conditioning systems. Topics include terminology, safety, and identification and function of components; refrigeration cycle; and tools and instrumentation used in mechanical refrigeration systems. Upon completion, students should be able to identify refrigeration systems and components, explain the refrigeration process, and use the tools and instrumentation of the trade.

| | | | | |
|----------------|--------------------------|---|---|---|
| AHR 111 | HVACR Electricity | 2 | 2 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces electricity as it applies to HVACR equipment. Emphasis is placed on power sources, interaction of electrical components, wiring of simple circuits, and the use of electrical test equipment. Upon completion, students should be able to demonstrate good wiring practices and the ability to read simple wiring diagrams.

| | | | | |
|----------------|---------------------------|---|---|---|
| AHR 112 | Heating Technology | 2 | 4 | 4 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers the fundamentals of heating including oil, gas, and electric heating systems. Topics include safety, tools and instrumentation, system operating characteristics, installation techniques, efficiency testing, electrical power, and control systems. Upon completion, students should be able to explain the basic oil, gas, and electrical heating systems and describe the major components of a heating system.

| | | | | |
|----------------|------------------------|---|---|---|
| AHR 113 | Comfort Cooling | 2 | 4 | 4 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers the installation procedures, system operations, and maintenance of residential and light commercial comfort cooling systems. Topics include terminology, component operation, and testing and repair of equipment used to control and produce assured comfort levels. Upon completion, students should be able to use psychometrics, manufacturer specifications, and test instruments to determine proper system operation.

| | | | | |
|----------------|-----------------------------|---|---|---|
| AHR 114 | Heat Pump Technology | 2 | 4 | 4 |
| Prerequisites: | AHR 110 or AHR 113 | | | |
| Corequisites: | None | | | |

This course covers the principles of air source and water source heat pumps. Emphasis is placed on safety, modes of operation, defrost systems, refrigerant charging, and system performance. Upon completion, students should be able to understand and analyze system performance and perform routine service procedures.

| | | | | |
|----------------|------------------------------|---|---|---|
| AHR 115 | Refrigeration Systems | 1 | 3 | 2 |
| Prerequisites: | AHR 110 | | | |
| Corequisites: | None | | | |

This course introduces refrigeration systems and applications. Topics include defrost methods, safety and operational control, refrigerant piping, refrigerant recovery and charging, and leak testing. Upon completion, students should be able to assist in installing and testing refrigeration systems and perform simple repairs.

| | | | | |
|----------------|--------------------------|---|---|---|
| AHR 120 | HVACR Maintenance | 1 | 3 | 2 |
| Prerequisites: | | | | |
| 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 133 | HVAC Servicing | 2 | 6 | 4 |
| Prerequisites: | | | | |
| Corequisites: | AHR 112 or AHR 113 | | | |

The course covers the maintenance and servicing of HVAC equipment. Topics include testing, adjusting, maintaining, and troubleshooting HVAC equipment and record keeping. Upon completion, students should be able to adjust, maintain, and service HVAC equipment.

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|----------------|----------------------------|---|---|---|
| AHR 151 | HVAC Duct Systems I | 1 | 3 | 2 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces the techniques used to lay out and fabricate duct work commonly found in HVAC systems. Emphasis is placed on the skills required to fabricate duct work. Upon completion, students should be able to lay out and fabricate simple duct work.

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|----------------|----------------------------------|---|---|---|
| AHR 160 | Refrigerant Certification | 1 | 0 | 1 |
| Prerequisites: | | | | |
| 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.

| | | | | |
|----------------|---------------------------------|---|---|---|
| AHR 180 | HVACR Customer Relations | 1 | 0 | 1 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces common business and customer relation practices that may be encountered in HVACR. Topics include business practices, appearance of self and vehicle, ways of handling customer complaints, invoices, telephone communications, and warranties. Upon completion, students should be able to present themselves to customers in a professional manner, understand how the business operates, complete invoices, and handle complaints.

| | | | | |
|----------------|----------------------------------|---|---|---|
| AHR 210 | Residential Building Code | 1 | 2 | 2 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers the residential building codes that are applicable to the design and installation of HVAC systems. Topics include current residential codes as applied to HVAC design, service, and installation. Upon completion, students should be able to demonstrate the correct usage of residential building codes that apply to specific areas of the HVAC trade.

| | | | | |
|----------------|----------------------------------|---|---|---|
| AHR 211 | Residential System Design | 2 | 2 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces the principles and concepts of conventional residential heating and cooling system design. Topics include heating and cooling load estimating, basic psychometrics, equipment selection, duct system selection, and system design. Upon completion, students should be able to design a basic residential heating and cooling system.

| | | | | |
|----------------|---------------------------------|---|---|---|
| AHR 212 | Advanced Comfort Systems | 2 | 6 | 4 |
| Prerequisites: | AHR 114 | | | |
| Corequisites: | None | | | |

This course covers water-cooled comfort systems, water-source/geothermal heat pumps, and high efficiency heat pump systems including variable speed drives and controls. Emphasis is placed on the application, installation, and servicing of water-source systems and the mechanical and electronic control components of advanced comfort systems. Upon completion, students should be able to test, analyze, and troubleshoot water-cooled comfort systems, water-source/geothermal heat pumps, and high efficiency heat pumps.

| | | | | |
|----------------|---------------------------------|---|---|---|
| AHR 215 | Commercial HVAC Controls | 1 | 3 | 2 |
| Prerequisites: | AHR 111 or ELC 111 | | | |
| Corequisites: | None | | | |

This course introduces HVAC control systems used in commercial applications. Topics include electric/electronic control systems, pneumatic control systems, DDC temperature sensors, humidity sensors, pressure sensors, wiring, controllers, actuators, and controlled devices. Upon completion, students should be able to verify or correct the performance of common control systems with regard to sequence of operation and safety.

| | | | | |
|----------------|-------------------------|---|---|---|
| AHR 240 | Hydronic Heating | 1 | 3 | 2 |
| Prerequisites: | AHR 112 | | | |
| Corequisites: | None | | | |

This course covers the accepted procedures for proper design, installation, and balance of hydronic heating systems for residential or commercial buildings. Topics include heating equipment; pump, terminal unit, and accessory selection; piping system selection and design; and pipe sizing and troubleshooting. Upon completion, students should be able to assist with the proper design, installation, and balance of typical hydronic systems.

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|----------------|------------------------|---|---|---|
| AHR 245 | Chiller Systems | 1 | 3 | 2 |
| Prerequisites: | AHR 110 | | | |
| Corequisites: | None | | | |

This course introduces the fundamentals of liquid chilling equipment. Topics include characteristics of water, principles of water chilling, the chiller, the refrigerant, water and piping circuits, freeze prevention, purging, and equipment flexibility. Upon completion, students should be able to describe the components, controls, and overall operation of liquid chilling equipment and perform basic maintenance tasks.

| | | | | |
|----------------|--------------------------------|---|---|---|
| AHR 250 | HVAC System Diagnostics | 0 | 4 | 2 |
| Prerequisites: | | | | |
| Corequisites: | AHR 212 | | | |

This course is a comprehensive study of air conditioning, heating, and refrigeration system diagnostics and corrective measures. Topics include advanced system analysis, measurement of operating efficiency, and inspection and correction of all major system components. Upon completion, students should be able to restore a residential or commercial AHR system so that it operates at or near manufacturers' specifications.

| | | | | |
|----------------|---------------------------------|---|---|---|
| ARC 111 | Intro to Arch Technology | 1 | 6 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces basic architectural drafting techniques, lettering, use of architectural and engineer scales, and sketching. Topics include orthographic, axonometric, and oblique drawing techniques using architectural plans, elevations, sections, and details; reprographic techniques; and other related topics. Upon completion, students should be able to prepare and print scaled drawings within minimum architectural standards.

| | | | | |
|----------------|-----------------------------------|---|---|---|
| ARC 112 | Constr Matls & Methods | 3 | 2 | 4 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces construction materials and their methodologies. Topics include construction terminology, materials and their properties, manufacturing processes, construction techniques, and other related topics. Upon completion, students should be able to detail construction assemblies and identify construction materials and properties.

| | | | | |
|----------------|------------------------------|---|---|---|
| ARC 113 | Residential Arch Tech | 1 | 6 | 3 |
| Prerequisites: | ARC 111 | | | |
| Corequisites: | ARC 112 | | | |

This course covers intermediate residential working drawings. Topics include residential plans, elevations, sections, details, schedules, and other related topics. Upon completion, students should be able to prepare a set of residential working drawings that are within accepted architectural standards.

| | | | | |
|----------------|--------------------------|---|---|---|
| ARC 114 | Architectural CAD | 1 | 3 | 2 |
| Prerequisites: | ARC 111 | | | |
| Corequisites: | None | | | |

This course introduces basic architectural CAD techniques. Topics include basic commands and system hardware and software. Upon completion, students should be able to prepare and plot architectural drawings to scale within accepted architectural standards.

| | | | | |
|-----------------|------------------------------|---|---|---|
| ARC 114A | Architectural CAD Lab | 0 | 3 | 1 |
| Prerequisites: | | | | |
| Corequisites: | ARC 114 | | | |

This course provides a laboratory setting to enhance architectural CAD skills. Emphasis is placed on further development of commands and system operation. Upon completion, students should be able to prepare and plot scaled architectural drawings.

| | | | | |
|----------------|-----------------------|---|---|---|
| ARC 131 | Building Codes | 2 | 2 | 3 |
| Prerequisites: | ARC 112 | | | |
| Corequisites: | None | | | |

This course covers the methods of researching building codes for specific projects. Topics include residential and commercial building codes. Upon completion, students should be able to determine the code constraints governing residential and commercial projects.

| | | | | |
|----------------|--------------------------------|---|---|---|
| ARC 211 | Light Constr Technology | 1 | 6 | 3 |
| Prerequisites: | ARC 111 | | | |
| Corequisites: | ARC 112 | | | |

This course covers working drawings for light construction. Topics include plans, elevations, sections, and details; schedules; and other related topics. Upon completion, students should be able to prepare a set of working drawings which are within accepted architectural standards.

| | | | | |
|----------------|-----------------------|---|---|---|
| ARC 213 | Design Project | 2 | 6 | 4 |
| Prerequisites: | ARC 114 and ARC 211 | | | |
| Corequisites: | None | | | |

This course provides the opportunity to design and prepare a set of contract documents within an architectural setting. Topics include schematic design, design development, construction documents, and other related topics. Upon completion, students should be able to prepare a set of commercial contract documents.

| | | | | |
|----------------|--------------------------|---|---|---|
| ARC 220 | Adv Architect CAD | 1 | 3 | 2 |
| Prerequisites: | ARC 114 | | | |
| Corequisites: | None | | | |

This course provides file management, productivity, and CAD customization skills. Emphasis is placed on developing advanced proficiency techniques. Upon completion, students should be able to create prototype drawings and symbol libraries, compose sheets with multiple details, and use advanced drawing and editing commands.

| | | | | |
|----------------|------------------------------|---|---|---|
| ARC 221 | Architectural 3-D CAD | 1 | 4 | 3 |
| Prerequisites: | ARC 114 | | | |
| Corequisites: | None | | | |

This course introduces architectural three-dimensional CAD applications. Topics include three-dimensional drawing, coordinate systems, viewing, rendering, modeling, and output options. Upon completion, students should be able to prepare architectural three-dimensional drawings and renderings.

| | | | | |
|----------------|------------------------------|---|---|---|
| ARC 230 | Environmental Systems | 3 | 3 | 4 |
| Prerequisites: | ARC 111 and MAT 121 | | | |
| Corequisites: | None | | | |

This course introduces plumbing, mechanical (HVAC), and electrical systems for the architectural environment. Topics include basic plumbing, mechanical, and electrical systems for residential and/or commercial buildings with an introduction to selected code requirements. Upon completion, students should be able to develop schematic drawings for plumbing, mechanical, and electrical systems and perform related calculations.

| | | | | |
|----------------|---------------------------|---|---|---|
| ARC 231 | Arch Presentations | 2 | 4 | 4 |
| Prerequisites: | ARC 111 | | | |
| Corequisites: | None | | | |

This course introduces architectural presentation techniques. Topics include perspective drawing, shadow projection, texturization, rendered plans, elevations, and other related topics. Upon completion, students should be able to present ideas graphically and do rendered presentation drawings.

| | | | | |
|----------------|--------------------------------|---|---|---|
| ARC 235 | Architectural Portfolio | 2 | 3 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers the methodology for the creation of an architectural portfolio. Topics include preparation of marketing materials and a presentation strategy using conventional and/or digital design media. Upon completion, students should be able to produce an architectural portfolio of selected projects.

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|----------------|----------------------|---|---|---|
| ARC 240 | Site Planning | 2 | 2 | 3 |
| Prerequisites: | ARC 111 | | | |
| Corequisites: | None | | | |

This course introduces the principles of site planning, grading plans, and earthwork calculations. Topics include site analysis, site work, site utilities, cut and fill, soil erosion control, and other related topics. Upon completion, students should be able to prepare site development plans and details and perform cut and fill calculations.

| | | | | |
|----------------|--------------------------------|---|---|---|
| ARC 241 | Contract Administration | 1 | 2 | 2 |
| Prerequisites: | ARC 111 or ARC 112 | | | |
| Corequisites: | None | | | |

This course covers the techniques for reviewing the progress of construction projects. Topics include site observations, field reports, applications for payment, change orders, and other related topics. Upon completion, students should be able to review construction progress and produce appropriate documentation.

| | | | | |
|----------------|-----------------------------|---|---|---|
| ARC 264 | Digital Architecture | 1 | 3 | 2 |
| Prerequisites: | ARC 114 | | | |
| Corequisites: | None | | | |

This course covers multiple digital architectural techniques. Topics include spreadsheets and word processing procedures, on-line resources, modems, e-mail, image capture, multimedia, and other related topics. Upon completion, students should be able to transmit/receive electronic data, create multimedia presentations, and produce a desktop publishing document.

ART 111 Art Appreciation

3 0 3

Prerequisites:

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 114 Art History Survey I

3 0 3

Prerequisites:

Corequisites: None

This course covers the development of art forms from ancient times to the Renaissance. Emphasis is placed on content, terminology, design, and style. Upon completion, students should be able to demonstrate an historical understanding of art as a product reflective of human social development. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

ART 115 Art History Survey II

3 0 3

Prerequisites:

Corequisites: None

This course covers the development of art forms from the Renaissance to the present. Emphasis is placed on content, terminology, design, and style. Upon completion, students should be able to demonstrate an historical understanding of art as a product reflective of human social development. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

ART 116 Survey of American Art

3 0 3

Prerequisites:

Corequisites: None

This course covers the development of American art forms from colonial times to the present. Emphasis is placed on architecture, painting, sculpture, graphics, and the decorative arts. Upon completion, students should be able to demonstrate understanding of the history of the American creative experience.

ART 117 Non-Western Art History

3 0 3

Prerequisites:

Corequisites: None

This course introduces non-Western cultural perspectives. Emphasis is placed on, but not limited to, African, Oriental, and Oceanic art forms throughout history. Upon completion, students should be able to demonstrate an historical understanding of art as a product reflective of non-Western social and cultural development. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

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.

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|----------------|-------------------|---|---|---|
| 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.

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|----------------|-------------------|---|---|---|
| ART 244 | Watercolor | 0 | 6 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces basic methods and techniques used in watercolor. Emphasis is placed on application, materials, content, and individual expression. Upon completion, students should be able to demonstrate a variety of traditional and nontraditional concepts used in watercolor media.

| | | | | |
|----------------|--------------------|---|---|---|
| ART 281 | Sculpture I | 0 | 6 | 3 |
| Prerequisites: | ART 132 | | | |
| Corequisites: | None | | | |

This course provides an exploration of the creative and technical methods of sculpture with focus on the traditional processes. Emphasis is placed on developing basic skills as they pertain to three-dimensional expression in various media. Upon completion, students should be able to show competence in variety of sculptural approaches.

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|----------------|-------------------|---|---|---|
| ART 283 | Ceramics I | 0 | 6 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course provides an introduction to three-dimensional design principles using the medium of clay. Emphasis is placed on fundamentals of forming, surface design, glaze application, and firing. Upon completion, students should be able to demonstrate skills in slab and coil construction, simple wheel forms, glaze technique, and creative expression.

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|----------------|--------------------|---|---|---|
| ART 284 | Ceramics II | 0 | 6 | 3 |
| Prerequisites: | ART 283 | | | |
| Corequisites: | None | | | |

This course covers advanced hand building and wheel techniques. Emphasis is placed on creative expression, surface design, sculptural quality, and glaze effect. Upon completion, students should be able to demonstrate a high level of technical competence in forming and glazing with a development of three-dimensional awareness.

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|----------------|--|---|---|---|
| ART 288 | Studio | 0 | 6 | 3 |
| Prerequisites: | Limited to those who have completed a sequence of art courses in the proposed area of study. | | | |
| Corequisites: | None | | | |

This course provides the opportunity for advanced self-determined work beyond the limits of regular studio course sequences. Emphasis is placed on creative self-expression and in-depth exploration of techniques and materials. Upon completion, students should be able to create original projects specific to media, materials, and techniques.

| | | | | |
|----------------|-------------------------|---|---|---|
| ASL 111 | Elementary ASL I | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces the fundamental elements of American Sign Language. Emphasis is placed on the development of basic expressive and receptive skills. Upon completion, students should be able to comprehend and respond with grammatical accuracy to expressive American Sign Language.

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|----------------|--------------------------|---|---|---|
| ASL 112 | Elementary ASL II | 3 | 0 | 3 |
| Prerequisites: | ASL 111 | | | |
| Corequisites: | None | | | |

This course is a continuation of ASL 111 focusing on the fundamental elements of American Sign Language. Emphasis is placed on the progressive development of expressive and receptive skills. Upon completion, students should be able to comprehend and respond with increasing proficiency to expressive American Sign Language.

| | | | | |
|----------------|------------------------------|---|---|---|
| AST 111 | Descriptive Astronomy | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

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: | | | | |
| Corequisites: | AST 111 | | | |

The 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.*

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|----------------|----------------------------|---|---|---|
| AST 151 | General Astronomy I | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

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.*

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|-----------------|--------------------------------|---|---|---|
| AST 151A | General Astronomy I Lab | 0 | 2 | 1 |
| Prerequisites: | | | | |
| 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.*

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|----------------|-----------------------------|---|---|---|
| AST 152 | General Astronomy II | 3 | 0 | 3 |
| Prerequisites: | AST 151 | | | |
| Corequisites: | None | | | |

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.*

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|-----------------|---------------------------------|---|---|---|
| AST 152A | General Astronomy II Lab | 0 | 2 | 1 |
| Prerequisites: | AST 151 | | | |
| 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.*

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|----------------|--------------------------------|---|---|---|
| AST 251 | Observational Astronomy | 1 | 3 | 2 |
| Prerequisites: | AST 111 or AST 152 | | | |
| Corequisites: | None | | | |

This course covers the operation of the telescope and related observatory equipment. Emphasis is placed on the use of the telescope and related observatory equipment, including techniques of data collection, measurements, and data analysis. Upon completion, students should be able to set up a telescope and use the coordinate system to locate objects, collect data, and make measurements with the telescope.

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|----------------|-------------------------------------|---|---|---|
| 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.

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|----------------|-------------------------|---|---|---|
| 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.

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|----------------|--------------------------------|---|---|---|
| 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.

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|----------------|---------------------------------|---|---|---|
| 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.

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|----------------|----------------------------|---|---|---|
| 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.

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|----------------|-----------------------------|---|---|---|
| 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.

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|----------------|-----------------------------|---|---|---|
| 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.

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|----------------|---------------------------------|---|---|---|
| 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.

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|----------------|----------------------------|---|---|---|
| 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.

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|----------------|-----------------------------|---|---|---|
| AUT 113 | Automotive Servicing | 2 | 6 | 4 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers diagnostic procedures necessary to determine the nature and cause of auto service problems and the procedures used to repair/replace components. Emphasis is placed on troubleshooting, testing, adjusting, repairing, and replacing components using appropriate test equipment and service information. Upon completion, students should be able to perform a variety of automotive repairs using proper service procedures and operate appropriate equipment.

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|----------------|----------------------------|---|---|---|
| AUT 115 | Engine Fundamentals | 2 | 3 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers the theory, construction, inspection, diagnosis, and repair of internal combustion engines and related systems. Topics include fundamental operating principles of engines and diagnosis, inspection, adjustment, and repair of automotive engines using appropriate service information. Upon completion, students should be able to perform basic diagnosis/repair of automotive engines using appropriate tools, equipment, procedures, and service information.

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|----------------|----------------------|---|---|---|
| AUT 116 | Engine Repair | 1 | 3 | 2 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers service/repair/rebuilding of block, head, and internal engine components. Topics include engine repair/reconditioning using service specifications. Upon completion, students should be able to rebuild/recondition an automobile engine to service specifications.

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|----------------|--------------------------------------|---|---|---|
| AUT 141 | Suspension & Steering Sys | 2 | 4 | 4 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers principles of operation, types, and diagnosis/repair of suspension and steering systems to include steering geometry. Topics include manual and power steering systems and standard and electronically controlled suspension and steering systems. Upon completion, students should be able to service and repair various steering and suspension components, check and adjust various alignment angles, and balance wheels.

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|----------------|----------------------|---|---|---|
| AUT 151 | Brake Systems | 2 | 2 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers principles of operation and types, diagnosis, service, and repair of brake systems. Topics include drum and disc brakes involving hydraulic, vacuum boost, hydra-boost, electrically powered boost, and anti-lock and parking brake systems. Upon completion, students should be able to diagnose, service, and repair various automotive braking systems.

| | | | | |
|----------------|--------------------------|---|---|---|
| AUT 152 | Brake Systems Lab | 0 | 2 | 1 |
| Prerequisites: | | | | |
| Corequisites: | AUT 151 | | | |

This course provides a laboratory setting to enhance brake system skills. Emphasis is placed on practical experiences that enhance the topics presented in AUT 151. Upon completion, students should be able to apply the laboratory experiences to the concepts presented in AUT 151.

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|----------------|---------------------------|---|---|---|
| AUT 161 | Electrical Systems | 2 | 6 | 4 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers basic electrical theory and wiring diagrams, test equipment, and diagnosis/repair/replacement of batteries, starters, alternators, and basic electrical accessories. Topics include diagnosis and repair of battery, starting, charging, lighting, and basic accessory systems problems. Upon completion, students should be able to diagnose, test, and repair the basic electrical components of an automobile.

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|----------------|--|---|---|---|
| AUT 162 | Chassis Elect & Electronics | 2 | 2 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers electrical/electronic diagnosis/repair, including wiring diagrams, instrumentation, and electronic/computer-controlled devices and accessories. Topics include interpreting wiring diagrams and diagnosis and repair of chassis electrical and electronic systems. Upon completion, students should be able to read and interpret wiring diagrams and determine/perform needed repairs on chassis electrical and electronic systems.

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|----------------|-------------------------------------|---|---|---|
| AUT 163 | Chassis Elec & Elect Lab | 0 | 2 | 1 |
| Prerequisites: | | | | |
| Corequisites: | AUT 162 | | | |

This course provides a laboratory setting to enhance chassis electrical and electronic system skills. Emphasis is placed on practical experiences that enhance the topics presented in AUT 162. Upon completion, students should be able to apply the laboratory experiences to the concepts presented in AUT 162.

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|----------------|-------------------------------|---|---|---|
| AUT 164 | Automotive Electronics | 2 | 2 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers fundamentals of electrical/electronic circuitry, semi-conductors, and microprocessors. Topics include Ohm's law, circuits, AC/DC current, solid state components, digital applications, and the use of digital multimeters. Upon completion, students should be able to apply Ohm's law to diagnose and repair electrical/electronic circuits using digital multimeters and appropriate service information.

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|----------------|---------------------------------------|---|---|---|
| AUT 171 | Heating & Air Conditioning | 2 | 3 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers the theory of refrigeration and heating, electrical/electronic/pneumatic controls, and diagnosis/repair of climate control systems. Topics include diagnosis and repair of climate control components and systems, recovery/recycling of refrigerants, and safety and environmental regulations. Upon completion, students should be able to describe the operation, diagnose, and safely service climate control systems using appropriate tools, equipment, and service information.

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|----------------|--------------------------------------|---|---|---|
| AUT 181 | Engine Performance-Electrical | 2 | 3 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers the principles, systems, and procedures required for diagnosing and restoring engine performance using electrical/electronics test equipment. Topics include procedures for diagnosis and repair of ignition, emission control, and related electronic systems. Upon completion, students should be able to describe operation of and diagnose/repair ignition/emission control systems using appropriate test equipment and service information.

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|----------------|-------------------------------|---|---|---|
| AUT 182 | Engine Perfor-Elec Lab | 0 | 3 | 1 |
| Prerequisites: | | | | |
| Corequisites: | AUT 181 | | | |

This course provides a laboratory setting to enhance the skills for diagnosing and restoring engine performance using electrical/electronics test equipment. Emphasis is placed on practical experiences that enhance the topics presented in AUT 181. Upon completion, students should be able to apply the laboratory experiences to the concepts presented in AUT 181.

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|----------------|---------------------------------|---|---|---|
| AUT 183 | Engine Performance-Fuels | 2 | 3 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers the principles of fuel delivery/management, exhaust/emission systems, and procedures for diagnosing and restoring engine performance using appropriate test equipment. Topics include procedures for diagnosis/repair of fuel delivery/management and exhaust/emission systems using appropriate service information. Upon completion, students should be able to describe, diagnose, and repair engine fuel delivery/management and emission control systems using appropriate service information and diagnostic equipment.

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|----------------|--------------------------------|---|---|---|
| AUT 184 | Engine Perfor-Fuels Lab | 0 | 3 | 1 |
| Prerequisites: | | | | |
| Corequisites: | AUT 183 | | | |

This course provides a laboratory setting to enhance the skills for diagnosing and repairing fuel delivery/management and emission systems. Emphasis is placed on practical experiences that enhance the topics presented in AUT 183. Upon completion, students should be able to apply the laboratory experiences to the concepts presented in AUT 183.

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|----------------|--------------------------|---|---|---|
| AUT 185 | Emission Controls | 1 | 2 | 2 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers the design and function of emission control devices. Topics include chemistry of combustion as well as design characteristics and emission control devices which limit tailpipe, crankcase, and evaporative emissions. Upon completion, students should be able to troubleshoot, test, and service emission control systems.

| | | | | |
|----------------|-----------------------------|---|---|---|
| AUT 211 | Automotive Machining | 2 | 6 | 4 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers engine machining processes for remanufacturing automotive engines. Emphasis is placed on cylinder head service, machining block surfaces, reconditioning connecting rod assemblies, camshafts, flywheels, and precision measurement. Upon completion, students should be able to explain the operation and proper use of automotive machining equipment.

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|----------------|--------------------------------|---|---|---|
| AUT 221 | Automatic Transmissions | 2 | 6 | 4 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers operation, diagnosis, service, and repair of automatic transmissions/transaxles. Topics include hydraulic, pneumatic, mechanical, and electrical/electronic operation of automatic drive trains and the use of appropriate service tools and equipment. Upon completion, students should be able to explain operational theory and diagnose and repair automatic drive trains.

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|----------------|----------------------------------|---|---|---|
| AUT 231 | Manual Drive Trains/Axles | 2 | 3 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers the operation, diagnosis, and repair of manual transmissions/transaxles, clutches, driveshafts, axles, and final drives. Topics include theory of torque, power flow, and manual drive train service and repair using appropriate service information, tools, and equipment. Upon completion, students should be able to explain operational theory and diagnose and repair manual drive trains.

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|----------------|-----------------------------------|---|---|---|
| AUT 232 | Manual Dr Trains/Axles Lab | 0 | 3 | 1 |
| Prerequisites: | | | | |
| Corequisites: | AUT 231 | | | |

This course provides a laboratory setting to enhance the skills for diagnosing and repairing manual transmissions/transaxles, clutches, driveshafts, axles, and final drives. Emphasis is placed on practical experiences that enhance the topics presented in AUT 231. Upon completion, students should be able to apply the laboratory experiences to the concepts presented in AUT 231.

| | | | | |
|----------------|------------------------------|---|---|---|
| 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 111 | Teller Training | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course provides an overview of banking teller operations, bank security, and customer relations in preparation for work as a bank teller. Topics include bank profitability, cash and cash handling, checks and other transactions, balancing and setting, and security threats and their detection. Upon completion, students should be able to discuss the components of teller performance and perform effectively as a teller after minimal on-the-job training.

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|----------------|------------------------------|---|---|---|
| BAF 115 | Marketing for Bankers | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course is designed to provide a practical understanding of marketing in the financial services organization. Topics include consumer motivation and buying, marketing information and research, the marketing management process, public relations, and communications. Upon completion, students should be able to develop a marketing plan integrating public relations, advertising, sales promotion, selling, and service distribution.

| | | | | |
|----------------|--------------------------------|---|---|---|
| BAF 116 | Supervision for Bankers | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course is designed to provide an overview of basic supervision considerations. Topics include supervisory management fundamentals, problem solving, and decision making. Upon completion, students should be able to demonstrate an understanding of basic managerial functions of supervision, including planning, organizing, staffing, directing, budgeting, and labor relations.

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|----------------|-----------------------------|---|---|---|
| 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 133 | Bank Cards | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course provides an overview of bank cards including operational aspects, interface with payment system, and relationship to electronic funds transfer technology. Topics include bank cards in the American economy, operations, payment and transfer systems, competition, and legal and regulatory issues. Upon completion, students should be able to demonstrate an understanding of bank cards in the overall framework of the commercial bank's services and profitability.

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|----------------|--------------------------------------|---|---|---|
| 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.*

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|----------------|---------------------------|---|---|---|
| BAF 142 | Deposit Operations | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course provides an overview of the US payments system and banking law and regulation. Topics include banking law and regulations, current industry practices, bank deposit-taking activities, managing deposited funds, and EFT systems. Upon completion, students should be able to explain how banks operate relative to their deposit-taking activities and management of deposited funds.

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|----------------|-----------------------|---|---|---|
| BAF 152 | Trust Business | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course provides an overview of the trust department. Emphasis is placed on the different types of individual and corporate trusts, agencies, and services. Upon completion, students should be able to explain the role of the trust department and identify the services provided and to whom they are delivered.

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|----------------|--------------------------|---|---|---|
| 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.*

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|----------------|-------------------------|---|---|---|
| BAF 232 | Consumer Lending | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course details the many types of credit arrangements in which a finance charge is paid for the privilege of repaying debt in delayed payments. Topics include consumer credit policy, the loan process, servicing and collecting loans, consumer compliance, and evaluating credit risks. Upon completion, students should be able to identify collection policies and procedures, explain principles of credit evaluation, define open-end credit, and describe indirect lending.

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|----------------|---------------------------------|---|---|---|
| BAF 234 | Residential Mort Lending | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course provides an overview of the field of mortgage lending and the various financial markets for real estate mortgages. Topics include conventional and government related mortgages, contracts, financial markets, and qualifying prospective loan customers. Upon completion, students should be able to demonstrate an understanding of mortgage loan origination and processing, government regulations, and compliance issues.

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|----------------|---------------------------------|---|---|---|
| BAF 235 | Analyzing Fin Statements | 3 | 0 | 3 |
| Prerequisites: | ACC 120 | | | |
| Corequisites: | None | | | |

This course provides practice in constructing and analyzing long-range, multiple-year forecasts of income statements and balance sheets, and cash budgets. Topics include trend, ratio, common size, comparative analysis, programs, projections, and cash budgets. Upon completion, students should be able to analyze income statements, balance sheets, and *pro forma* statements.

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|----------------|------------------------------|---|---|---|
| BAF 236 | Financing Real Estate | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces construction lending and other areas of commercial real estate finance with particular emphasis on managing credit risk. Topics include real estate law, appraisal, and investment analysis. Upon completion, students should be able to explain the basic formulas used in the analysis of commercial real estate investments and the principles of risk.

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|----------------|------------------------|---|---|---|
| BAF 244 | Bank Management | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces the handling of day-to-day bank activities. Emphasis is placed on the objectives, planning, structure, control, and interrelationship of various bank departments. Upon completion, students should be able to demonstrate an understanding of bank objectives and policies and the administration of deposits, loans, and other investments.

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|----------------|-------------------------|---|---|---|
| BAF 245 | Bank Investments | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces the factors that affect investment strategies and decisions grounded in a framework of fundamental investment concepts such as risk, liquidity, and yield. Topics include profit and risk analysis, characteristics of specific investment instruments, funds strategies, and investment risks and returns. Upon completion, students should be able to identify and describe bank securities, identify tax factors in bank investments, and define investment accounts and maturity strategies.

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|----------------|-------------------------|---|---|---|
| BAF 253 | Trust Operations | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers basic trust terminology and the concepts that comprise the various trust functions. Topics include securities funds, special investments, types of trust accounts and services, and cash and asset/liability transactions. Upon completion, students should be able to explain the management and operations of trust services and apply the fundamentals of trust accounting.

Initial student placement in developmental courses is based on individual college placement testing policies and procedures. Students should begin developmental course work at the appropriate level indicated by the college's placement test.

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|----------------|-------------------------------|---|---|---|
| BIO 092 | Basics of Cell Biology | 3 | 2 | 4 |
| Prerequisites: | | | | |
| Corequisites: | RED 090 | | | |

This course covers basic cell biology. Emphasis is placed on biological chemistry, cell structure and function, cellular metabolism, genetics, and other related topics. Upon completion, students should be able to demonstrate preparedness for college-level biology courses.

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|----------------|----------------------------------|---|---|---|
| BIO 094 | Concepts of Human Biology | 3 | 2 | 4 |
| Prerequisites: | | | | |
| Corequisites: | RED 090 | | | |

This course focuses on fundamental concepts of human biology. Topics include terminology, biochemistry, cell biology, tissues, body systems, and other related topics. Upon completion, students should be able to demonstrate preparedness for college-level anatomy and physiology courses.

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|----------------|---------------------------------|---|---|---|
| BIO 106 | Intro to Anat/Phys/Micro | 2 | 2 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers the fundamental and principle concepts of human anatomy and physiology and microbiology. Topics include an introduction to the structure and function of cells, tissues, and human organ systems, and an overview of microbiology, epidemiology, and control of microorganisms. Upon completion, students should be able to identify structures and functions of the human body and describe microorganisms and their significance in health and disease. *This is a certificate and diploma level course.*

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|----------------|------------------------------|---|---|---|
| BIO 110 | Principles of Biology | 3 | 3 | 4 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course provides a survey of fundamental biological principles for non-science majors. Emphasis is placed on basic chemistry, cell biology, metabolism, genetics, taxonomy, evolution, ecology, diversity, and other related topics. Upon completion, students should be able to demonstrate increased knowledge and better understanding of biology as it applies to everyday life. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

| | | | | |
|----------------|--------------------------|---|---|---|
| BIO 111 | General Biology I | 3 | 3 | 4 |
| Prerequisites: | | | | |
| 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.*

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|----------------|---------------------------|---|---|---|
| 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.*

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|----------------|----------------------------|---|---|---|
| BIO 120 | Introductory Botany | 3 | 3 | 4 |
| Prerequisites: | BIO 110 or 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 has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

| | | | | |
|----------------|-----------------------------|---|---|---|
| BIO 130 | Introductory Zoology | 3 | 3 | 4 |
| Prerequisites: | BIO 110 or BIO 111 | | | |
| Corequisites: | None | | | |

This course provides an introduction to the classification, relationships, structure, and function of major animal phyla. Emphasis is placed on levels of organization, reproduction and development, comparative systems, and a survey of selected phyla. Upon completion, students should be able to demonstrate comprehension of animal form and function including comparative systems of selected groups. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

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|----------------|------------------------------|---|---|---|
| BIO 140 | Environmental Biology | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

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 has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

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|-----------------|----------------------------------|---|---|---|
| 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 has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

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|----------------|--------------------|---|---|---|
| BIO 145 | Ecology | 3 | 3 | 4 |
| Prerequisites: | BIO 110 or BIO 111 | | | |
| Corequisites: | None | | | |

This course provides an introduction to ecological concepts using an ecosystems approach. Topics include energy flow, nutrient cycling, succession, population dynamics, community structure, and other related topics. Upon completion, students should be able to demonstrate comprehension of basic ecosystem structure and dynamics.

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|----------------|----------------------------------|---|---|---|
| BIO 160 | Introductory Life Science | 2 | 2 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces scientific and biological concepts. Topics include basic chemistry, cell structure and function, cell division, basic genetic concepts, anatomical terminology, and metric-English measurements and conversions. Upon completion, students should be able to demonstrate an understanding of basic chemistry, cell biology, genetic concepts; anatomical terminology; and metric-English measurements and conversions.

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|----------------|-------------------------------|---|---|---|
| BIO 161 | Intro to Human Biology | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course provides a basic survey of human biology. Emphasis is placed on the basic structure and function of body systems and the medical terminology used to describe normal and pathological states. Upon completion, students should be able to demonstrate an understanding of normal anatomy and physiology and the appropriate use of medical terminology.

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|----------------|----------------------------------|---|---|---|
| BIO 162 | Intro to Human Physiology | 4 | 0 | 4 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces the functions of the human organ systems. Emphasis is placed on the organ systems relationships and the role of each in homeostasis and maintenance of life. Upon completion, students should be able to demonstrate knowledge of various organ system functions and their role in homeostasis.

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|----------------|------------------------------------|---|---|---|
| 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.

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|----------------|---------------------------------|---|---|---|
| BIO 168 | Anatomy and Physiology I | 3 | 3 | 4 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course provides a comprehensive study of the anatomy and physiology of the human body. Topics include body organization, homeostasis, cytology, histology, and the integumentary, skeletal, muscular, nervous, special senses, and endocrine systems. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and their interrelationships.

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|----------------|----------------------------------|---|---|---|
| BIO 169 | Anatomy and Physiology II | 3 | 3 | 4 |
| Prerequisites: | BIO 168 | | | |
| Corequisites: | None | | | |

This course provides a continuation of the comprehensive study of the anatomy and physiology of the human body. Topics include the cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive systems as well as metabolism, nutrition, acid-base balance, and fluid and electrolyte balance. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and their interrelationships.

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|----------------|----------------------------------|---|---|---|
| BIO 170 | Introductory Microbiology | 3 | 3 | 4 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces fundamental concepts of microbiology with emphasis on the relationships of microorganisms to humans. Topics include common groups of microorganisms and their relationships to human disease, including means of transmission, body defenses, prevention, control, and treatment. Upon completion, students should be able to practice and recognize the value of aseptic technique in microbial control.

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|----------------|------------------------------|---|---|---|
| BIO 175 | General Microbiology | 2 | 2 | 3 |
| Prerequisites: | BIO 110, BIO 163, 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.

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|----------------|---------------------------------|---|---|---|
| BIO 176 | Adv General Microbiology | 1 | 2 | 2 |
| Prerequisites: | BIO 175 | | | |
| Corequisites: | None | | | |

This course is a continuation of BIO 175. Emphasis is placed on microbial metabolism, genetics, and environmental and food microbiology. Upon completion, students should be able to identify unknown microbes and demonstrate an understanding of the fundamentals of molecular biology and microbial ecology.

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|----------------|-----------------------------|---|---|---|
| BIO 180 | Biological Chemistry | 2 | 2 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course provides an introduction to basic biochemical processes in living systems. Topics include properties of carbohydrates, lipids, proteins, nucleic acids, vitamins, and buffers, with emphasis on biosynthesis, degradation, function, and equilibrium. Upon completion, students should be able to demonstrate an understanding of fundamental biochemical concepts.

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|----------------|-----------------|---|---|---|
| BIO 221 | Botany I | 3 | 3 | 4 |
| Prerequisites: | BIO 112 | | | |
| Corequisites: | None | | | |

This course provides an introduction to the higher vascular plants. Topics include the structure, function, growth, life cycles, reproduction, and economic importance. Upon completion, students should be able to describe the biology and value of the higher vascular plants.

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|----------------|------------------|---|---|---|
| BIO 222 | Botany II | 3 | 3 | 4 |
| Prerequisites: | BIO 112 | | | |
| Corequisites: | None | | | |

This course includes a survey of the plant kingdom complete with a plant collection and field work. Emphasis is placed on ecology and the taxonomy of higher plants. Upon completion, students should be able to classify common plants.

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|----------------|---------------------|---|---|---|
| BIO 223 | Field Botany | 2 | 3 | 3 |
| Prerequisites: | BIO 112 | | | |
| Corequisites: | None | | | |

This course provides a field and laboratory study of local flora. Emphasis is placed on local flora classification, identification, and ecology by the use of keys and field studies. Upon completion, students should be able to use keys for the classification and identification of local flora and to demonstrate an understanding of plant ecology.

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|----------------|-----------------------|---|---|---|
| BIO 243 | Marine Biology | 3 | 3 | 4 |
| Prerequisites: | BIO 110 or BIO 111 | | | |
| Corequisites: | None | | | |

This course covers the physical and biological components of the marine environment. Topics include major habitats, the diversity of organisms, their biology and ecology, marine productivity, and the use of marine resources by humans. Upon completion, students should be able to identify various marine habitats and organisms and to demonstrate a knowledge of their biology and ecology.

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|----------------|---------------------------------------|---|---|---|
| BIO 275 | Microbiology | 3 | 3 | 4 |
| Prerequisites: | BIO 110, BIO 112, BIO 163, or BIO 168 | | | |
| Corequisites: | None | | | |

This course covers principles of microbiology and the impact these organisms have on man and the environment. Topics include the various groups of microorganisms, their structure, physiology, genetics, microbial pathogenicity, infectious diseases, immunology, and selected practical applications. Upon completion, students should be able to demonstrate knowledge and skills including microscopy, aseptic technique, staining, culture methods, and identification of microorganisms.

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|----------------|----------------------|---|---|---|
| BIO 280 | Biotechnology | 2 | 3 | 3 |
| Prerequisites: | BIO 111 or CHM 151 | | | |
| Corequisites: | None | | | |

This course provides experience in selected laboratory procedures. Topics include proper laboratory techniques in biology and chemistry. Upon completion, students should be able to identify laboratory techniques and instrumentation in basic biotechnology.

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|----------------|-----------------------------------|---|---|---|
| BIO 285 | Research & Measurement | 2 | 4 | 4 |
| Prerequisites: | BIO 112 and CHM 132 | | | |
| Corequisites: | None | | | |

This course provides an intensive laboratory experience with an investigative approach. Emphasis is placed on the use of various laboratory equipment and field techniques to enhance research and measurement competencies in ecology, natural resources, and other related topics. Upon completion, students should be able to demonstrate competencies with laboratory equipment and prepare a presentation of a selected research topic.

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|----------------|--------------------------|---|---|---|
| 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.

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|----------------|--------------------------------|---|---|---|
| BPR 121 | Blueprint Reading: Mech | 1 | 2 | 2 |
| Prerequisite: | BPR 111 | | | |
| 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.

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|----------------|--------------------------------|---|---|---|
| BPR 130 | Blueprint Reading/Const | 1 | 2 | 2 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers the interpretation of blueprints and specifications that are associated with the construction trades. Emphasis is placed on interpretation of details for foundations, floor plans, elevations, and schedules. Upon completion, students should be able to read and interpret a set of construction blueprints.

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|----------------|-----------------------------|---|---|---|
| BTC 181 | Basic Lab Techniques | 3 | 3 | 4 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces the basic skills and knowledge necessary in a biological or chemical laboratory. Emphasis is placed on good manufacturing practices, safety, solution preparation, and equipment operation and maintenance following standard operating procedures. Upon completion, students should be able to prepare and perform basic laboratory procedures using labware, solutions, and equipment according to prescribed protocols.

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|----------------|------------------------------|---|---|---|
| BTC 281 | Bioprocess Techniques | 2 | 6 | 4 |
| Prerequisites: | BTC 181 | | | |
| Corequisites: | None | | | |

This course covers processes used in the production of biomolecules. Emphasis is placed on the production, characterization, and purification of biological products using fermentation, centrifugation, filtration, electrophoresis, and other techniques used in industry. Upon completion, students should be able to produce biological products using the various methods of bioprocessing.

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|----------------|---------------------|---|---|---|
| BTC 285 | Cell Culture | 2 | 3 | 3 |
| Prerequisites: | BIO 275 | | | |
| Corequisites: | None | | | |

This course introduces the theory and practices required to successfully initiate and maintain plant and animal cell cultures. Topics include aseptic techniques, the growth environment, routine maintenance of cell cultures, specialized culture techniques, and various applications. Upon completion, students should be able to demonstrate the knowledge and skills required to grow, maintain, and manipulate cells in culture.

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|----------------|---------------------------------|---|---|---|
| BTC 286 | Immunological Techniques | 3 | 3 | 4 |
| Prerequisites: | BTC 285 | | | |
| Corequisites: | None | | | |

This course covers the principles and practices of modern immunology, including the interactions between the various cellular and chemical components of the immune response. Topics include antigens, humoral immunity, cellular immunity, complement, immunological assays, and hybridoma use and production. Upon completion, students should be able to discuss the immune response, perform immunological assays, and make monoclonal antibody-producing hybridomas.

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|----------------|-------------------------------|---|---|---|
| BTC 288 | Biotech Lab Experience | 0 | 6 | 2 |
| Prerequisites: | BTC 281 and BTC 285 or 286 | | | |
| Corequisites: | None | | | |

This course provides an opportunity to pursue an individual laboratory project in biotechnology. Emphasis is placed on developing, performing, and maintaining records of a project in a specific area of interest. Upon completion, students should be able to complete the project with accurate records and demonstrate an understanding of the process.

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|----------------|---------------------------------|---|---|---|
| BUS 110 | Introduction to Business | 3 | 0 | 3 |
|----------------|---------------------------------|---|---|---|

Prerequisites:

Corequisites: None

This course provides a survey of the business world. Topics include the basic principles and practices of contemporary business. Upon completion, students should be able to demonstrate an understanding of business concepts as a foundation for studying other business subjects.

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|----------------|-----------------------|---|---|---|
| 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.

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|----------------|------------------------|---|---|---|
| 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.

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|----------------|----------------------|---|---|---|
| BUS 121 | Business Math | 2 | 2 | 3 |
|----------------|----------------------|---|---|---|

Prerequisites:

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.

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|----------------|-------------------------|---|---|---|
| BUS 125 | Personal Finance | 3 | 0 | 3 |
|----------------|-------------------------|---|---|---|

Prerequisites:

Corequisites: None

This course provides a study of individual and family financial decisions. Emphasis is placed on building useful skills in buying, managing finances, increasing resources, and coping with current economic conditions. Upon completion, students should be able to develop a personal financial plan.

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|----------------|----------------------------------|---|---|---|
| BUS 135 | Principles of Supervision | 3 | 0 | 3 |
|----------------|----------------------------------|---|---|---|

Prerequisites:

Corequisites: None

This course introduces the basic responsibilities and duties of the supervisor and his/her relationship to higher-level supervisors, subordinates, and associates. Emphasis is placed on effective utilization of the work force and understanding the role of the supervisor. Upon completion, students should be able to apply supervisory principles in the work place.

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|----------------|---------------------------------|---|---|---|
| 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.

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|----------------|---------------------------|---|---|---|
| BUS 147 | Business Insurance | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course surveys the basic concepts of risk management. Topics include principles and applications of health, property, life, and casualty insurance. Upon completion, students should be able to evaluate different insurance needs and assist an organization in acquiring adequate insurance coverage.

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|----------------|------------------------|---|---|---|
| BUS 152 | Human Relations | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces the concepts of effective human interaction in the business work environment. Topics include effective communication techniques, motivation, ego states, stress, and conflict. Upon completion, students should be able to explain the importance of human relations, apply motivational techniques, and implement strategies for resolving work-related conflicts.

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|----------------|----------------------------------|---|---|---|
| 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.

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|----------------|----------------------------|---|---|---|
| BUS 210 | Investment Analysis | 3 | 0 | 3 |
| Prerequisites: | ACC 111 or ACC 120 | | | |
| Corequisites: | None | | | |

This course examines the concepts related to financial investment and the fundamentals of managing investments. Emphasis is placed on the securities markets, stocks, bond, and mutual funds, as well as tax implications of investment alternatives. Upon completion, students should be able to analyze and interpret investment alternatives and report findings to users of financial information.

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|----------------|--------------------------------|---|---|---|
| BUS 217 | Employment Law and Regs | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces the principle laws and regulations affecting public and private organizations and their employees or prospective employees. Topics include fair employment practices, EEO, affirmative action, and employee rights and protections. Upon completion, students should be able to evaluate organization policy for compliance and assure that decisions are not contrary to law.

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|----------------|-------------------|---|---|---|
| BUS 220 | Purchasing | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces the purchasing function and explains its role in business. Topics include the legal and ethical aspects of purchasing, quality assurance, and the application of purchasing formulas and methods for cost analysis. Upon completion, students should be able to complete a purchase transaction incorporating legal, ethical, quality, and cost considerations.

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|----------------|-------------------------|---|---|---|
| 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.

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|----------------|------------------------------|---|---|---|
| BUS 228 | Business Statistics | 2 | 2 | 3 |
| Prerequisites: | MAT 115, MAT 140, or MAT 161 | | | |
| Corequisites: | None | | | |

This course introduces the use of statistical methods and tools in evaluating research data for business applications. Emphasis is placed on basic probability, measures of spread and dispersion, central tendency, sampling, regression analysis, and inductive inference. Upon completion, students should be able to apply statistical problem solving to business.

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|----------------|----------------------------------|---|---|---|
| BUS 230 | Small Business Management | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces the challenges of entrepreneurship including the startup and operation of a small business. Topics include market research techniques, feasibility studies, site analysis, financing alternatives, and managerial decision making. Upon completion, students should be able to develop a small business plan.

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|----------------|---------------------------------|---|---|---|
| BUS 234 | Training and Development | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers developing, conducting, and evaluating employee training with attention to adult learning principles. Emphasis is placed on conducting a needs assessment, using various instructional approaches, designing the learning environment, and locating learning resources. Upon completion, students should be able to design, conduct, and evaluate a training program.

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|----------------|-------------------------------|---|---|---|
| BUS 235 | Performance Management | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course includes the legal background for performance management and the basic methodology used in developing and validating a performance management system. Emphasis is placed on job analysis, job descriptions, appraisal instruments, and action plans. Upon completion, students should be able to develop, implement, and maintain a comprehensive performance management system.

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|----------------|----------------------------------|---|---|---|
| BUS 237 | Current Management Issues | 2 | 0 | 2 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces current management issues and problems. Emphasis is placed on the management topics and challenges faced by all employees in an organization. Upon completion, students should be able to critically analyze alternative solutions within a team environment.

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|----------------|--|---|---|---|
| BUS 239 | Bus Applications Seminar | 1 | 2 | 2 |
| Prerequisites: | ACC 120, BUS 115, BUS 137, MKT 120, and either ECO 151, 251 or 252 | | | |
| Corequisites: | None | | | |

This course is designed as a capstone course for Business Administration majors. Emphasis is placed on decision making in the areas of management, marketing, production, purchasing, and finance. Upon completion, students should be able to apply the techniques, processes, and vital professional skills needed in the work place.

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|----------------|------------------------|---|---|---|
| BUS 240 | Business Ethics | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces contemporary and controversial ethical issues that face the business community. Topics include moral reasoning, moral dilemmas, law and morality, equity, justice and fairness, ethical standards, and moral development. Upon completion, students should be able to demonstrate an understanding of their moral responsibilities and obligations as members of the workforce and society.

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|----------------|------------------------|---|---|---|
| BUS 252 | Labor Relations | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers the history of the organized labor movement and the contractual relationship between corporate management and employees represented by a union. Topics include labor laws and unfair labor practices, the role of the NLRB, organizational campaigns, certification/decertification elections, and grievance procedures. Upon completion, students should be able to act in a proactive and collaborative manner in an environment where union representation exists.

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|----------------|----------------------------------|---|---|---|
| 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.

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|----------------|-------------------------------|---|---|---|
| BUS 260 | Business Communication | 3 | 0 | 3 |
| Prerequisites: | ENG 111 | | | |
| 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.

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|----------------|--------------------------|---|---|---|
| BUS 261 | Diversity in Mgmt | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course is designed to help managers recognize the need to incorporate diversity into all phases of organizational management. Topics include self-evaluation, management, sexual harassment, workforce diversity, dual careers, role conflict, and communication issues. Upon completion, students should be able to implement solutions that minimize policies, attitudes, and stereotypical behaviors that block effective team building.

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|----------------|---------------------------------|---|---|---|
| BUS 270 | Professional Development | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course provides basic knowledge of self-improvement techniques as related to success in the professional world. Topics include positive human relations, job-seeking skills, and projecting positive self-image. Upon completion, students should be able to demonstrate competent personal and professional skills necessary to get and keep a job.

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|----------------|-----------------------------------|---|---|---|
| BUS 285 | Business Management Issues | 2 | 2 | 3 |
| Prerequisites: | BUS 137 | | | |
| Corequisites: | None | | | |

This course covers contemporary issues that affect successful businesses and their managers and employees. Emphasis is placed on using case studies and exercises to develop analytical and problem-solving skills, ethics, quality management concepts, team skills, and effective communication. Upon completion, students should be able to apply the specific knowledge and skills covered to become more effective managers and employees.

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|----------------|------------------------|---|---|---|
| CAB 110 | Shop Operations | 3 | 3 | 4 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers establishing and maintaining a custom cabinet shop. Topics include financing, equipment acquisition, maintenance, inventory techniques, OSHA requirements, shop organization, and safety and delivery systems. Upon completion, students should be able to organize and maintain a custom cabinet business. *This is a diploma-level course.*

| | | | | |
|----------------|------------------------|---|---|---|
| CAB 111 | Cabinetmaking I | 4 | 9 | 7 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces wood technology, materials, purchasing, estimating, design considerations, and cabinet construction. Topics include wood identification and use, hand tools, safe machine operation, glue and clamping, abrasives, wood joinery, kitchen and bath layout, laminates, and finishing techniques. Upon completion, students should be able to select and process materials; make sound production decisions; and design, lay out, construct, and install cabinets. *This is a diploma-level course.*

| | | | | |
|----------------|-------------------------|---|----|---|
| CAB 112 | Cabinetmaking II | 5 | 12 | 9 |
| Prerequisites: | CAB 111 | | | |
| Corequisites: | None | | | |

This course uses previously learned skills in the design and construction of furniture, European cabinetry, and special cabinet requirements. Topics include furniture repair, wood carving, inlaying, veneering, and millwork products. Upon completion, students should be able to design and construct a piece of furniture, repair defects, and understand the foundation of the 32 mm system. *This is a diploma-level course.*

| | | | | |
|----------------|--------------------------|---|---|---|
| CAB 113 | Cabinetmaking III | 4 | 6 | 6 |
| Prerequisites: | CAB 112 | | | |
| Corequisites: | None | | | |

This course provides an opportunity to construct a cabinetmaking project. Emphasis is placed on following construction plans, quality construction, and efficient use of time and materials. Upon completion, students should be able to plan and construct an item of furniture and/or set of cabinets. *This is a diploma-level course.*

| | | | | |
|----------------|--------------------|---|----|---|
| CAR 111 | Carpentry I | 4 | 15 | 9 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces the theory and construction methods associated with the building industry, including framing, materials, tools, and equipment. Topics include safety, hand/power tool use, site preparation, measurement and layout, footings and foundations, construction framing, and other related topics. Upon completion, students should be able to safely lay out and perform basic framing skills with supervision. *This is a diploma-level course.*

| | | | | |
|----------------|---------------------|---|----|---|
| CAR 112 | Carpentry II | 4 | 15 | 9 |
| Prerequisites: | CAR 111 | | | |
| Corequisites: | None | | | |

This course covers the advanced theory and construction methods associated with the building industry including framing and exterior finishes. Topics include safety, hand/power tool use, measurement and layout, construction framing, exterior trim and finish, and other related topics. Upon completion, students should be able to safely frame and apply exterior finishes to a residential building with supervision.

| | | | | |
|----------------|----------------------|---|---|---|
| CAR 113 | Carpentry III | 3 | 9 | 6 |
| Prerequisites: | CAR 111 | | | |
| Corequisites: | None | | | |

This course covers interior trim and finishes. Topics include safety, hand/power tool use, measurement and layout, specialty framing, interior trim and finishes, cabinetry, and other related topics. Upon completion, students should be able to safely install various interior trim and finishes in a residential building with supervision.

| | | | | |
|----------------|-------------------------------|---|---|---|
| CAR 114 | Residential Bldg Codes | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers building codes and the requirements of state and local construction regulations. Emphasis is placed on the minimum requirements of the North Carolina building codes related to residential structures. Upon completion, students should be able to determine if a structure is in compliance with North Carolina building codes.

| | | | | |
|----------------|--------------------------------|---|---|---|
| CAR 115 | Res Planning/Estimating | 3 | 0 | 3 |
| Prerequisites: | BPR 130 | | | |
| Corequisites: | None | | | |

This course covers project planning, management, and estimating for residential or light commercial buildings. Topics include planning and scheduling, interpretation of working drawings and specifications, estimating practices, and other related topics. Upon completion, students should be able to perform quantity take-offs and cost estimates.

Initial student placement in developmental courses is based on individual college placement testing policies and procedures. Students should begin developmental course work at the appropriate level indicated by the college's placement test.

| | | | | |
|----------------|--------------------------|---|---|---|
| CHM 081 | Basic Chemistry I | 3 | 2 | 4 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers basic fundamental principles and laws of chemistry. Topics include matter, energy, atomic structure, periodic classification, nomenclature, bonding, molecular geometry, measurement, chemical reactions, stoichiometry, and gas laws. Upon completion, students should be able to explain and apply the chemical concepts and laboratory skills as needed in CHM 082.

| | | | | |
|----------------|---------------------------|---|---|---|
| CHM 082 | Basic Chemistry II | 3 | 2 | 4 |
| Prerequisites: | CHM 081 | | | |
| Corequisites: | None | | | |

This course provides a continuation of the study of basic fundamental principles and laws of chemistry. Topics include intermolecular forces, solutions, acids and bases, redox reactions, chemical equilibrium, with elements of organic and nuclear chemistry. Upon completion, students should be able to explain and apply basic chemical concepts and laboratory skills needed for success in college-level chemistry courses.

| | | | | |
|----------------|------------------------------|---|---|---|
| CHM 115 | Concepts in Chemistry | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces basic chemical concepts and their applications to daily life for non-science majors. Topics include air pollution, global warming, energy, world of polymers, water and its importance to a technological society, food, drugs, and nuclear chemistry. Upon completion, students should be able to discuss, apply, and appreciate the impact of chemistry on modern society.

| | | | | |
|-----------------|---|---|---|---|
| CHM 115A | Concepts in Chemistry Laboratory | 0 | 2 | 1 |
| Prerequisites: | | | | |
| Corequisites: | CHM 115 | | | |

This course is a laboratory for CHM 115. Emphasis is placed on laboratory experiences that enhance materials presented in CHM 115. Upon completion, students should be able to utilize basic laboratory procedures and apply them to chemical concepts presented in CHM 115.

| | | | | |
|----------------|----------------------------------|---|---|---|
| CHM 131 | Introduction to Chemistry | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces the fundamental concepts of inorganic chemistry. Topics include measurement, matter and energy, atomic and molecular structure, nuclear chemistry, stoichiometry, chemical formulas and reactions, chemical bonding, gas laws, solutions, and acids and bases. Upon completion, students should be able to demonstrate a basic understanding of chemistry as it applies to other fields. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

| | | | | |
|-----------------|--------------------------------------|---|---|---|
| CHM 131A | Introduction to Chemistry Lab | 0 | 3 | 1 |
| Prerequisites: | | | | |
| 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: | 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 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 135 | Survey of Chemistry I | 3 | 2 | 4 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course provides an introduction to inorganic chemistry. Emphasis is placed on measurement, atomic structure, bonding, molecular geometry, nomenclature, reactions, the mole concept, stoichiometric calculations, states of matter, and the gas laws. Upon completion, students should be able to demonstrate 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 136 | Survey of Chemistry II | 3 | 2 | 4 |
| Prerequisites: | CHM 135 | | | |
| Corequisites: | None | | | |

This course is a continuation of CHM 135 with further study of inorganic reactions and an introduction to organic, biological, and nuclear chemistry. Topics include solutions, acid-base theory, redox reactions, chemical kinetics, organic chemistry, biochemistry, and nuclear chemistry. Upon completion, students should be able to demonstrate 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 151 | General Chemistry I | 3 | 3 | 4 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers fundamental principles and laws of chemistry. Topics include measurement, atomic and molecular structure, periodicity, chemical reactions, chemical bonding, stoichiometry, thermochemistry, gas laws, and solutions. Upon completion, students should be able to demonstrate an understanding of fundamental chemical laws and concepts as needed in CHM 152. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

| | | | | |
|----------------|-----------------------------|---|---|---|
| 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 complex ions. Upon completion, students should be able to demonstrate an understanding of chemical concepts as needed to pursue further study in chemistry and related professional fields. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

| | | | | |
|----------------|----------------------------|---|---|---|
| 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.

| | | | | |
|----------------|------------------------------|---|---|---|
| CHM 261 | Quantitative Analysis | 2 | 6 | 4 |
| Prerequisites: | CHM 152 | | | |
| Corequisites: | None | | | |

This course introduces classical methods of chemical analysis with an emphasis on laboratory techniques. Topics include statistical data treatment; stoichiometric and equilibrium calculations; and titrimetric, gravimetric, acid-base, oxidation-reduction, and compleximetric methods. Upon completion, students should be able to perform classical quantitative analytical procedures.

| | | | | |
|----------------|-------------------------------|---|---|---|
| CHM 271 | Biochemical Principles | 3 | 0 | 3 |
| Prerequisites: | CHM 252 | | | |
| Corequisites: | None | | | |

The course covers fundamental principles of biochemistry. Topics include structures, properties, reactions, and mechanisms of biomacromolecules including amino acids, peptides, proteins, carbohydrates and nucleic acids, enzymatic metabolic pathways, and biochemical genetics. Upon completion, students should be able to demonstrate an understanding of fundamental biochemical processes.

| | | | | |
|----------------|----------------------------------|---|---|---|
| CIS 110 | Introduction to Computers | 2 | 2 | 3 |
| Prerequisites: | | | | |
| 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 111 | Basic PC Literacy | 1 | 2 | 2 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course provides a brief overview of computer concepts. Emphasis is placed on the use of personal computers and software applications for personal and workplace use. Upon completion, students should be able to demonstrate basic personal computer skills.

| | | | | |
|----------------|--------------------|---|---|---|
| CIS 112 | Windows | 1 | 2 | 2 |
| Prerequisites: | CIS 110 or CIS 111 | | | |
| 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 113 | Computer Basics | 0 | 2 | 1 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces basic computer usage for non-computer majors. Emphasis is placed on developing basic personal computer skills. Upon completion, students should be able to demonstrate competence in basic computer applications sufficient to use computer-assisted instructional software.

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|----------------|----------------------------------|---|---|---|
| CIS 115 | Intro to Prog & Logic | 2 | 2 | 3 |
| Prerequisites: | MAT 080 or MAT 090 | | | |
| 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.

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|----------------|----------------------|---|---|---|
| CIS 120 | Spreadsheet I | 2 | 2 | 3 |
| Prerequisites: | CIS 110 or CIS 111 | | | |
| 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 122 | Intro to Business Comp | 2 | 2 | 3 |
| Prerequisites: | CIS 110 or CIS 111 | | | |
| Corequisites: | None | | | |

This course provides preparation in solving business problems using computers. Topics include hardware and software concepts, the DOS operating system, Windows™, spreadsheets, and communications. Upon completion, students should be able to use DOS commands, navigate a Windows™ environment, use spreadsheet capabilities, and access information in a business environment.

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|----------------|------------------------------|---|---|---|
| CIS 124 | DTP Graphics Software | 2 | 2 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces graphic design software using a variety of software packages. Emphasis is placed on efficient utilization of software capabilities. Upon completion, students should be able to incorporate appropriate graphic designs into desktop publishing publications.

| | | | | |
|--------------------|--------------------------------|---|---|---|
| CIS 126 | Graphics Software Intro | 2 | 2 | 3 |
| Prerequisites: | | | | |
| Corequisites: None | | | | |

This course provides an introduction to graphic design and execution of pictorial graphics using a variety of software packages. Emphasis is placed on creation and manipulation of images using graphic design software. Upon completion, students should be able to create graphic designs and incorporate these designs into printed publications.

| | | | | |
|--------------------|---------------------------------|---|---|---|
| CIS 128 | Computer Language Survey | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: None | | | | |

This course provides an opportunity to compare various computer languages. Emphasis is placed on appropriate uses, syntax, and comparative programming. Upon completion, students should be able to select the appropriate language for problem solving.

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|--------------------|--------------------------------|---|---|---|
| CIS 130 | Survey of Operating Sys | 2 | 3 | 3 |
| Prerequisites: | | | | |
| 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.

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|---|-------------------------------------|---|---|---|
| CIS 152 | Database Concepts & Apps | 2 | 2 | 3 |
| Prerequisites: CIS 110, CIS 111, or CIS 115 | | | | |
| Corequisites: None | | | | |

This course introduces database design and creation using a DBMS product. Topics include database terminology, usage in industry, design theory, types of DBMS models, and creation of simple tables, queries, reports, and forms. Upon completion, students should be able to create simple database tables, queries, reports, and forms which follow acceptable design practices.

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|-----------------------------------|-----------------------------|---|---|---|
| CIS 154 | Database Utilization | 1 | 2 | 2 |
| Prerequisites: CIS 110 or CIS 111 | | | | |
| Corequisites: None | | | | |

This course introduces basic database functions and uses. Emphasis is placed on database manipulation with queries, reports, forms, and some table creation. Upon completion, students should be able to enter and manipulate data from the end-user mode.

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|------------------------|---------------------------------|---|---|---|
| CIS 155 | Database Theory/Analysis | 2 | 2 | 3 |
| Prerequisites: CIS 152 | | | | |
| Corequisites: None | | | | |

This course introduces database design theories and analyses. Emphasis is placed on data dictionaries, normalization, data integrity, and data modeling. Upon completion, students should be able to design normalized database structures which exhibit data integrity.

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|----------------|-------------------------------|---|---|---|
| CIS 157 | Database Programming I | 2 | 2 | 3 |
| Prerequisites: | CIS 130 and CIS 152 | | | |
| Corequisites: | None | | | |

This course is designed to develop programming proficiency in a selected DBMS. Emphasis is placed on the Data Definition Language (DDL) and Data Manipulation Language (DML) of the DBMS as well as on report generation. Upon completion, students should be able to write programs which create, update, and produce reports representative of industry requirements.

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|----------------|---------------------------------|---|---|---|
| CIS 162 | MM Presentation Software | 2 | 2 | 3 |
| Prerequisites: | CIS 110 or CIS 111 | | | |
| Corequisites: | None | | | |

This course is designed to integrate visual and audio resources using presentation software in a simple interactive multimedia project. Emphasis is placed upon design and audience considerations, general prototyping, and handling of media resources. Upon completion, students should be able to demonstrate an original interactive multimedia presentation implementing all of these resources in a professional manner.

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|----------------|-----------------------------|---|---|---|
| CIS 165 | Desktop Publishing I | 2 | 2 | 3 |
| Prerequisites: | | | | |
| 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.

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|----------------|-------------------------------|---|---|---|
| CIS 169 | Business Presentations | 1 | 2 | 2 |
| Prerequisites: | CIS 110 or CIS 111 | | | |
| 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.

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|----------------|------------------------------|---|---|---|
| CIS 172 | Intro to the Internet | 2 | 3 | 3 |
| Prerequisites: | | | | |
| 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.

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|----------------|-------------------------------|---|---|---|
| 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.

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|----------------|-------------------------------|---|---|---|
| CIS 216 | Software Install/Maint | 1 | 2 | 2 |
| Prerequisites: | CIS 130 | | | |
| Corequisites: | None | | | |

This course introduces the installation and troubleshooting aspects of personal computer software. Emphasis is placed on initial installation and optimization of system software, commercial programs, system configuration files, and device drivers. Upon completion, students should be able to install, upgrade, uninstall, optimize, and troubleshoot personal computer software.

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|----------------|------------------------|---|---|---|
| CIS 220 | Spreadsheets II | 1 | 2 | 2 |
| Prerequisites: | CIS 120 | | | |
| Corequisites: | None | | | |

This course covers advanced spreadsheet design and development. Topics include advanced functions, charting, macros, databases, and linking. Upon completion, students should be able to demonstrate competence in designing complex spreadsheets.

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|----------------|-----------------------------|---|---|---|
| CIS 226 | Trends in Technology | 1 | 2 | 2 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces emerging information systems technologies. Emphasis is placed on evolving technologies and trends in business and industry. Upon completion, students should be able to articulate an understanding of the current trends and issues in emerging technologies for information systems.

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|----------------|--------------------------------------|---|---|---|
| CIS 245 | Operating System - Multi-User | 2 | 3 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course includes operating systems concepts for multi-user systems. Topics include hardware management, file and memory management, system configuration/optimization, and utilities. Upon completion, students should be able to perform operating system functions in a multi-user environment.

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|----------------|--------------------------------|---|---|---|
| CIS 246 | Operating System - UNIX | 2 | 3 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course includes operating systems concepts for UNIX operating systems. Topics include hardware management, file and memory management, system configuration/optimization, utilities, and other related topics. Upon completion, students should be able to effectively use the UNIX operating system and its utilities.

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|----------------|--------------------------------------|---|---|---|
| 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.

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|----------------|------------------------|---|---|---|
| CIS 288 | Systems Project | 1 | 4 | 3 |
| Prerequisite: | 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.

| | | | | |
|----------------|--------------------------------------|---|---|---|
| CIV 110 | Statics/Strength of Materials | 2 | 6 | 4 |
| Prerequisites: | MAT 121 | | | |
| Corequisites: | None | | | |

This course includes vector analysis, equilibrium of force systems, friction, sectional properties, stress/strain, and deformation. Topics include resultants and components of forces, moments and couples, free-body diagrams, shear and moment diagrams, trusses, frames, beams, columns, connections, and combined stresses. Upon completion, students should be able to analyze simple structures.

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|----------------|------------------------------|---|---|---|
| CIV 111 | Soils and Foundations | 2 | 3 | 3 |
| Prerequisite: | CIV 110 | | | |
| Corequisites: | None | | | |

This course presents an overview of soil as a construction material using both analysis and testing procedures. Topics include index properties, classification, stress analysis, compressibility, compaction, dewatering, excavation, stabilization, settlement, and foundations. Upon completion, students should be able to perform basic soil tests and analyze engineering properties of soil.

| | | | | |
|----------------|-------------------------------|---|---|---|
| CIV 125 | Civil/Surveying CAD | 1 | 6 | 3 |
| Prerequisites: | CIS 111, EGR 115, and SRV 110 | | | |
| Corequisites: | None | | | |

This course introduces civil/surveying computer-aided drafting (CAD) software. Topics include drawing, editing, and dimensioning commands; plotting; and other related civil/surveying topics. Upon completion, students should be able to produce civil/surveying drawings using CAD software.

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|----------------|------------------------------|---|---|---|
| CIV 210 | Engineering Materials | 1 | 3 | 2 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers the behavior and properties of Portland cement and asphaltic concretes and laboratory and field testing. Topics include cementing agents and aggregates; water and admixtures; proportioning, production, placing, consolidation, and curing; and inspection methods. Upon completion, students should be able to proportion concrete mixes to attain predetermined strengths and other properties and perform standard control tests.

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|----------------|---------------------------------|---|---|---|
| CIV 211 | Hydraulics and Hydrology | 2 | 3 | 3 |
| Prerequisite: | CIV 110 | | | |
| Corequisites: | None | | | |

This course introduces the basic engineering principles and characteristics of hydraulics and hydrology. Topics include precipitation and runoff, fluid statics and dynamics, flow measurement, and pipe and open channel flow. Upon completion, students should be able to analyze and size drainage structures.

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|----------------|-------------------------------|---|---|---|
| CIV 212 | Environmental Planning | 2 | 3 | 3 |
| Prerequisites: | CIV 211 | | | |
| Corequisites: | None | | | |

This course covers water and wastewater technology, erosion and sedimentation control, and other related topics. Topics include collection, treatment, and distribution of water and wastewater and erosion and sedimentation control law. Upon completion, students should be able to demonstrate knowledge of water and wastewater systems and prepare erosion and sedimentation control plans.

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|----------------|----------------------------|---|---|---|
| CIV 222 | Reinforced Concrete | 2 | 3 | 3 |
| Prerequisite: | CIV 110 | | | |
| Corequisites: | None | | | |

This course introduces the basic elements of reinforced concrete and masonry structures. Topics include analysis and design of reinforced concrete beams, slabs, columns, footings, and retaining walls; load-bearing masonry walls; and ACI manuals and codes. Upon completion, students should be able to analyze and design components of a structure using reinforced concrete and masonry elements and utilize appropriate ACI publications.

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|----------------|---------------------------------------|---|---|---|
| CIV 230 | Construction Estimating | 2 | 3 | 3 |
| Prerequisites: | ARC 111, CIS 110, CIS 111, or EGR 115 | | | |
| Corequisites: | None | | | |

This course covers quantity take-offs of labor, materials, and equipment and calculation of direct and overhead costs for a construction project. Topics include the interpretation of working drawings and specifications, types of contracts and estimates, building codes, bidding techniques and procedures, and estimating software. Upon completion, students should be able to prepare a detailed cost estimate and bid documents for a construction project.

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|----------------|---------------------------|---|---|---|
| CIV 240 | Project Management | 2 | 3 | 3 |
| Prerequisites: | EGR 115 | | | |
| Corequisites: | None | | | |

This course introduces construction planning and scheduling techniques and project management software. Topics include construction safety, operation analysis, construction scheduling, construction control systems, claims and dispute resolutions, project records, and documentation. Upon completion, students should be able to demonstrate an understanding of the roles of construction project participants, maintain construction records, and prepare construction schedules.

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|----------------|--|---|---|---|
| CIV 250 | Civil Eng Tech Project | 1 | 3 | 2 |
| Prerequisites: | Successful completion of three semesters of the Civil Engineering Technology program | | | |
| Corequisites: | None | | | |

This course includes an integrated team approach to civil engineering technology projects. Emphasis is placed on project proposal, site selection, analysis/design of structures, construction material selection, time and cost estimating, planning, and management of a project. Upon completion, students should be able to apply team concepts, prepare estimates, submit bid proposals, and manage projects.

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|----------------|----------------------------------|---|----|----|
| CJC 100 | Basic Law Enforcement Trn | 9 | 27 | 18 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers the skills and knowledge needed for entry-level employment as a law enforcement officer in North Carolina. Emphasis is placed on topics and areas as defined by the North Carolina Administrative Code. Upon completion, students should be able to demonstrate competence in the topics and areas required for the state comprehensive examination. *This is a certificate-level course.*

| | | | | |
|----------------|----------------------------------|---|---|---|
| CJC 111 | Intro to Criminal Justice | 3 | 0 | 3 |
| Prerequisites: | | | | |
| 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.

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|----------------|--------------------|---|---|---|
| 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.

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|----------------|-------------------------|---|---|---|
| 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.

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|----------------|----------------------------------|---|---|---|
| CJC 114 | Investigative Photography | 1 | 2 | 2 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers the operation of various photographic equipment and its application to criminal justice. Topics include using various cameras, proper exposure of film, developing film/prints, and preparing photographic evidence. Upon completion, students should be able to demonstrate and explain the role of photography and proper film exposure and development techniques.

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| 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.

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|----------------|-----------------------------------|---|---|---|
| CJC 121 | Law Enforcement Operations | 3 | 0 | 3 |
| Prerequisites: | | | | |
| 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.

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|--------------------|---------------------------|---|---|---|
| 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.

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|--------------------|---------------------|---|---|---|
| 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.

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|--------------------|---------------------------------------|---|---|---|
| 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.

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|--------------------|--------------------|---|---|---|
| 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.

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| CJC 151 | Intro to Loss Prevention | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: None | | | | |

This course introduces the concepts and methods related to commercial and private security systems. Topics include the historical, philosophical, and legal basis of security, with emphasis on security surveys, risk analysis, and associated functions. Upon completion, students should be able to demonstrate and understand security systems, risk management, and the laws relative to loss prevention.

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| CJC 211 | Counseling | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: None | | | | |

This course introduces the basic elements of counseling and specific techniques applicable to the criminal justice setting. Topics include observation, listening, recording, interviewing, and problem exploration necessary to form effective helping relationships. Upon completion, students should be able to discuss and demonstrate the basic techniques of counseling.

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|----------------|------------------------------------|---|---|---|
| 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.

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|----------------|------------------------|---|---|---|
| CJC 213 | Substance Abuse | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course is a study of substance abuse in our society. Topics include the history and classifications of drug abuse and the social, physical, and psychological impact of drug abuse. Upon completion, students should be able to identify various types of drugs, their effects on human behavior and society, and treatment modalities.

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|----------------|--------------------|---|---|---|
| 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.

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|----------------|--|---|---|---|
| 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.

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|----------------|---------------------------------|---|---|---|
| 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.

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|----------------|-----------------------|---|---|---|
| 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.

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|--------------------|------------------------|---|---|---|
| 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.

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|--------------------|----------------------------|---|---|---|
| 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.

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|--------------------|---------------------------|---|---|---|
| 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.

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|--------------------|------------------------|---|---|---|
| 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.

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|--------------------|-------------------------|---|---|---|
| CJC 233 | Correctional Law | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: None | | | | |

This course introduces statutory/case law pertinent to correctional concepts, facilities, and related practices. Topics include examination of major legal issues encompassing incarceration, probation, parole, restitution, pardon, restoration of rights, and other related topics. Upon completion, students should be able to identify/discuss legal issues which directly affect correctional systems and personnel.

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|----------------|------------------------------------|---|---|---|
| CJC 241 | Community-Based Corrections | 3 | 0 | 3 |
|----------------|------------------------------------|---|---|---|

Prerequisites:

Corequisites: None

This course covers programs for convicted offenders that are used both as alternatives to incarceration and in post-incarceration situations. Topics include offenders, diversion, house arrest, restitution, community service, probation and parole, including both public and private participation, and other related topics. Upon completion, students should be able to identify/discuss the various programs from the perspective of the criminal justice professional, the offender, and the community.

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|----------------|----------------------|---|---|---|---|
| COE 110 | World of Work | 1 | 0 | 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.

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|----------------|--------------------------------|---|---|----|---|
| 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 112 | Co-op Work Experience I | 0 | 0 | 20 | 2 |
|----------------|--------------------------------|---|---|----|---|

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.

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|----------------|--------------------------------|---|---|----|---|
| COE 113 | Co-op Work Experience I | 0 | 0 | 30 | 3 |
|----------------|--------------------------------|---|---|----|---|

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.

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|----------------|--------------------------------|---|---|----|---|
| COE 114 | Co-op Work Experience I | 0 | 0 | 40 | 4 |
|----------------|--------------------------------|---|---|----|---|

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, COE 112, COE 113, or COE 114 | | | | |

This course description may be written by the individual colleges.

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|----------------|---------------------------------|---|---|----|---|
| 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.

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|----------------|---------------------------------|---|---|----|---|
| COE 122 | Co-op Work Experience II | 0 | 0 | 20 | 2 |
| 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 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 132 | Co-op Work Experience III | 0 | 0 | 20 | 2 |
| 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 211 | Co-op Work Experience IV | 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 212 | Co-op Work Experience IV | 0 | 0 | 20 | 2 |
| 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.

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|----------------|--------------------------------------|---|---|---|--|
| COM 110 | Introduction to Communication | 3 | 0 | 3 | |
| Prerequisites: | | | | | |
| Corequisites: | None | | | | |

This course provides an overview of the basic concepts of communication and the skills necessary to communicate in various contexts. Emphasis is placed on communication theories and techniques used in interpersonal group, public, intercultural, and mass communication situations. Upon completion, students should be able to explain and illustrate the forms and purposes of human communication in a variety of contexts. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in speech/communication.*

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|----------------|----------------------------|---|---|---|--|
| COM 111 | Voice and Diction I | 3 | 0 | 3 | |
| Prerequisites: | | | | | |
| Corequisites: | None | | | | |

This course provides guided practice in the proper production of speech. Emphasis is placed on improving speech, including breathing, articulation, pronunciation, and other vocal variables. Upon completion, students should be able to demonstrate effective natural speech in various contexts.

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|----------------|------------------------------------|---|---|---|--|
| COM 120 | Interpersonal Communication | 3 | 0 | 3 | |
| Prerequisites: | | | | | |
| Corequisites: | None | | | | |

This course introduces the practices and principles of interpersonal communication in both dyadic and group settings. Emphasis is placed on the communication process, perception, listening, self-disclosure, speech apprehension, ethics, nonverbal communication, conflict, power, and dysfunctional communication relationships. Upon completion, students should be able to demonstrate interpersonal communication skills, apply basic principles of group discussion, and manage conflict in interpersonal communication situations. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in speech/communication.*

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|----------------|--------------------------------|---|---|---|--|
| COM 130 | Nonverbal Communication | 3 | 0 | 3 | |
| Prerequisites: | COM 120 | | | | |
| Corequisites: | None | | | | |

This course introduces the contemporary study of nonverbal communication in daily life. Topics include haptics, kinesics, proxemics, facial displays, and appearance. Upon completion, students should be able to analyze/interpret nonverbal communication and demonstrate greater awareness of their own nonverbal communication habits.

COM 140 Intercultural Commun

3 0 3

Prerequisites:

Corequisites: None

This course introduces techniques of cultural research, definitions, functions, characteristics, and impacts of cultural differences in public address. Emphasis is placed on how diverse backgrounds influence the communication act and how cultural perceptions and experiences determine how one sends and receives messages. Upon completion, students should be able to demonstrate an understanding of the principles and skills needed to become effective in communicating outside one's primary culture.

COM 231 Public Speaking

3 0 3

Prerequisites:

Corequisites: None

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.*

COM 233 Persuasive Speaking

3 0 3

Prerequisites: ENG 112 or ENG 113

Corequisites: None

This course introduces theory and history of persuasive speaking, covering critical thinking skills in analyzing problems, assessing solutions, and communicating the information to an audience. Emphasis is placed on analysis, evidence, reasoning, and library and field research used to enhance persuasive public speaking skills. Upon completion, students should be able to apply the principles of persuasive speaking in a public setting.

COM 251 Debate I

3 0 3

Prerequisites:

Corequisites: None

This course introduces the principles of debate. Emphasis is placed on argument, refutation, research, and logic. Upon completion, students should be able to use research skills and logic in the presentation of ideas within the context of formal debate.

COM 252 Debate II

3 0 3

Prerequisites: COM 251

Corequisites: None

This course continues the study of debate begun in COM 251. Emphasis is placed on argument, refutation, research, and logic. Upon completion, students should be able to demonstrate proficiency in research skills, logic, and presentation of ideas within the context of formal debate.

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.

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|----------------|----------------|---|----|---|
| 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.

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|----------------|--------------------------------|---|---|---|
| COS 113 | Cosmetology Concepts II | 4 | 0 | 4 |
| Prerequisites: | | | | |
| 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.

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|----------------|-----------------|---|----|---|
| COS 114 | Salon II | 0 | 24 | 8 |
| Prerequisites: | | | | |
| 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: | | | | |
| 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.

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|----------------|------------------|---|----|---|
| COS 116 | Salon III | 0 | 12 | 4 |
| Prerequisites: | | | | |
| 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.

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|----------------|--------------------------------|---|---|---|
| COS 117 | Cosmetology Concepts IV | 2 | 0 | 2 |
| Prerequisites: | | | | |
| 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.

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|----------------|---------------------|---|----|---|
| COS 118 | Salon IV | 0 | 21 | 7 |
| Prerequisites: | COS 114 and COS 116 | | | |
| 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.

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|----------------|-------------------------------|---|---|---|
| COS 150 | Computerized Salon Ops | 1 | 0 | 1 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces computer and salon software. Emphasis is placed on various computer and salon software applications. Upon completion, students should be able to utilize computer skills and software applications in the salon setting.

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|----------------|------------------------|---|---|---|
| CSC 134 | C++ Programming | 2 | 3 | 3 |
| Prerequisites: | | | | |
| 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.

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|----------------|--------------------------|---|---|---|
| CSC 135 | COBOL Programming | 2 | 3 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces computer programming using the COBOL 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 COBOL language programs.

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|----------------|---------------------------|---|---|---|
| CSC 137 | Pascal Programming | 2 | 3 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces structured computer programming using the Pascal programming language. Topics include input/output operations, sequence, selection, iteration, arithmetic operations, arrays, and other related topics. Upon completion, students should be able to design, code, test, and debug Pascal language programs.

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|----------------|------------------------|---|---|---|
| CSC 138 | RPG Programming | 2 | 3 | 3 |
| Prerequisites: | | | | |
| 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.

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|----------------|---------------------------------|---|---|---|
| CSC 139 | Visual BASIC Programming | 2 | 3 | 3 |
| Prerequisites: | | | | |
| 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.

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|----------------|-------------------------------|---|---|---|
| CSC 141 | Visual C++ Programming | 2 | 3 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces event-driven computer programming using the Visual C++ programming language. Topics include input/output operations, sequence, selection, iteration, arithmetic operations, arrays, and other related topics. Upon completion, students should be able to design, code, test, and debug Visual C++ language programs.

| | | | | |
|----------------|---------------------------------|---|---|---|
| CSC 142 | Visual COBOL Programming | 2 | 3 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces computer programming using the Visual COBOL 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 Visual COBOL language programs.

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|----------------|-----------------------------|---|---|---|
| CSC 143 | Object-Oriented Prog | 2 | 3 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces the concepts of object-oriented programming. Emphasis is placed on event-driven programming methods, including creating and manipulating objects, classes, and using object-oriented tools such as the class debugger. Upon completion, students should be able to design, test, debug, and implement objects at the application level using the appropriate environment. *This course is a unique concentration requirement of the Programming concentration in the Information Systems program.*

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|----------------|-----------------------|---|---|---|
| CSC 235 | Advanced COBOL | 2 | 3 | 3 |
| Prerequisites: | CSC 135 | | | |
| Corequisites: | None | | | |

This course is a continuation of CSC 135 using COBOL 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.*

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|----------------|---------------------|---|---|---|
| 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.*

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|----------------|------------------------------|---|---|---|
| CSC 239 | Advanced Visual BASIC | 2 | 3 | 3 |
| Prerequisites: | CSC 139 | | | |
| Corequisites: | None | | | |

This course is a continuation of CSC 139 using Visual BASIC with structured programming principles. Emphasis is placed on advanced arrays/tables, file management/processing techniques, data structures, sub-programs, interactive processing, sort/merge routines, and libraries. Upon completion, students should be able to design, code, test, debug, and document programming solutions.

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|----------------|--------------------------------|---|---|---|
| CUL 110 | Sanitation & Safety | 2 | 0 | 2 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces the basic principles of sanitation and safety and their relationship to the hospitality industry. Topics include personal hygiene, sanitation and safety regulations, use and care of equipment, the principles of food-borne illness, and other related topics. Upon completion, students should be able to demonstrate an understanding of sanitation and safety procedures in the hospitality industry.

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|-----------------|------------------------------------|---|---|---|
| CUL 110A | Sanitation & Safety Lab | 0 | 2 | 1 |
| Prerequisites: | | | | |
| Corequisites: | CUL 110 | | | |

This course is a laboratory to accompany CUL 110. Emphasis is placed on practical experiences that enhance the materials presented in CUL 110. Upon completion, students should be able to demonstrate practical applications of sanitation and safety procedures in the hospitality industry.

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|----------------|-------------------|---|---|---|
| CUL 120 | Purchasing | 2 | 0 | 2 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers purchasing for hotels and restaurants. Emphasis is placed on procurement, yield tests, inventory control, specification, planning, forecasting, market trends, terminology, cost controls, pricing, and foodservice ethics. Upon completion, students should be able to apply effective purchasing techniques based on the end-use of the product.

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|-----------------|-----------------------|---|---|---|
| CUL 120A | Purchasing Lab | 0 | 2 | 1 |
| Prerequisites: | | | | |
| Corequisites: | CUL 120 | | | |

This course is a laboratory to accompany CUL 120. Emphasis is placed on practical experiences that enhance the materials presented in CUL 120. Upon completion, students should be able to demonstrate practical applications of purchasing within in the hospitality industry.

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|----------------|-----------------------------|---|---|---|
| CUL 125 | Hospitality Info Sys | 1 | 2 | 2 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces hospitality and food service information systems. Topics include planning, cost controls, forecasting, inventory control, recipe control, production control, and nutritional analysis. Upon completion, students should be able to demonstrate competence in utilizing contemporary information application systems in a hospitality setting.

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|----------------|--------------------|---|---|---|
| CUL 130 | Menu Design | 2 | 0 | 2 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces menu design. Topics include development of standardized recipes, layout, nutritional concerns, product utilization, demographics, and customer needs. Upon completion, students should be able to write, lay out, and produce effective menus for a variety of hospitality settings.

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|----------------|------------------------------------|---|---|---|
| CUL 135 | Food & Beverage Service | 2 | 0 | 2 |
| Prerequisite | | | | |
| Corequisites: | None | | | |

This course covers the practical skills and knowledge for effective food and beverage service in a variety of settings. Topics include reservations, greeting and service of guests, styles of service, handling complaints, and sales and merchandising. Upon completion, students should be able to demonstrate competence in human relations and technical skills required in the service of foods and beverages.

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|-----------------|-------------------------------------|---|---|---|
| CUL 135A | Food & Beverage Serv Lab | 0 | 2 | 1 |
| Prerequisites: | | | | |
| Corequisites: | CUL 135 | | | |

This course is a laboratory to accompany CUL 135. Emphasis is placed on practical experiences that enhance the materials presented in CUL 135. Upon completion, students should be able to demonstrate practical applications of skills required in the service of foods and beverages.

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|----------------|------------------------------|---|---|---|
| CUL 140 | Basic Culinary Skills | 2 | 6 | 5 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces the fundamental concepts, skills, and techniques involved in basic cookery. Emphasis is placed on recipe conversion, measurements, terminology, knife skills, safe food handling, cooking methods, flavorings, seasonings, stocks/sauces/soups, and other related topics. Upon completion, students should be able to exhibit the basic cooking skills used in the food service industry.

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|----------------|---------------------|---|---|---|
| CUL 150 | Food Science | 1 | 2 | 2 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers the chemical and physical changes in foods that occur with cooking, handling, and processing. Topics include heat transfer and its effect on color, flavor, and texture; and emulsification, protein coagulation, leavening agents, viscosity, and gel formation. Upon completion, students should be able to demonstrate an understanding of the principles covered as they apply to food preparation in an experimental setting.

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|----------------|-----------------|---|---|---|
| CUL 160 | Baking I | 1 | 4 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers basic ingredients, weights and measures, baking terminology, and formula calculations. Topics include yeast-raised products, quick breads, pastry dough, various cakes and cookies, and appropriate filling and finishing techniques. Upon completion, students should be able to prepare and evaluate baked products.

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|----------------|-----------------------|---|---|---|
| CUL 170 | Garde-Manger I | 1 | 4 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces basic cold food preparation techniques and pantry production. Topics include salads, sandwiches, appetizers, dressings, basic garnishes, cheeses, cold sauces, and related food items. Upon completion, students should be able to lay out a basic cold food display and exhibit an understanding of the cold kitchen and its related terminology.

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|----------------|--|---|---|---|
| CUL 180 | Internat & Amer Reg Cuisine | 1 | 8 | 5 |
| Prerequisites: | CUL 140 | | | |
| Corequisites: | None | | | |

This course provides practical experience in the planning, preparation, and service of representative foods from different countries and regions of America. Emphasis is placed on eating habits, indigenous foods and customs, nutritional concerns, and traditional equipment. Upon completion, students should be able to research and execute international and domestic menus.

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|----------------|---|---|---|---|
| CUL 192 | Selected Topics in Culinary Technology | 2 | 0 | 2 |
| Prerequisites: | Enrollment in the program | | | |
| Corequisites: | None | | | |

This course provides an opportunity to explore areas of current interest in specific program or discipline areas. Emphasis is placed on subject matter appropriate to the program or discipline. Upon completion, students should be able to demonstrate an understanding of the specific area of study.

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|----------------|----------------------------------|---|---|---|
| CUL 210 | Food Service for Spec Pop | 1 | 8 | 5 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers nutrition and menu planning principles, food preparation, and food management skills needed to provide meals to special populations. Topics include food preparation for child care, geriatric, and school settings. Upon completion, students should be able to plan, organize, and prepare appealing and nutritious meals for special populations within appropriate guidelines.

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|----------------|--------------------------|---|---|---|
| CUL 214 | Wine Appreciation | 1 | 2 | 2 |
| Prerequisites: | HRM 225 | | | |
| Corequisites: | None | | | |

This course provides comprehensive and detailed information about wine from all the major wine producing countries. Emphasis is placed on the history of wine, production characteristics, laws, and purchasing and storing requirements. Upon completion, students should be able to determine what wines compliment various cuisines and particular tastes.

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|----------------|----------------------------------|---|---|---|
| CUL 220 | Food Service for Spec Ops | 1 | 8 | 5 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers menu planning principles, food preparation, food procurement, and food management skills needed to provide appealing and profitable food service in special operations. Topics include fast-food cookery, convenience-store food service, supermarkets, delicatessens, and take-out venue. Upon completion, students should be able to plan, organize, and prepare food service items for special operations.

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|----------------|----------------------------|---|---|---|
| CUL 240 | Adv Culinary Skills | 1 | 8 | 5 |
| Prerequisites: | CUL 140 | | | |
| Corequisites: | None | | | |

This course is a continuation of CUL 140. Emphasis is placed on meat fabrication and butchery; vegetable, starch, and protein cookery; compound sauces; plate presentation; breakfast cookery; and quantity food preparation. Upon completion, students should be able to plan, execute, and successfully serve entrees with complementary side items.

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|----------------|--------------------------|---|---|---|
| CUL 250 | Classical Cooking | 1 | 8 | 5 |
| Prerequisites: | CUL 140 and CUL 240 | | | |
| Corequisites: | None | | | |

This course reinforces the classical culinary kitchen as established by Escoffier. Topics include the working Grand Brigade of the kitchen, table d'hôte menus, signature dishes, alfresco dining, exhibition cooking, and classical banquets. Upon completion, students should be able to demonstrate competence in food preparation in a classical/upscale restaurant or banquet setting.

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| CUL 260 | Baking II | 1 | 4 | 3 |
| Prerequisites: | CUL 160 | | | |
| Corequisites: | None | | | |

This course is a continuation of CUL 160. Topics include specialty breads, pastillage, marzipan, chocolate, pulled-sugar, confections, classic desserts, pastries, and cake decorating. Upon completion, students should be able to demonstrate pastry preparation and plating, cake decorating, and show-piece production skills.

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|----------------|------------------------|---|---|---|
| CUL 270 | Garde-Manger II | 1 | 4 | 3 |
| Prerequisites: | CUL 170 | | | |
| Corequisites: | None | | | |

This course is a continuation of CUL 170. Topics include pâtés, terrines, galantines, ice and tallow carving, chaud-froid/aspic work, charcuterie, smoking, canapés, hors d'oeuvres, and related food items. Upon completion, students should be able to design, set up, and evaluate a catering function to include a classical cold buffet with appropriate show pieces.

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|----------------|---------------------------------|---|---|---|
| CUL 280 | Pastry & Confections | 1 | 4 | 3 |
| Prerequisites: | CUL 160 | | | |
| Corequisites: | None | | | |

This course covers the operations of the pastry shop, emphasizing advanced techniques in the production of continental and classical pastries. Topics include advanced work in French pastries, hot and cold desserts, and decorative display pieces. Upon completion, students should be able to plan, execute, and evaluate dessert platters, individual plated desserts, and show pieces.

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|----------------|---------------------------|---|---|---|
| DAN 110 | Dance Appreciation | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course for non-dance majors surveys diverse dance forms and the religious and cultural values that shape them. Topics include dances from Europe, Africa, Asia, and America. Upon completion, students should be able to demonstrate an understanding of the diverse forms and values that dance embraces. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

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|----------------|--------------------|---|---|---|
| DAN 121 | Tap Dance I | 0 | 3 | 1 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course provides the fundamentals of elementary tap dance technique. Emphasis is placed on sounds, rhythms, terminology, and body placement. Upon completion, students should be able to demonstrate significant progress in elementary tap skills.

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|----------------|---------------------|---|---|---|
| DAN 122 | Tap Dance II | 0 | 3 | 1 |
| Prerequisites: | Audition or DAN 121 | | | |
| Corequisites: | None | | | |

This course is the second in a series and provides an expansion of elementary tap dance techniques. Emphasis is placed on weight shifts, turns, and more complex rhythm patterns. Upon completion, students should be able to demonstrate a moderate mastery of elementary/intermediate tap dance skills.

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|----------------|---------------------|---|---|---|
| DAN 124 | Jazz Dance I | 0 | 3 | 1 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course provides the fundamentals of elementary jazz technique. Emphasis is placed on body placement, stretching, jazz movements, and syncopated rhythms. Upon completion, students should be able to demonstrate significant progress in fundamental jazz dance technique and simple center combinations.

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|----------------|----------------------|---|---|---|
| DAN 125 | Jazz Dance II | 0 | 3 | 1 |
| Prerequisites: | Audition or DAN 124 | | | |
| Corequisites: | None | | | |

This course is the second in a series and provides an expansion of elementary/intermediate jazz dance. Emphasis is placed on "Cool Jazz," theatrical jazz styles, and extended sequences of movement (routines). Upon completion, students should be able to demonstrate moderate mastery of elementary/intermediate-level jazz dance and be able to perform routines.

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|----------------|-----------------|---|---|---|
| DAN 130 | Ballet I | 0 | 4 | 2 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces the elementary elements of ballet technique. Emphasis is placed on simple positions, body placement, classroom discipline, and the Dalcroze method of counting music. Upon completion, students should be able to recognize the names and rhythms of basic steps and be able to perform those movements at barre and in center.

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|----------------|---------------------|---|---|---|
| DAN 131 | Ballet II | 0 | 4 | 2 |
| Prerequisites: | Audition or DAN 130 | | | |
| Corequisites: | None | | | |

This course is the second in a series of elementary ballet techniques. Emphasis is placed on motor skill development, elementary allegro steps, and body positions. Upon completion, students should be able to exhibit moderate technical skill in elementary ballet.

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|----------------|-----------------------|---|---|---|
| DAN 140 | Modern Dance I | 0 | 4 | 2 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces the elementary elements of modern dance technique. Emphasis is placed on floor, barre, and center floor exercises. Upon completion, students should be able to exhibit a basic understanding and skill in performing elementary modern dance technique.

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|----------------|------------------------|---|---|---|
| DAN 141 | Modern Dance II | 0 | 4 | 2 |
| Prerequisites: | Audition or DAN 140 | | | |
| Corequisites: | None | | | |

This course is the second in a series of elementary modern dance technique. Emphasis is placed on motor skill development and simple combinations in center floor. Upon completion, students should be able to exhibit moderate technical skill in elementary modern dance technique.

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|----------------|------------------------|---|---|---|
| DAN 211 | Dance History I | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course provides an in-depth study of world dance from pre-history to 1800. Emphasis is placed on examining the dance and dancers of diverse cultures including Africa, Asia, and Europe. Upon completion, students should be able to analyze the common need to dance and the forms, religions, and cultural values it embodies. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

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|----------------|-------------------------|---|---|---|
| DAN 212 | Dance History II | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course provides an in-depth study of world dance from 1800 to the present. Emphasis is placed on Western theatrical dance (ballet, modern dance, tap, and jazz) and the personalities that shaped it. Upon completion, students should be able to analyze culturally diverse dance forms and their cross-pollination which have produced the "pan world dance of today." *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

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|----------------|--------------------------------|---|---|---|
| DAN 221 | Advanced Modern Dance I | 0 | 4 | 2 |
| Prerequisites: | Audition or DAN 143 | | | |
| Corequisites: | None | | | |

This course introduces the advanced elements of modern dance technique. Emphasis is placed on advanced movements, mastery of technical skills, and spatial divisions. Upon completion, students should be able to demonstrate significant progress in the execution of all movements and to demonstrate a sense of quality in them.

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|----------------|---------------------------------|---|---|---|
| DAN 222 | Advanced Modern Dance II | 0 | 4 | 2 |
| Prerequisites: | Audition or DAN 221 | | | |
| Corequisites: | None | | | |

This course is the second in a series of advanced modern dance technique. Emphasis is placed on mastery and quality of technical skills and execution of complicated movement variations in extended sequence. Upon completion, students should be able to demonstrate significant achievement in modern dance skills and the ability to perform modern dance repertoire.

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|----------------|---|---|---|---|
| DAN 225 | Choreography I | 1 | 4 | 3 |
| Prerequisites: | Audition or DAN 140 | | | |
| Corequisites: | Enrollment in DAN 142 or higher-level dance class | | | |

This course introduces the fundamental techniques of modern dance choreography. Emphasis is placed on improvisation and development of movement phrases. Upon completion, students should be able to create simple movements, improvise upon them, and develop longer movement phrases to create short dances.

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|----------------|---|---|---|---|
| DAN 226 | Choreography II | 1 | 4 | 3 |
| Prerequisites: | Audition or DAN 140 | | | |
| Corequisites: | Enrollment in DAN 142 or higher-level dance class | | | |

This course introduces the elements of dance (time, space, form) and structural forms as used to choreograph. Emphasis is placed on the use of design, dynamics, rhythm, motivation, and musical forms to create dances. Upon completion, students should be able to utilize the elements of time, space, and form and form manipulation to choreograph and rehearse a group dance.

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|----------------|--------------------------------|---|---|---|
| DDF 110 | Cabinet Design/Drafting | 1 | 2 | 2 |
| Prerequisites: | DFT 117 | | | |
| Corequisites: | None | | | |

This course covers the production of shop drawings and equipment lists. Topics include the use of orthographic projections and axonometric, oblique, and perspective projections in production drawings. Upon completion, students should be able to design and produce a set of plans that will facilitate the economical production of a project.

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| DDF 252 | Solid Models & Rendering | 3 | 2 | 4 |
| Prerequisites: | DFT 153 | | | |
| Corequisites: | None | | | |

This course introduces three-dimensional solid modeling and design software. Topics include parametric design principles, design constraints, work planes, view generation, and model shading and rendering. Upon completion, students should be able to create three-dimensional solid models using parametric design, generate two-dimensional views, and render three-dimensional models.

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|----------------|-------------------------------|---|---|---|---|
| DEN 101 | Preclinical Procedures | 4 | 6 | 0 | 7 |
| Prerequisites: | | | | | |
| Corequisites: | DEN 111 | | | | |

This course provides instruction in procedures for the clinical dental assistant as specified by the North Carolina Dental Practice Act. Emphasis is placed on orientation to the profession, infection control techniques, instruments, related expanded functions, and diagnostic, operative, and specialty procedures. Upon completion, students should be able to demonstrate proficiency in clinical dental assisting procedures. *This is a diploma-level course.*

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|----------------|-------------------------|---|---|---|---|
| DEN 102 | Dental Materials | 3 | 4 | 0 | 5 |
| Prerequisites: | | | | | |
| Corequisites: | DEN 101 | | | | |

This course provides instruction in identification, properties, evaluation of quality, principles, and procedures related to manipulation and storage of operative and specialty dental materials. Emphasis is placed on the understanding and safe application of materials used in the dental office and laboratory. Upon completion, students should be able to demonstrate proficiency in the laboratory and clinical application of routinely used dental materials. *This is a diploma-level course.*

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|----------------|------------------------|---|---|---|---|
| DEN 103 | Dental Sciences | 2 | 0 | 0 | 2 |
| Prerequisites: | | | | | |
| Corequisites: | None | | | | |

This course is a study of oral pathology, pharmacology, and dental office emergencies. Topics include oral pathological conditions, dental therapeutics, and management of emergency situations. Upon completion, students should be able to recognize abnormal oral conditions, identify classifications, describe actions and effects of commonly prescribed drugs, and respond to medical emergencies. *This is a diploma-level course.*

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|----------------|--------------------------------|---|---|---|---|
| DEN 104 | Dental Health Education | 2 | 2 | 0 | 3 |
| Prerequisites: | DEN 101 and DEN 111 | | | | |
| Corequisites: | DEN 106 | | | | |

This course covers the study of preventive dentistry to prepare dental assisting students for the role of dental health educator. Topics include etiology of dental diseases, preventive procedures, and patient education theory and practice. Upon completion, students should be able to demonstrate proficiency in patient counseling and oral health instruction in private practice or public health settings. *This is a diploma-level course.*

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|----------------|----------------------------|---|---|---|---|
| DEN 105 | Practice Management | 2 | 0 | 0 | 2 |
| Prerequisites: | | | | | |
| Corequisites: | None | | | | |

This course provides a study of principles and procedures related to management of the dental practice. Emphasis is placed on maintaining clinical and financial records, patient scheduling, and supply and inventory control. Upon completion, students should be able to demonstrate fundamental skills in dental practice management. *This is a diploma-level course.*

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|----------------|-------------------------------|---|---|----|---|
| DEN 106 | Clinical Practice I | 1 | 0 | 12 | 5 |
| Prerequisites: | DEN 101 and DEN 111 | | | | |
| Corequisites: | DEN 102, DEN 104, and DEN 112 | | | | |

This course is designed to provide experience assisting in a clinical setting. Emphasis is placed on the application of principles and procedures of four-handed dentistry and laboratory and clinical support functions. Upon completion, students should be able to utilize classroom theory and laboratory and clinical skills in a dental setting. *This is a diploma-level course.*

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|----------------|-----------------------------|---|---|----|---|
| DEN 107 | Clinical Practice II | 1 | 0 | 12 | 5 |
| Prerequisites: | DEN 106 | | | | |
| Corequisites: | None | | | | |

This course is designed to increase the level of proficiency in assisting in a clinical setting. Emphasis is placed on the application of principles and procedures of four-handed dentistry and laboratory and clinical support functions. Upon completion, students should be able to combine theoretical and ethical principles necessary to perform entry-level skills including functions delegable to a DA II. *This is a diploma-level course.*

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|----------------|--------------------------|---|---|---|---|
| DEN 110 | Orofacial Anatomy | 2 | 2 | 0 | 3 |
| Prerequisites: | | | | | |
| Corequisites: | None | | | | |

This course introduces the structures of the head, neck, and oral cavity. Topics include tooth morphology, head and neck anatomy, histology, and embryology. Upon completion, students should be able to relate the identification of normal structures and development to the practice of dental assisting and dental hygiene.

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|----------------|---------------------------------|---|---|---|---|
| DEN 111 | Infection/Hazard Control | 2 | 0 | 0 | 2 |
| Prerequisites: | | | | | |
| Corequisites: | None | | | | |

This course introduces the infection and hazard control procedures necessary for the safe practice of dentistry. Topics include microbiology, practical infection control, sterilization and monitoring, chemical disinfectants, aseptic technique, infectious diseases, OSHA standards, and applicable North Carolina laws. Upon completion, students should be able to understand infectious diseases, disease transmission, infection control procedures, biohazard management, OSHA standards, and applicable North Carolina laws.

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|----------------|---|---|---|---|---|
| DEN 112 | Dental Radiography | 2 | 3 | 0 | 3 |
| Prerequisites: | Enrollment in the Dental Hygiene or Dental Assisting programs | | | | |
| Corequisites: | DEN 110 and DEN 111 | | | | |

This course provides a comprehensive view of the principles and procedures of radiology as they apply to dentistry. Topics include techniques in exposing, processing, and evaluating radiographs, as well as radiation safety, quality assurance, and legal issues. Upon completion, students should be able to demonstrate proficiency in the production of diagnostically acceptable radiographs using appropriate safety precautions.

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|----------------|--|---|---|---|---|
| DEN 120 | Dental Hyg Preclinic Lec | 2 | 0 | 0 | 2 |
| Prerequisites: | Enrollment in the Dental Hygiene program | | | | |
| Corequisites: | DEN 121 | | | | |

This course introduces preoperative and clinical dental hygiene concepts. Emphasis is placed on the assessment phase of patient care as well as the theory of basic dental hygiene instrumentation. Upon completion, students should be able to collect and evaluate patient data at a basic level and demonstrate knowledge of dental hygiene instrumentation.

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|----------------|--|---|---|---|---|
| DEN 121 | Dental Hygiene Precl Lab | 0 | 6 | 0 | 2 |
| Prerequisites: | Enrollment in the Dental Hygiene program | | | | |
| Corequisites: | DEN 120 | | | | |

This course provides the opportunity to perform clinical dental hygiene procedures discussed in DEN 120. Emphasis is placed on clinical skills in patient assessment and instrumentation techniques. Upon completion, students should be able to demonstrate the ability to perform specific preclinical procedures.

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|----------------|--------------------------------|---|---|---|---|
| DEN 123 | Nutrition/Dental Health | 2 | 0 | 0 | 2 |
| Prerequisites: | | | | | |
| Corequisites: | None | | | | |

This course introduces basic principles of nutrition with emphasis on nutritional requirements and their application to individual patient needs. Topics include the study of the food pyramid, nutrient functions, Recommended Daily Allowances, and related psychological principles. Upon completion, students should be able to recommend and counsel individuals on their food intake as related to their dental health.

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|----------------|-----------------------|---|---|---|---|
| DEN 124 | Periodontology | 2 | 0 | 0 | 2 |
| Prerequisites: | DEN 110 | | | | |
| Corequisites: | None | | | | |

This course provides an in-depth study of the periodontium, periodontal pathology, periodontal monitoring, and the principles of periodontal therapy. Topics include periodontal anatomy and a study of the etiology, classification, and treatment modalities of periodontal diseases. Upon completion, students should be able to describe, compare, and contrast techniques involved in periodontal/maintenance therapy, as well as patient care management.

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|----------------|--------------------------------|---|---|---|---|
| DEN 130 | Dental Hygiene Theory I | 2 | 0 | 0 | 2 |
| Prerequisites: | DEN 120 | | | | |
| Corequisites: | DEN 131 | | | | |

This course is a continuation of the didactic dental hygiene concepts necessary for providing an oral prophylaxis. Topics include deposits/removal, instrument sharpening, patient education, fluorides, planning for dental hygiene treatment, charting, and clinical records and procedures. Upon completion, students should be able to demonstrate knowledge needed to complete a thorough oral prophylaxis.

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|----------------|--------------------------------|---|---|---|---|
| DEN 131 | Dental Hygiene Clinic I | 0 | 0 | 9 | 3 |
| Prerequisites: | DEN 121 | | | | |
| Corequisites: | DEN 130 | | | | |

This course continues skill development in providing an oral prophylaxis. Emphasis is placed on treatment of the recall patients with gingivitis or light deposits. Upon completion, students should be able to assess these patients' needs and complete the necessary dental hygiene treatment.

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|----------------|---------------------------------|---|---|---|---|
| DEN 140 | Dental Hygiene Theory II | 1 | 0 | 0 | 1 |
| Prerequisites: | DEN 130 | | | | |
| Corequisites: | DEN 141 | | | | |

This course provides a continuation of the development, theory, and practice of patient care. Topics include modification of treatment for special needs patients, advanced radiographic interpretation, and ergonomics. Upon completion, students should be able to differentiate necessary treatment modifications, effective ergonomic principles, and radiographic abnormalities.

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|----------------|---------------------------------|---|---|---|---|
| DEN 141 | Dental Hygiene Clinic II | 0 | 0 | 6 | 2 |
| Prerequisites: | DEN 131 | | | | |
| Corequisites: | DEN 140 | | | | |

This course continues skill development in providing an oral prophylaxis. Emphasis is placed on treatment of patients with early periodontal disease and subgingival deposits. Upon completion, students should be able to assess these patients' needs and complete the necessary dental hygiene treatment.

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|----------------|----------------------------------|---|---|---|---|
| DEN 220 | Dental Hygiene Theory III | 2 | 0 | 0 | 2 |
| Prerequisites: | DEN 140 | | | | |
| Corequisites: | DEN 221 | | | | |

This course provides a continuation in developing the theories and practices of patient care. Topics include periodontal debridement, pain control, subgingival irrigation, air polishing, and case presentations. Upon completion, students should be able to demonstrate knowledge of methods of treatment and management of periodontally compromised patients.

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|----------------|----------------------------------|---|---|----|---|
| DEN 221 | Dental Hygiene Clinic III | 0 | 0 | 12 | 4 |
| Prerequisites: | DEN 141 | | | | |
| Corequisites: | DEN 220 | | | | |

This course continues skill development in providing an oral prophylaxis. Emphasis is placed on treatment of patients with moderate to advanced periodontal involvement and moderate deposits. Upon completion, students should be able to assess these patients' needs and complete the necessary dental hygiene treatment.

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|----------------|-------------------------------------|---|---|---|---|
| DEN 222 | General & Oral Pathology | 2 | 0 | 0 | 2 |
| Prerequisites: | BIO 163 or BIO 165 or BIO 168 | | | | |
| Corequisites: | None | | | | |

This course provides a general knowledge of oral pathological manifestations associated with selected systemic and oral diseases. Topics include developmental and degenerative diseases, selected microbial diseases, specific and nonspecific immune and inflammatory responses with emphasis on recognizing abnormalities. Upon completion, students should be able to differentiate between normal and abnormal tissues and refer unusual findings to the dentist for diagnosis.

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|----------------|--|---|---|---|---|
| DEN 223 | Dental Pharmacology | 2 | 0 | 0 | 2 |
| Prerequisites: | Enrollment in the Dental Hygiene program | | | | |
| Corequisites: | BIO 163 or BIO 165 or BIO 168 | | | | |

This course provides basic drug terminology, general principles of drug actions, dosages, routes of administration, adverse reactions, and basic principles of anesthesiology. Emphasis is placed on knowledge of drugs in overall understanding of patient histories and health status. Upon completion, students should be able to recognize that each patient's general health or drug usage may require modification of the treatment procedures.

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|----------------|---------------------------------|---|---|---|---|
| DEN 224 | Materials and Procedures | 1 | 3 | 0 | 2 |
| Prerequisites: | DEN 111 | | | | |
| Corequisites: | None | | | | |

This course introduces the physical properties of materials and related procedures used in dentistry. Topics include restorative and preventive materials, fabrication of casts and appliances, and chairside functions of the dental hygienist. Upon completion, students should be able to demonstrate proficiency in the laboratory and/or clinical application of routinely used dental materials and chairside functions.

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|----------------|---------------------------------|---|---|---|---|
| DEN 230 | Dental Hygiene Theory IV | 1 | 0 | 0 | 1 |
| Prerequisites: | DEN 220 | | | | |
| Corequisites: | DEN 231 | | | | |

This course provides an opportunity to increase knowledge of the profession. Emphasis is placed on dental specialties and completion of a case presentation. Upon completion, students should be able to demonstrate knowledge of various disciplines of dentistry and principles of case presentations.

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|----------------|---------------------------------|---|---|----|---|
| DEN 231 | Dental Hygiene Clinic IV | 0 | 0 | 12 | 4 |
| Prerequisites: | DEN 221 | | | | |
| Corequisites: | DEN 230 | | | | |

This course continues skill development in providing an oral prophylaxis. Emphasis is placed on periodontal maintenance and on treating patients with moderate to advanced/refractory periodontal disease. Upon completion, students should be able to assess these patients' needs and complete the necessary dental hygiene treatment.

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|----------------|--|---|---|---|---|
| DEN 232 | Community Dental Health | 2 | 0 | 3 | 3 |
| Prerequisites: | Enrollment in the Dental Hygiene program | | | | |
| Corequisites: | None | | | | |

This course provides a study of the principles and methods used in assessing, planning, implementing, and evaluating community dental health programs. Topics include epidemiology, research methodology, biostatistics, preventive dental care, dental health education, program planning, and financing and utilization of dental services. Upon completion, students should be able to assess, plan, implement, and evaluate a community dental health program.

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|----------------|--|---|---|---|---|
| DEN 233 | Professional Development | 2 | 0 | 0 | 2 |
| Prerequisites: | Enrollment in the Dental Hygiene program | | | | |
| Corequisites: | None | | | | |

This course includes professional development, ethics, and jurisprudence with applications to practice management. Topics include conflict management, state laws, résumés, interviews, and legal liabilities as health care professionals. Upon completion, students should be able to demonstrate the ability to practice dental hygiene within established ethical standards and state laws.

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|----------------|-----------------------------|---|---|---|--|
| DFT 111 | Technical Drafting I | 2 | 6 | 4 | |
| 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.

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|----------------|------------------------------|---|---|---|--|
| DFT 112 | Technical Drafting II | 2 | 6 | 4 | |
| 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.

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|----------------|---------------------------|---|---|---|--|
| DFT 117 | Technical Drafting | 1 | 2 | 2 | |
| Prerequisites: | | | | | |
| Corequisites: | None | | | | |

This course introduces basic drafting practices for non-drafting majors. Emphasis is placed on instrument use and care, shape and size description, sketching, and pictorials. Upon completion, students should be able to produce drawings of assigned parts.

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|----------------|------------------|---|---|---|--|
| DFT 119 | Basic CAD | 1 | 2 | 2 | |
| Prerequisites: | | | | | |
| Corequisites: | None | | | | |

This course introduces computer-aided drafting software for specific technologies to non-drafting majors. Emphasis is placed on understanding the software command structure and drafting standards for specific technical fields. Upon completion, students should be able to create and plot basic drawings.

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|----------------|----------------------------|---|---|---|--|
| 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.

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|----------------|--------------|---|---|---|
| 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.

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|----------------|---------------|---|---|---|
| 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.

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| 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.

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|----------------|-----------------------------|---|---|---|
| DFT 214 | Descriptive Geometry | 1 | 2 | 2 |
| Prerequisites: | DFT 111 | | | |
| Corequisites: | None | | | |

This course includes a graphic analysis of space problems. Topics include points, lines, planes, connectors, and combinations of these. Upon completion, students should be able to solve real world spatial problems using descriptive geometry techniques.

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|----------------|-----------------------------|---|---|---|
| DRA 111 | Theatre Appreciation | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course provides a study of the art, craft, and business of the theatre. Emphasis is placed on the audience's appreciation of the work of the playwright, director, actor, designer, producer, and critic. Upon completion, students should be able to demonstrate a vocabulary of theatre terms and to recognize the contributions of various theatre artists. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

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|----------------|----------------------------------|---|---|---|
| DRA 112 | Literature of the Theatre | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course provides a survey of dramatic works from the classical Greek through the present. Emphasis is placed on the language of drama, critical theory, and background as well as on play reading and analysis. Upon completion, students should be able to articulate, orally and in writing, their appreciation and understanding of dramatic works. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

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|----------------|--------------------------|---|---|---|
| DRA 115 | Theatre Criticism | 3 | 0 | 3 |
| Prerequisites: | DRA 111 | | | |
| Corequisites: | None | | | |

This course is designed to develop a critical appreciation of the theatre from the viewpoint of the audience/consumer. Emphasis is placed on viewing, discussing, and evaluating selected theatre performance, either live or on film/video. Upon completion, students should be able to express their critical judgments both orally and in writing. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

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|----------------|------------------------------|---|---|---|
| DRA 120 | Voice for Performance | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course provides guided practice in the proper production of speech for the theatre. Emphasis is placed on improving speech, including breathing, articulation, pronunciation, and other vocal variables. Upon completion, students should be able to demonstrate effective theatrical speech.

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|----------------|----------------------------|---|---|---|
| DRA 122 | Oral Interpretation | 3 | 0 | 3 |
| Prerequisites: | | | | |
| 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. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

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|----------------|------------------------|---|---|---|
| DRA 124 | Readers Theatre | 3 | 0 | 3 |
| Prerequisites: | | | | |
| 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.

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|----------------|---------------------|---|---|---|
| DRA 126 | Storytelling | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces the art of storytelling and the oral traditions of folk literature. Topics include the history of storytelling, its value and purpose, techniques of the storyteller, and methods of collecting verbal art. Upon completion, students should be able to present and discuss critically stories from the world's repertory of traditional lore. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

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|----------------|---------------------------|---|---|---|
| DRA 128 | Children's Theatre | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces the philosophy and practice involved in producing plays for young audiences. Topics include the selection of age-appropriate scripts and the special demands placed on directors, actors, designers, and educators in meeting the needs of young audiences. Upon completion, students should be able to present and critically discuss productions for children.

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|----------------|-----------------|---|---|---|
| DRA 130 | Acting I | 0 | 6 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course provides an applied study of the actor's craft. Topics include role analysis, training the voice, and body concentration, discipline, and self-evaluation. Upon completion, students should be able to explore their creativity in an acting ensemble.

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|----------------|------------------|---|---|---|
| DRA 131 | Acting II | 0 | 6 | 3 |
| Prerequisites: | DRA 130 | | | |
| Corequisites: | None | | | |

This course provides additional hands-on practice in the actor's craft. Emphasis is placed on further analysis, characterization, growth, and training for acting competence. Upon completion, students should be able to explore their creativity in an acting ensemble.

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|----------------|--------------------------|---|---|---|
| DRA 211 | Theatre History I | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers the development of theatre from its origin to the closing of the British theatre in 1642. Topics include the history, aesthetics, and representative dramatic literature of the period. Upon completion, students should be able to trace the evolution of theatre and recognize the styles and types of world drama. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

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|----------------|---------------------------|---|---|---|
| DRA 212 | Theatre History II | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers the development of theatre from 1660 through the diverse influences which shaped the theatre of the twentieth century. Topics include the history, aesthetics, and representative dramatic literature of the period. Upon completion, students should be able to trace the evolution of theatre and recognize the styles and types of world drama. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

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|----------------|----------------------------|---|---|---|
| ECO 151 | Survey of Economics | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces basic concepts of micro- and macroeconomics. Topics include supply and demand, optimizing economic behavior, prices and wages, money, interest rates, banking system, unemployment, inflation, taxes, government spending, and international trade. Upon completion, students should be able to explain alternative solutions for economic problems faced by private and government sectors. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

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|----------------|-------------------------------|----------|----------|----------|
| ECO 251 | Prin of Microeconomics | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces economic analysis of individual, 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.*

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|----------------|-------------------------------|----------|----------|----------|
| ECO 252 | Prin of Macroeconomics | 3 | 0 | 3 |
| Prerequisites: | | | | |
| 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.*

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|----------------|-------------------------------|----------|----------|----------|
| EDU 111 | Early Childhood Cred I | 2 | 0 | 2 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces early childhood education and the role of the teacher in environments that encourage exploration and learning. Topics include professionalism, child growth and development, individuality, family, and culture. Upon completion, students should be able to identify and demonstrate knowledge of professional roles, major areas of child growth and development, and diverse families.

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|----------------|--------------------------------|----------|----------|----------|
| EDU 112 | Early Childhood Cred II | 2 | 0 | 2 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces developmentally appropriate practices, positive guidance, and standards of health, safety, and nutrition. Topics include the learning environment, planning developmentally appropriate activities, positive guidance techniques, and health, safety, and nutrition standards. Upon completion, students should be able to demonstrate developmentally appropriate activities and positive guidance techniques and describe health/sanitation/nutrition practices that promote healthy environments for children.

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|----------------|--------------------------------|----------|----------|----------|
| EDU 113 | Family/Early Child Cred | 2 | 0 | 2 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers business/professional practices for family early childhood providers, developmentally appropriate practices, positive guidance, and methods of providing a safe and healthy environment. Topics include developmentally appropriate practices; health, safety and nutrition; and business and professionalism. Upon completion, students should be able to develop a handbook of policies, procedures, and practices for a family child care home.

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|----------------|---------------------------|---|---|---|
| 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.

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|----------------|---------------------------|---|---|---|
| EDU 119 | Early Childhood Ed | 3 | 2 | 4 |
| Prerequisites: | | | | |
| 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.

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|----------------|------------------------------------|---|---|---|
| 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.

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|----------------|----------------------------|---|---|---|
| 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.

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| EDU 145 | Child Development II | 3 | 0 | 3 |
| Prerequisites: | EDU 144 | | | |
| 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.

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|----------------|-----------------------|---|---|---|
| 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.

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|----------------|-------------------------------------|---|---|---|
| EDU 153 | Health, Safety, & Nutrit | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course focuses on promoting and maintaining the health and well-being of children. Topics include health and nutritional needs, safe and healthy environments, and recognition and reporting of child abuse and neglect. Upon completion, students should be able to set up and monitor safe indoor and outdoor environments and implement a nutrition education program.

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|----------------|--------------------|---|---|---|
| EDU 157 | Active Play | 2 | 2 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces the use of indoor and outdoor physical activities to promote the physical, cognitive, and social/emotional development of children. Topics include the role of active play, development of play skills, playground design, selection of safe equipment, and materials and surfacing for active play. Upon completion, students should be able to discuss the stages of play, the role of teachers in play, and the design of appropriate active play areas and activities.

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|----------------|-----------------------------------|---|---|---|
| EDU 161 | Intro to Exceptional Child | 3 | 3 | 4 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers exceptional children as learners within the context of the community, school, and family. Emphasis is placed on the legal, social, physical, political, and cultural issues relating to the analysis and teaching of exceptional children. Upon completion, students should be able to demonstrate knowledge of identification processes, mainstreaming techniques, and professional practices and attitudes.

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| EDU 162 | Early Exp/Prosp Teachers | 1 | 2 | 2 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course provides an opportunity to observe teachers and pupils in a natural classroom environment. Emphasis is placed on observation methods, planning, teaching, evaluation, personal goal assessment, and curriculum. Upon completion, students should be able to demonstrate an understanding of their own personal teaching goals, teaching methods, planning methods, and student performance evaluation.

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|----------------|----------------------------|---|---|---|
| EDU 171 | Instructional Media | 1 | 2 | 2 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers the development and maintenance of effective teaching materials and the operation of selected pieces of equipment. Topics include available community resources, various types of instructional materials and bulletin boards, and audiovisual and computer use with children. Upon completion, students should be able to construct and identify resources for instructional materials and bulletin boards and use audiovisual and computer equipment.

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|----------------|------------------------|---|---|---|
| EDU 172 | Education Tools | 2 | 2 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers practical applications of technology in educational settings. Topics include software selection for classroom usage, record keeping, and adaptive technology for children with special needs. Upon completion, students should be able to demonstrate appropriate computer skills for the educational environment.

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| 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.

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|----------------|---------------------------------|---|---|---|
| EDU 188 | Issues in Early Child Ed | 2 | 0 | 2 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers topics and issues in early childhood education. Emphasis is placed on current advocacy issues, emerging technology, professional growth experiences, and other related topics. Upon completion, students should be able to list, discuss, and explain current topics and issues in early childhood education.

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|----------------|-------------------------------|---|---|---|
| EDU 221 | Children with Sp Needs | 3 | 0 | 3 |
| Prerequisites: | EDU 144 and EDU 145 | | | |
| 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.

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| EDU 234 | Infants, Toddlers, & Twos | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers the skills needed to effectively implement group care for infants, toddlers, and two-year olds. Emphasis is placed on child development and developmentally appropriate practices. Upon completion, students should be able to identify, plan, select materials and equipment, and implement and evaluate a developmentally appropriate curriculum.

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|----------------|-------------------------------------|---|---|---|
| EDU 235 | School-Age Dev & Program | 2 | 0 | 2 |
| Prerequisites: | | | | |
| 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.

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| EDU 241 | Adult-Child Relations | 2 | 0 | 2 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers self-concept and effective and active listening skills in positive one-to-one interactions with individuals and groups of children. Emphasis is placed on self-concept development and effective communication techniques used with children. Upon completion, students should be able to identify principles underlying self-concept and demonstrate effective listening and communication skills used by adults with children.

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| 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.

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|----------------|----------------------------------|---|---|---|
| EDU 252 | Math & Sci Activities | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces discovery experiences in math and science. Topics include concepts, facts, phenomena, and skills in each area. Upon completion, students should be able to identify, plan, select materials and equipment, and implement and evaluate developmentally appropriate curriculum materials.

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| EDU 254 | Music & Move for Child | 1 | 2 | 2 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers the use of music and creative movement for children. Topics include a general survey of the basic elements of music and planning, designing, and implementing music and movement experiences for creative learning. Upon completion, students should be able to use voice and various musical instruments to provide musical and movement activities for children.

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| EDU 256 | Sci & Soc Studies Methods | 3 | 2 | 4 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers objectives, content, materials, and instructional approaches to natural sciences and social studies. Topics include classroom and laboratory science experiences; integration of history, geography, economics, and government materials; research/study techniques; and critical thinking. Upon completion, students should be able to assess, plan, implement, and evaluate developmentally appropriate learning experiences in science and social studies.

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| EDU 257 | Math Methods & Materials | 2 | 2 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers concepts, activities, methods, and materials for teaching mathematics in elementary through middle school grades. Topics include individual instruction, developmental skill building, manipulatives, problem solving, critical thinking, and numerical concepts. Upon completion, students should be able to assess, plan, implement, and evaluate developmentally appropriate math experiences.

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| EDU 259 | Curriculum Planning | 3 | 0 | 3 |
| Prerequisites: | EDU 112, 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.

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|----------------|--------------------------------|----------|----------|----------|
| 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.

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| 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.

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|----------------|----------------------------|----------|----------|----------|
| EDU 263 | Dev School-Age Prog | 2 | 0 | 2 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces the methods and procedures for operating a school-age program in either the public or proprietary setting. Emphasis is placed on constructing and organizing the physical environment as well as planning and developing a school-age program. Upon completion, students should be able to plan and develop a quality school-age program.

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| 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.

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|----------------|------------------------------|---|---|---|
| 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.

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|----------------|-----------------------------|---|---|---|
| EDU 280 | Literacy Experiences | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers literacy, early literacy development, and appropriate early experiences with books and writing. Emphasis is placed on reading and writing readiness, major approaches used in teaching literacy, and strategies for sharing quality in children's literature. Upon completion, students should be able to select, plan, and evaluate appropriate early literacy experiences.

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|----------------|----------------------------|---|---|---|
| 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.

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|----------------|----------------------------|---|---|---|
| EGR 115 | Intro to Technology | 2 | 6 | 4 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces the basic skills and career fields for technicians. Topics include career options, technical vocabulary, dimensional analysis, measurement systems, engineering graphics, calculator applications, professional ethics, safety practices, and other related topics. Upon completion, students should be able to demonstrate an understanding of the basic technologies, prepare drawings and sketches, and perform computations using a scientific calculator.

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|----------------|-----------------------------|---|---|---|
| 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.

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|----------------|--------------------------|---|---|---|
| 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.

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|----------------|-----------------------|---|---|---|
| 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.

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|----------------|------------------------|---|---|---|
| ELC 114 | Basic Wiring II | 2 | 6 | 4 |
| Prerequisites: | ELC 113 | | | |
| 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.

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|----------------|--------------------------|---|---|---|
| ELC 115 | Industrial Wiring | 2 | 6 | 4 |
| Prerequisites: | ELC 113 | | | |
| 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.

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|----------------|----------------------------|---|---|---|
| ELC 117 | Motors and Controls | 2 | 6 | 4 |
| Prerequisites: | ELC 112 or ELC 131 | | | |
| 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.

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|----------------|---------------------------------|---|---|---|
| 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.

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|----------------|-------------------------|---|---|---|
| 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.

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|----------------|---------------------------------|---|---|---|
| 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.

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|----------------|---------------------|---|---|---|
| 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.

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|----------------|-------------------------------|---|---|---|
| ELC 131 | DC/AC Circuit Analysis | 4 | 3 | 5 |
| Prerequisites: | | | | |
| Corequisites: | MAT 121 | | | |

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.

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|----------------|------------------------------|---|---|---|
| ELC 140 | Fund of DC/AC Circuit | 5 | 6 | 7 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers the principles of DC/AC circuit analysis as applied to electronics. Topics include atomic theory, circuit analysis, components, test equipment, troubleshooting techniques, schematics, diagrams, and other related topics. Upon completion, students should be able to interpret, construct, verify, analyze, and troubleshoot DC/AC circuits in a safe manner.

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|----------------|------------------------------|---|---|---|
| ELC 213 | Instrumentation | 3 | 2 | 4 |
| Prerequisites: | ELC 111, ELC 112, or ELC 131 | | | |
| Corequisites: | None | | | |

This course covers the fundamentals of instrumentation used in industry. Emphasis is placed on electric, electronic, and pneumatic instruments. Upon completion, students should be able to design, install, maintain, and calibrate instrumentation.

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|----------------|-------------------------------|---|---|---|
| ELC 215 | Electrical Maintenance | 2 | 3 | 3 |
| Prerequisites: | ELC 117 | | | |
| Corequisites: | None | | | |

This course introduces the theory of maintenance and the skills necessary to maintain electrical equipment found in industrial and commercial facilities. Topics include maintenance theory, predictive and preventive maintenance, electrical equipment operation and maintenance, and maintenance documentation. Upon completion, students should be able to perform maintenance on electrical equipment in industrial and commercial facilities.

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|----------------|------------------------------|---|---|---|
| ELN 131 | Electronic Devices | 3 | 3 | 4 |
| Prerequisites: | ELC 112, ELC 131, or ELC 140 | | | |
| Corequisites: | None | | | |

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.

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|----------------|-------------------------------|---|---|---|
| ELN 132 | Linear IC Applications | 3 | 3 | 4 |
| Prerequisites: | ELN 131 | | | |
| 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.

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|----------------|---------------------------------------|---|---|---|
| ELN 133 | Digital Electronics | 3 | 3 | 4 |
| Prerequisites: | ELN 111, ELC 112, ELC 131, or ELC 140 | | | |
| Corequisites: | None | | | |

This course covers combinational and sequential logic circuits. Topics include number systems, Boolean algebra, logic families, MSI and LSI circuits, AC/DC converters, and other related topics. Upon completion, students should be able to construct, analyze, verify, and troubleshoot digital circuits using appropriate techniques and test equipment.

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|----------------|------------------------------|---|---|---|
| ELN 140 | Semiconductor Devices | 4 | 6 | 6 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers semiconductor devices and circuits as they apply to the area of electronic servicing. Topics include semiconductor theory, diodes, transistors, linear integrated circuits, biasing, amplifiers, power supplies, and other related topics. Upon completion, students should be able to construct, verify, analyze, and troubleshoot semiconductor circuits.

| | | | | |
|----------------|-----------------------------|---|---|---|
| ELN 141 | Digital Fundamentals | 4 | 6 | 6 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers combinational and sequential logic circuits. Topics include number systems, logic elements, Boolean algebra, Demorgan's theorem, logic families, flip flops, registers, counters, and other related topics. Upon completion, students should be able to analyze, verify, and troubleshoot digital circuits.

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|----------------|------------------------------|---|---|---|
| ELN 231 | Industrial Controls | 2 | 3 | 3 |
| Prerequisites: | ELC 112, 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.

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|----------------|-------------------------------|---|---|---|
| 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.

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|----------------|------------------------------|---|---|---|
| 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.

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|----------------|----------------------------|---|---|---|
| ELN 240 | Microprocessor Fund | 3 | 3 | 4 |
| Prerequisites: | ELN 141 | | | |
| Corequisites: | None | | | |

This course introduces microprocessor architecture and microcomputer systems. Topics include use of technical documentation, bus architecture, I/O and memory systems, and other related topics. Upon completion, students should be able to analyze and troubleshoot basic microprocessor circuits.

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|----------------|----------------------------------|---|---|---|
| ELN 243 | Communication Electronics | 2 | 3 | 3 |
| Prerequisites: | ELC 140 | | | |
| Corequisites: | ELN 140 | | | |

This course covers the installation, maintenance, troubleshooting, and repair of electronic communications equipment. Topics include the theory, operation, and maintenance of electronic communications equipment. Upon completion, students should be able to maintain, troubleshoot, and repair electronic communications equipment.

| | | | | |
|----------------|------------------------|---|---|---|
| ELN 244 | Computer Repair | 3 | 6 | 5 |
| Prerequisites: | ELN 133 or ELN 141 | | | |
| Corequisites: | None | | | |

This course covers the assembly, upgrading, and repair of microcomputers. Topics include logic test equipment, computer motherboards, storage devices, I/O devices, power supplies, and other peripherals. Upon completion, students should be able to assemble, upgrade, maintain, troubleshoot, and repair microcomputers.

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|----------------|------------------------------|---|---|---|--|
| ELN 249 | Digital Communication | 2 | 3 | 3 | |
| Prerequisites: | ELN 133 | | | | |
| Corequisites: | None | | | | |

This course covers the core processes and applications associated with digital 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 digital communication systems.

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|----------------|---------------------------|---|---|---|---|
| EMS 110 | EMT-Basic | 5 | 3 | 0 | 6 |
| Prerequisites: | Enrollment in EMS program | | | | |
| Corequisites: | None | | | | |

This course introduces basic emergency medical care. Topics include preparatory, airway, patient assessment, medical emergencies, trauma, infants and children, and operations. Upon completion, students should be able to demonstrate the skills necessary to achieve North Carolina State or National Registry EMT-Basic certification.

| | | | | | |
|----------------|--------------------------------|---|---|---|---|
| EMS 111 | Prehospital Environment | 2 | 2 | 0 | 3 |
| Prerequisites: | Enrollment in EMS program | | | | |
| Corequisites: | None | | | | |

This course introduces the prehospital care environment and is required for all levels of EMT certification. Topics include roles, responsibilities, laws, ethics, communicable diseases, hazardous materials recognition, therapeutic communications, EMS systems, and defense tactics. Upon completion, students should be able to demonstrate competence in rules and regulations governing prehospital care and personal protection.

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|----------------|--|---|---|---|---|
| EMS 120 | Intermediate Interventions | 2 | 3 | 0 | 3 |
| Prerequisites: | EMS 110 and EMS 111 | | | | |
| Corequisites: | EMS 121 or EMS 122 and COE 111, EMS 130, and EMS 131 | | | | |

This course is designed to provide the necessary information for interventions appropriate to the EMT-Intermediate and is required for intermediate certification. Topics include automated external defibrillation, basic cardiac electrophysiology, intravenous therapy, venipuncture, acid-base balance, and fluids and electrolytes. Upon completion, students should be able to properly establish an IV line, obtain venous blood, utilize AEDs, and correctly interpret arterial blood gases.

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|----------------|---------------------------------|---|---|---|---|
| EMS 121 | EMS Clinical Practicum I | 0 | 0 | 6 | 2 |
| Prerequisites: | EMS 110 and EMS 111 | | | | |
| Corequisites: | EMS 120, EMS 130, and EMS 131 | | | | |

This course is the initial hospital and field internship and is required for intermediate and paramedic certification. Emphasis is placed on intermediate-level care. Upon completion, students should be able to demonstrate competence with intermediate-level skills.

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|----------------|-------------------------------|---|---|---|---|
| EMS 130 | Pharmacology I for EMS | 1 | 2 | 0 | 2 |
| Prerequisites: | EMS 110 | | | | |
| Corequisites: | EMS 120 and EMS 131 | | | | |

This course introduces the fundamental principles of pharmacology and medication administration and is required for intermediate and paramedic certification. Topics include terminology, pharmacokinetics, pharmacodynamics, weights, measures, drug calculations, legislation, and administration routes. Upon completion, students should be able to accurately calculate drug dosages, properly administer medications, and demonstrate general knowledge of pharmacology.

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|----------------|------------------------------|---|---|---|---|
| EMS 131 | Adv Airway Management | 1 | 2 | 0 | 2 |
| Prerequisites: | EMS 110 | | | | |
| Corequisites: | EMS 120 and EMS 130 | | | | |

This course is designed to provide advanced airway management techniques and is required for intermediate and paramedic certification. Topics include respiratory anatomy and physiology, airway, ventilation, adjuncts, surgical intervention, and rapid sequence intubation. Upon completion, students should be able to properly utilize all airway adjuncts and pharmacology associated with airway control and maintenance.

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|----------------|--------------------------------|---|---|---|---|
| EMS 140 | Rescue Scene Management | 1 | 6 | 0 | 3 |
| Prerequisites: | Enrollment in EMS program | | | | |
| Corequisites: | None | | | | |

This course introduces rescue scene management and is required for paramedic certification. Topics include response to hazardous material conditions, medical incident command, and extrication of patients from a variety of situations. Upon completion, students should be able to recognize and manage rescue operations based upon initial and follow-up scene assessment.

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|----------------|--------------------------------------|---|---|---|---|
| EMS 150 | Emerg Vehicles & EMS Comm | 1 | 3 | 0 | 2 |
| Prerequisites: | Enrollment in EMS program | | | | |
| Corequisites: | None | | | | |

This course examines the principles governing emergency vehicles, maintenance of emergency vehicles, and EMS communication equipment and is required for paramedic certification. Topics include applicable motor vehicle laws affecting emergency vehicle operation, defensive driving, collision avoidance techniques, communication systems, and information management systems. Upon completion, students should have a basic knowledge of emergency vehicles, maintenance, and communication needs.

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|----------------|---|---|---|---|---|
| EMS 210 | Adv Patient Assessment | 2 | 2 | 0 | 3 |
| Prerequisites: | EMS 120, EMS 130, EMS 131, and either EMS 121 or both COE 111 and EMS 122 | | | | |
| Corequisites: | None | | | | |

This course covers advanced patient assessment techniques and is required for paramedic certification. Topics include initial assessment, medical-trauma history, field impression, complete physical exam process, on-going assessment, and documentation skills. Upon completion, students should be able to utilize basic communication skills and record and report collected patient data.

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|----------------|-------------------------------|---|---|---|---|
| EMS 220 | Cardiology | 3 | 3 | 0 | 4 |
| Prerequisites: | EMS 120, EMS 130, and EMS 131 | | | | |
| Corequisites: | None | | | | |

This course provides an in-depth study of cardiovascular emergencies and is required for paramedic certification. Topics include anatomy and physiology, pathophysiology, rhythm interpretation, cardiac pharmacology, and patient treatment. Upon completion, students should be able to certify at the Advanced Cardiac Life Support Provider level utilizing American Heart Association guidelines.

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|----------------|----------------------------------|---|---|---|---|
| EMS 221 | EMS Clinical Practicum II | 0 | 0 | 9 | 3 |
| Prerequisites: | EMS 121; or EMS 122 and COE 111 | | | | |
| Corequisites: | None | | | | |

This course is a continuation of the hospital and field internship required for paramedic certification. Emphasis is placed on advanced-level care. Upon completion, students should be able to demonstrate continued progress in advanced-level patient care.

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|----------------|---------------------------------|---|---|---|---|
| EMS 231 | EMS Clinical Pract III | 0 | 0 | 9 | 3 |
| Prerequisites: | EMS 221; or EMS 222 and COE 121 | | | | |
| Corequisites: | None | | | | |

This course is a continuation of the hospital and field internship required for paramedic certification. Emphasis is placed on advanced-level care. Upon completion, students should be able to demonstrate continued progress in advanced-level patient care.

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|----------------|---------------------------|---|---|---|---|
| EMS 235 | EMS Management | 2 | 0 | 0 | 2 |
| Prerequisites: | Enrollment in EMS program | | | | |
| Corequisites: | None | | | | |

This course stresses the principles of managing a modern emergency medical service system. Topics include structure and function of municipal governments, EMS grantsmanship, finance, regulatory agencies, system management, legal issues, and other topics relevant to the EMS manager. Upon completion, students should be able to understand the principles of managing emergency medical service delivery systems.

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|----------------|---|---|---|---|---|
| EMS 240 | Behavioral Emergencies | 2 | 0 | 0 | 2 |
| Prerequisites: | EMS 120, EMS 121 or EMS 122 and COE 111, EMS 130, and EMS 131 | | | | |
| Corequisites: | None | | | | |

This course includes concepts of crisis intervention and techniques of dealing with different behavioral emergencies and is required for paramedic certification. Topics include psychiatric emergencies, abuse, assault, challenged patients, personal well-being, home care, and psychotherapeutic pharmacology. Upon completion, students should be able to recognize and manage frequently encountered behavioral emergencies.

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|----------------|----------------------------------|---|---|---|---|
| EMS 241 | EMS Clinical Practicum IV | 0 | 0 | 9 | 3 |
| Prerequisites: | EMS 231 | | | | |
| Corequisites: | None | | | | |

This course is a continuation of the hospital and field internship required for paramedic certification. Emphasis is placed on advanced-level care. Upon completion, students should be able to provide advanced-level patient care as an entry-level paramedic.

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|----------------|---|---|---|---|---|
| EMS 250 | Advanced Medical Emergencies | 2 | 2 | 0 | 3 |
| Prerequisites: | EMS 120, EMS 130, EMS 131, and either EMS 121 or both COE 111 and EMS 122 | | | | |
| Corequisites: | None | | | | |

This course provides an in-depth study of medical conditions frequently encountered in the prehospital setting and is required for paramedic certification. Topics include pulmonology, neurology, endocrinology, anaphylaxis, gastroenterology, toxicology, and environmental emergencies integrating case presentation and emphasizing pharmacotherapeutics. Upon completion, students should be able to recognize and manage frequently encountered medical conditions based upon initial patient impression.

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|----------------|--|---|---|---|---|
| EMS 260 | Advanced Trauma Emergencies | 1 | 3 | 0 | 2 |
| Prerequisites: | EMS 120, EMS 130, EMS 131, and EMS 121 | | | | |
| Corequisites: | None | | | | |

This course provides in-depth study of trauma including pharmacological interventions for conditions frequently encountered in the prehospital setting and is required for paramedic certification. Topics include hemorrhage control, shock, burns, and trauma to head, spine, soft tissue, thoracic, abdominal, and musculoskeletal areas with case presentations utilized for special problems situations. Upon completion, students should be able to recognize and manage trauma situations based upon patient impressions and should meet requirements of BTLS or PHTLS courses.

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|----------------|-------------------------------|---|---|---|---|
| EMS 270 | Life Span Emergencies | 2 | 2 | 0 | 3 |
| Prerequisites: | EMS 120, EMS 130, and EMS 131 | | | | |
| Corequisites: | None | | | | |

This course, required for paramedic certification, covers medical/ethical/legal issues and the spectrum of age-specific emergencies from conception through death. Topics include gynecological, obstetrical, neonatal, pediatric, and geriatric emergencies and pharmacological therapeutics. Upon completion, students should be able to recognize and treat age-specific emergencies and certify at the Pediatric Advanced Life Support Provider level.

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|----------------|-------------------------------|---|---|---|---|
| EMS 285 | EMS Capstone | 1 | 3 | 0 | 2 |
| Prerequisites: | EMS 220, EMS 250, and EMS 260 | | | | |
| Corequisites: | None | | | | |

This course provides an opportunity to demonstrate problem-solving skills as a team leader in simulated patient scenarios and is required for paramedic certification. Emphasis is placed on critical thinking, integration of didactic and psychomotor skills, and effective performance in simulated emergency situations. Upon completion, students should be able to recognize and appropriately respond to a variety of EMS-related events.

Initial student placement in developmental courses is based on individual college placement testing policies and procedures. Students should begin developmental course work at the appropriate level indicated by the college's placement test.

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|----------------|------------------------------|---|---|---|--|
| ENG 070 | Basic Language Skills | 2 | 2 | 3 | |
| Prerequisites: | | | | | |
| Corequisites: | None | | | | |

This course introduces the fundamentals of standard written English. Emphasis is placed on effective word choice, recognition of sentences and sentence parts, and basic usage. Upon completion, students should be able to generate a variety of sentence types that clearly express ideas. *This course does not satisfy the developmental reading and writing prerequisite for ENG 111 or ENG 111A.*

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|----------------|----------------------------|---|---|---|--|
| 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.*

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|----------------|-------------------------------|---|---|---|--|
| ENG 090 | Composition Strategies | 3 | 0 | 3 | |
| Prerequisites: | ENG 080 or ENG 085 | | | | |
| 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 requirement for ENG 111 and ENG 111A.*

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|-----------------|----------------------------|---|---|---|
| ENG 090A | Comp Strategies Lab | 0 | 2 | 1 |
| Prerequisites: | ENG 080 or ENG 085 | | | |
| 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.

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|----------------|---------------------------------|---|---|---|
| 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.*

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|----------------|----------------------------------|---|---|---|
| ENG 102 | Applied Communications II | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course is designed to enhance writing and speaking skills for the workplace. Emphasis is placed on generating short writings such as job application documents, memoranda, and reports and developing interpersonal communication skills with employees and the public. Upon completion, students should be able to prepare effective, short, and job-related written and oral communications. *This is a diploma-level course.*

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|----------------|---------------------------------|---|---|---|
| ENG 111 | Expository Writing | 3 | 0 | 3 |
| Prerequisites: | ENG 090 and RED 090; or ENG 095 | | | |
| 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.*

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|-----------------|-------------------------------|---|---|---|
| ENG 111A | Expository Writing Lab | 0 | 2 | 1 |
| Prerequisites: | ENG 090 and RED 090; | | | |
| Corequisites: | ENG 111 | | | |

This writing laboratory is designed to apply the skills introduced in ENG 111. Emphasis is placed on the editing and revision components of the writing process. Upon completion, students should be able to apply those skills in the production of final drafts in ENG 111.

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|----------------|--------------------------------|---|---|---|
| ENG 112 | Argument-Based Research | 3 | 0 | 3 |
| Prerequisites: | ENG 111 | | | |
| Corequisites: | None | | | |

This course, the second in a series of two, introduces research techniques, documentation styles, and argumentative strategies. Emphasis is placed on analyzing data and incorporating research findings into documented argumentative essays and research projects. Upon completion, students should be able to summarize, paraphrase, interpret, and synthesize information from primary and secondary sources using standard research format and style. *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.*

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|----------------|--------------------------------------|---|---|---|
| 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.*

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|----------------|---------------------------|---|---|---|
| ENG 115 | Oral Communication | 3 | 0 | 3 |
| Prerequisites: | | | | |
| 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.

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|----------------|------------------------------|---|---|---|
| ENG 121 | Mass Communications | 3 | 0 | 3 |
| Prerequisites: | ENG 111 | | | |
| Corequisites: | ENG 112, ENG 113, or ENG 114 | | | |

This course introduces the history and cultural impact of print and electronic media. Emphasis is placed on various media, their development, functions, theoretical foundations, present uses, and effects. Upon completion, students should be able to identify logical fallacies, employ critical thinking skills, and respond rationally to media messages.

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|----------------|------------------------------|---|---|---|
| ENG 125 | Creative Writing I | 3 | 0 | 3 |
| Prerequisites: | ENG 111 | | | |
| Corequisites: | ENG 112, ENG 113, or ENG 114 | | | |

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.

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|----------------|----------------------------|---|---|---|
| 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.

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|----------------|-----------------------------------|---|---|---|
| ENG 131 | Introduction to Literature | 3 | 0 | 3 |
| Prerequisites: | ENG 111 | | | |
| Corequisites: | ENG 112, ENG 113, or ENG 114 | | | |

This course introduces the principal genres of literature. Emphasis is placed on literary terminology, devices, structure, and interpretation. Upon completion, students should be able to analyze and respond to literature. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

| | | | | |
|----------------|------------------------------|---|---|---|
| ENG 132 | Introduction to Drama | 3 | 0 | 3 |
| Prerequisites: | ENG 111 | | | |
| Corequisites: | ENG 112, ENG 113, or ENG 114 | | | |

This course provides intensive study of drama as a literary form, based on close reading of representative texts. Emphasis is placed on the development and analysis of drama. Upon completion, students should be able to interpret, analyze, and discuss the distinguishing features of drama.

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|----------------|----------------------------------|---|---|---|
| ENG 133 | Introduction to the Novel | 3 | 0 | 3 |
| Prerequisites: | ENG 111 | | | |
| Corequisites: | ENG 112, ENG 113, or ENG 114 | | | |

This course provides intensive study of the novel as a literary form, based on close reading of representative texts. Emphasis is placed on the development and analysis of the novel. Upon completion, students should be able to interpret, analyze, and discuss the distinguishing features of the novel.

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|----------------|-------------------------------|---|---|---|
| ENG 134 | Introduction to Poetry | 3 | 0 | 3 |
| Prerequisites: | ENG 111 | | | |
| Corequisites: | ENG 112, ENG 113, or ENG 114 | | | |

This course provides intensive study of the poem as a literary form, based on close reading of representative texts. Emphasis is placed on the development and analysis of poetry. Upon completion, students should be able to interpret, analyze, and discuss the distinguishing features of poetry.

| | | | | |
|----------------|-------------------------------|---|---|---|
| ENG 135 | Intro to Short Fiction | 3 | 0 | 3 |
| Prerequisites: | ENG 111 | | | |
| Corequisites: | ENG 112, ENG 113, or ENG 114 | | | |

This course provides intensive study of short fiction as a literary form, based on close reading of representative texts. Emphasis is placed on the development and analysis of short fiction. Upon completion, students should be able to interpret, analyze, and discuss the distinguishing features of short fiction.

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|----------------|------------------------------|---|---|---|
| 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 233 | Major American Writers | 3 | 0 | 3 |
| Prerequisites: | ENG 112, ENG 113, or ENG 114 | | | |
| Corequisites: | None | | | |

This course provides an intensive study of the works of several major American authors. Emphasis is placed on American history, culture, and the literary merits. Upon completion, students should be able to interpret, analyze, and evaluate the works studied. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

| | | | | |
|----------------|------------------------------|---|---|---|
| ENG 234 | Modern American Poets | 3 | 0 | 3 |
| Prerequisites: | ENG 112, ENG 113, or ENG 114 | | | |
| Corequisites: | None | | | |

This course covers the works of selected major modern American poets. Topics include each poet's theory and practice of poetry and the historical and literary traditions which influenced or were influenced by the poets. Upon completion, students should be able to read poetry with more comprehension and explicate selected poems in light of technique, theory, and poetic traditions.

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|----------------|------------------------------|---|---|---|
| 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 243 | Major British Writers | 3 | 0 | 3 |
| Prerequisites: | ENG 112, ENG 113, or ENG 114 | | | |
| Corequisites: | None | | | |

This course provides an intensive study of the works of several major British authors. Emphasis is placed on British history, culture, and the literary merits. Upon completion, students should be able to interpret, analyze, and evaluate the works studied. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

| | | | | |
|----------------|-----------------------------------|---|---|---|
| ENG 251 | Western World Literature I | 3 | 0 | 3 |
| Prerequisites: | ENG 112, ENG 113, or ENG 114 | | | |
| Corequisites: | None | | | |

This course provides a survey of selected European works from the Classical period through the Renaissance. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to selected works. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

| | | | | |
|----------------|------------------------------------|---|---|---|
| ENG 252 | Western World Literature II | 3 | 0 | 3 |
| Prerequisites: | ENG 112, ENG 113, or ENG 114 | | | |
| Corequisites: | None | | | |

This course provides a survey of selected European works from the Neoclassical period to the present. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to selected works. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

| | | | | |
|----------------|--------------------------------|---|---|---|
| ENG 253 | The Bible as Literature | 3 | 0 | 3 |
| Prerequisites: | ENG 112, ENG 113, or ENG 114 | | | |
| Corequisites: | None | | | |

This course introduces the Hebrew Old Testament and the Christian New Testament as works of literary art. Emphasis is placed on the Bible's literary aspects including history, composition, structure, and cultural contexts. Upon completion, students should be able to identify and analyze selected books and passages using appropriate literary conventions.

| | | | | |
|----------------|------------------------------|---|---|---|
| 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 271 | Contemporary Literature | 3 | 0 | 3 |
| Prerequisites: | ENG 112, ENG 113, or ENG 114 | | | |
| Corequisites: | None | | | |

This course includes a study of contemporary literature. Emphasis is placed on literary and cultural trends of selected texts. Upon completion, students should be able to interpret, analyze, and respond to the literature.

| | | | | |
|----------------|------------------------------|---|---|---|
| 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.

| | | | | |
|----------------|------------------------------------|---|---|---|
| ENG 273 | African-American Literature | 3 | 0 | 3 |
| Prerequisites: | ENG 112, ENG 113, or ENG 114 | | | |
| Corequisites: | None | | | |

This course provides a survey of the development of African-American literature from its beginnings to the present. Emphasis is placed on historical and cultural context, themes, literary traditions, and backgrounds of the authors. Upon completion, students should be able to interpret, analyze, and respond to selected texts.

| | | | | |
|----------------|------------------------------|---|---|---|
| ENG 274 | Literature by Women | 3 | 0 | 3 |
| Prerequisites: | ENG 112, ENG 113, or ENG 114 | | | |
| Corequisites: | None | | | |

This course provides an analytical study of the works of several women authors. Emphasis is placed on the historical and cultural contexts, themes and aesthetic features of individual works, and biographical backgrounds of the authors. Upon completion, students should be able to interpret, analyze, and discuss selected works.

| | | | | |
|----------------|-------------------------------|---|---|---|
| ENG 275 | Science Fiction | 3 | 0 | 3 |
| Prerequisites: | ENG 112, ENG 113, or ENG 114. | | | |
| Corequisites: | None | | | |

This course covers the relationships between science and literature through analysis of short stories and novels. Emphasis is placed on scientific discoveries that shaped Western culture and our changing view of the universe as reflected in science fiction literature. Upon completion, students should be able to trace major themes and ideas and illustrate relationships between science, world view, and science fiction literature.

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|----------------|----------------------------|---|---|---|
| FLO 189 | Basic Floral Design | 1 | 2 | 2 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course provides general knowledge of floral design on a non-commercial level. Topics include simple corsage work, vase arrangements, and holiday novelty items. Upon completion, students should be able to tie a bow and construct simple corsages, bud vases, and holiday items.

| | | | | |
|----------------|----------------------------|---|---|---|
| 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 120 | French for the Workplace | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course offers applied French for the workplace to facilitate basic communication with people whose native language is French. Emphasis is placed on oral communication and career-specific vocabulary that targets business and industry. Upon completion, students should be able to communicate at a functional level with native speakers and demonstrate cultural sensitivity.

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|----------------|---------------------------------|---|---|---|
| FRE 141 | Culture and Civilization | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course, taught in English, provides an opportunity to explore issues related to the Francophone world. Topics include historical and current events, geography, and customs. Upon completion, students should be able to identify and discuss selected topics and cultural differences related to the Francophone world.

| | | | | |
|----------------|-------------------------------|---|---|---|
| FRE 151 | Francophone Literature | 3 | 0 | 3 |
| Prerequisites: | ENG 111 | | | |
| Corequisites: | None | | | |

This course, in English, includes selected readings by Francophone writers. Topics include fictional and non-fictional works by representative authors from a variety of genres and literary periods. Upon completion, students should be able to analyze and discuss selected texts within relevant cultural and historical contexts.

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|----------------|---------------------------|---|---|---|
| FRE 161 | Cultural Immersion | 2 | 3 | 3 |
| Prerequisites: | FRE 111 | | | |
| Corequisites: | None | | | |

This course explores Francophone culture through intensive study on campus and field experience in a host country or area. Topics include an overview of linguistic, historical, geographical, sociopolitical, economic, and/or artistic concerns of the area visited. Upon completion, students should be able to exhibit first-hand knowledge of issues pertinent to the host area and demonstrate an understanding of cultural differences.

| | | | | |
|----------------|---------------------|---|---|---|
| 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.

| | | | | |
|----------------|------------------------------|---|---|---|
| FRE 211 | Intermediate French I | 3 | 0 | 3 |
| Prerequisites: | FRE 112 | | | |
| Corequisites: | None | | | |

This course provides a review and expansion of the essential skills of the French 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.*

| | | | | |
|----------------|-------------------------------|---|---|---|
| FRE 212 | Intermediate French II | 3 | 0 | 3 |
| Prerequisites: | FRE 211 | | | |
| Corequisites: | None | | | |

This course is a continuation of FRE 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.*

| | | | | |
|----------------|----------------------------|---|---|---|
| FRE 221 | French Conversation | 3 | 0 | 3 |
| Prerequisites: | FRE 212 | | | |
| Corequisites: | None | | | |

This course provides an opportunity for intensive communication in spoken French. Emphasis is placed on vocabulary acquisition and interactive communication through the discussion of media materials and authentic texts. Upon completion, students should be able to discuss selected topics, express ideas and opinions clearly, and engage in formal and informal conversations.

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|----------------|--------------------------------|---|---|---|
| FRE 231 | Reading and Composition | 3 | 0 | 3 |
| Prerequisites: | FRE 212 | | | |
| Corequisites: | None | | | |

This course provides an opportunity for intensive reading and composition in French. Emphasis is placed on the use of literary and cultural materials to enhance and expand reading and writing skills. Upon completion, students should be able to demonstrate in writing an in-depth understanding of assigned readings.

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|----------------|---------------------|---|---|---|
| FRE 281 | French Lab 3 | 0 | 2 | 1 |
| Prerequisites: | FRE 182 | | | |
| Corequisites: | None | | | |

This course provides an opportunity to enhance the review and expansion of the essential skills of the French language. Emphasis is placed on the study of authentic and representative literary and cultural texts through the use of supplementary learning media and materials. Upon completion, students should be able to communicate effectively, accurately, and creatively about the past, present, and future.

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|----------------|---------------------|---|---|---|
| FRE 282 | French Lab 4 | 0 | 2 | 1 |
| Prerequisites: | FRE 281 | | | |
| Corequisites: | None | | | |

This course provides an opportunity to enhance the review and expansion of the essential skills of the French language. Emphasis is placed on the continuing study of authentic and representative literary and cultural texts through the use of supplementary learning media and materials. Upon completion, students should be able to communicate spontaneously and accurately with increasing complexity and sophistication.

| | | | | |
|----------------|---------------------------------|---|---|---|
| FSE 112 | Princ of Funeral Service | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers the principles of funeral service and various religious and cultural customs of funeral service in the US. Emphasis is placed on Protestant, Catholic, Jewish, and other religious groups and the professional and ethical obligations of the profession. Upon completion, students should be able to demonstrate an understanding of religious and cultural traditions and how various funeral services are conducted.

| | | | | |
|----------------|----------------------------|---|---|---|
| FSE 114 | Embalming Chemistry | 4 | 0 | 4 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers the fundamentals of organic chemistry and biochemistry as related to the funeral service profession. Emphasis is placed on chemical changes in the human body during life, after death, and during chemical preservation. Upon completion, students should be able to use various embalming chemicals and mix embalming solutions for laboratory use.

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|----------------|-------------------------------|---|---|---|
| FSE 116 | Funeral Law and Ethics | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers fundamentals of mortuary law and ethical considerations relevant to the funeral profession. Emphasis is placed on North Carolina Mortuary Law, OSHA requirements, anatomical donations, vital statistics, and general law relative to mortuary law. Upon completion, students should be able to demonstrate an understanding of the legal and ethical aspects of funeral service.

| | | | | |
|----------------|--------------------------|---|---|---|
| FSE 118 | Embalming Anatomy | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers the general anatomy needed in funeral service. Emphasis is placed on medical terminology and the normal structure and function of the human body with special consideration of the circulatory system. Upon completion, students should be able to understand the normal structure and function of the human body and how it relates to the embalming process.

| | | | | |
|----------------|-------------------------------|---|---|---|
| FSE 120 | Embalming Microbiology | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course is a survey of the basic principles of microbiology and related funeral service considerations. Emphasis is placed on sanitation, disinfection, public health, and embalming practices as it relates to various microorganisms. Upon completion, students should be able to characterize various microbial agents and discuss topical, chemical, and biological methods of control.

| | | | | |
|----------------|---------------------------|---|---|---|
| FSE 210 | Embalming Theory I | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | FSE 211 | | | |

This course introduces various embalming procedures and the purpose, history, and need for embalming. Emphasis is placed on laboratory equipment, post mortem changes, and the proper use of embalming chemicals. Upon completion, students should be able to identify various instruments and relate theoretical case analysis to embalming procedures used in the funeral home.

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|----------------|------------------------|---|---|---|
| FSE 211 | Embalming Lab I | 0 | 4 | 2 |
| Prerequisites: | | | | |
| Corequisites: | FSE 210 | | | |

This course provides hands-on experience with general embalming techniques. Emphasis is placed on preparation of human remains in the embalming laboratory. Upon completion, students should be able to utilize sanitation and disinfection procedures correctly and properly prepare human remains for burial.

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|----------------|----------------------------|---|---|---|
| FSE 212 | Embalming Theory II | 3 | 0 | 3 |
| Prerequisites: | FSE 210 and FSE 211 | | | |
| Corequisites: | FSE 213 | | | |

This course is a continuation of FSE 210 and covers more detailed embalming procedures. Topics include anatomical consideration for embalming, case analysis, positioning features, arterial injection, cavity treatment, autopsies, and other post mortem conditions. Upon completion, students should be able to demonstrate knowledge of embalming theory and sanitation to protect the public health.

| | | | | |
|----------------|-------------------------|---|---|---|
| FSE 213 | Embalming Lab II | 0 | 4 | 2 |
| Prerequisites: | FSE 210 and FSE 211 | | | |
| Corequisites: | FSE 212 | | | |

This course provides hands-on experience in more advanced embalming skills. Emphasis is placed on preparation of human remains in the embalming laboratory. Upon completion, students should be able to determine the proper techniques to be utilized in each particular embalming situation.

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|----------------|------------------|---|---|---|
| FSE 214 | Pathology | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course is a general survey of the disease process. Topics include pathological terminology, basic body functions, trauma, disease process, and etiology. Upon completion, students should be able to recognize medical terminology used in completing death certificates and understand the disease process.

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|----------------|--------------------------------|---|---|---|
| FSE 215 | Funeral Home Operations | 4 | 0 | 4 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers funeral home operations, including business techniques and effective counseling skills. Topics include establishing a funeral home, choosing and financing a location, building, merchandising, caskets, vaults, planning, and counseling techniques and philosophies. Upon completion, students should be able to understand the proper procedures for operating a funeral home and relate more effectively to those experiencing grief.

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|----------------|-------------------------|---|---|---|
| FSE 216 | Restorative Arts | 2 | 4 | 4 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers the terminology used and pathological conditions observed during the restoration process. Topics include basic restoration, anatomical modeling, expression, use of photographs, legal aspects, pathological discoloration, cosmetics, and solvents. Upon completion, students should be able to utilize materials and techniques in the restoration of human remains.

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|----------------|---------------------------------|---|---|---|
| FSE 217 | Funeral Service Projects | 1 | 2 | 2 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course provides an overview of funeral service practices and procedures, including computer software used in the funeral service profession. Emphasis is placed on utilizing funeral service software and on topics required for licensure. Upon completion, students should be able to enter information, generate documents, and demonstrate knowledge of the topics covered on state or national licensure exams.

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|----------------|-----------------------------|---|---|---|
| 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.*

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|----------------|---------------------------|---|---|---|
| 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.*

| | | | | |
|----------------|-------------------------|---|---|---|
| GEL 120 | Physical Geology | 3 | 2 | 4 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course provides a study of the structure and composition of the earth's crust. Emphasis is placed on weathering, erosional and depositional processes, mountain building forces, rocks and minerals, and structural changes. Upon completion, students should be able to explain the structure, composition, and formation of the earth's crust. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

| | | | | |
|----------------|------------------------------|---|---|---|
| GEL 230 | Environmental Geology | 3 | 2 | 4 |
| Prerequisites: | GEL 120 or PHS 130 | | | |
| Corequisites: | None | | | |

This course provides insights into geologic forces that cause environmental changes influencing man's activities. Emphasis is placed on natural hazards and disasters caused by geologic forces. Upon completion, students should be able to relate major hazards and disasters to the geologic forces responsible for their occurrence. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

| | | | | |
|----------------|---------------------------------|---|---|---|
| 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 112 | Cultural Geography | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course is designed to explore the diversity of human cultures and to describe their shared characteristics. Emphasis is placed on the characteristics, distribution, and complexity of earth's cultural patterns. Upon completion, students should be able to demonstrate an understanding of the differences and similarities in human cultural groups. *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.*

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|----------------|-----------------------------------|---|---|---|
| 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.*

| | | | | |
|----------------|----------------------------|---|---|---|
| GER 111 | Elementary German I | 3 | 0 | 3 |
|----------------|----------------------------|---|---|---|

Prerequisites:

Corequisites: None

This course introduces the fundamental elements of the German 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 German and demonstrate cultural awareness. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

| | | | | |
|----------------|-----------------------------|---|---|---|
| GER 112 | Elementary German II | 3 | 0 | 3 |
|----------------|-----------------------------|---|---|---|

Prerequisites: GER 111

Corequisites: None

This course is a continuation of GER 111 focusing on the fundamental elements of the German 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 German and demonstrate further cultural awareness. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

| | | | | |
|----------------|---------------------------------|---|---|---|
| GER 141 | Culture and Civilization | 3 | 0 | 3 |
|----------------|---------------------------------|---|---|---|

Prerequisites:

Corequisites: None

This course, taught in English, provides an opportunity to explore issues related to the German-speaking world. Topics include historical and current events, geography, and customs. Upon completion, students should be able to identify and discuss selected topics and cultural differences related to the German-speaking world.

| | | | | |
|----------------|---------------------|---|---|---|
| GER 181 | German Lab 1 | 0 | 2 | 1 |
|----------------|---------------------|---|---|---|

Prerequisites:

Corequisites: None

This course provides an opportunity to enhance acquisition of the fundamental elements of the German 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 German and demonstrate cultural awareness.

| | | | | |
|----------------|---------------------|---|---|---|
| GER 182 | German Lab 2 | 0 | 2 | 1 |
| Prerequisites: | GER 181 | | | |
| Corequisites: | None | | | |

This course provides an opportunity to enhance acquisition of the fundamental elements of the German 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 German and demonstrate cultural awareness.

| | | | | |
|----------------|------------------------------|---|---|---|
| GER 211 | Intermediate German I | 3 | 0 | 3 |
| Prerequisites: | GER 112 | | | |
| Corequisites: | None | | | |

This course provides a review and expansion of the essential skills of the German 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.*

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|----------------|-------------------------------|---|---|---|
| GER 212 | Intermediate German II | 3 | 0 | 3 |
| Prerequisites: | GER 211 | | | |
| Corequisites: | None | | | |

This course provides a continuation of GER 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.*

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|----------------|----------------------------|---|---|---|
| GER 221 | German Conversation | 3 | 0 | 3 |
| Prerequisites: | GER 212 | | | |
| Corequisites: | None | | | |

This course provides an opportunity for intensive communication in spoken German. Emphasis is placed on vocabulary acquisition and interactive communication through the discussion of media materials and authentic texts. Upon completion, students should be able to discuss selected topics, express ideas and opinions clearly, and engage in formal and informal conversations.

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|----------------|--------------------------------|---|---|---|
| GER 231 | Reading and Composition | 3 | 0 | 3 |
| Prerequisites: | GER 212 | | | |
| Corequisites: | None | | | |

This course provides an opportunity for intensive reading and composition in German. Emphasis is placed on the use of literary and cultural materials to enhance and expand reading and writing skills. Upon completion, students should be able to demonstrate in writing an in-depth understanding of assigned readings.

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|----------------|---------------------|---|---|---|
| GER 281 | German Lab 3 | 0 | 2 | 1 |
| Prerequisites: | GER 182 | | | |
| Corequisites: | None | | | |

This course provides an opportunity to enhance the review and expansion of the essential skills of the German language. Emphasis is placed on the study of authentic and representative literary and cultural texts through the use of supplementary learning media and materials. Upon completion, students should be able to communicate effectively, accurately, and creatively about the past, present, and future.

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|----------------|---------------------|---|---|---|
| GER 282 | German Lab 4 | 0 | 2 | 1 |
| Prerequisites: | GER 281 | | | |
| Corequisites: | None | | | |

This course provides an opportunity to enhance the review and expansion of the essential skills of the German language. Emphasis is placed on the continuing study of authentic and representative literary and cultural texts through the use of supplementary learning media and materials. Upon completion, students should be able to communicate spontaneously and accurately with increasing complexity and sophistication.

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|----------------|-----------------------|---|---|---|
| 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.

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|----------------|-----------------------------|---|---|---|
| GRA 140 | Graphic Arts Imaging | 1 | 2 | 2 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers the use of photographic and electronic imaging techniques in the printing industry. Topics include exposure control and manipulation for a variety of process photography procedures and emerging electronic imaging techniques. Upon completion, students should be able to create line, special effect, and halftone images by both conventional and computer imaging methods.

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|----------------|------------------------|---|---|---|
| GRA 220 | Industry Survey | 1 | 2 | 2 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course explores various graphic arts businesses and trade associations through tours, guest speakers, and research. Emphasis is placed on presenting a broad industry overview through research of a variety of industry activities and relationships. Upon completion, students should be able to describe local graphic arts businesses and local and national trade and professional associations.

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|----------------|---------------------|---|---|---|
| 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.

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|----------------|----------------------------------|---|---|---|
| GRD 117 | Design Career Exploration | 2 | 0 | 2 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers opportunities in the graphic design field and employment requirements. Topics include evaluation of career choices, operations, structure of advertising and graphic design businesses, and related business issues. Upon completion, students should be able to demonstrate an understanding of the graphic design field and consider an appropriate personal direction of career specialization.

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|----------------|-------------------------------|---|---|---|
| GRD 121 | Drawing Fundamentals I | 1 | 3 | 2 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course increases observation skills using basic drawing techniques and media in graphic design. Emphasis is placed on developing the use of graphic design principles, media applications, spatial considerations, drawing styles, and approaches. Upon completion, students should be able to show competence and proficiency in finished works.

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|----------------|------------------------------|---|---|---|
| GRD 131 | Illustration I | 1 | 3 | 2 |
| Prerequisites: | ART 131, 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.

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|----------------|------------------------|---|---|---|
| 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.

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|----------------|-------------------------|---|---|---|
| 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.

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|----------------|------------------------------|---|---|---|
| GRD 142 | Graphic Design II | 2 | 4 | 4 |
| Prerequisites: | ART 121, DES 135, or GRD 141 | | | |
| 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: | | | | |
| 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.

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|----------------|-------------------------------|---|---|---|
| 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.

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|----------------|--------------------------------|---|---|---|
| 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.

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|----------------|-----------------------------|---|---|---|
| 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.

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|----------------|------------------------------|---|---|---|
| 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 220 | Calligraphy | 0 | 2 | 1 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers calligraphy as a design element. Emphasis is placed on the history, methods, materials, tools, and techniques of hand lettering. Upon completion, students should be able to use a variety of pens, brushes, inks, paint, and surfaces to produce several finished calligraphic works.

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|----------------|-------------------------------|---|---|---|
| GRD 230 | Technical Illustration | 1 | 3 | 2 |
| Prerequisites: | ART 131 or GRD 121 | | | |
| Corequisites: | None | | | |

This course introduces technical and industrial illustration techniques. Topics include orthographic, isometric, linear perspective, and exploded views. Upon completion, students should be able to demonstrate competence in various technical rendering techniques.

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|----------------|----------------------------|---|---|---|
| GRD 231 | Marker Illustration | 1 | 3 | 2 |
| Prerequisites: | ART 131 or GRD 121 | | | |
| Corequisites: | None | | | |

This course covers marker illustration. Emphasis is placed on various marker types, techniques, and surfaces used in marker illustration. Upon completion, students should be able to demonstrate competence in the use of markers as a medium for commercial illustration.

| | | | | |
|----------------|---------------------------|---|---|---|
| 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.

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|----------------|--------------------------|---|---|---|
| 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.

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|----------------|----------------------------|---|---|---|
| GRD 271 | Multimedia Design I | 1 | 3 | 2 |
| Prerequisites: | GRD 151 | | | |
| Corequisites: | None | | | |

This course introduces the fundamentals of multimedia design and production for computer-related presentations. Topics include interface design, typography, storyboarding, scripting, simple animation, graphics, digital audiovideo, and copyright issues. Upon completion, students should be able to design and produce multimedia presentations.

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|----------------|-----------------------------|---|---|---|
| GRD 272 | Multimedia Design II | 1 | 3 | 2 |
| Prerequisites: | GRD 271 | | | |
| Corequisites: | None | | | |

This course is a continuation of GRD 271. Emphasis is placed on advanced animation, specialized software, quality control, and cross-platform delivery, as well as problems associated with delivery media and interactivity. Upon completion, students should be able to produce multimedia presentations and determine and adapt to technical specifications for delivery.

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|----------------|-------------------------|---|---|---|
| GRD 280 | Portfolio Design | 2 | 4 | 4 |
| Prerequisites: | GRD 142 and GRD 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.

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|----------------|--------------------------------|---|---|---|
| GRD 282 | Advertising Copywriting | 1 | 2 | 2 |
| Prerequisites: | ENG 111 | | | |
| Corequisites: | None | | | |

This course covers copywriting for print, electronic, and broadcast advertising and promotion. Topics include advertising strategies, proposals, headlines, slogans, and text copy for various types of advertising. Upon completion, students should be able to write and articulate advertising proposals and understand the ethical and regulatory environment for advertising.

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|----------------|--------------------------------|---|---|---|
| GRD 285 | Client/Media Relations | 1 | 2 | 2 |
| Prerequisites: | GRD 142 and GRA 121 or GRD 152 | | | |
| Corequisites: | None | | | |

This course introduces media pricing, scheduling, and business ethics. Emphasis is placed on communication with clients and determination of clients' advertising needs. Upon completion, students should be able to use professional communication skills to effectively orchestrate client/media relationships.

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|----------------|----------------------------|---|---|---|
| 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.

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|----------------|------------------------------|---|---|---|
| HIS 111 | World Civilizations I | 3 | 0 | 3 |
| Prerequisites: | | | | |
| 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: | | | | |
| 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 114 | Comparative World History | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course provides a comparison of western and non-western cultures. Emphasis is placed on historical developments and their impact on the modern world through religion, politics, economics, and social developments. Upon completion, students should be able to compare and contrast western and non-western cultures. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

| | | | | |
|----------------|--------------------------------|---|---|---|
| HIS 115 | Intro to Global History | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces the study of global history. Emphasis is placed on topics such as colonialism, industrialism, and nationalism. Upon completion, students should be able to analyze significant global historical issues. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

| | | | | |
|----------------|-------------------------------|---|---|---|
| HIS 121 | Western Civilization I | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces western civilization from pre-history to the early modern era. Topics include ancient Greece, Rome, and Christian institutions of the Middle Ages and the emergence of national monarchies in western Europe. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in early western civilization. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

| | | | | |
|----------------|--------------------------------|---|---|---|
| HIS 122 | Western Civilization II | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces western civilization from the early modern era to the present. Topics include the religious wars, the Industrial Revolution, World Wars I and II, and the Cold War. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in modern western civilization. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

| | | | | |
|----------------|---------------------------|---|---|---|
| HIS 131 | American History I | 3 | 0 | 3 |
| Prerequisites: | | | | |
| 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: | | | | |
| 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 162 | Women and History | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course surveys the experience of women in historical perspective. Topics include the experiences and contributions of women in culture, politics, economics, science, and religion. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural contributions of women in history.

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|----------------|---------------------------------|---|---|---|
| HIS 221 | African-American History | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers African-American history from the Colonial period to the present. Topics include African origins, the slave trade, the Civil War, Reconstruction, the Jim Crow era, the civil rights movement, and contributions of African Americans. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in the history of African Americans.

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|----------------|--------------------------------|---|---|---|
| HIS 222 | African-American Hist I | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers African American history through the Civil War period. Topics include African origins, the nature of slavery, African-American participation in the American Revolution, abolitionism, and the emergence of a distinct African-American culture. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in early African-American history.

| | | | | |
|----------------|---------------------------------|---|---|---|
| HIS 223 | African-American Hist II | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers African American history from the Civil War to the present. Topics include Reconstruction, the Jim Crow era, urbanization, the Harlem Renaissance, the Civil Rights movement, and the philosophies of major African-American leaders. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in African-American history since the Civil War.

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|----------------|----------------------|---|---|---|
| HIS 226 | The Civil War | 3 | 0 | 3 |
| Prerequisites: | | | | |
| 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.

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|----------------|-----------------------------|---|---|---|
| HIS 228 | History of the South | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers the origin and development of the South as a distinct region of the United States. Emphasis is placed on Southern identity and its basis in cultural, social, economic, and political developments during the 19th and 20th centuries. Upon completion, students should be able to identify and analyze the major cultural, social, economic, and political developments in the South.

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|----------------|-------------------------------|---|---|---|
| HIS 236 | North Carolina History | 3 | 0 | 3 |
| Prerequisites: | | | | |
| 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.

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|----------------|----------------------------------|---|---|---|
| HIS 271 | The French Revolution Era | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course traces the causes and effects of the French Revolution. Topics include the Enlightenment; Jacobins; Reign of Terror; Napoleon's republic, empire, and wars; and the French Revolution's impact upon world history. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments during the French revolutionary era.

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|----------------|---------------------------|---|---|---|
| HOR 112 | Landscape Design I | 2 | 3 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers landscape principles and practices for residential and commercial sites. Emphasis is placed on drafting, site analysis, and common elements of good design, plant material selection, and proper plant utilization. Upon completion, students should be able to read, plan, and draft a landscape design.

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|----------------|-------------------------------|---|---|---|
| HOR 114 | Landscape Construction | 2 | 2 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces the design and fabrication of landscape structures/features. Emphasis is placed on safety, tool identification and use, material selection, construction techniques, and fabrication. Upon completion, students should be able to design and construct common landscape structures/features.

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|----------------|-------------------------------|---|---|---|
| HOR 116 | Landscape Management I | 2 | 2 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers information and skills necessary to analyze a property and develop a management schedule. Emphasis is placed on property measurement, plant condition, analysis of client needs, and plant culture needs. Upon completion, students should be able to analyze a property, develop management schedules, and implement practices based on client needs.

HOR 118 Equipment Op & Maint

1 3 2

Prerequisites:

Corequisites: None

This course covers the proper operation and maintenance of selected equipment used in horticulture. Emphasis is placed on the maintenance, minor repairs, safety devices, and actual operation of selected equipment. Upon completion, students should be able to design a maintenance schedule, service equipment, and demonstrate safe operation of selected equipment.

HOR 134 Greenhouse Operations

2 2 3

Prerequisites:

Corequisites: None

This course covers the principles and procedures involved in the operation and maintenance of greenhouse facilities. Emphasis is placed on the operation of greenhouse systems, including the environmental control, record keeping, scheduling, and production practices. Upon completion, students should be able to demonstrate the ability to operate greenhouse systems and facilities to produce greenhouse crops.

HOR 152 Horticultural Practices

0 3 1

Prerequisites:

Corequisites: None

This course covers the maintenance of ornamental plantings and production areas. Topics include maintenance of flower beds, vegetable gardens, greenhouses, and container and field nursery stock using sound horticultural practices. Upon completion, students should be able to apply the principles and practices of maintaining ornamental landscape plantings.

HOR 160 Plant Materials I

2 2 3

Prerequisites:

Corequisites: None

This course covers identification, culture, characteristics, and use of plants. Emphasis is placed on nomenclature, identification, growth requirements, cultural requirements, soil preferences, and landscape applications. Upon completion, students should be able to demonstrate knowledge of the proper selection and utilization of plant materials.

HOR 162 Applied Plant Science

2 2 3

Prerequisites:

Corequisites: None

This course introduces the basic concepts of botany as they apply to horticulture. Topics include nomenclature, physiology, morphology, and anatomy as they apply to plant culture. Upon completion, students should be able to apply the basic principles of botany to horticulture.

HOR 164 Hort Pest Management

2 2 3

Prerequisites:

Corequisites: None

This course covers the identification and control of plant pests including insects, diseases, and weeds. Topics include pest identification and chemical regulations, safety, and pesticide application. Upon completion, students should be able to meet the requirements for North Carolina Commercial Pesticide Ground Applicators license.

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|----------------|--------------------------------|---|---|---|
| HOR 166 | Soils & Fertilizers | 2 | 2 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers the physical and chemical properties of soils and soil fertility and management. Topics include soil formation, classification, physical and chemical properties, testing, fertilizer application, and other amendments. Upon completion, students should be able to analyze, evaluate, and properly amend soils/media.

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|----------------|--------------------------|---|---|---|
| HOR 168 | Plant Propagation | 2 | 2 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course is a study of sexual and asexual reproduction of plants. Emphasis is placed on seed propagation, grafting, stem and root propagation, micro-propagation, and other propagation techniques. Upon completion, students should be able to successfully propagate ornamental plants.

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|----------------|--------------------------|---|---|---|
| HOR 170 | Hor Computer Apps | 1 | 3 | 2 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces computer programs as they apply to the horticulture industry. Emphasis is placed on applications of software for plant identification, design, and irrigation. Upon completion, students should be able to use computer programs in horticultural situations.

| | | | | |
|----------------|-----------------------------|---|---|---|
| HOR 215 | Landscape Irrigation | 2 | 2 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces basic irrigation design, layout, and installation. Topics include site analysis, components of irrigation systems, safety, types of irrigation systems, and installation techniques. Upon completion, students should be able to design and install basic landscape irrigation systems.

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|----------------|-------------------------------|---|---|---|
| HOR 253 | Horticulture Turfgrass | 2 | 2 | 3 |
| Prerequisites: | HOR 162 or HOR 166 | | | |
| Corequisites: | None | | | |

This course covers information and skill development necessary to establish and manage landscape turfgrasses. Topics include grass identification, establishment, cultural requirements, application of control products, fertilization, and overseeding techniques. Upon completion, students should be able to analyze a landscape site and determine those cultural and physical activities needed to establish or manage a quality turf.

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|----------------|--------------------------------|---|---|---|
| HOR 257 | Arboriculture Practices | 1 | 3 | 2 |
| Prerequisites: | HOR 160 | | | |
| Corequisites: | None | | | |

This course covers the culture and maintenance of trees and shrubs. Topics include fertilization, pruning, approved climbing techniques, pest control, and equipment use and safety. Upon completion, students should be able to properly prune trees and shrubs and perform arboricultural practices.

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|----------------|---------------------------|---|---|---|
| HOR 260 | Plant Materials II | 2 | 2 | 3 |
| Prerequisites: | HOR 160 | | | |
| Corequisites: | None | | | |

This course is a continuation of HOR 160 and covers additional plants. Emphasis is placed on reinforcement of skills and the introduction of additional plants. Upon completion, students should be able to demonstrate knowledge of the proper selection and utilization of plant materials.

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|----------------|----------------------------|---|---|---|
| HOR 275 | Hor Production Mgmt | 3 | 2 | 4 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces starting and/or managing a horticulture production operation. Emphasis is placed on types of horticulture production businesses, production management practices and skills, and appropriate safety measures for equipment, personnel, and facilities. Upon completion, students should be able to identify various types of production businesses, prepare appropriate schedules and inventories, and manage personnel/facilities for safe crop production. *This course is a unique concentration requirement of the Management Concentration in the Horticulture Technology program.*

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|----------------|---------------------------------|---|---|---|
| HOR 277 | Hor Sales & Services | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces various strategies for marketing horticulture products and services. Topics include wholesale, retail, and consignment sales; advertising media; costing products and services; preparing estimates, bids, and proposals; and consumer relations. Upon completion, students should be able to develop a marketing strategy for various horticulture products and services. *This course is a unique concentration requirement of the Management Concentration in the Horticulture Technology program.*

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|----------------|---------------------------------|---|---|---|
| HOR 278 | Hor Bus Entrepreneurship | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces starting and/or managing a horticulture business operation. Emphasis is placed on types of business ownership, legal aspects of licenses, worker safety and facility criteria, and creating inventories, schedules, and financial statements. Upon completion, students should be able to prepare appropriate schedules and financial statements and demonstrate knowledge of legal standards for equipment and personnel. *This course is a unique concentration requirement of the Management Concentration in the Horticulture Technology program.*

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|----------------|------------------------------|---|---|---|
| HRM 125 | Hospitality Etiquette | 1 | 0 | 1 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers social skills needed to effectively interact within organizational and customer situations. Topics include general social manners, personal appearance, table manners, restaurant and meeting etiquette, and business interaction. Upon completion, students should be able to function with confidence in various social, cultural, and professional situations.

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|----------------|--------------------------------|---|---|---|
| HRM 145 | Hospitality Supervision | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers principles of supervision as they apply to the hospitality industry. Topics include recruitment, selection, orientation, training, evaluation, and leadership skills. Upon completion, students should be able to understand and apply basic supervisory skills unique to the hospitality and service industry.

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|----------------|------------------------------|---|---|---|
| HRM 215 | Restaurant Management | 3 | 0 | 3 |
| Prerequisites: | CUL 135 | | | |
| Corequisites: | None | | | |

This course provides an overview of the various challenges and responsibilities encountered in managing a food and beverage operation. Topics include planning, administration, organization, accounting, marketing, and human resources from an integrated managerial viewpoint. Upon completion, students should be able to demonstrate an understanding of the operation of a restaurant.

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| HRM 215 A | Restaurant Management Lab | 0 | 2 | 1 |
| Prerequisites: | | | | |
| Corequisites: | HRM 215 | | | |

This course is a laboratory to accompany HRM 215. Emphasis is placed on practical applications of restaurant management principles. Upon completion, students should be able to demonstrate a basic proficiency in restaurant management applications.

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|----------------|-------------------------------------|---|---|---|
| HRM 220 | Food & Beverage Controls | 3 | 0 | 3 |
| Prerequisites: | MAT 115 | | | |
| Corequisites: | None | | | |

This course introduces controls and accounting procedures used in the hospitality industry. Topics include analysis of financial statements, reports, and costs. Upon completion, students should be able to understand and apply food, beverage, and labor cost control systems.

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|----------------|----------------------------|---|---|---|
| HRM 225 | Beverage Management | 2 | 0 | 2 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces the management of beverage operations in a hospitality operation. Topics include history, service, procurement, storage, and control of wines, fermented and distilled beverages, sparkling waters, coffees, and teas. Upon completion, students should be able to demonstrate knowledge of the beverages consumed in a hospitality operation.

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|----------------|------------------------------|---|---|---|
| HRM 240 | Hospitality Marketing | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers planning, organizing, directing, and analyzing the results of marketing programs in the hospitality industry. Emphasis is placed on market segmentation and analysis, product and image development, sales planning, advertising, public relations, and collateral materials. Upon completion, students should be able to prepare a marketing plan applicable to the hospitality industry.

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|--------------------|--------------------------------|---|---|---|
| HRM 245 | Hosp Human Resource Mgt | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: None | | | | |

This course presents a systematic approach to human resource management in the hospitality industry. Topics include labor regulations and laws, hiring, development, discipline, motivation, separation, productivity, and organizational culture. Upon completion, students should be able to apply sound human resource management skills to the hospitality industry.

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|--------------------|-------------------------------|---|---|---|
| HUM 110 | Technology and Society | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: None | | | | |

This course considers technological change from historical, artistic, and philosophical perspectives and its effect on human needs and concerns. Emphasis is placed on the causes and consequences of technological change. Upon completion, students should be able to critically evaluate the implications of technology. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

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|-----------------------------------|--------------------------|---|---|---|
| HUM 115 | Critical Thinking | 3 | 0 | 3 |
| Prerequisites: ENG 101 or ENG 111 | | | | |
| Corequisites: None | | | | |

This course introduces the use of critical thinking skills in the context of human conflict. Emphasis is placed on evaluating information, problem solving, approaching cross-cultural perspectives, and resolving controversies and dilemmas. Upon completion, students should be able to demonstrate orally and in writing the use of critical thinking skills in the analysis of appropriate texts. *This course may meet the SACS humanities requirement for AAS degree programs.*

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|--------------------|-------------------------|---|---|---|
| HUM 120 | Cultural Studies | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: None | | | | |

This course introduces the distinctive features of a particular culture. Topics include art, history, music, literature, politics, philosophy, and religion. Upon completion, students should be able to appreciate the unique character of the study culture. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

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|--------------------|------------------------------|---|---|---|
| HUM 121 | The Nature of America | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: None | | | | |

This course provides an interdisciplinary survey of the American cultural, social, and political experience. Emphasis is placed on the multicultural character of American society, distinctive qualities of various regions, and the American political system. Upon completion, students should be able to analyze significant cultural, social, and political aspects of American life. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

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|----------------|-------------------------|---|---|---|
| HUM 122 | Southern Culture | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course explores the major qualities that make the South a distinct region. Topics include music, politics, literature, art, religion, race relations, and the role of social class in historical and contemporary contexts. Upon completion, students should be able to identify the characteristics that distinguish Southern culture. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

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|----------------|------------------------------|---|---|---|
| HUM 130 | Myth in Human Culture | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course provides an in-depth study of myths and legends. Topics include the varied sources of myths and their influence on the individual and society within diverse cultural contexts. Upon completion, students should be able to demonstrate a general familiarity with myths and a broad-based understanding of the influence of myths and legends on modern culture. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

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|----------------|--------------------------------|---|---|---|
| HUM 140 | History of Architecture | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers the political and religious influences upon architecture. Topics include specific historical buildings evidencing architectural advancement, with special emphasis upon modern architecture. Upon completion, students should be able to analyze and identify significant developments in architecture.

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|----------------|----------------------------------|---|---|---|
| HUM 145 | History of Landscape Arch | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers the political, religious, and technological development of landscape architecture. Topics include specific historical landscapes showing architectural advancement. Upon completion, students should be able to analyze and identify significant developments in landscape architecture.

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|----------------|---------------------------------|---|---|---|
| HUM 150 | American Women's Studies | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course provides an inter-disciplinary study of the history, literature, and social roles of American women from Colonial times to the present. Emphasis is placed on women's roles as reflected in American language usage, education, law, the workplace, and mainstream culture. Upon completion, students should be able to identify and analyze the roles of women as reflected in various cultural forms. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

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|----------------|-----------------------------|---|---|---|
| HUM 160 | Introduction to Film | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces the fundamental elements of film artistry and production. Topics include film styles, history, and production techniques, as well as the social values reflected in film art. Upon completion, students should be able to critically analyze the elements covered in relation to selected films. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

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|----------------|----------------------|---|---|---|
| HUM 170 | The Holocaust | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course provides a survey of the destruction of European Jewry by the Nazis during World War II. Topics include the anti-Semitic ideology, bureaucratic structures, and varying conditions of European occupation and domination under the Third Reich. Upon completion, students should be able to demonstrate an understanding of the historical, social, religious, political, and economic factors which cumulatively resulted in the Holocaust.

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|----------------|---------------------|---|---|---|
| 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.*

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|----------------|----------------------|---|---|---|
| HUM 212 | Humanities II | 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 early modern times to the present. 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.*

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|----------------|---------------------------------|---|---|---|
| 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 has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

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|----------------|-------------------------------|---|---|---|
| HUM 230 | Leadership Development | 3 | 0 | 3 |
| Prerequisites: | ENG 111 | | | |
| Corequisites: | None | | | |

This course explores the theories and techniques of leadership and group process. Emphasis is placed on leadership styles, theories of group dynamics, and the moral and ethical responsibilities of leadership. Upon completion, students should be able to identify and analyze a personal philosophy and style of leadership and integrate these concepts in various practical situations.

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|----------------|--------------------------------|----------|----------|----------|
| 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.

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|----------------|---------------------------------|----------|----------|----------|
| 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.

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|----------------|-------------------------------|----------|----------|----------|
| 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.

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|----------------|------------------------------------|----------|----------|----------|
| 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.

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|----------------|------------------------|----------|----------|----------|
| 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.

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|----------------|-------------------------|----------|----------|----------|
| INS 107 | Claims Adjusting | 3 | 0 | 3 |
|----------------|-------------------------|----------|----------|----------|

Prerequisites:

Corequisites: None

This course introduces the legal basis of contracts and claims. Emphasis is placed on the elements and purpose of negligence, principles of torts, investigation and interview techniques, medical terminology, and diagnostic procedures. Upon completion, students should be able to demonstrate the ability to investigate and legally settle claims.

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|--------------------|---------------------------------|---|---|---|
| INS 108 | Income Taxation of Insur | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: None | | | | |

This course introduces the federal income tax system with particular reference to the taxation of life insurance and annuities. Topics include tax concepts, gross income, business expenses, deductions, credits, sales and exchanges, capital gains and losses, and taxation of business entities. Upon completion, students should be able to demonstrate professional financial service planning strategies to minimize, defer, or avoid taxation for clients.

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|--------------------|--------------------------|---|---|---|
| INS 109 | Employee Benefits | 2 | 0 | 2 |
| Prerequisites: | | | | |
| Corequisites: None | | | | |

This course introduces the concepts of employee benefit options in the business insurance market. Emphasis is placed on governmental and private programs, group insurance benefits, pension plans, and other deferred compensation arrangements. Upon completion, students should be able to explain the fundamental features of employer sponsored benefit plans.

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|--------------------|-------------------------------|---|---|---|
| INT 110 | International Business | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: None | | | | |

This course provides an overview of the environment, concepts, and basic differences involved in international business. Topics include forms of foreign involvement, international trade theory, governmental influences on trade and strategies, international organizations, multinational corporations, personnel management, and international marketing. Upon completion, students should be able to describe the foundation of international business.

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|--------------------|--------------------------|---|---|---|
| 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.

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|--------------------|----------------------------------|---|---|---|
| ISC 113 | Industrial Specifications | 1 | 0 | 1 |
| Prerequisites: | | | | |
| Corequisites: None | | | | |

This course introduces industrial specifications. Emphasis is placed on using machinist reference materials. Upon completion, students should be able to use and interpret charts and data found in reference materials.

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|--------------------|----------------------------|---|---|---|
| ISC 115 | Construction Safety | 2 | 0 | 2 |
| Prerequisites: | | | | |
| Corequisites: None | | | | |

This course introduces the basic concepts of construction site safety. Topics include ladders, lifting, lock-out/tag-out, personal protective devices, scaffolds, and above/below ground work based on OSHA regulations. Upon completion, students should be able to demonstrate knowledge of applicable safety regulations and safely participate in construction projects.

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|----------------|---------------------------|---|---|---|
| ISC 131 | Quality Management | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course provides a study and analysis of the aspects and implications of quality management that lead to customer satisfaction through continuous quality improvement. Topics include Total Quality Management, ISO 9000, organizing for quality, supplier/vendor relationships, and the role of leadership in quality management. Upon completion, students should be able to demonstrate an understanding of quality management concepts and techniques.

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|----------------|----------------------------|---|---|---|
| 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.

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|----------------|---------------------------------|---|---|---|
| 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.

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|----------------|--------------------------------------|---|---|---|
| ISC 135 | Principles of Industrial Mgmt | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers the managerial principles and practices required for organizations to succeed in modern industry. Topics include the functions and roles of all levels of management, organization design, and planning and control of manufacturing operations. Upon completion, students should be able to demonstrate an understanding of management principles and integrate these principles into job situations.

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|----------------|--------------------------------|---|---|---|
| ISC 136 | Productivity Analysis I | 2 | 3 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers modern methods of improving productivity. Topics include traditional motion economy, methods analysis, time standards, process analysis, cycle time management, and human factors/ergonomics. Upon completion, students should be able to demonstrate an understanding of productivity concepts and apply productivity improvement techniques to work situations.

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|----------------|-------------------------------------|---|---|---|
| ISC 140 | Material & Capacity Plan | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers materials requirements planning (MRP) and capacity requirements planning (CRP). Emphasis is placed on measuring the amount of work scheduled and determining the human, physical, and material resources necessary. Upon completion, students should be able to demonstrate an understanding of material and capacity requirements planning and be prepared for the APICS CPIM examination.

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|----------------|------------------------------|----------|----------|----------|
| ISC 141 | Prod Activity Control | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers a broad base of production operations in a wide variety of production environments. Emphasis is placed on the principles, approaches, and techniques needed to schedule, control, measure, and evaluate the effectiveness of production operations. Upon completion, students should be able to demonstrate an understanding of production activity control and be prepared for the APICS CPIM examination.

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|----------------|---------------------|----------|----------|----------|
| ISC 151 | Plant Layout | 2 | 2 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course provides a practical study of factory planning. Emphasis is placed on site selection and efficient arrangement of work areas to achieve lower manufacturing costs. Upon completion, students should be able to produce sample layouts of manufacturing operations.

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|----------------|-------------------------------|----------|----------|----------|
| ISC 170 | Problem-Solving Skills | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers basic concepts of interpersonal and problem-solving skills. Topics include leadership development, constructive feedback, building relationships, and winning support from others. Upon completion, students should be able to use interpersonal skills effectively and lead others.

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|----------------|--|----------|----------|----------|
| ISC 214 | Job Analysis/Wages & Salary | 2 | 3 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers job analysis and evaluation as a basis for determining equitable wages and salaries. Topics include selection and definition of job factors, relative values of factors, preparation of job specifications and descriptions, and determination of wage/salary structure. Upon completion, students should be able to prepare job specifications and descriptions, evaluate jobs by four commonly accepted methods, and calculate costs of wage curves.

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|----------------|-------------------------|----------|----------|----------|
| ISC 216 | Work Measurement | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces the techniques of work simplification, job method improvement, and sampling using the various charts and methods of evaluations to determine utilization. Emphasis is placed on the development of effective work methods and the charting of methods to improve output. Upon completion, students should be able to demonstrate the use of various charts and studies to indicate levels or changes in levels of performance.

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|----------------|------------------------|----------|----------|----------|
| ISC 225 | Facility Layout | 3 | 2 | 4 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course provides a practical study of facility planning with emphasis on a structured approach to solving layout problems. Emphasis is placed on investigating and designing an effective facility layout. Upon completion, students should be able to design a basic work area indicating effective use of allowable resources.

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|----------------|--|---|---|---|
| ISC 230 | Simulation Prod Processes | 1 | 3 | 2 |
| Prerequisites: | Completion of curriculum mathematics requirement | | | |
| Corequisites: | None | | | |

This course introduces fundamental principles and procedures for simulation modeling of production processes. Emphasis is placed on problem-solving and engineering applications of simulation modeling for quality enhancement and productivity improvement. Upon completion, students should be able to analyze and model a production process to obtain optimum productive operations.

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|----------------|----------------------------------|---|---|---|
| ISC 233 | Industrial Org & Mgmt | 3 | 0 | 3 |
| Prerequisites: | ISC 133 | | | |
| Corequisites: | None | | | |

This course covers advanced organization and management philosophies for organization improvement. Emphasis is placed on understanding comprehensive organization improvement concepts such as reengineering, MBQA, ISO 9000, and teams. Upon completion, students should be able to demonstrate an understanding of organizations and assess their strengths and weaknesses.

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|----------------|----------------------------|---|---|---|
| ISC 235 | Management Problems | 3 | 0 | 3 |
| Prerequisites: | ISC 135 | | | |
| Corequisites: | None | | | |

This course covers problem-solving strategies for a variety of industrial management problems. Emphasis is placed on integrating management principles and practices in an industrial setting through a case-study approach. Upon completion, students should be able to analyze a variety of management problems and provide oral and/or written reports which include problem definition and recommendations.

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|----------------|----------------------------|---|---|---|
| ISC 255 | Engineering Economy | 2 | 2 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers the process of economic evaluation of manufacturing industrial alternatives such as equipment selection, replacement studies, and cost reduction proposals. Topics include discounted cash flows, time value of money, income tax considerations, internal rates of return, and comparison of alternatives using computer programs. Upon completion, students should be able to analyze complex manufacturing alternatives based on engineering economy principles.

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|----------------|----------------------------|---|---|---|
| ISC 261 | Methods Improvement | 2 | 3 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces the principles of methods improvement. Topics include the analysis, development, and installation of new methods and/or equipment in the manufacturing operation. Upon completion, students should be able to analyze operations for methods improvements and recommend process modifications.

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|----------------|---------------------------------|---|---|---|
| LEX 110 | Intro to Paralegal Study | 2 | 0 | 2 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces the paralegal profession and the legal system. Topics include regulations and concepts, ethics, case analysis, legal reasoning, career opportunities, certification, professional organizations, and other related topics. Upon completion, students should be able to explain the role of the paralegal and identify the skills, knowledge, and ethics required of legal assistants.

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|----------------|---------------------------------|---|---|---|
| LEX 120 | Legal Research/Writing I | 2 | 2 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces the techniques of legal research and writing. Emphasis is placed on locating, analyzing, applying, and updating sources of law; effective legal writing, including proper citation; and the use of electronic research methods. Upon completion, students should be able to perform legal research and writing assignments using techniques covered in the course.

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|----------------|----------------------------------|---|---|---|
| LEX 121 | Legal Research/Writing II | 2 | 2 | 3 |
| Prerequisites: | LEX 120 | | | |
| Corequisites: | None | | | |

This course covers advanced topics in legal research and writing. Topics include more complex legal issues and assignments involving preparation of legal memos, briefs, and other documents and the advanced use of electronic research methods. Upon completion, students should be able to perform legal research and writing assignments using techniques covered in the course.

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|----------------|-----------------------|---|---|---|
| LEX 130 | Civil Injuries | 2 | 0 | 2 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers traditional tort concepts and the evolving body of individual rights created by statute. Topics include intentional and non-intentional torts with emphasis on negligence, strict liability, civil rights, workplace and environmental liability, remedies, and damages. Upon completion, students should be able to recognize, explain, and evaluate elements of civil injuries and related defenses.

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|----------------|---------------------------|---|---|---|
| LEX 140 | Civil Litigation I | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces the structure of the legal system and the rules governing civil litigation. Emphasis is placed on jurisdiction and the state and federal rules of civil procedure and rules of evidence. Upon completion, students should be able to assist an attorney in the preparation of a civil case.

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|----------------|----------------------------|---|---|---|
| LEX 141 | Civil Litigation II | 2 | 2 | 3 |
| Prerequisites: | LEX 140 | | | |
| Corequisites: | None | | | |

This course covers the paralegal's role in the civil litigation process. Topics include investigation, interviewing, pleadings, motions, discovery, and trial and appellate procedures. Upon completion, students should be able to assist an attorney in preparing, directing, and organizing documents for civil litigation.

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|----------------|-----------------------|---|---|---|
| LEX 150 | Commercial Law | 2 | 2 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers legally enforceable agreements, forms of organization, and selected portions of the Uniform Commercial Code. Topics include drafting and enforcement of contracts, leases, and related documents and selection and implementation of business organization forms, sales, and commercial papers. Upon completion, students should be able to apply the elements of a contract, prepare various business documents, and understand the role of commercial paper.

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|----------------|-------------------------------------|---|---|---|
| LEX 160 | Criminal Law & Procedure | 2 | 2 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces substantive criminal law and procedural rights of the accused. Topics include elements of state/federal crimes, defenses, constitutional issues, pre-trial and trial process, and other related topics. Upon completion, students should be able to explain elements of specific crimes and assist an attorney in preparing a criminal case.

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|----------------|--------------------------------------|---|---|---|
| LEX 180 | Case Analysis & Reasoning | 1 | 2 | 2 |
| Prerequisites: | | | | |
| Corequisites: | LEX 120 | | | |

This course covers the techniques of reading and applying legal opinions and the skills of case analysis. Emphasis is placed on the components of opinions and on types of legal writing. Upon completion, students should be able to read, analyze, and brief opinions and prepare legal memoranda, briefs, and other legal documents.

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|----------------|------------------------|---|---|---|
| LEX 210 | Real Property I | 2 | 0 | 2 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces the study of real property law. Topics include the distinction between real and personal property, various estates, mechanics of conveyance and encumbrance, recordation, special proceedings, and other related topics. Upon completion, students should be able to identify estates, forms of deeds, requirements for recording, and procedures to enforce rights to real property.

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|----------------|-------------------------|---|---|---|
| LEX 211 | Real Property II | 1 | 4 | 3 |
| Prerequisites: | LEX 210 | | | |
| Corequisites: | None | | | |

This course continues the study of real property law relating to title examination and preparation of closing documents. Topics include use of courthouse and other public records in title examination and preparation of documents required in real estate transactions and closings. Upon completion, students should be able to plot/draft a description, perform complete title examination, draft closing documents including title insurance forms, and prepare disbursement reconciliation.

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|----------------|-------------------|---|---|---|
| LEX 240 | Family Law | 2 | 0 | 2 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers laws governing domestic relations. Topics include marriage, separation, divorce, child custody, support, property division, adoption, domestic violence, and other related topics. Upon completion, students should be able to interview clients, gather information, and draft documents related to family law.

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|----------------|-------------------------------------|---|---|---|
| LEX 250 | Wills, Estates, & Trusts | 2 | 2 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers various types of wills, trusts, probate, estate administration, and intestacy. Topics include types of wills and execution requirements, caveats and dissents, intestate succession, inventories and accountings, distribution and settlement, and other related topics. Upon completion, students should be able to draft simple wills, prepare estate forms, understand administration of estates including taxation, and explain terms regarding trusts.

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|----------------|-------------------------------------|---|---|---|
| LEX 260 | Bankruptcy & Collections | 2 | 0 | 2 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course provides an overview of the laws of bankruptcy and the rights of creditors and debtors. Topics include bankruptcy procedures and estate management, attachment, claim and delivery, repossession, foreclosure, collection, garnishment, and post-judgment collection procedure. Upon completion, students should be able to prepare and file bankruptcy forms, collection letters, statutory liens, and collection of judgments.

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|----------------|----------------------------------|---|---|---|
| LEX 270 | Law Office Mgt/Technology | 1 | 2 | 2 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course provides an overview of law office management and organization. Topics include office forms, filing systems, billing/time keeping, computer systems, calendar systems, library administration, case management, office/personnel procedures, ethics, and technology. Upon completion, students should be able to set up and maintain various law office systems, monitor case progress, and supervise non-lawyer personnel.

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|----------------|---------------------------|---|---|---|
| LEX 271 | Law Office Writing | 1 | 2 | 2 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers the basics of writing for the law office including the drafting of general correspondence, the briefing of cases, and the preparation of settlement brochures. Emphasis is placed on legal vocabulary in the context of letter writing, briefing judicial opinions, and the preparation of the settlement brochure. Upon completion, students should be able to draft letters to clients, opposing counsel, government entities, and insurance companies and prepare the settlement brochure.

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|----------------|-------------------------------|---|---|---|
| LEX 283 | Investigation | 1 | 2 | 2 |
| Prerequisites: | LEX 110, LEX 130, and LEX 140 | | | |
| Corequisites: | None | | | |

This course covers various aspects of civil and criminal investigation. Topics include locating witnesses, interviewing techniques, obtaining records, sketching and photographing accident scenes, collecting and preserving evidence, and preparation of exhibits for trial. Upon completion, students should be able to locate witnesses, prepare questionnaires, interview witnesses, obtain criminal/motor vehicle/medical/ accident records, sketch scenes, and prepare exhibits.

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|----------------|--------------------------|---|---|---|
| LEX 285 | Workers' Comp Law | 2 | 0 | 2 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers the process of initiating and handling workers' compensation claims. Emphasis is placed on reviewing and drafting relevant Industrial Commission forms. Upon completion, students should be able to interview clients, gather information, and draft documents related to workers' compensation claims.

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|----------------|-------------------------------|---|----|---|
| 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.

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|----------------|--------------------------------|---|----|---|
| 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.

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|----------------|---------------------------|---|---|---|
| MAC 114 | Intro to Metrology | 2 | 0 | 2 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces the care and use of precision measuring instruments. Emphasis is placed on the inspection of machine parts and use of a wide variety of measuring instruments. Upon completion, students should be able to demonstrate the correct use of measuring instruments.

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|----------------|---------------------|---|---|---|
| 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.

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|----------------|--------------------|---|---|---|
| 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.

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|----------------|--------------------|---|---|---|
| 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.

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|----------------|-------------------------------|---|---|---|
| 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.

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|----------------|--------------------------|---|---|---|
| MAC 226 | CNC EDM Machining | 1 | 3 | 2 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces the programming, setup, and operation of CNC electrical discharge machines. Topics include programming formats, control functions, program editing, production of parts, and inspection. Upon completion, students should be able to manufacture simple parts using CNC electrical discharge machines.

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|----------------|------------------------------|---|---|---|
| MAC 241 | Jigs & Fixtures I | 2 | 6 | 4 |
| Prerequisites: | MAC 112 | | | |
| Corequisites: | None | | | |

This course introduces the application and use of jigs and fixtures. Emphasis is placed on design and manufacture of simple jigs and fixtures. Upon completion, students should be able to design and build simple jigs and fixtures.

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|----------------|---------------------|---|---|---|
| MAC 243 | Die Making I | 2 | 6 | 4 |
| Prerequisites: | MAC 112 | | | |
| Corequisites: | None | | | |

This course introduces the principles and applications of die making. Topics include types, construction, and application of dies. Upon completion, students should be able to design and build simple dies.

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|----------------|----------------------------|---|---|---|
| MAC 245 | Mold Construction I | 2 | 6 | 4 |
| Prerequisites: | MAC 112 | | | |
| Corequisites: | None | | | |

This course introduces the principles of mold making. Topics include types, construction, and application of molds. Upon completion, students should be able to design and build simple molds.

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|----------------|------------------|---|----|----|
| MAS 110 | Masonry I | 4 | 18 | 10 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces the basic principles of construction with masonry units. Topics include history of the masonry field, safety practices, blueprint reading, and principles of laying masonry units to the line using tools, equipment, and materials. Upon completion, students should be able to demonstrate knowledge of safety practices, blueprint reading, and basic tool use; identify materials; operate machinery; and lay masonry units.

| | | | | |
|----------------|-------------------|---|----|----|
| MAS 120 | Masonry II | 4 | 18 | 10 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course provides practical experience in cost estimating, foundations, bonding variations, expansion joints, wall ties, building codes, and other related topics. Emphasis is placed on material estimation, layout of footing, construction of walls, reinforcements, scaffolding, insulating, and building codes. Upon completion, students should be able to determine cost, plan sound building procedures, construct masonry projects, and apply building codes.

| | | | | |
|----------------|--------------------|---|---|---|
| MAS 130 | Masonry III | 6 | 6 | 8 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course provides fundamentals and skills used in masonry construction. Emphasis is placed on building chimneys, fireplaces, columns, concrete masonry, and arches; using materials economically; satisfying needs and expectations; and proper work ethics. Upon completion, students should be able to build structures covered in the course, demonstrate increased speed and accuracy, and make smooth transitions between construction stages.

Initial student placement in developmental courses is based on individual college placement testing policies and procedures. Students should begin developmental course work at the appropriate level indicated by the college's placement test.

| | | | | |
|----------------|--------------------------|---|---|---|
| MAT 050 | Basic Math Skills | 3 | 2 | 4 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course is designed to strengthen basic math skills. Topics include properties, rounding, estimating, comparing, converting, and computing whole numbers, fractions, and decimals. Upon completion, students should be able to perform basic computations and solve relevant mathematical problems.

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|----------------|------------------------------|---|---|---|
| MAT 060 | Essential Mathematics | 3 | 2 | 4 |
| Prerequisites: | MAT 050 | | | |
| 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 | | | |
| Corequisites: | RED 080 or ENG 085 | | | |

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.

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|----------------|-----------------------------|---|---|---|
| MAT 080 | Intermediate Algebra | 3 | 2 | 4 |
| Prerequisites: | MAT 070 | | | |
| Corequisites: | RED 080 or ENG 085 | | | |

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.

| | | | | |
|----------------|----------------------------|---|---|---|
| MAT 090 | Accelerated Algebra | 3 | 2 | 4 |
| Prerequisites: | MAT 060 | | | |
| Corequisites: | RED 080 or ENG 085 | | | |

This course covers algebraic concepts with emphasis on applications. Topics include those covered in MAT 070 and MAT 080. Upon completion, students should be able to apply algebraic concepts in problem solving using appropriate technology.

| | | | | |
|----------------|------------------------------|---|---|---|
| MAT 101 | Applied Mathematics I | 2 | 2 | 3 |
| Prerequisites: | MAT 060 | | | |
| 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 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 groups, probability, sampling techniques, scatter plots, and modeling. Upon completion, students should be able to solve practical problems, reason and communicate with mathematics, and work confidently, collaboratively, and independently.

| | | | | |
|----------------|----------------------------------|---|---|---|
| MAT 120 | Geometry and Trigonometry | 2 | 2 | 3 |
| Prerequisites: | MAT 070 | | | |
| Corequisites: | None | | | |

This course introduces the concepts of plane 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, right triangle trigonometry, and oblique triangles. Upon completion, students should be able to solve applied problems both independently and collaboratively using technology.

| | | | | |
|----------------|-------------------------------|---|---|---|
| MAT 121 | Algebra/Trigonometry I | 2 | 2 | 3 |
| Prerequisites: | MAT 080 or MAT 090 | | | |
| Corequisites: | None | | | |

This course provides an integrated approach to technology and the skills required to manipulate, display, and interpret mathematical functions and formulas used in problem solving. Topics include simplification, evaluation, and solving of algebraic, radical, exponential, and logarithmic functions; descriptive statistics; right triangle trigonometry; and the use of technology. Upon completion, students should be able to demonstrate an understanding of the use of mathematics and technology to solve problems and analyze and communicate results.

| | | | | |
|----------------|--------------------------------|---|---|---|
| MAT 122 | Algebra/Trigonometry II | 2 | 2 | 3 |
| Prerequisites: | MAT 121 | | | |
| Corequisites: | None | | | |

This course extends the concepts covered in MAT 121 to include additional topics in algebra, function analysis, trigonometry, and systems of equations. Topics include translation and scaling of functions, Sine Law, Cosine Law, complex numbers, vectors, statistics, and systems of equations. Upon completion, students should be able to demonstrate an understanding of the use of technology to solve problems and to analyze and communicate results.

| | | | | |
|----------------|------------------------------|---|---|---|
| MAT 140 | Survey of Mathematics | 3 | 0 | 3 |
| Prerequisites: | MAT 070 | | | |
| Corequisites: | None | | | |

This course provides an introduction in a non-technical setting to selected topics in mathematics. Topics include, but are not limited to, sets, logic, probability, statistics, matrices, mathematical systems, geometry, topology, mathematics of finance, and modeling. Upon completion, students should be able to understand a variety of mathematical applications, think logically, and be able to work collaboratively and independently. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

| | | | | |
|-----------------|----------------------------------|---|---|---|
| MAT 140A | Survey of Mathematics Lab | 0 | 2 | 1 |
| Prerequisites: | MAT 070 | | | |
| Corequisites: | MAT 140 | | | |

This course is a laboratory for MAT 140. Emphasis is placed on experiences that enhance the materials presented in the class. Upon completion, students should be able to solve problems, apply critical thinking, work in teams, and communicate effectively.

| | | | | |
|----------------|------------------------|---|---|---|
| MAT 145 | Analytical Math | 3 | 0 | 3 |
| Prerequisites: | MAT 080 or MAT 090 | | | |
| Corequisites: | None | | | |

This course is designed to develop problem-solving and reasoning skills by the study of selected areas of mathematics. Topics include elementary and Boolean algebra, sets, logic, number theory, numeration systems, probability, statistics, and linear programming. Upon completion, students should be able to apply logic and other mathematical concepts.

| | | | | |
|-----------------|----------------------------|---|---|---|
| MAT 145A | Analytical Math Lab | 0 | 2 | 1 |
| Prerequisites: | MAT 080 or MAT 090 | | | |
| Corequisites: | MAT 145 | | | |

This course is a laboratory for MAT 145. 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.

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|----------------|---------------------|---|---|---|
| MAT 151 | Statistics I | 3 | 0 | 3 |
| Prerequisites: | MAT 080 or MAT 090 | | | |
| 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. 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 151A | Statistics I Lab | 0 | 2 | 1 |
| Prerequisites: | MAT 080 or MAT 090 | | | |
| Corequisites: | MAT 151 | | | |

This course is a laboratory for MAT 151. 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.

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|----------------|-----------------------------|---|---|---|
| MAT 155 | Statistical Analysis | 3 | 0 | 3 |
| Prerequisites: | MAT 080 or MAT 090 | | | |
| Corequisites: | None | | | |

This course is an introduction to descriptive and inferential statistics. Topics include sampling, distributions, plotting data, central tendency, dispersion, Central Limits Theorem, confidence intervals, hypothesis testing, correlations, regressions, and multinomial experiments. Upon completion, students should be able to describe data and test inferences about populations using sample data. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

| | | | | |
|-----------------|--------------------------------|---|---|---|
| MAT 155A | Statistics Analysis Lab | 0 | 2 | 1 |
| Prerequisites: | MAT 080 or MAT 090 | | | |
| Corequisites: | MAT 155 | | | |

This course is a laboratory for MAT 155. 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.

| | | | | |
|----------------|------------------------|---|---|---|
| MAT 161 | College Algebra | 3 | 0 | 3 |
| Prerequisites: | MAT 080 or MAT 090 | | | |
| Corequisites: | None | | | |

This course provides an integrated technological approach to algebraic topics used in problem solving. Emphasis is placed on equations and inequalities; polynomial, rational, exponential and logarithmic functions; and graphing and data analysis/modeling. Upon completion, students should be able to choose an appropriate model to fit a data set and use the model for analysis and prediction. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

| | | | | |
|-----------------|----------------------------|---|---|---|
| MAT 161A | College Algebra Lab | 0 | 2 | 1 |
| Prerequisites: | MAT 080 or MAT 090 | | | |
| Corequisites: | MAT 161 | | | |

This course is a laboratory for MAT 161. 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.

| | | | | |
|----------------|-----------------------------|---|---|---|
| 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 162A | College Trig Lab | 0 | 2 | 1 |
| Prerequisites: | MAT 161 | | | |
| Corequisites: | MAT 162 | | | |

This course is a laboratory for MAT 162. 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.

| | | | | |
|----------------|---------------------------|---|---|---|
| MAT 165 | Finite Mathematics | 3 | 0 | 3 |
| Prerequisites: | MAT 161 | | | |
| Corequisites: | None | | | |

This course provides topics used to formulate models and to solve and interpret solutions using an algorithmic approach. Topics include linear algebra, linear programming, simplex method, sets and counting, probability, mathematics of finance, and logic. Upon completion, students should be able to demonstrate both an understanding of the theoretical concepts of finite mathematics and the ability to solve related problems. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

| | | | | |
|-----------------|------------------------|---|---|---|
| MAT 165A | Finite Math Lab | 0 | 2 | 1 |
| Prerequisites: | MAT 161 | | | |
| Corequisites: | MAT 165 | | | |

This course is a laboratory for MAT 165. 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.

| | | | | |
|----------------|----------------------------|---|---|---|
| MAT 171 | Precalculus Algebra | 3 | 0 | 3 |
| Prerequisites: | MAT 080 or MAT 090 | | | |
| Corequisites: | None | | | |

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 has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

| | | | | |
|-----------------|--------------------------------|---|---|---|
| MAT 171A | Precalculus Algebra Lab | 0 | 2 | 1 |
| Prerequisites: | MAT 080 or MAT 090 | | | |
| 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.

| | | | | |
|----------------|---------------------------------|---|---|---|
| MAT 172 | Precalculus Trigonometry | 3 | 0 | 3 |
| Prerequisites: | MAT 171 | | | |
| Corequisites: | None | | | |

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 has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

| | | | | |
|-----------------|-----------------------------|---|---|---|
| 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.

| | | | | |
|----------------|--------------------------------------|---|---|---|
| MAT 175 | Precalculus | 4 | 0 | 4 |
| Prerequisites: | High School Algebra III/Trigonometry | | | |
| 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. 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 175A | Precalculus Lab | 0 | 2 | 1 |
| Prerequisites: | High School Algebra III/Trigonometry | | | |
| Corequisites: | MAT 175 | | | |

This course is a laboratory for MAT 175. 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.

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|----------------|-------------------------|---|---|---|
| MAT 223 | Applied Calculus | 2 | 2 | 3 |
| Prerequisites: | MAT 122 | | | |
| Corequisites: | None | | | |

This course provides an introduction to the calculus concepts of differentiation and integration by way of application and is designed for engineering technology students. Topics include limits, slope, derivatives, related rates, areas, integrals, and applications. Upon completion, students should be able to demonstrate an understanding of the use of calculus and technology to solve problems and to analyze and communicate results.

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|----------------|---------------------------------------|---|---|---|
| MAT 252 | Statistics II | 3 | 0 | 3 |
| Prerequisites: | MAT 151 and either MAT 121 or MAT 161 | | | |
| Corequisites: | None | | | |

This course provides a technology-based treatment of multiple sample inferential statistics. Emphasis is placed on two sample hypothesis tests and confidence intervals, linear and multiple regression, analysis of variance, experimental design, and non-parametric techniques. Upon completion, students should be able to draw statistical inferences on multiple sample data taken from business and health, social, natural, and applied sciences.

| | | | | |
|-----------------|---------------------------------------|---|---|---|
| MAT 252A | Statistics II Lab | 0 | 2 | 1 |
| Prerequisites: | MAT 151 and either MAT 121 or MAT 161 | | | |
| Corequisites: | MAT 252 | | | |

This course is a laboratory for MAT 252. 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.

| | | | | |
|----------------|-----------------------|---|---|---|
| MAT 263 | Brief Calculus | 3 | 0 | 3 |
| Prerequisites: | MAT 161 | | | |
| Corequisites: | None | | | |

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 an 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 requirement 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.

| | | | | |
|----------------|--------------------|---|---|---|
| MAT 271 | Calculus I | 3 | 2 | 4 |
| Prerequisites: | MAT 172 or MAT 175 | | | |
| 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 the third calculus course in a three-course sequence. Topics include functions of several variables, partial derivatives, multiple integrals, solid analytical geometry, vector-valued functions, and line and surface integrals. Upon completion, students should be able to solve problems involving vectors and functions of several variables. *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.

| | | | | |
|----------------|-------------------------|---|---|---|
| MEC 110 | Intro to CAD/CAM | 1 | 2 | 2 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces CAD/CAM. Emphasis is placed on transferring part geometry from CAD to CAM for the development of a CNC-ready program. Upon completion, students should be able to use CAD/CAM software to produce a CNC program.

| | | | | |
|----------------|----------------------------|---|---|---|
| MEC 111 | Machine Processes I | 2 | 3 | 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 131 | Metalworking Processes | 2 | 3 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces the standard practices that are found in a metal workshop. Topics include the proper care/use of basic hand tools and precision measuring instruments and layout procedures/operation of lathes, drill presses, grinders, milling machines, and power saws. Upon completion, students should be able to work safely in the metal workshop and use basic metalworking equipment.

| | | | | |
|----------------|----------------------------|---|---|---|
| MEC 142 | Physical Metallurgy | 1 | 2 | 2 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers the heat treating of metals. Emphasis is placed on the effects of hardening, tempering, and annealing on the structure and physical properties of metals. Upon completion, students should be able to heat treat materials.

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|----------------|------------------------|---|---|---|
| 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.

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|----------------|----------------------------|---|---|---|
| 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 263 | Electro-Pneu Components | 2 | 4 | 4 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces principles and practical applications of electrical/pneumatic control systems, and primary control devices incorporated in those systems. Emphasis is placed on reading and interpreting ladder diagrams, building control circuits, and troubleshooting valves, switches, and sensors. Upon completion, students should be able to design, build, and troubleshoot basic electro-pneumatic control systems.

| | | | | |
|----------------|----------------------------------|---|---|---|
| MIT 110 | Intr to Distance Learning | 2 | 2 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers the principles of distance learning, including an introduction to using an interactive distance learning classroom. Emphasis is placed on the different technologies utilized to provide distance learning events (NCIH, telecourses, Internet, etc.). Upon completion, students should be able to demonstrate an understanding of distance learning principles and the technologies that are used to implement distance learning events.

| | | | | |
|----------------|--------------------------------|---|---|---|
| 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.

| | | | | |
|----------------|--------------------------|---|---|---|
| MIT 215 | Video Integration | 2 | 4 | 4 |
| Prerequisites: | MIT 115 | | | |
| Corequisites: | None | | | |

This course provides an opportunity to gain competence in the integration of digital and analog video resources. Emphasis is placed on configuration, troubleshooting, and management of analog/digital video resources. Upon completion, students should be able to demonstrate familiarity with video setup and configurations and be able to integrate video resources.

| | | | | |
|----------------|--------------------------|---|---|---|
| MIT 220 | Audio Integration | 2 | 4 | 4 |
| Prerequisites: | MIT 120 | | | |
| Corequisites: | None | | | |

This course provides an opportunity to gain a basic level of competence in integration of digital/analog audio resources. Emphasis is placed on configuration, troubleshooting, and management of analog/digital audio resources. Upon completion, students should be able to integrate audio resources into various multimedia systems to meet user requirements.

| | | | | |
|----------------|--------------------------------|---|---|---|
| MIT 230 | Media Sys Design/Implem | 1 | 4 | 3 |
| Prerequisites: | CIS 215, MIT 215, and MIT 220 | | | |
| Corequisites: | None | | | |

This course provides an opportunity to design an entire media integration project. Emphasis is placed on using the system life-cycle method and structured design techniques to design media integration platforms and scheduling the project for completion. Upon completion, students should be able to design and implement an appropriate media integration project based on user specifications.

| | | | | |
|----------------|---------------------------------|---|---|---|
| MIT 250 | Tech Implementation Proj | 2 | 4 | 4 |
| Prerequisites: | MIT 230 | | | |
| Corequisites: | None | | | |

This course provides experience in the implementation of an entire multimedia integration project. Emphasis is placed on designing an appropriate media integration project, scheduling the project for completion within sixteen weeks, and implementing a functioning media project. Upon completion, students should be able to function as a media integration technician in a multimedia environment.

| | | | | |
|----------------|--------------------------------|---|---|---|
| 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 121 | Retailing | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course examines the role of retailing in the economy. Topics include the development of present retail structure, functions performed, effective operations, and managerial problems resulting from current economic and social trends. Upon completion, students should be able to demonstrate an understanding of the basic principles of retailing.

| | | | | |
|----------------|-----------------------------|---|---|---|
| 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.

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|----------------|--|---|---|---|
| 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 221 | Consumer Behavior | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course is designed to describe consumer behavior as applied to the exchange processes involved in acquiring, consuming, and disposing of goods and services. Topics include an analysis of basic and environmental determinants of consumer behavior with emphasis on the decision-making process. Upon completion, students should be able to analyze concepts related to the study of the individual consumer.

| | | | | |
|----------------|--------------------------|---|---|---|
| MKT 222 | Credit Procedures | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers areas of collection that provide an understanding of the expertise needed to manage collection operations. Topics include principles and practices in the extension of credit, collection procedures, and laws pertaining to credit extension and collection. Upon completion, students should be able to demonstrate an understanding of the concepts covered.

| | | | | |
|----------------|---------------------------|---|---|---|
| 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 227 | Marketing Applications | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course extends the study of diverse marketing strategies. Emphasis is placed on case studies and small-group projects involving research or planning. Upon completion, students should be able to effectively participate in the formulation of a marketing strategy. *This course is a unique concentration requirement of the Marketing and Retailing concentration in the Business Administration program.*

| | | | | |
|----------------|--------------------------|---|---|---|
| MKT 228 | Service Marketing | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course is designed to define service marketing, demonstrate its importance, and note its special characteristics. Topics include basic building blocks of service marketing, distinctive aspects of services, and applications of service marketing mix. Upon completion, students should be able to demonstrate a basic understanding of the marketing mix as it applies to the service industry.

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|----------------|-------------------------|---|---|---|
| MKT 230 | Public Relations | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces public relations as it affects communications, strategic planning, and management of the organization. Topics include basic principles and functions of management that guide public relations activities as applied to businesses, services, institutions, and associations. Upon completion, students should be able to perform the communications, evaluation, planning, and research activities of the public relations professional.

| | | | | |
|----------------|----------------------------------|---|---|---|
| MNT 110 | Intro to Maint Procedures | 1 | 3 | 2 |
| Prerequisites: | | | | |
| 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.

| | | | | |
|----------------|---------------------------|---|---|---|
| MUS 110 | Music Appreciation | 3 | 0 | 3 |
| Prerequisites: | | | | |
| 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 111 | Fundamentals of Music | 2 | 0 | 2 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course is an introductory course for students with little or no music background. Emphasis is placed on music notation, rhythmic patterns, scales, key signatures, intervals, and chords. Upon completion, students should be able to demonstrate an understanding of the rudiments of music.

| | | | | |
|----------------|-----------------------------|---|---|---|
| MUS 112 | Introduction to Jazz | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces the origins and musical components of jazz and the contributions of its major artists. Emphasis is placed on the development of discriminating listening habits, as well as the investigation of the styles and structural forms of the jazz idiom. Upon completion, students should be able to demonstrate skills in listening and understanding this form of American music. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

| | | | | |
|----------------|-----------------------|---|---|---|
| MUS 113 | American Music | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces various musical styles, influences, and composers of the United States from pre-Colonial times to the present. Emphasis is placed on the broad variety of music particular to American culture. Upon completion, students should be able to demonstrate skills in basic listening and understanding of American music. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

| | | | | |
|----------------|--------------------------|---|---|---|
| MUS 114 | Non-Western Music | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course provides a basic survey of the music of the non-Western world. Emphasis is placed on non-traditional instruments, sources, and performing practices. Upon completion, students should be able to demonstrate skills in basic listening and understanding of the art of non-Western 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: | | | | |
| 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, ear-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 123 | Music Composition | 0 | 2 | 1 |
| Prerequisites: | MUS 111 or MUS 121 | | | |
| Corequisites: | None | | | |

This course provides a study of elementary forms and traditional approaches to the organization of melody, harmony, rhythm, etc. in musical composition. Emphasis is placed on using musical notation to create new musical works. Upon completion, students should be able to create short musical works using appropriate musical notation.

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|----------------|------------------------------|---|---|---|
| MUS 210 | History of Rock Music | 3 | 0 | 3 |
| Prerequisites: | MUS 110 | | | |
| Corequisites: | None | | | |

This course is a survey of Rock music from the early 1950's to the present. Emphasis is placed on musical groups, soloists, and styles related to the evolution of this idiom and on related historical and social events. Upon completion, students should be able to identify specific styles and to explain the influence of selected performers within their respective eras.

| | | | | |
|----------------|---------------------------------|---|---|---|
| MUS 211 | History of Country Music | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces the varied origins of country music and the commercialization of this art form. Emphasis is placed on historical, sociocultural, and stylistic factors related to country music and musicians. Upon completion, students should be able to identify specific styles and explain the influence of pop culture on the development of country music.

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|----------------|---------------------------------|---|---|---|
| MUS 212 | American Musical Theatre | 3 | 0 | 3 |
| Prerequisites: | MUS 110 | | | |
| Corequisites: | None | | | |

This course covers the origins and development of the musical from *Show Boat* to the present. Emphasis is placed on the investigation of the structure of the musical and its components through listening and analysis. Upon completion, students should be able to demonstrate skills in listening and understanding this form of American music.

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|----------------|----------------------------------|---|---|---|
| MUS 213 | Opera and Musical Theatre | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers the origins and development of opera and musical theatre from the works of Claudio Monteverdi to the present. Emphasis is placed on how the structure and components of opera and musicals effect dramaturgy through listening examples and analysis. Upon completion, students should be able to demonstrate analytical and listening skills in understanding both opera and the musical. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

| | | | | |
|----------------|---------------------------|---|---|---|
| MUS 214 | Electronic Music I | 1 | 2 | 2 |
| Prerequisites: | MUS 111 | | | |
| Corequisites: | None | | | |

This course provides an opportunity to study and explore various electronic instruments and devices. Emphasis is placed on fundamental MIDI applications and implementation, features and application of sequences, sound modules, and digital keyboards. Upon completion, students should be able to demonstrate proficiency by creation of appropriate musical projects using the equipment and techniques covered.

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|----------------|----------------------------|---|---|---|
| MUS 215 | Electronic Music II | 1 | 2 | 2 |
| Prerequisites: | MUS 214 | | | |
| Corequisites: | None | | | |

This course is a continuation of MUS 214. Emphasis is placed on advanced MIDI applications and implementation and continued work with sequencers, sound modules, and digital keyboards. Upon completion, students should be able to demonstrate proficiency by creation of appropriate musical projects using the equipment and techniques covered.

| | | | | |
|----------------|------------------------|---|---|---|
| MUS 271 | Music History I | 3 | 0 | 3 |
| Prerequisites: | MUS 122 | | | |
| Corequisites: | None | | | |

This course is the first of a two-semester, in-depth study of music history. Emphasis is placed on the history and literature of music from Antiquity through the Baroque Period. Upon completion, students should be able to trace important musical developments and demonstrate an understanding of the composers' styles.

| | | | | |
|----------------|-------------------------|---|---|---|
| MUS 272 | Music History II | 3 | 0 | 3 |
| Prerequisites: | MUS 271 | | | |
| Corequisites: | None | | | |

This course is the second of a two-semester, in-depth study of music history. Emphasis is placed on the history and literature of music from the Classical Period to the present. Upon completion, students should be able to trace important musical developments and demonstrate an understanding of the composers' styles.

| | | | | | |
|----------------|----------------------------|---|---|---|---|
| NAS 101 | Nursing Assistant I | 3 | 2 | 3 | 5 |
| Prerequisites: | High school diploma or GED | | | | |
| Corequisites: | None | | | | |

This course introduces basic nursing skills required to provide personal care for patients, residents, or clients in a health care setting. Topics include communications, safety, patients' rights, personal care, vital signs, elimination, nutrition, emergencies, rehabilitation, and mental health. Upon completion, students should be able to demonstrate skills necessary to qualify as a Nursing Assistant I with the North Carolina Nurse Aide I Registry. *This is a certificate-level course.*

| | | | | | |
|----------------|--|---|---|---|---|
| NAS 102 | Nursing Assistant II | 3 | 2 | 6 | 6 |
| Prerequisites: | High school diploma or GED and currently listed as NA I with State of North Carolina | | | | |
| Corequisites: | None | | | | |

This course provides training in selected advanced nursing assistant procedures. Emphasis is placed on sterile techniques, respiratory procedures, catheterizations, wound and trach care, irrigations, and ostomy care. Upon completion, students should be able to demonstrate skills necessary to qualify as a Nursing Assistant II with the North Carolina Board of Nursing. *This is a certificate-level course.*

| | | | | | |
|----------------|----------------------------|---|---|---|---|
| NAS 103 | Home Health Care | 2 | 0 | 0 | 2 |
| Prerequisites: | High school diploma or GED | | | | |
| Corequisites: | None | | | | |

This course covers basic health issues that affect clients in the home setting. Emphasis is placed on home safety, recognizing significant changes in the client's condition, family dynamics, and use of home health care equipment. Upon completion, students should be able to identify care for clients at home. *This is a certificate-level course.*

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|----------------|-----------------------------|---|---|---|---|
| NAS 104 | Home Health Clinical | 0 | 0 | 3 | 1 |
| Prerequisites: | | | | | |
| Corequisites: | None | | | | |

This course provides supervised experience in the home and/or simulated laboratory with emphasis on the application of basic nursing skills. Emphasis is placed on the transfer of knowledge and skills from institutional settings to home environments. Upon completion, students should be able to safely and efficiently provide delegated basic care to clients in the home. *This is a certificate-level course.*

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|----------------|----------------------------|---|---|---|---|
| NAS 105 | Life Span Changes | 2 | 0 | 0 | 2 |
| Prerequisites: | High school diploma or GED | | | | |
| Corequisites: | None | | | | |

This course covers growth and development in relation to the human body throughout the life span. Topics include restorative care, safety, nutrition, and the physical, mental, and social aspects of the aging process. Upon completion, students should be able to understand the changes that occur throughout the life span. *This is a certificate-level course.*

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|----------------|-----------------------------|---|---|---|--|
| NET 110 | Data Comm/Networking | 2 | 2 | 3 | |
| Prerequisites: | | | | | |
| Corequisites: | None | | | | |

This course introduce 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.

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|----------------|--------------------------------|---|---|---|--|
| NET 120 | Network Install/Admin I | 2 | 2 | 3 | |
| Prerequisites: | NET 110 | | | | |
| Corequisites: | None | | | | |

This course covers the installation and administration of network hardware and system software. Topics include network topologies, various network operating systems, server and workstation installation and configuration, printer services, and connectivity options. Upon completion, students should be able to perform basic installation and administration of departmental networks.

| | | | | | |
|----------------|---|---|---|---|----|
| 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. *This is a diploma-level course.*

| | | | | | |
|----------------|-----------------------------|---|---|----|----|
| NUR 102 | Practical Nursing II | 8 | 0 | 12 | 12 |
| Prerequisites: | | | | | |
| Corequisites: | | | | | |

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. *This is a diploma-level course.*

| | | | | | |
|----------------|------------------------------|---|---|----|----|
| NUR 103 | Practical Nursing III | 6 | 0 | 12 | 10 |
| Prerequisites: | | | | | |
| Corequisites: | | | | | |

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. *This is a diploma-level course.*

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|----------------|---|---|---|---|---|
| NUR 110 | Nursing I | 5 | 3 | 6 | 8 |
| Prerequisites: | Admission to the Associate Degree Nursing program | | | | |
| Corequisites: | None | | | | |

This course introduces concepts basic to beginning nursing practice. Emphasis is placed on introducing the nurse's role as provider of care, manager of care, and member of the discipline of nursing. Upon completion, students should be able to demonstrate beginning competence in caring for individuals with common alterations in health.

| | | | | | |
|----------------|-------------------|---|---|---|---|
| NUR 120 | Nursing II | 5 | 3 | 6 | 8 |
| Prerequisites: | NUR 110 | | | | |
| Corequisites: | None | | | | |

This course provides an expanded knowledge base for delivering nursing care to individuals of various ages. Emphasis is placed on developing the nurse's role as provider of care, manager of care, and member of the discipline of nursing. Upon completion, students should be able to participate in the delivery of nursing care for individuals with common alterations in health.

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|----------------|--------------------|---|---|---|---|
| NUR 130 | Nursing III | 4 | 3 | 6 | 7 |
| Prerequisites: | NUR 120 | | | | |
| Corequisites: | None | | | | |

This course provides an expanded knowledge base for delivering nursing care to individuals of various ages. Emphasis is placed on expanding the nurse's role as provider of care, manager of care, and member of the discipline of nursing. Upon completion, students should be able to deliver nursing care to individuals with common alterations in health.

| | | | | | |
|----------------|-------------------|---|---|----|----|
| NUR 210 | Nursing IV | 5 | 3 | 12 | 10 |
| Prerequisites: | NUR 130 | | | | |
| Corequisites: | None | | | | |

This course provides an expanded knowledge base for delivering nursing care to individuals of various ages. Emphasis is placed on using collaboration as a provider of care, manager of care, and member of the discipline of nursing. Upon completion, students should be able to modify nursing care for individuals with common alterations in health.

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|----------------|------------------|---|---|----|----|
| NUR 220 | Nursing V | 4 | 3 | 15 | 10 |
| Prerequisites: | NUR 210 | | | | |
| Corequisites: | None | | | | |

This course provides an expanded knowledge base for delivering nursing care to individuals of various ages. Emphasis is placed on the nurse's role as an independent provider and manager of care for a group of individuals and member of a multidisciplinary team. Upon completion, students should be able to provide comprehensive nursing care to a group of individuals with common complex health alterations.

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|--------------------|------------------|---|---|---|
| NUT 110 | Nutrition | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: None | | | | |

This course covers basic principles of nutrition and their relationship to human health. Topics include meeting nutritional needs of healthy people, menu modification based on special dietary needs, food habits, and contemporary problems associated with food selection. Upon completion, students should be able to apply basic nutritional concepts to food preparation and selection.

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|--------------------|---------------------------------|---|---|---|
| OMT 110 | Intro to Operations Mgmt | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: None | | | | |

This course provides an overview of the operations management field. Topics include production and operations planning, materials management, environmental health and safety, and quality management. Upon completion, students should be able to demonstrate an understanding of the operations management functions.

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|--------------------|-------------------------------------|---|---|---|
| OMT 155 | Meeting & Present Skills | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: None | | | | |

This course is designed to develop skills for facilitating successful meetings by enhancing employee involvement and initiative. Topics include planning meetings that promote results, encouraging diverse points of view, handling disruptive behavior, encouraging participation, and taking action when required. Upon completion, students should be able to plan and participate in meetings that accomplish positive results.

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|--------------------|------------------------------|---|---|---|
| OMT 227 | Maintenance Practices | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: None | | | | |

This course introduces the methods of planning, organizing, and controlling maintenance. Topics include scheduling and supervision, development and use of reports, entrance and retrieval of data, and maintenance of inventory control systems. Upon completion, students should be able to demonstrate an understanding of maintenance practices and procedures.

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|--------------------|-------------------------------|---|---|---|
| OMT 246 | Systems and Technology | 2 | 0 | 2 |
| Prerequisites: | | | | |
| Corequisites: None | | | | |

This course includes the planning and design of production systems and the selection of appropriate technology. Emphasis is placed on investigation into computerized production technology and appropriate systems to implement the technology. Upon completion, students should be able to demonstrate an understanding of production systems and technology and be prepared for the APICS CPIM examination.

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|--------------------|-----------------------------|---|---|---|
| OST 080 | Keyboarding Literacy | 1 | 2 | 2 |
| Prerequisites: | | | | |
| Corequisites: None | | | | |

This course is designed to develop elementary keyboarding skills. Emphasis is placed on mastery of the keyboard. Upon completion, students should be able to demonstrate basic proficiency in keyboarding.

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|----------------|----------------------------|---|---|---|
| OST 122 | Office Computations | 1 | 2 | 2 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces the keypad and the touch method using the electronic calculator. Topics include mathematical functions in business applications. Upon completion, students should be able to use the electronic calculator to solve a wide variety of problems commonly encountered in business.

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|----------------|--------------------|---|---|---|
| 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.

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|----------------|--------------------------------|---|---|---|
| OST 132 | Keyboard Skill Building | 1 | 2 | 2 |
| Prerequisites: | OST 131 | | | |
| Corequisites: | None | | | |

This course provides accuracy- and speed-building drills. Emphasis is placed on diagnostic tests to identify accuracy and speed deficiencies followed by corrective drills. Upon completion, students should be able to keyboard rhythmically with greater accuracy and speed.

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|----------------|--------------------------------|---|---|---|
| OST 133 | Adv Keyboard Skill Bldg | 1 | 2 | 2 |
| Prerequisites: | OST 132 | | | |
| Corequisites: | None | | | |

This course is designed to increase speed and improve accuracy to meet employment tests and job requirements. Emphasis is placed on individualized diagnostic and prescriptive drills. Upon completion, students should be able to keyboard with greater speed and accuracy as measured by five-minute timed writings and skill-development paragraphs.

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|----------------|------------------------------------|---|---|---|
| OST 134 | Text Entry & Formatting | 3 | 2 | 4 |
| 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.

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|----------------|------------------------------------|---|---|---|
| OST 135 | Adv Text Entry & Format | 3 | 2 | 4 |
| Prerequisites: | OST 134 | | | |
| Corequisites: | None | | | |

This course is designed to incorporate computer application skills in the generation of office documents. Emphasis is placed on the production of letters, manuscripts, business forms, tabulation, legal documents, and newsletters. Upon completion, students should be able to make independent decisions regarding planning, style, and method of presentation.

| | | | | |
|----------------|------------------------|---|---|---|
| OST 136 | Word Processing | 1 | 2 | 2 |
| Prerequisites: | | | | |
| 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.

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|----------------|-------------------------------------|---|---|---|
| OST 137 | Office Software Applications | 1 | 2 | 2 |
| Prerequisites: | OST 131 | | | |
| Corequisites: | None | | | |

This course introduces the concepts and functions of software that meets the changing needs of the community. Emphasis is placed on the terminology and use of software through a hands-on approach. Upon completion, students should be able to use software in a business environment.

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|----------------|------------------------------|---|---|---|
| OST 162 | Executive Terminology | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course is designed to increase and improve proficiency in word usage. Topics include root words, prefixes, suffixes, homonyms, synonyms, and specialized vocabularies. Upon completion, students should be able to use acquired vocabulary skills in the global workplace.

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|----------------|----------------------------------|---|---|---|
| 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.

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|----------------|--------------------------------|---|---|---|
| OST 181 | Intro to Office Systems | 3 | 0 | 3 |
| Prerequisites: | OST 131 | | | |
| Corequisites: | None | | | |

This course introduces the skills and abilities needed in today's office. Topics include effectively interacting with co-workers and the public, processing simple financial and informational documents, and performing functions typical of today's offices. Upon completion, students should be able to display skills and decision-making abilities essential for functioning in the total office context.

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|----------------|---------------------------|---|---|---|
| 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.

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|----------------|---------------------------------|---|---|---|
| OST 224 | Machine Transcription II | 1 | 2 | 2 |
| Prerequisites: | OST 223 | | | |
| Corequisites: | None | | | |

This course provides advanced transcription skills. Emphasis is placed on specialized transcription features. Upon completion, students should be able to transcribe complex business documents into mailable copy with minimal assistance.

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|----------------|-----------------------------------|---|---|---|
| OST 233 | Office Publications Design | 2 | 2 | 3 |
| Prerequisites: | OST 136 | | | |
| Corequisites: | None | | | |

This course provides entry-level skills in using software with desktop publishing capabilities. Topics include principles of page layout, desktop publishing terminology and applications, and legal and ethical considerations of software use. Upon completion, students should be able to design and produce professional business documents and publications.

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|----------------|----------------------------------|---|---|---|
| OST 236 | Adv Word/Information Proc | 2 | 2 | 3 |
| Prerequisites: | OST 136 | | | |
| Corequisites: | None | | | |

This course develops proficiency in the utilization of advanced word/information processing functions. Topics include tables, graphics, macros, sorting, document assembly, merging, and newspaper and brochure columns. Upon completion, students should be able to produce a variety of complex business documents.

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|----------------|---------------------------------|---|---|---|
| OST 286 | Professional Development | 2 | 0 | 2 |
| 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.

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|----------------|----------------------------------|---|---|---|
| OST 289 | Office Systems Management | 2 | 2 | 3 |
| Prerequisites: | OST 134, 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.

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|--------------------|------------------------------|----------|----------|----------|
| PAD 151 | Intro to Public Admin | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: None | | | | |

This course includes an overview of the role of the public administrator in government and an examination of the development and implementation of public policy. Topics include public personnel administration and management, decision making, public affairs, ethics, organizational theories, budgetary functions within governmental agencies, and other governmental issues. Upon completion, students should be able to explain the functions of government in society and in the lives of people composing that society. *This course is a unique concentration requirement of the Public Administration concentration in the Business Administration program.*

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|--------------------|-----------------------------|----------|----------|----------|
| PAD 152 | Ethics in Government | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: None | | | | |

This course introduces the ethical issues and problems within the public administration field. Emphasis is placed on building analytical skills, stimulating moral imagination, and recognizing the discretionary power of the administrator's role. Upon completion, students should be able to understand the moral dimensions of public administrative decision making.

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|--------------------|---------------------------------------|----------|----------|----------|
| PAD 251 | Public Finance & Budgeting | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: None | | | | |

This course provides an overview of the public finance and budgeting processes used in the allocation of public resources to meet differing public interests. Topics include the political environment, government expenditures, revenues, taxation, budgetary process theories and techniques, and the relation of government finance to the economy. Upon completion, students should be able to recognize impacts of government revenue and expenditure policies and understand the role of budgeting in executing governmental policy. *This course is a unique concentration requirement of the Public Administration concentration in the Business Administration program.*

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|--------------------|-------------------------------|----------|----------|----------|
| PAD 252 | Public Policy Analysis | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: None | | | | |

This course is a study of methods and techniques used to determine the effectiveness of public programs. Emphasis is placed on the concept of ecology and environmental impact, informal groups and information networks, and the relationship between public and private sectors. Upon completion, students should be able to analyze case studies with the use of political analysis techniques. *This course is a unique concentration requirement of the Public Administration concentration in the Business Administration program.*

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|--------------------|--------------------------------|----------|----------|----------|
| PAD 253 | Intro to Urban Planning | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: None | | | | |

This course includes an analysis of current urban problems and the forces responsible for urban and regional growth. Topics include historical perspectives on the planning approach to urban phenomena and the evaluation of current proposals dealing with aspects of the urban situation. Upon completion, students should be able to evaluate urban and regional growth problems through case study analysis.

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|----------------|----------------------|---|---|---|
| PAD 254 | Grant Writing | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers the basic techniques of successful grant writing. Topics include concept development, funding sources research, and writing skills relevant to the grants process. Upon completion, students should be able to demonstrate a basic understanding of the grants process.

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|----------------|-------------------------------|---|---|---|
| PAD 255 | Government Contracting | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course is a study of the nature, process, and legal ramifications of contracting with and for the federal government. Emphasis is placed on developing and writing bid specifications for contracts and on negotiating and working with contractors. Upon completion, students should be able to read, write, and interpret government contracts.

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|----------------|-------------------|---|---|---|
| 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.

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|----------------|--------------------------|---|---|---|
| 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 weight training program.

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|----------------|-------------------------------|---|---|---|
| PED 125 | Self-Defense-Beginning | 0 | 2 | 1 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course is designed to aid students in developing rudimentary skills in self-defense. Emphasis is placed on stances, blocks, punches, and kicks as well as non-physical means of self-defense. Upon completion, students should be able to demonstrate basic self-defense techniques of a physical and non-physical nature.

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|----------------|----------------------------------|---|---|---|
| PED 126 | Self-Defense-Intermediate | 0 | 2 | 1 |
| Prerequisites: | PED 125 | | | |
| Corequisites: | None | | | |

This course is designed to aid students in building on the techniques and skills developed in PED 125. Emphasis is placed on the appropriate psychological and physiological responses to various encounters. Upon completion, students should be able to demonstrate intermediate skills in self-defense stances, blocks, punches, and kick combinations.

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|----------------|-----------------------|---|---|---|
| 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.

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|----------------|--------------------------|---|---|---|
| PED 129 | Golf-Intermediate | 0 | 2 | 1 |
| Prerequisites: | PED 128 | | | |
| Corequisites: | None | | | |

This course covers the more advanced phases of golf. Emphasis is placed on refining the fundamental skills and learning more advanced phases of the games such as club selection, trouble shots, and course management. Upon completion, students should be able demonstrate the knowledge and ability to play a recreational round 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.

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|----------------|----------------------------|---|---|---|
| PED 131 | Tennis-Intermediate | 0 | 2 | 1 |
| Prerequisites: | PED 130 | | | |
| Corequisites: | None | | | |

This course emphasizes the refinement of playing skills. Topics include continuing the development of fundamentals, learning advanced serves, and strokes and pace and strategies in singles and doubles play. Upon completion, students should be able to play competitive tennis.

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|----------------|------------------------------|---|---|---|
| PED 132 | Racquetball-Beginning | 0 | 2 | 1 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces the fundamentals of racquetball. Emphasis is placed on rules, fundamentals, and strategies of beginning racquetball. Upon completion, students should be able to play recreational racquetball.

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|----------------|---------------------------------|---|---|---|
| PED 133 | Racquetball-Intermediate | 0 | 2 | 1 |
| Prerequisites: | PED 132 | | | |
| Corequisites: | None | | | |

This course covers more advanced racquetball techniques. Emphasis is placed on refining basic skills, performing advanced shots, and playing strategies for singles and doubles. Upon completion, students should be able to play competitive racquetball.

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|----------------|------------------|---|---|---|
| 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.

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|----------------|--------------------------|---|---|---|
| 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.

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|----------------|-----------------------------|---|---|---|
| PED 140 | Bowling-Intermediate | 0 | 2 | 1 |
|----------------|-----------------------------|---|---|---|

Prerequisites: PED 139

Corequisites: None

This course covers more advanced bowling techniques. Emphasis is placed on refining basic skills and performing advanced shots, spins, pace, and strategy. Upon completion, students should be able to participate in competitive bowling.

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|----------------|-----------------------------|---|---|---|
| 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.

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|----------------|--------------------------------|---|---|---|
| PED 144 | Volleyball-Intermediate | 0 | 2 | 1 |
|----------------|--------------------------------|---|---|---|

Prerequisites: PED 143

Corequisites: None

This course covers more advanced volleyball techniques. Emphasis is placed on refining skills and developing more advanced strategies and techniques. Upon completion, students should be able to participate in competitive volleyball.

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|----------------|-----------------------------|---|---|---|
| PED 145 | Basketball-Beginning | 0 | 2 | 1 |
|----------------|-----------------------------|---|---|---|

Prerequisites:

Corequisites: None

This course covers the fundamentals of basketball. Emphasis is placed on skill development, knowledge of the rules, and basic game strategy. Upon completion, students should be able to participate in recreational basketball.

| | | | | |
|----------------|--------------------------------|---|---|---|
| PED 146 | Basketball-Intermediate | 0 | 2 | 1 |
|----------------|--------------------------------|---|---|---|

Prerequisites: PED 145

Corequisites: None

This course covers more advanced basketball techniques. Emphasis is placed on refining skills and developing more advanced strategies and techniques. Upon completion, students should be able to play basketball at a competitive level.

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|----------------|---------------------------|---|---|---|
| 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.

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|----------------|------------------------------|---|---|---|
| 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.

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|----------------|-----------------------|---|---|---|
| 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.

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|----------------|------------------------|---|---|---|
| PED 161 | Canoeing-Rivers | 0 | 2 | 1 |
| Prerequisites: | PED 160 | | | |
| Corequisites: | None | | | |

This course provides practice in the basic skills of river and whitewater canoeing. Emphasis is placed on river running, safety, and care of equipment. Upon completion, students should be able to demonstrate navigation in a moving current, canoe safety, and self-rescue skills.

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|----------------|---------------------|---|---|---|
| PED 169 | Orienteering | 0 | 2 | 1 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces the various types of orienteering and proper orienteering techniques. Emphasis is placed on defining various types of orienteering and recognizing and drawing topographic map symbols. Upon completion, students should be able to draw topographic map symbols and negotiate a 3-5 km cross-country orienteering course in a specified time period.

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|----------------|-----------------------|---|---|---|
| PED 172 | Outdoor Living | 1 | 2 | 2 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course is designed to acquaint the beginning camper with outdoor skills. Topics include camping techniques such as cooking and preserving food, safety, and setting up camp. Upon completion, students should be able to set up camp sites in field experiences using proper procedures.

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|----------------|---------------------|---|---|---|
| PED 183 | Folk Dancing | 0 | 2 | 1 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course teaches the fundamental folk dance movements along with cultural traditions from various countries. Emphasis is placed on the history and traditions of the folk dance as well as the movements and the dances themselves. Upon completion, students should be able to demonstrate folk dances as well as knowledge of their origins and cultural traditions.

PED 220 Exer for Phys Challenged

0 2 1

Prerequisites:

Corequisites: None

This course is designed to improve physical strength, endurance, and range of motion while focusing on individual needs. Emphasis is placed on exercises which are designed and adapted to serve those with special needs. Upon completion, students should be able to show improved physical fitness, body awareness, and an appreciation for their physical well-being.

PHI 210 History of Philosophy

3 0 3

Prerequisites: ENG 111

Corequisites: None

This course introduces fundamental philosophical issues through an historical perspective. Emphasis is placed on such figures as Plato, Aristotle, Lao-Tzu, Confucius, Augustine, Aquinas, Descartes, Locke, Kant, Wollstonecraft, Nietzsche, and Sartre. Upon completion, students should be able to identify and distinguish among the key positions of the philosophers studied. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

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 220 Western Philosophy I

3 0 3

Prerequisites: ENG 111

Corequisites: None

This course covers Western intellectual and philosophic thought from the early Greeks through the medievalists. Emphasis is placed on such figures as the pre-Socratics, Plato, Aristotle, Epicurus, Epictetus, Augustine, Suarez, Anselm, and Aquinas. Upon completion, students should be able to trace the development of leading ideas regarding reality, knowledge, reason, and faith. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

PHI 221 Western Philosophy II

3 0 3

Prerequisites: ENG 111

Corequisites: None

This course covers Western intellectual and philosophic thought from post-medievalists through recent thinkers. Emphasis is placed on such figures as Descartes, Spinoza, Leibnitz, Locke, Berkeley, Hume, Kant, Hegel, Marx, Mill, and representatives of pragmatism, logical positivism, and existentialism. Upon completion, students should be able to trace the development of leading ideas concerning knowledge, reality, science, society, and the limits of reason. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

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|----------------|------------------------------|---|---|---|
| PHI 230 | Introduction to Logic | 3 | 0 | 3 |
| Prerequisites: | ENG 111 | | | |
| Corequisites: | None | | | |

This course introduces basic concepts and techniques for distinguishing between good and bad reasoning. Emphasis is placed on deduction, induction, validity, soundness, syllogisms, truth functions, predicate logic, analogical inference, common fallacies, and scientific methods. Upon completion, students should be able to analyze arguments, distinguish between deductive and inductive arguments, test validity, and appraise inductive reasoning.

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|----------------|-------------------------------|---|---|---|
| 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.*

| | | | | | |
|----------------|---|---|---|---|---|
| PHM 110 | Introduction to Pharmacy | 3 | 0 | 0 | 3 |
| Prerequisites: | Enrollment in the Pharmacy Technology program | | | | |
| Corequisites: | PHM 111 and PHM 115 | | | | |

This course introduces pharmacy practice and the technician's role in a variety of pharmacy settings. Topics include medical terminology and abbreviations, drug delivery systems, law and ethics, prescription and medication orders, and the health care system. Upon completion, students should be able to explain the role of pharmacy technicians, read and interpret drug orders, describe quality assurance, and utilize pharmacy references.

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|----------------|---|---|---|---|---|
| PHM 111 | Pharmacy Practice I | 3 | 3 | 0 | 4 |
| Prerequisites: | Enrollment in the Pharmacy Technology program | | | | |
| Corequisites: | PHM 110 and PHM 115 | | | | |

This course provides instruction in the technical procedures for preparing and dispensing drugs in the hospital and retail settings under supervision of a registered pharmacist. Topics include drug packaging and labeling, out-patient dispensing, hospital dispensing procedures, controlled substance procedures, inventory control, and non-sterile compounding. Upon completion, students should be able to perform basic supervised dispensing techniques in a variety of pharmacy settings.

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|----------------|---|---|---|---|---|
| PHM 115 | Pharmacy Calculations | 3 | 0 | 0 | 3 |
| Prerequisites: | Enrollment in the Pharmacy Technology program | | | | |
| Corequisites: | PHM 110 and PHM 111 | | | | |

This course provides an introduction to the metric, avoirdupois, and apothecary systems of measurement and the calculations used in pharmacy practice. Topics include ratio and proportion, dosage determinations, percentage preparations, reducing and enlarging formulas, dilution and concentration, aliquots, specific gravity and density, and flow rates. Upon completion, students should be able to correctly perform calculations required to properly prepare a medication order.

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|-----------------|---|---|---|---|---|
| PHM 115A | Pharmacy Calculations Lab | 0 | 2 | 0 | 1 |
| Prerequisites: | Enrollment in the Pharmacy Technology program | | | | |
| Corequisites: | None | | | | |

This course provides an opportunity to practice and perform calculations encountered in pharmacy practice. Emphasis is placed on ratio and proportion, dosage calculations, percentage, reduction/enlargement formulas, aliquots, flow rates, and specific gravity/density. Upon completion, students should be able to perform the calculations required to properly prepare a medication order.

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|----------------|-------------------------|---|---|---|---|
| PHM 118 | Sterile Products | 3 | 3 | 0 | 4 |
| Prerequisites: | PHM 110 and PHM 111 | | | | |
| Corequisites: | None | | | | |

This course provides an introduction to intravenous admixture preparation and other sterile products, including total parenteral nutrition and chemotherapy. Topics include aseptic techniques; facilities, equipment, and supplies utilized in admixture preparation; incompatibility and stability; laminar flow hoods; immunizations and irrigation solutions; and quality assurance. Upon completion, students should be able to describe and demonstrate the steps involved in preparation of intermittent and continuous infusions, total parenteral nutrition, and chemotherapy.

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|----------------|---|---|---|---|---|
| PHM 120 | Pharmacology I | 3 | 0 | 0 | 3 |
| Prerequisites: | Enrollment in the Pharmacy Technology program | | | | |
| Corequisites: | None | | | | |

This course introduces the study of the properties, effects, and therapeutic value of the primary agents in the major drug categories. Topics include nutritional products, blood modifiers, hormones, diuretics, cardiovascular agents, respiratory drugs, and gastrointestinal agents. Upon completion, students should be able to place major drugs into correct therapeutic categories and identify indications, side effects, and trade and generic names.

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|----------------|------------------------|---|---|---|---|
| PHM 125 | Pharmacology II | 3 | 0 | 0 | 3 |
| Prerequisites: | PHM 120 | | | | |
| Corequisites: | None | | | | |

This course provides a continuation of the study of the properties, effects, and therapeutic value of the primary agents in the major drug categories. Topics include autonomic and central nervous system agents, anti-inflammatory agents, and anti-infective drugs. Upon completion, students should be able to place major drugs into correct therapeutic categories and identify indications, side effects, and trade and generic names.

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|----------------|---|---|---|---|---|
| PHM 132 | Pharmacy Clinical | 0 | 0 | 6 | 2 |
| Prerequisites: | Enrollment in the Pharmacy Technology program | | | | |
| Corequisites: | Reference program plan of study. | | | | |

This course provides an opportunity to work in pharmacy settings under a pharmacist's supervision. Emphasis is placed on effective communication with personnel, developing proper employee attitude, and dispensing of medications. Upon completion, students should be able to demonstrate an understanding of pharmacy operations, utilize references, dispense medications, prepare patient charges, and efficiently operate computers.

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|----------------|---|---|---|----|---|
| PHM 138 | Pharmacy Clinical | 0 | 0 | 24 | 8 |
| Prerequisites: | Enrollment in the Pharmacy Technology program | | | | |
| Corequisites: | Reference program plan of study | | | | |

This course provides an opportunity to work in pharmacy settings under a pharmacist's supervision. Emphasis is placed on effective communication with personnel, developing proper employee attitude, and dispensing of medications. Upon completion, students should be able to demonstrate an understanding of pharmacy operations, utilize references, dispense medications, prepare patient charges, and efficiently operate computers.

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|----------------|--|---|---|---|---|
| PHM 140 | Trends in Pharmacy | 2 | 0 | 0 | 2 |
| Prerequisites: | | | | | |
| Corequisites: | Pharmacy Clinical as per program plan of study | | | | |

This course covers the major issues, trends, and concepts in contemporary pharmacy practice. Topics include professional ethics, continuing education, job placement, and the latest developments in pharmacy technician practice. Upon completion, students should be able to demonstrate a basic knowledge of the topics discussed.

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|----------------|-------------------------------|---|---|---|
| PHS 110 | Basic Physical Science | 3 | 2 | 4 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces the physical environment with emphasis on the laws and physical concepts that impact the world and universe. Topics include astronomy, geology, meteorology, general chemistry, and general physics. Upon completion, students should be able to describe the forces and composition of the earth and universe.

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|----------------|---------------------------|---|---|---|
| PHS 111 | Physical Science I | 3 | 2 | 4 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers the general principles of chemistry and geology. Topics include measurement, matter, chemical reactions, and geological concepts. Upon completion, students should be able to perform metric measurements, describe chemical composition and reactions, and explain these in relation to the earth's composition.

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|----------------|----------------------------|---|---|---|
| PHS 112 | Physical Science II | 3 | 2 | 4 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers the general principles of physics, astronomy, and meteorology. Topics include measurement, mechanics, forces, heat, light, sound, electricity, descriptive astronomy, and weather. Upon completion, students should be able to measure and analyze the forces and energy, describe the composition of the universe, and explain basic meteorology.

| | | | | |
|----------------|-------------------------------|---|---|---|
| PHS 121 | Applied Physical Sci I | 3 | 2 | 4 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces the general principles of physics and chemistry. Topics include measurement, motion, Newton's laws of motion, momentum, energy, work, power, heat, thermodynamics, waves, sound, light, electricity, magnetism, and chemical principles. Upon completion, students should be able to demonstrate an understanding of the physical environment and be able to apply the scientific principles to observations experienced.

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|----------------|--------------------------------|---|---|---|
| PHS 122 | Applied Physical Sci II | 3 | 2 | 4 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces the principles of nuclear energy, modern physics, geology, oceanography, meteorology, and astronomy. Topics include nuclear chemistry, relativity, composition of the earth, geologic processes and time, ocean currents and tides, eroding beaches, climate, weather, atmospheric influences, and the solar system. Upon completion, students should be able to demonstrate an understanding of the physical environment and be able to apply the scientific principles to observations experienced.

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|----------------|----------------------|---|---|---|
| PHS 130 | Earth Science | 3 | 2 | 4 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course is a survey of the forces that impact the earth. Topics include geology, oceanography, and meteorology. Upon completion, students should be able to explain and identify the forces within, on, and around the earth as they influence the earth's dynamics.

Initial student placement in developmental courses is based on individual college placement testing policies and procedures. Students should begin developmental course work at the appropriate level indicated by the college's placement test.

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|----------------|-------------------------|---|---|---|
| PHY 080 | Intro to Physics | 3 | 2 | 4 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces applied principles of physics through hands-on activities and guided discussions. Emphasis is placed on basic graphical analysis, machines, friction, work, energy, power, hydraulics, heat transfer, and the gas laws. Upon completion, students should be able to use the basic language of physics and utilize problem-solving skills necessary for success in certificate-level physics courses.

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|----------------|------------------------------|---|---|---|
| PHY 090 | Developmental Physics | 3 | 2 | 4 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course strengthens basic vocabulary and problem-solving skills in physics. Topics include an overview of the major divisions of physics, including mechanics, electricity, optics, and modern physics. Upon completion, students should be able to utilize fundamental physics principles and problem-solving skills necessary for success in college-level physics course.

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|----------------|---------------------------|---|---|---|
| PHY 110 | Conceptual Physics | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course provides a conceptually-based exposure to the fundamental principles and processes of the physical world. Topics include basic concepts of motion, forces, energy, heat, electricity, magnetism, and the structure of matter and the universe. Upon completion, students should be able to describe examples and applications of the principles studied. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

| | | | | |
|-----------------|-------------------------------|---|---|---|
| PHY 110A | Conceptual Physics Lab | 0 | 2 | 1 |
| Prerequisites: | | | | |
| Corequisites: | PHY 110 | | | |

This course is a laboratory for PHY 110. Emphasis is placed on laboratory experiences that enhance materials presented in PHY 110. Upon completion, students should be able to apply the laboratory experiences to the concepts presented in PHY 110. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

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|----------------|--------------------------|---|---|---|
| PHY 121 | Applied Physics I | 3 | 2 | 4 |
|----------------|--------------------------|---|---|---|

Prerequisites:

Corequisites: None

This algebra-based course introduces fundamental physical concepts as applied to industrial and service technology fields. Topics include systems of units, problem-solving methods, graphical analyses, vectors, motion, forces, Newton's laws of motion, work, energy, power, momentum, and properties of matter. Upon completion, students should be able to demonstrate an understanding of the principles studied as applied in industrial and service fields.

| | | | | |
|----------------|---------------------------|---|---|---|
| PHY 122 | Applied Physics II | 3 | 2 | 4 |
|----------------|---------------------------|---|---|---|

Prerequisites:

Corequisites: None

This algebra-based course introduces fundamental physical concepts as applied to industrial and service technology fields. Emphasis is placed on systems of units, problem-solving methods, graphical analysis, static electricity, AC and DC circuits, magnetism, transformers, AC and DC motors, and generators. Upon completion, students should be able to demonstrate an understanding of the principles studied as applied in industrial and service fields.

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|----------------|--------------------------------|---|---|---|
| PHY 125 | Health Sciences Physics | 3 | 2 | 4 |
|----------------|--------------------------------|---|---|---|

Prerequisites:

Corequisites: None

This course introduces fundamental physical principles as they apply to health technologies. Topics include motion, force, work, power, simple machines, and other topics as required by the students' area of study. Upon completion, students should be able to demonstrate an understanding of the fundamental principles covered as they relate to practical applications in the health sciences.

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|----------------|--------------------------|---|---|---|
| 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.

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|----------------|-------------------------------------|---|---|---|
| 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.

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|----------------|----------------------------------|---|---|---|
| PHY 133 | Physics-Sound & Light | 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, wave motion, sound, light, and modern physics. 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.*

| | | | | |
|----------------|------------------------|---|----|---|
| PLU 110 | Modern Plumbing | 4 | 15 | 9 |
| Prerequisites: | None | | | |
| Corequisites: | None | | | |

This course introduces the tools, equipment, and materials associated with the plumbing industry. Topics include safety, use and care of tools, recognition and assembly of fittings and pipes, and other related topics. Upon completion, students should be able to safely assemble various pipes and fittings in accordance with state code requirements.

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|--------------------|------------------------------|---|----|---|
| PLU 120 | Plumbing Applications | 4 | 15 | 9 |
| Prerequisites: | | | | |
| Corequisites: None | | | | |

This course covers general plumbing layout, fixtures, and water heaters. Topics include drainage, waste and vent pipes, water service and distribution, fixture installation, water heaters, and other related topics. Upon completion, students should be able to safely install common fixtures and systems in compliance with state and local building codes.

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|--------------------|-------------------------|---|---|---|
| PLU 130 | Plumbing Systems | 3 | 9 | 6 |
| Prerequisites: | | | | |
| Corequisites: None | | | | |

This course covers the maintenance and repair of plumbing lines and fixtures. Emphasis is placed on identifying and diagnosing problems related to water, drain and vent lines, water heaters, and plumbing fixtures. Upon completion, students should be able to identify and diagnose needed repairs to the plumbing system.

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|--------------------|--------------------------------|---|---|---|
| PLU 140 | Intro to Plumbing Codes | 1 | 2 | 2 |
| Prerequisites: | | | | |
| Corequisites: None | | | | |

This course covers plumbing industry codes and regulations. Emphasis is placed on North Carolina regulations and the minimum requirements for plumbing materials and design. Upon completion, students should be able to research and interpret North Carolina plumbing codes.

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|--------------------|--------------------------|---|---|---|
| PLU 150 | Plumbing Diagrams | 1 | 2 | 2 |
| Prerequisites: | | | | |
| Corequisites: None | | | | |

This course introduces sketching diagrams and interpretation of blueprints applicable to the plumbing trades. Emphasis is placed on plumbing plans for domestic and/or commercial buildings. Upon completion, students should be able to sketch plumbing diagrams applicable to the plumbing trades.

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|--------------------|--------------------------------|---|---|---|
| POL 110 | Intro Political Science | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: None | | | | |

This course introduces basic political concepts used by governments and addresses a wide range of political issues. Topics include political theory, ideologies, legitimacy, and sovereignty in democratic and non-democratic systems. Upon completion, students should be able to discuss a variety of issues inherent in all political systems and draw logical conclusions in evaluating these systems. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

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|--------------------|----------------------------|---|---|---|
| POL 120 | American Government | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: None | | | | |

This course is a study of the origins, development, structure, and functions of American national government. Topics include the constitutional framework, federalism, the three branches of government including the bureaucracy, civil rights and liberties, political participation and behavior, and policy formation. Upon completion, students should be able to demonstrate an understanding of the basic concepts and participatory processes of the American political system. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

| | | | | |
|--------------------------|-------------------------------------|---|---|---|
| POL 130 | State & Local Government | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: None | | | | |

This course includes state and local political institutions and practices in the context of American federalism. Emphasis is placed on procedural and policy differences as well as political issues in state, regional, and local governments of North Carolina. Upon completion, students should be able to identify and discuss various problems associated with intergovernmental politics and their effect on the community and the individual.

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|--------------------------|-------------------------------|---|---|---|
| POL 210 | Comparative Government | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: None | | | | |

This course provides a cross-national perspective on the government and politics of contemporary nations such as Great Britain, France, Germany, and Russia. Topics include each country's historical uniqueness, key institutions, attitudes and ideologies, patterns of interaction, and current political problems. Upon completion, students should be able to identify and compare various nations' governmental structures, processes, ideologies, and capacity to resolve major problems. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

| | | | | |
|--------------------------|--------------------------------|---|---|---|
| POL 220 | International Relations | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: None | | | | |

This course provides a study of the effects of ideologies, trade, armaments, and alliances on relations among nation-states. Emphasis is placed on regional and global cooperation and conflict, economic development, trade, non-governmental organizations, and international institutions such as the World Court and UN. Upon completion, students should be able to identify and discuss major international relationships, institutions, and problems. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

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|--------------------------|-----------------------------|---|---|---|
| POL 230 | Political Ideologies | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: None | | | | |

This course introduces major belief systems which underlie modern societies. Emphasis is placed on democracy, capitalism, socialism, communism, fascism, and emerging ideologies of change. Upon completion, students should be able to identify the beliefs and values upon which our society is based and to differentiate those of other nations.

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|--------------------------|--------------------------------|---|---|---|
| POL 240 | The American Presidency | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: None | | | | |

This course provides an in-depth examination of the American presidency as the pivotal institution in American government and history. Emphasis is placed on the creation of the office, its constitutional powers and limitations, elections, and the leadership of selected presidents. Upon completion, students should be able to identify and explain the evolution of presidential powers and the reasons for successful and failed presidential leadership.

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|----------------|-------------------------------|---|---|---|
| POL 241 | Presidential Elections | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course provides an in-depth examination of the process by which an American president is selected. Emphasis is placed on major party primaries and conventions, minor parties, campaigns and voting in the media age, fundraising, and the Electoral College. Upon completion, students should be able to discuss the effectiveness of candidacies and campaigns and to assess the need for reform.

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|----------------|---------------------------------------|---|---|---|
| POS 110 | POS History & Organization | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers the history and organization of the US Postal Service. Topics include postal service history, policies, philosophies, regulations, rules, and organization. Upon completion, students should be able to explain the history and organization of the US Postal Service.

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|----------------|------------------------------------|---|---|---|
| POS 115 | Processing and Distribution | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers the steps involved in reviewing, processing, and dispatching all classes and types of mail. Topics include quality control, platform operation, dispatch discipline, automation and mechanization, mail flow, manual operations, mail preparation, and premium service. Upon completion, students should be able to explain the flow of mail from sender to receiver and the importance of service standards.

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|----------------|----------------------------------|---|---|---|
| POS 120 | Postal Operations Support | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers in-plant support and customer services operations programs support. Topics include quality improvement, address management systems, transportation and networks, delivery services, mail processing, bar coding, and automation sort plans. Upon completion, students should be able to explain postal mechanization, machine distribution, operational planning, budgeting, and functional coordination with customer services.

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|----------------|-----------------------------------|---|---|---|
| POS 125 | Postal Delivery/Collection | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course is an in-depth study of delivery, collection, and Function-Four review. Topics include carrier responsibilities, delivery and collection rules, time keeping, equipment and supplies, mail count and route inspection, parcel post, and Function-Four review. Upon completion, students should be able to explain the duties and skills required in the carrier crafts, the management of delivery services, and staffing and scheduling audits.

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|----------------|----------------------------------|---|---|---|
| POS 130 | POS Support & Finance | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers information and procedures necessary to administer financial control of post offices. Topics include protecting funds and accountable paper, recording receipts and disbursements, verifying accountability, postal service reports, and controlling receipts and receipt forms. Upon completion, students should be able to explain postal revenue receipt and control, budgeting, financial accounting/reporting, time keeping, travel regulations, and administrative services.

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|----------------|-----------------------------------|---|---|---|
| POS 135 | Officer-in-Charge Training | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers the duties of a window clerk. Topics include window services, image and customer relations, one-on-one selling, postage meters, mail classifications, claims and inquiry, and daily financial reporting. Upon completion, students should be able to explain effective customer relations, retailing postal products, professional window service operations, and the duties of customer service representatives.

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|----------------|---------------------------|---|---|---|
| PSY 101 | Applied Psychology | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces the basic principles of psychology as they apply to daily life. Topics include perception, emotions, motivation, adjustment, behavior management, communication, and related topics that promote growth and development on the job and in one's personal life. Upon completion, students should be able to apply the principles learned in this class to everyday living. *This course is intended for certificate and diploma programs.*

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|----------------|------------------------------|---|---|---|
| PSY 110 | Life Span Development | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course provides an introduction to the study of human growth and development. Emphasis is placed on the physical, cognitive, and psychosocial aspects of development from conception to death. Upon completion, students should be able to demonstrate knowledge of development across the life span and apply this knowledge to their specific field of study.

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|----------------|--------------------------|---|---|---|
| PSY 115 | Stress Management | 2 | 0 | 2 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers stressors and techniques for stress management. Topics include anger, assertiveness, adaptation to change, conflict, coping skills, identification of stressors, time management, and the physiology of stress and burnout. Upon completion, students should be able to demonstrate an understanding of the effective management of stress.

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|----------------|---------------------------------|---|---|---|
| PSY 118 | Interpersonal Psychology | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces the basic principles of psychology as they relate to personal and professional development. Emphasis is placed on personality traits, communication/leadership styles, effective problem solving, and cultural diversity as they apply to personal and work environments. Upon completion, students should be able to demonstrate an understanding of these principles of psychology as they apply to personal and professional development.

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|----------------|---------------------------------|---|---|---|
| PSY 141 | Psych of Death and Dying | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course presents psychological perspectives on death and dying. Topics include the culturally diverse aspects of death and the grieving process, adjustment mechanisms, interventions, and the psychological and ethical dimensions of death and dying. Upon completion, students should be able to demonstrate an understanding of the psychosocial aspects of death and dying.

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|----------------|---------------------------|---|---|---|
| PSY 150 | General Psychology | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course provides an overview of the scientific study of human behavior. Topics include history, methodology, biopsychology, sensation, perception, learning, motivation, cognition, abnormal behavior, personality theory, social psychology, and other relevant topics. Upon completion, students should be able to demonstrate a basic knowledge of the science of psychology. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

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|----------------|----------------------------------|---|---|---|
| PSY 234 | Organizational Psychology | 3 | 0 | 3 |
| Prerequisites: | PSY 150 | | | |
| Corequisites: | None | | | |

This course introduces the field of industrial and organizational psychology. Topics include employee motivation, organizational structure, leadership, selection and training, conflict resolution, communication, job satisfaction, and other related influences on performance. Upon completion, students should be able to demonstrate a basic understanding of organizational dynamics and behaviors in the work place.

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|----------------|--------------------------|---|---|---|
| PSY 237 | Social Psychology | 3 | 0 | 3 |
| Prerequisites: | PSY 150 or SOC 210 | | | |
| Corequisites: | None | | | |

This course introduces the study of individual behavior within social contexts. Topics include affiliation, attitude formation and change, conformity, altruism, aggression, attribution, interpersonal attraction, and group behavior. Upon completion, students should be able to demonstrate an understanding of the basic principles of social influences on behavior. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

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|----------------|----------------------------------|---|---|---|
| PSY 239 | Psychology of Personality | 3 | 0 | 3 |
| Prerequisites: | PSY 150 | | | |
| Corequisites: | None | | | |

This course covers major personality theories and personality research methods. Topics include psychoanalytic, behavioristic, social learning, cognitive, humanistic, and trait theories including supporting research. Upon completion, students should be able to compare and contrast traditional and contemporary approaches to the understanding of individual differences in human behavior. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

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|----------------|----------------------------|---|---|---|
| PSY 241 | Developmental Psych | 3 | 0 | 3 |
| Prerequisites: | PSY 150 | | | |
| Corequisites: | None | | | |

This course is a study of human growth and development. Emphasis is placed on major theories and perspectives as they relate to the physical, cognitive, and psychosocial aspects of development from conception to death. Upon completion, students should be able to demonstrate knowledge of development across the life span. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

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|----------------|------------------------------|---|---|---|
| PSY 246 | Adolescent Psychology | 3 | 0 | 3 |
| Prerequisites: | PSY 150 | | | |
| Corequisites: | None | | | |

This course provides an overview of the behavior patterns, life changes, and social issues that accompany the developmental stage of adolescence. Topics include developmental theories; physical, cognitive and psychosocial growth; transitions to young adulthood; and sociocultural factors that influence adolescent roles in home, school and community. Upon completion, students should be able to identify typical and atypical adolescent behavior patterns as well as appropriate strategies for interacting with adolescents.

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|----------------|----------------------------|---|---|---|
| PSY 249 | Psychology of Aging | 3 | 0 | 3 |
| Prerequisites: | PSY 150 | | | |
| Corequisites: | None | | | |

This course covers the particular needs and behaviors of the maturing adult. Emphasis is placed on psychosocial processes; biological and intellectual aspects of aging; adjustments to retirement, dying, bereavement; and the stereotypes and misconceptions concerning the elderly. Upon completion, students should be able to show an understanding of the psychological factors related to the aging process.

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|----------------|--------------------------------|---|---|---|
| PSY 255 | Intro to Exceptionality | 3 | 0 | 3 |
| Prerequisites: | PSY 150 | | | |
| Corequisites: | None | | | |

This course introduces the psychology of the exceptional person. Topics include theoretical perspectives, terminology, and interventions pertaining to various handicapping conditions as well as the resulting psychosocial adjustments. Upon completion, students should be able to demonstrate a basic understanding of the potentials and limitations of the exceptional person.

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|----------------|-----------------------------|---|---|---|
| PSY 256 | Exceptional Children | 3 | 0 | 3 |
| Prerequisites: | PSY 150 | | | |
| Corequisites: | None | | | |

This course introduces major exceptionalities in children including mental, emotional, and physical variations; learning disabilities; and giftedness. Emphasis is placed on theoretical perspectives, identification methods, and intervention strategies. Upon completion, students should be able to demonstrate a general knowledge of the exceptionalities of children and recommended intervention techniques.

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|----------------|----------------------------|---|---|---|
| PSY 261 | Learning and Memory | 3 | 0 | 3 |
| Prerequisites: | PSY 150 | | | |
| Corequisites: | None | | | |

This course provides an in-depth study of the theories, principles, and research findings pertaining to human learning and memory. Topics include classical and operant conditioning, information processing, short-term and long-term storage, retrieval processes, and forgetting. Upon completion, students should be able to demonstrate an understanding of the basic mechanisms of learning and memory as applied to behavior.

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|----------------|-------------------------------|---|---|---|
| PSY 263 | Educational Psychology | 3 | 0 | 3 |
| Prerequisites: | PSY 150 | | | |
| Corequisites: | None | | | |

This course examines the application of psychological theories and principles to the educational process and setting. Topics include learning and cognitive theories, achievement motivation, teaching and learning styles, teacher and learner roles, assessment, and developmental issues. Upon completion, students should be able to demonstrate an understanding of the application of psychological theory to educational practice.

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|----------------|------------------------------|---|---|---|
| PSY 264 | Counseling Techniques | 2 | 2 | 3 |
| Prerequisites: | PSY 150 | | | |
| Corequisites: | None | | | |

This course introduces basic counseling skills, models, and methods used in helping relationships. Emphasis is placed on listening, communication and interviewing skills, practical exercises and techniques, intervention strategies, and self-awareness in helping relationships. Upon completion, students should be able to demonstrate basic helping skills.

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|----------------|--------------------------------|---|---|---|
| PSY 265 | Behavioral Modification | 3 | 0 | 3 |
| Prerequisites: | PSY 150 | | | |
| Corequisites: | None | | | |

This course is an applied study of factors influencing human behavior and strategies for behavioral change. Emphasis is placed on cognitive-behavioral theory, behavioral assessment, practical applications of conditioning techniques, and maintenance of adaptive behavior patterns. Upon completion, students should be able to implement basic learning principles to effect behavioral changes in self and others.

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|----------------|----------------------------|---|---|---|
| PSY 281 | Abnormal Psychology | 3 | 0 | 3 |
| Prerequisites: | PSY 150 | | | |
| Corequisites: | None | | | |

This course provides an examination of the various psychological disorders, as well as theoretical, clinical, and experimental perspectives of the study of psychopathology. Emphasis is placed on terminology, classification, etiology, assessment, and treatment of the major disorders. Upon completion, students should be able to distinguish between normal and abnormal behavior patterns as well as demonstrate knowledge of etiology, symptoms, and therapeutic techniques. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

| | | | | |
|----------------|--------------------------------|---|---|---|
| PSY 284 | Experimental Psychology | 3 | 2 | 4 |
| Prerequisites: | PSY 150 and MAT 161 | | | |
| Corequisites: | None | | | |

This course introduces basic methods of psychological experimentation. Emphasis is placed on research methods and problems of experimental control and data evaluation. Upon completion, students should be able to demonstrate an understanding of experimental methods as they relate to psychology and of statistical methods of research.

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|----------------|--|---|---|---|---|
| PTA 110 | Intro to Physical Therapy | 2 | 3 | 0 | 3 |
| Prerequisites: | Enrollment in the Physical Therapist Assistant program | | | | |
| Corequisites: | None | | | | |

This course introduces the field of physical therapy including the history and standards of practice for the physical therapist assistant and basic treatment techniques. Emphasis is placed on ethical and legal considerations, universal precautions, vital signs, documentation, basic patient preparation and treatment skills, and architectural barrier screening. Upon completion, students should be able to explain the role of the physical therapist assistant and demonstrate competence in basic techniques of patient care.

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|----------------|--|---|---|---|---|
| PTA 120 | Functional Anatomy | 1 | 6 | 0 | 3 |
| Prerequisites: | Enrollment in the Physical Therapist Assistant program | | | | |
| Corequisites: | PTA 140 | | | | |

This course provides an organized study of anatomy and kinesiology. Emphasis is placed on the integration of structure and function of the skeletal, articular, muscular, nervous, and circulatory systems to include gait analysis. Upon completion, students should be able to describe the components and demonstrate function of these systems as applied to physical therapy.

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|----------------|--|---|---|---|---|
| PTA 130 | Physical Therapy Proc I | 1 | 6 | 0 | 3 |
| Prerequisites: | Enrollment in the Physical Therapist Assistant program | | | | |
| Corequisites: | PTA 110 | | | | |

This course covers superficial thermal agents, massage, ultrasound, and documentation methods. Emphasis is placed on physiological effects, indications, contraindications, and skilled applications of heat, cold, ultrasound, massage, and documentation. Upon completion, students should be able to safely, correctly, and effectively apply these techniques and procedures.

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|----------------|--|---|---|---|---|
| PTA 140 | Therapeutic Exercise | 2 | 6 | 0 | 4 |
| Prerequisites: | Enrollment in the Physical Therapist Assistant program | | | | |
| Corequisites: | PTA 120 | | | | |

This course covers muscle physiology, exercise concepts, testing, and applications to the spine and extremities. Topics include strength, endurance, flexibility, and exercise protocols and progressions. Upon completion, students should be able to demonstrate skill in applying therapeutic exercise principles for non-neurological conditions in a safe and appropriate manner.

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|----------------|---------------------------------|---|---|---|---|
| PTA 150 | Physical Therapy Proc II | 1 | 6 | 0 | 3 |
| Prerequisites: | PTA 130 | | | | |
| Corequisites: | None | | | | |

This course, a continuation of PTA 130, emphasizes the theory and practice of electrotherapy, ultraviolet, hydrotherapy, wound and burn care, and deep heating modalities. Topics include application of deep heating modalities, aquatic therapy, edema reduction, high and low frequency currents, and biofeedback. Upon completion, students should be able to apply these modalities and treatment techniques effectively and safely and demonstrate knowledge of physiological principles involved.

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|----------------|----------------------------------|---|---|---|---|
| PTA 160 | Physical Therapy Proc III | 2 | 3 | 0 | 3 |
| Prerequisites: | PTA 150 | | | | |
| Corequisites: | None | | | | |

This course introduces treatment and measurement techniques and discusses treatment programs for neuromusculoskeletal dysfunction and injury. Topics include soft tissue and joint dysfunction; assessment of girth, volume, length, sensation, pain, and muscle strength; and selected exercise programs. Upon completion, students should be able to measure strength and joint motion and identify methods to assess sensation, pain, volume, girth, length, and gait abnormalities.

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|----------------|--|---|---|---|---|
| PTA 170 | Pathophysiology | 3 | 0 | 0 | 3 |
| Prerequisites: | Enrollment in the Physical Therapist Assistant program | | | | |
| Corequisites: | None | | | | |

This course is a survey of basic pathology with emphasis on conditions most frequently observed and treated in physical therapy. Topics include etiology, pathology, manifestation, treatment, and prognosis. Upon completion, students should be able to explain repair processes, categorize diseases, define pathology, identify organ/body systems involved, and discuss treatment and prognosis.

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|----------------|--|---|---|---|---|
| PTA 180 | PTA Clinical Ed Intro | 0 | 0 | 9 | 3 |
| Prerequisites: | Enrollment in the Physical Therapist Assistant program | | | | |
| Corequisites: | None | | | | |

This course introduces the physical therapy clinic in planned learning experiences and practice under supervision. Emphasis is placed on reinforcement of learned skills in direct patient care and communication. Upon completion, students should be able to demonstrate satisfactory performance in learned patient care skills, communication activities, and professional behaviors.

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|----------------|--|---|---|---|---|
| PTA 212 | Health Care/Resources | 2 | 0 | 0 | 2 |
| Prerequisites: | Enrollment in the Physical Therapist Assistant program | | | | |
| Corequisites: | None | | | | |

This course provides an overview of various aspects of health care delivery systems and the interrelationships of health care team members. Topics include health agencies and their functions, health care team member roles, management, and other health care issues. Upon completion, students should be able to discuss the functions of health organizations and team members and aspects of health care affecting physical therapy delivery.

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|----------------|--|---|---|---|---|
| PTA 222 | Professional Interactions | 2 | 0 | 0 | 2 |
| Prerequisites: | Enrollment in the Physical Therapist Assistant program | | | | |
| Corequisites: | None | | | | |

This course is designed to assist in the development of effective interpersonal skills in the physical therapist assistant setting. Topics include reactions to disability, the grieving process, methods of communication, motivation, health promotion, disease prevention, and aging. Upon completion, students should be able to discuss and demonstrate methods for achieving effective interaction with patients, families, the public, and other health care providers.

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|----------------|---------------------------------|---|---|---|---|
| PTA 240 | Physical Therapy Proc IV | 3 | 6 | 0 | 5 |
| Prerequisites: | PTA 160 | | | | |
| Corequisites: | None | | | | |

This course covers normal development, adult and pediatric/CNS dysfunction, spinal cord injuries, amputee rehabilitation techniques, and cardiopulmonary rehabilitation. Topics include neurology review, selected rehabilitation techniques, ADL and functional training, prosthetic and orthotic training, and environmental access. Upon completion, students should be able to demonstrate safe and correct application of selected rehabilitation techniques for neurological dysfunction, cardiopulmonary conditions, and amputations.

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|----------------|----------------------------|---|---|----|----|
| PTA 260 | Adv PTA Clinical Ed | 0 | 0 | 30 | 10 |
| Prerequisites: | PTA 180 | | | | |
| Corequisites: | None | | | | |

This course provides full-time clinical affiliations for planned learning experiences and practice under supervision. Emphasis is placed on reinforcement of learned skills in direct patient care, communications, and professional behaviors. Upon completion, students should be able to demonstrate satisfactory performance as an entry-level physical therapist assistant and as a member of the physical therapy team.

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|----------------|-------------------------------------|---|---|---|---|
| RAD 110 | Rad Intro & Patient Care | 2 | 3 | 0 | 3 |
| Prerequisites: | Enrollment in Radiography program | | | | |
| Corequisites: | RAD 111 and RAD 151 | | | | |

This course provides an overview of the radiography profession and student responsibilities. Emphasis is placed on basic principles of patient care, radiation protection, technical factors, and medical terminology. Upon completion, students should be able to demonstrate basic skills in these areas.

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|----------------|---------------------------------------|---|---|---|---|
| RAD 111 | RAD Procedures I | 3 | 3 | 0 | 4 |
| Prerequisites: | Enrollment in the Radiography program | | | | |
| Corequisites: | RAD 110 and RAD 151 | | | | |

This course provides the knowledge and skills necessary to perform standard radiographic procedures. Emphasis is placed on radiography of the chest, abdomen, extremities, spine, and pelvis. Upon completion, students should be able to demonstrate competence in these areas.

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|----------------|-------------------------------|---|---|---|---|
| RAD 112 | RAD Procedures II | 3 | 3 | 0 | 4 |
| Prerequisites: | RAD 110, RAD 111, and RAD 151 | | | | |
| Corequisites: | None | | | | |

This course provides the knowledge and skills necessary to perform standard radiographic procedures. Emphasis is placed on radiography of the skull, bony thorax, and gastrointestinal, biliary, and urinary systems. Upon completion, students should be able to demonstrate competence in these areas.

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|----------------|-------------------------------|---|---|---|---|
| RAD 121 | Radiographic Imaging I | 2 | 3 | 0 | 3 |
| Prerequisites: | RAD 110, RAD 111, and RAD 151 | | | | |
| Corequisites: | None | | | | |

This course covers factors of image quality and methods of exposure control. Topics include density, contrast, recorded detail, distortion, technique charts, manual and automatic exposure control, and tube rating charts. Upon completion, students should be able to demonstrate an understanding of exposure control and the effects of exposure factors on image quality.

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|----------------|--------------------------------|---|---|---|---|
| RAD 122 | Radiographic Imaging II | 1 | 3 | 0 | 2 |
| Prerequisites: | RAD 112, RAD 121, and RAD 161 | | | | |
| Corequisites: | RAD 131 and RAD 171 | | | | |

This course covers image receptor systems and processing principles. Topics include film, film storage, processing, intensifying screens, grids, and beam limitation. Upon completion, students should be able to demonstrate the principles of selection and usage of imaging accessories to produce quality images.

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|----------------|-------------------------------|---|---|---|---|
| RAD 131 | Radiographic Physics I | 1 | 3 | 0 | 2 |
| Prerequisites: | RAD 112, RAD 121, and RAD 161 | | | | |
| Corequisites: | RAD 122 and RAD 171 | | | | |

This course introduces the fundamental principles of physics that underlie diagnostic X-ray production and radiography. Topics include electromagnetic waves, electricity and magnetism, electrical energy, and power and circuits as they relate to radiography. Upon completion, students should be able to demonstrate an understanding of basic principles of physics as they relate to the operation of radiographic equipment.

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|----------------|---------------------------------------|---|---|---|---|
| RAD 151 | RAD Clinical Ed I | 0 | 0 | 6 | 2 |
| Prerequisites: | Enrollment in the Radiography program | | | | |
| Corequisites: | RAD 110 and RAD 111 | | | | |

This course introduces patient management and basic radiographic procedures in the clinical setting. Emphasis is placed on mastering positioning of the chest and extremities, manipulating equipment, and applying principles of ALARA. Upon completion, students should be able to demonstrate successful completion of clinical objectives.

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|----------------|-------------------------------|---|---|----|---|
| RAD 161 | RAD Clinical Ed II | 0 | 0 | 15 | 5 |
| Prerequisites: | RAD 110, RAD 111, and RAD 151 | | | | |
| Corequisites: | RAD 112 and RAD 121 | | | | |

This course provides additional experience in patient management and in more complex radiographic procedures. Emphasis is placed on mastering positioning of the spine, pelvis, head and neck, and thorax and adapting procedures to meet patient variations. Upon completion, students should be able to demonstrate successful completion of clinical objectives.

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|----------------|-------------------------------|---|---|----|---|
| RAD 171 | RAD Clinical Ed III | 0 | 0 | 12 | 4 |
| Prerequisites: | RAD 112, RAD 121, and RAD 161 | | | | |
| Corequisites: | RAD 122 and RAD 131 | | | | |

This course provides experience in patient management specific to fluoroscopic and advanced radiographic procedures. Emphasis is placed on applying appropriate technical factors to all studies and mastering positioning of gastrointestinal and urological studies. Upon completion, students should be able to demonstrate successful completion of clinical objectives.

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|----------------|---------------------------------------|---|---|---|---|
| RAD 183 | RAD Clinical Elective | 0 | 0 | 9 | 3 |
| Prerequisites: | Enrollment in the Radiography program | | | | |
| Corequisites: | None | | | | |

This course provides advanced knowledge of clinical applications. Emphasis is placed on enhancing clinical skills. Upon completion, students should be able to successfully complete the clinical course objectives.

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|----------------|-------------------------------|---|---|---|---|
| RAD 211 | RAD Procedures III | 2 | 3 | 0 | 3 |
| Prerequisites: | RAD 122 | | | | |
| Corequisites: | RAD 231, RAD 241, and RAD 251 | | | | |

This course provides the knowledge and skills necessary to perform standard and specialty radiographic procedures. Emphasis is placed on radiographic specialty procedures, pathology, and advanced imaging. Upon completion, students should be able to demonstrate competence in these areas.

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|----------------|--------------------------------|---|---|---|---|
| RAD 231 | Radiographic Physics II | 1 | 3 | 0 | 2 |
| Prerequisites: | RAD 171 | | | | |
| Corequisites: | RAD 211, RAD 241, and RAD 251 | | | | |

This course continues the study of physics that underlie diagnostic X-ray production and radiographic and fluoroscopic equipment. Topics include X-ray production, electromagnetic interactions with matter, X-ray devices, equipment circuitry, targets, filtration, and dosimetry. Upon completion, students should be able to demonstrate an understanding of the application of physical concepts as related to image production.

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|----------------|-------------------------------|---|---|---|---|
| RAD 241 | Radiation Protection | 2 | 0 | 0 | 2 |
| Prerequisites: | RAD 122, RAD 131, and RAD 171 | | | | |
| Corequisites: | RAD 211, RAD 231, and RAD 251 | | | | |

This course covers the principles of radiation protection and radiobiology. Topics include the effects of ionizing radiation on body tissues, protective measures for limiting exposure to the patient and personnel, and radiation monitoring devices. Upon completion, students should be able to demonstrate an understanding of the effects and uses of radiation in diagnostic radiology.

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|----------------|------------------------------|---|---|---|---|
| RAD 245 | Radiographic Analysis | 2 | 3 | 0 | 3 |
| Prerequisites: | RAD 251 | | | | |
| Corequisites: | RAD 261 | | | | |

This course provides an overview of imaging concepts and introduces methods of quality assurance. Topics include a systematic approach for image evaluation and analysis of imaging service and quality assurance. Upon completion, students should be able to establish and administer a quality assurance program and conduct a critical review of images.

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|----------------|-------------------------------|---|---|----|---|
| RAD 251 | RAD Clinical Ed IV | 0 | 0 | 21 | 7 |
| Prerequisites: | RAD 122, RAD 131, and RAD 171 | | | | |
| Corequisites: | RAD 211, RAD 231, and RAD 241 | | | | |

This course provides the opportunity to continue mastering all basic radiographic procedures and to attain experience in advanced areas. Emphasis is placed on equipment operation, pathological recognition, pediatric and geriatric variations, and a further awareness of radiation protection requirements. Upon completion, students should be able to demonstrate successful completion of clinical objectives.

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|----------------|--------------------------|---|---|----|---|
| RAD 261 | RAD Clinical Ed V | 0 | 0 | 21 | 7 |
| Prerequisites: | RAD 251 | | | | |
| Corequisites: | RAD 245 | | | | |

This course is designed to enhance expertise in all radiographic procedures, patient management, radiation protection, and image production and evaluation. Emphasis is placed on developing an autonomous approach to the diversity of clinical situations and successfully adapting to those procedures. Upon completion, students should be able to demonstrate successful completion of clinical objectives.

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|----------------|---------------------------------------|---|---|---|---|
| RAD 281 | RAD Clinical Elective | 0 | 0 | 3 | 1 |
| Prerequisites: | Enrollment in the Radiography program | | | | |
| Corequisites: | None | | | | |

This course provides advanced knowledge of clinical applications. Emphasis is placed on enhancing clinical skills. Upon completion, students should be able to successfully complete the clinical course objectives.

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|----------------|--|---|---|---|---|
| RCP 110 | Intro to Respiratory Care | 3 | 3 | 0 | 4 |
| Prerequisites: | Enrollment in the Respiratory Care program | | | | |
| Corequisites: | None | | | | |

This course introduces the respiratory care profession. Topics include the role of the respiratory care practitioner, medical gas administration, basic patient assessment, infection control, and medical terminology. Upon completion, students should be able to demonstrate competence in concepts and procedures through written and laboratory evaluations.

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|----------------|---------------------------------|---|---|---|---|
| RCP 111 | Therapeutics/Diagnostics | 4 | 3 | 0 | 5 |
| Prerequisites: | RCP 110 | | | | |
| Corequisites: | None | | | | |

This course is a continuation of RCP 110. Emphasis is placed on entry-level therapeutic and diagnostic procedures used in respiratory care. Upon completion, students should be able to demonstrate competence in concepts and procedures through written and laboratory evaluations.

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|----------------|-------------------------------------|---|---|---|---|
| RCP 114 | C-P Anatomy & Physiology | 3 | 0 | 0 | 3 |
| Prerequisites: | BIO 168 and 169 | | | | |
| Corequisites: | None | | | | |

This course provides a concentrated study of cardiopulmonary anatomy and physiology essential to the practice of respiratory care. Emphasis is placed on cardiovascular and pulmonary physiology, acid/base balance, and blood gas interpretation. Upon completion, students should be able to demonstrate competence in these concepts through written evaluation.

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|----------------|----------------------------|---|---|---|---|
| RCP 115 | C-P Pathophysiology | 2 | 0 | 0 | 2 |
| Prerequisites: | BIO 168 and 169 | | | | |
| Corequisites: | None | | | | |

This course introduces the etiology, pathogenesis, and physiology of cardiopulmonary diseases and disorders. Emphasis is placed on clinical signs and symptoms along with diagnoses, complications, prognoses, and management. Upon completion, students should be able to demonstrate competence in these concepts through written evaluations.

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|----------------|--|---|---|---|---|
| RCP 133 | RCP Clinical Practice I | 0 | 0 | 9 | 3 |
| Prerequisites: | Enrollment in the Respiratory Care program | | | | |
| Corequisites: | RCP 110 | | | | |

This course provides entry-level clinical experience. Emphasis is placed on therapeutic and diagnostic patient care. Upon completion, students should be able to demonstrate clinical competence in required performance evaluations.

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|----------------|---------------------------------|---|---|---|---|
| RCP 142 | RCP Clinical Practice II | 0 | 0 | 6 | 2 |
| Prerequisites: | RCP 110 | | | | |
| Corequisites: | RCP 111 | | | | |

This course provides entry-level clinical experience. Emphasis is placed on therapeutic and diagnostic patient care. Upon completion, students should be able to demonstrate clinical competence in required performance evaluations.

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|----------------|----------------------------------|---|---|----|---|
| RCP 156 | RCP Clinical Practice III | 0 | 0 | 18 | 6 |
| Prerequisites: | RCP 111 | | | | |
| Corequisites: | None | | | | |

This course provides entry-level clinical experience. Emphasis is placed on therapeutic and diagnostic patient care. Upon completion, students should be able to demonstrate clinical competence in required performance evaluations.

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|----------------|---|---|---|---|---|
| RCP 210 | Critical Care Concepts | 3 | 3 | 0 | 4 |
| Prerequisites: | Successful completion of three semesters of the Respiratory Care program. | | | | |
| Corequisites: | None | | | | |

This course provides further refinement of acute patient care and underlying pathophysiology. Topics include a continuation in the study of mechanical ventilation, underlying pathophysiology, and introduction of critical care monitoring. Upon completion, students should be able to demonstrate competence in concepts and procedures through written and laboratory evaluations.

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|----------------|----------------------------------|---|---|---|---|
| RCP 211 | Adv Monitoring/Procedures | 3 | 3 | 0 | 4 |
| Prerequisites: | RCP 210 | | | | |
| Corequisites: | None | | | | |

This course includes advanced information gathering and decision making for the respiratory care professional. Topics include advanced cardiac monitoring and special procedures. Upon completion, students should be able to evaluate, design, and recommend appropriate care plans through written and laboratory evaluations.

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|----------------|--------------------------|---|---|---|---|
| RCP 214 | Neonatal/Ped's RC | 1 | 3 | 0 | 2 |
| Prerequisites: | RCP 111 | | | | |
| Corequisites: | None | | | | |

This course provides in-depth coverage of the concepts of neonatal and pediatric respiratory care. Emphasis is placed on neonatal and pediatric pathophysiology and on the special therapeutic needs of neonates and children. Upon completion, students should be able to demonstrate competence in these concepts through written and laboratory evaluations.

| | | | | | |
|----------------|--|---|---|---|---|
| RCP 223 | Special Practice Lab | 0 | 3 | 0 | 1 |
| Prerequisites: | Enrollment in the Respiratory Care program | | | | |
| Corequisites: | None | | | | |

This course provides additional laboratory learning opportunities in respiratory care. Emphasis is placed on therapeutic procedures and equipment management. Upon completion, students should be able to demonstrate competence in concepts and procedures through laboratory evaluations.

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|----------------|---------------------------------|---|---|----|---|
| RCP 237 | RCP Clinical Practice IV | 0 | 0 | 21 | 7 |
| Prerequisites: | RCP 111 | | | | |
| Corequisites: | RCP 210 | | | | |

This course provides advanced practitioner clinical experience. Emphasis is placed on therapeutic and diagnostic patient care. Upon completion, students should be able to demonstrate clinical competence in required performance evaluations.

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|----------------|-------------------------------|---|---|---|--|
| REA 101 | Intro Real Est App R-1 | 2 | 0 | 2 | |
| Prerequisites: | | | | | |
| Corequisites: | None | | | | |

This course introduces the entire valuation process, with specific coverage of residential neighborhood and property analysis. Topics include basic real property law, concepts of value and operation of real estate markets, mathematical and statistical concepts, finance, and residential construction/design. Upon completion, students should be able to demonstrate adequate preparation for REA 102. *This course is required for the Real Estate Appraisal certificate.*

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|----------------|--------------------------------------|---|---|---|--|
| REA 102 | Valuation Prin & Prac R-2 | 2 | 0 | 2 | |
| Prerequisites: | REA 101 | | | | |
| Corequisites: | None | | | | |

This course introduces procedures used to develop an estimate of value and how the various principles of value relate to the application of such procedures. Topics include the sales comparison approach, site valuation, sales comparison, the cost approach, the income approach, and reconciliation. Upon completion, students should be able to complete the Uniform Residential Appraisal Report (URAR). *This course is required for the Real Estate Appraisal certificate.*

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|----------------|---------------------------------|---|---|---|--|
| REA 103 | Applied Res Prop Val R-3 | 2 | 0 | 2 | |
| Prerequisites: | REA 102 | | | | |
| Corequisites: | None | | | | |

This course covers the laws and standards practiced by appraisers in the appraisal of residential 1-4 unit properties and small farms. Topics include Financial Institutions Reform and Recovery Enforcement Act (FIRREA), Uniform Standards of Professional Appraisal Practice (USPAP), and North Carolina statutes and rules. Upon completion, students should be able to demonstrate eligibility to sit for the NC Appraisal Board license trainee examination and to enroll in REA 201. *This course is required for the Real Estate Appraisal certificate.*

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|----------------|----------------------------------|---|---|---|
| REA 201 | Intro Income Prop App G-1 | 2 | 0 | 2 |
| Prerequisites: | REA 103 | | | |
| Corequisites: | None | | | |

This course introduces concepts and techniques used to appraise real estate income properties. Topics include real estate market analysis, property analysis and site valuation, how to use financial calculators, present value, NOI, and before-tax cash flow. Upon completion, students should be able to estimate income property values using direct capitalization and to sit for the NC Certified Residential Appraiser examination. *This course is required for the Real Estate Appraisal certificate.*

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|----------------|--|---|---|---|
| REA 202 | Adv Inc Capital Proc G-2 | 2 | 0 | 2 |
| Prerequisites: | REA 201 | | | |
| Corequisites: | A financial calculator is required for this course | | | |

This course expands direct capitalization techniques and introduces yield capitalization. Topics include yield rates, discounted cash flow, financial leverage, and traditional yield capitalization formulas. Upon completion, students should be able to estimate the value of income producing property using yield capitalization techniques. *This course is required for the Real Estate Appraisal certificate.*

| | | | | |
|----------------|---------------------------------|---|---|---|
| REA 203 | Applied Inc Prop Val G-3 | 2 | 0 | 2 |
| Prerequisites: | REA 202 | | | |
| Corequisites: | None | | | |

This course covers the laws, rules, and standards pertaining to the principles and practices applicable to the appraisal of income properties. Topics include FIRREA, USPAP, Uniform Commercial and Industrial Appraisal Report (UCIAR) form, North Carolina statutes and rules, and case studies. Upon completion, students should be able to prepare a narrative report that conforms to the USPAP and sit for the NC Certified General Appraisal examination. *This course is required for the Real Estate Appraisal certificate.*

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|----------------|----------------------------------|---|---|---|
| REC 110 | Intro to Leisure Services | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces park and recreation systems focusing on the social aspects and the role of government in meeting the recreational needs of America. Emphasis is placed on the importance of resource management arising from the social needs of urban America. Upon completion, students should be able to outline the leisure need of America in the 21st century.

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|----------------|-------------------------------------|---|---|---|
| REC 112 | Outdoor Rec Admin & Mgmt | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces the history of natural resource management and basic administration principles as well as management related to outdoor recreation. Emphasis is placed on planning and controlling a budget system, directing the finances of an outdoor recreation program and facility, and hiring and other personnel policies. Upon completion, students should be able to develop, implement, and evaluate a budget system for an outdoor recreation facility.

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|----------------|--------------------------------------|---|---|---|
| REC 113 | Programming & Special Pop | 3 | 3 | 4 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces the essential elements and principles of programming and leisure problems confronting disadvantaged individuals and groups. Topics include programming, organization, supervision, and promotion activities for the developmentally disadvantaged. Upon completion, students should be able to plan, implement, and evaluate a recreation program for all persons.

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|----------------|----------------------------|---|---|---|
| REC 114 | Wilderness Survival | 1 | 2 | 2 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course is designed to acquaint the camper with wilderness survival skills. Topics include selecting equipment, bushwhacking, mapping, safety, orienteering, foraging for food, identifying and constructing shelter, and low impact camping. Upon completion, students should be able to survive in a wilderness setting with minimum equipment and supplies.

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|----------------|--------------------------------|---|---|---|
| REC 119 | Environmental Awareness | 1 | 2 | 2 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces environmental issues such as population dynamics, biodiversity, and ecosystem management. Emphasis is placed on ecosystem structure, management for biodiversity, and current environmental issues. Upon completion, students should be able to evaluate ecosystems and manage areas based on biodiversity concepts.

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|----------------|----------------------------------|---|---|---|
| REC 120 | Intro Special Populations | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces a variety of special populations and conditions that may be encountered in therapeutic recreation environments. Topics include mental retardation, mental illness, communication disorders, as well as many specific physical and muscular conditions. Upon completion, students should be able to define and identify characteristics of special conditions and locate corresponding treatment locations within the community.

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|----------------|-------------------------------|---|---|---|
| REC 122 | Program Administration | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers the organization and implementation of recreational programs. Topics include schedules and budgets, group dynamics, problem-solving techniques, and leadership roles. Upon completion, students should be able to construct schedules for facilities and personnel, prepare budgets and cost analysis, and demonstrate leadership characteristics and problem-solving techniques.

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|----------------|------------------------------|---|---|---|
| REC 123 | Intramural Management | 1 | 3 | 2 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers management of intramural programs. Emphasis is placed on promoting and tracking within the intramural structure and conducting and implementing tournament play, including administration of the campus intramural program. Upon completion, students should be able to demonstrate skills in selecting appropriate activities and scheduling and conducting tournaments.

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|--------------------|------------------------------|---|---|---|
| REC 124 | Social Rec Activities | 1 | 2 | 2 |
| Prerequisites: | | | | |
| Corequisites: None | | | | |

This course covers planning, organizing, and leading social recreational activities and programs. Emphasis is placed on understanding group dynamics and incorporating these techniques in social activities. Upon completion, students should be able to organize and carry out social events for all age groups in various social settings.

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|--------------------|-------------------------|---|---|---|
| REC 125 | Public Relations | 1 | 3 | 2 |
| Prerequisites: | | | | |
| Corequisites: None | | | | |

This course covers the creation of marketing materials used in promoting recreational programs. Topics include computer-generated flyers, posters, newsletters, pamphlets, and brochures; video presentations; and interview skills. Upon completion, students should be able to demonstrate computer skills, video techniques, and other marketing tools used in promoting recreational programs.

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|--------------------|---------------------------|---|---|---|
| REC 126 | Outdoor Recreation | 1 | 2 | 2 |
| Prerequisites: | | | | |
| Corequisites: None | | | | |

This course introduces outdoor recreation and its relationship to our natural surroundings. Emphasis is placed on conservation, wildlife, nature, community resources, and federal and state regulatory agencies. Upon completion, students should be able to plan, organize, and conduct activities in an outdoor natural environment.

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|--------------------|--------------------------------|---|---|---|
| REC 127 | Team Sports & Games | 1 | 2 | 2 |
| Prerequisites: | | | | |
| Corequisites: None | | | | |

This course covers the basic rules, skills, and terminology of selected team sports that are popular in recreation settings. Emphasis is placed on organization, administration, and promotion of sports. Upon completion, students should be able to demonstrate knowledge of the basics of team sports and be able to evaluate a good team sports program.

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|--------------------|--------------------------------------|---|---|---|
| REC 128 | Individual Sports & Games | 1 | 2 | 2 |
| Prerequisites: | | | | |
| Corequisites: None | | | | |

This course covers individual sports and games. Emphasis is placed on skills, rules, equipment, and proper teaching techniques. Upon completion, students should be able to demonstrate the proper techniques necessary to lead others in individual activities.

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|--------------------|---------------------------|---|---|---|
| REC 129 | Fitness Management | 2 | 3 | 3 |
| Prerequisites: | | | | |
| Corequisites: None | | | | |

This course introduces basic fitness principles and evaluation techniques for progressive maintenance programming. Emphasis is placed on testing for physical fitness, cardiovascular conditioning, evaluation of isometric and isotonic strength, and assessing exercise programs for lifetime value. Upon completion, students should be able to assess fitness programs for their personal use and plan programs for public use in various recreational settings.

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|----------------|----------------------------------|---|---|---|
| REC 131 | Prin of Motor Development | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers principles of motor development. Topics include prenatal development; reflexive, rudimentary, and fundamental motor development; and basic motor skills patterns. Upon completion, students should be able to identify the sequential development of fundamental movements, motor patterns, and sports skills.

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|----------------|----------------------------|---|---|---|
| REC 214 | Camp Administration | 3 | 2 | 4 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers the skills and knowledge necessary to work effectively in outdoor camping environments. Emphasis is placed on layout and design of a camp setting and programming outdoor activities and nature skills. Upon completion, students should be able to plan and conduct recreational activities for day and residential camping environments.

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|----------------|------------------------------|---|---|---|
| REC 216 | Rec Arts & Crafts | 1 | 3 | 2 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers the various art media with particular emphasis on their use in recreational settings. Emphasis is placed on practical hands-on experience in age-related multimedia art activities. Upon completion, students should be able to demonstrate teaching techniques and acquired hands-on skills.

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|----------------|---------------------------------|---|---|---|
| REC 217 | Maintenance/Facility Mgt | 2 | 2 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course provides hands-on experience in maintaining equipment and managing a recreational facility. Emphasis is placed on the use of indoor and outdoor recreational facilities and equipment. Upon completion, students should be able to lay out a recreational environment, including equipment that meets safety standards.

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|----------------|--------------------------|---|---|---|
| REC 218 | Cultural Programs | 1 | 3 | 2 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course provides a general knowledge of music, dance, and drama required for cultural programming. Emphasis is placed on activity planning and practical skills in cultural arts. Upon completion, students should be able to discuss values, scope, and organizational patterns for cultural programming.

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|----------------|-------------------------------------|---|---|---|
| REC 222 | Commercial Rec & Tourism | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers job opportunities in the tourism industry. Emphasis is placed on the economic impact of tourism in communities and the job opportunities available through commercial activities. Upon completion, students should be able to describe the economic impact and commercial recreation endeavors within the state.

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|----------------|--------------------------------|---|---|---|
| REC 224 | Leisure & the Aging | 2 | 2 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course covers the basic components of planning leisure programs for older adults. Emphasis is placed on needs and capabilities of older adults, programming techniques, and leadership skills. Upon completion, students should be able to initiate, direct, and coordinate personnel and carry out activities for older adults.

| | | | | |
|----------------|-----------------------------|---|---|---|
| REC 226 | Pathways to Wellness | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces the concept of total wellness by making lifestyle changes so that spiritual, mental, and social well-being are attained. Emphasis is placed on current health information and setting health goals and objectives to attain total well-being. Upon completion, students should be able to make positive changes in attaining personal and family wellness.

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|----------------|---------------------------|---|---|---|
| REC 228 | Volunteer Services | 1 | 3 | 2 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course provides an overview of volunteer possibilities and opportunities for volunteer activities. Emphasis is placed on volunteer characteristics, locations where volunteers are used, and actual volunteering activities. Upon completion, students should be able to state the importance of volunteering and demonstrate capabilities of volunteering in actual locations.

Initial student placement in developmental courses is based on individual college placement testing policies and procedures. Students should begin developmental course work at the appropriate level indicated by the college's placement test.

| | | | | |
|----------------|---------------------------------|---|---|---|
| RED 070 | Essential Reading Skills | 3 | 2 | 4 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course is designed for those with limited reading skills. Emphasis is placed on basic word attack skills, vocabulary, transitional words, paragraph organization, basic comprehension skills, and learning strategies. Upon completion, students should be able to demonstrate competence in the skills required for RED 080. *This course does not satisfy the developmental reading prerequisite for ENG 111 or ENG 111A.*

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|----------------|---------------------------------|---|---|---|
| RED 080 | Intro to College Reading | 3 | 2 | 4 |
| Prerequisites: | RED 070 or ENG 075 | | | |
| Corequisites: | None | | | |

This course introduces effective reading and inferential thinking skills in preparation for RED 090. Emphasis is placed on vocabulary, comprehension, and reading strategies. Upon completion, students should be able to determine main ideas and supporting details, recognize basic patterns of organization, draw conclusions, and understand vocabulary in context. *This course does not satisfy the developmental reading prerequisite for ENG 111 or ENG 111A.*

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|----------------|---------------------------------|---|---|---|
| RED 090 | Improved College Reading | 3 | 2 | 4 |
| Prerequisites: | RED 080 or ENG 085 | | | |
| Corequisites: | None | | | |

This course is designed to improve reading and critical thinking skills. Topics include vocabulary enhancement; extracting implied meaning; analyzing author's purpose, tone, and style; and drawing conclusions and responding to written material. Upon completion, students should be able to comprehend and analyze college-level reading material. *This course satisfies the developmental reading prerequisite for ENG 111 or ENG 111A.*

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|----------------|---------------------------------|---|---|---|
| RED 111 | Crit Reading for College | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course is designed to enhance critical reading skills. Topics include vocabulary enrichment, reading flexibility, metacognitive strategies, and advanced comprehension skills, including analysis and evaluation. Upon completion, students should be able to demonstrate comprehension and analysis and respond effectively to material across disciplines.

| | | | | |
|----------------|------------------------|---|---|---|
| REL 110 | World Religions | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces the world's major religious traditions. Topics include Primal religions, Hinduism, Buddhism, Islam, Judaism, and Christianity. Upon completion, students should be able to identify the origins, history, beliefs, and practices of the religions studied. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

| | | | | |
|----------------|--------------------------|---|---|---|
| REL 111 | Eastern Religions | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces the major Asian religious traditions. Topics include Hinduism, Buddhism, Taoism, Confucianism, and Shinto. Upon completion, students should be able to identify the origins, history, beliefs, and practices of the religions studied. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

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|----------------|--------------------------|---|---|---|
| REL 112 | Western Religions | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces the major western religious traditions. Topics include Zoroastrianism, Islam, Judaism, and Christianity. Upon completion, students should be able to identify the origins, history, beliefs, and practices of the religions studied. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

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|----------------|-------------------------------|---|---|---|
| REL 211 | Intro to Old Testament | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course is a survey of the literature of the Hebrews with readings from the law, prophets, and other writings. Emphasis is placed on the use of literary, historical, archeological, and cultural analysis. Upon completion, students should be able to use the tools of critical analysis to read and understand Old Testament literature. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

| | | | | |
|----------------|-------------------------------|---|---|---|
| REL 212 | Intro to New Testament | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course is a survey of the literature of first-century Christianity with readings from the gospels, Acts, and the Pauline and pastoral letters. Topics include the literary structure, audience, and religious perspective of the writings, as well as the historical and cultural context of the early Christian community. Upon completion, students should be able to use the tools of critical analysis to read and understand New Testament literature. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

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|----------------|----------------------------|---|---|---|
| REL 221 | Religion in America | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course is an examination of religious beliefs and practice in the United States. Emphasis is placed on mainstream religious traditions and non-traditional religious movements from the Colonial period to the present. Upon completion, students should be able to recognize and appreciate the diversity of religious traditions in America. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

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|----------------|---------------------------------|---|---|---|
| RLS 112 | Real Estate Fundamentals | 4 | 0 | 4 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course provides basic instruction in real estate principles and practices. Topics include law, finance, brokerage, closing, valuation, management, taxation, mathematics, construction, land use, property insurance, and NC License Law and Commission Rules. Upon completion, students should be able to demonstrate basic knowledge and skills necessary for real estate sales.

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|----------------|--------------------------------|---|---|---|
| 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.

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|----------------|--|---|---|---|
| RLS 114 | Real Estate Brokerage | 2 | 0 | 2 |
| Prerequisites: | RLS 112 or current Real Estate license | | | |
| Corequisites: | None | | | |

This course provides basic instruction in the various real estate brokerage operations, including trust account records and procedures. Topics include establishing a brokerage firm, management concepts and practices, personnel and training, property management, advertising and publicity, records and bookkeeping systems, and financial operations. Upon completion, students should be able to establish, operate, and manage a realty brokerage practice in a manner which protects and serves the public interest.

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|----------------|--|---|---|---|
| RLS 115 | Real Estate Finance | 2 | 0 | 2 |
| Prerequisites: | RLS 112 or current Real Estate license | | | |
| Corequisites: | None | | | |

This course provides advanced instruction in financing real estate transactions and real property valuation. Topics include sources of mortgage funds, financing instruments, mortgage types, loan underwriting, essential mathematics, and property valuation. Upon completion, students should be able to demonstrate knowledge of real estate finance necessary to act as real estate brokers.

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|----------------|--|---|---|---|
| RLS 116 | Real Estate Law | 2 | 0 | 2 |
| Prerequisites: | RLS 112 or current Real Estate license | | | |
| Corequisites: | None | | | |

This course provides advanced instruction in legal aspects of real estate brokerage. Topics include property ownership and interests, brokerage relationships, agency law, contracts, settlement statements, and NC License Law and Commission Rules. Upon completion, students should be able to demonstrate knowledge of laws relating to real estate brokerage necessary to act as real estate brokers.

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|----------------|---------------------------------|---|---|---|
| RLS 212 | Real Property Management | 2 | 0 | 2 |
| Prerequisites: | RLS 112 | | | |
| Corequisites: | None | | | |

This course covers the principles and practices employed in the management of income-producing properties. Topics include accounting and budgeting techniques, leases and contracts, tenant selection, marketing and investment analysis, and other responsibilities of the property manager. Upon completion, students should be able to read and analyze a property management plan.

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|----------------|------------------------------------|---|---|---|
| RLS 214 | Construction Mthd/Materials | 2 | 2 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course introduces the design of residential structures and the materials, methods, and systems utilized in their construction. Topics include architectural and site considerations, building codes and inspections, cooling and heating systems, and interior/exterior materials. Upon completion, students should be able to identify architectural styles, cabinetry, doors, roofs, windows, and interior/exterior materials and describe environmental concerns.

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|----------------|--------------------------|---|---|---|
| RLS 216 | Land Use Controls | 2 | 0 | 2 |
| Prerequisites: | RLS 112 | | | |
| Corequisites: | None | | | |

This course analyzes private and public issues germane to the "highest and best use" of real property. Topics include the property survey, zoning ordinances, financing, and other considerations appropriate to the development of real property. Upon completion, students should be able to explain public policies and considerations regarding the uses and development of private property.

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|----------------|----------------------------------|---|---|---|
| RLS 218 | Intro Real Prop Valuation | 2 | 0 | 2 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course provides an overview of the entire valuation process for real property. Topics include basic real property law, concepts of value, operations of real estate markets, mathematical and statistical concepts, and residential construction and design. Upon completion, students should be able to read and interpret a form appraisal.

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|----------------|------------------------------|---|---|---|---|
| SLP 111 | Intro to Sp-Lan Patho | 3 | 0 | 0 | 3 |
| Prerequisites: | | | | | |
| Corequisites: | None | | | | |

This course provides an overview of the theory, practice, and philosophy of speech-language pathology assisting. Topics include legal and ethical issues, scope of practice, multiculturalism, and diversity. Upon completion, students should be able to describe characteristics of the profession and identify components of safe and ethical practice.

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|----------------|-------------------------------------|---|---|---|---|
| SLP 112 | SLP Anatomy & Physiology | 3 | 0 | 0 | 3 |
| Prerequisites: | BIO 163, BIO 166, or BIO 169 | | | | |
| Corequisites: | None | | | | |

This course introduces the basic pathophysiology of the orofacial and thoracic structures of the human body. Emphasis is placed on the most commonly treated speech, language, and hearing disorders. Upon completion, students should be able to identify and describe basic pathophysiology related to the production of speech and hearing.

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|----------------|-------------------------------|---|---|---|---|
| SLP 120 | SLP Admin Office Proc | 2 | 0 | 0 | 2 |
| Prerequisites: | Enrollment in the SLP program | | | | |
| Corequisites: | None | | | | |

This course covers organizational and functional skills appropriate to the speech-language pathology workplace. Emphasis is placed on scheduling, office etiquette, operation of office equipment, time management, and quality issues. Upon completion, students should be able to demonstrate correct operation of office equipment and work cooperatively and effectively within the speech-language pathology professional environment.

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|----------------|----------------------------------|---|---|---|---|
| SLP 130 | Phonetics/Speech Patterns | 2 | 2 | 0 | 3 |
| Prerequisites: | Enrollment in the SLP program | | | | |
| Corequisites: | None | | | | |

This course introduces the International Phonetic Alphabet and the categories of speech sounds, including voice, place, and manner of production. Emphasis is placed on the accurate transcription of normal and abnormal speech samples using the IPA and on the production of effective natural speech. Upon completion, students should be able to transcribe and categorize speech sounds and produce natural speech using appropriate breathing, articulation, and pronunciation.

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|----------------|-------------------------------|---|---|---|---|
| SLP 140 | Normal Communication | 3 | 0 | 0 | 3 |
| Prerequisites: | Enrollment in the SLP program | | | | |
| Corequisites: | None | | | | |

This course introduces normal verbal and non-verbal communications across the life span, including appropriate social interaction with diverse populations. Topics include normal speech, language, and hearing in a multicultural society and an introduction to screening for normality and abnormality. Upon completion, students should be able to identify normal speech, language, and hearing patterns.

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|----------------|--|---|---|---|---|
| SLP 211 | Disorders & Treatment I | 3 | 2 | 0 | 4 |
| Prerequisites: | SLP 111, SLP 112, SLP 130, and SLP 140 | | | | |
| Corequisites: | None | | | | |

This course covers screening for speech, language, and hearing disorders; use of observational checklists; and administration of therapeutic protocols. Emphasis is placed on conditions commonly treated in speech-language pathology. Upon completion, students should be able to accurately administer screening tests and therapeutic protocols and identify characteristics of developmental speech, language, and hearing disorders.

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|----------------|-------------------------------------|---|---|---|---|
| SLP 212 | Disorders & Treatment II | 3 | 2 | 3 | 5 |
| Prerequisites: | SLP 211 | | | | |
| Corequisites: | None | | | | |

This course is a continuation of SLP 211 and includes an introduction to clinical settings. Emphasis is placed on acquired conditions commonly treated in speech-language pathology. Upon completion, students should be able to accurately administer screening tests and therapeutic protocols and identify characteristics of acquired speech, language, and hearing disorders.

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|----------------|-------------------------------|---|---|---|---|
| SLP 220 | Assistive Technology | 1 | 2 | 0 | 2 |
| Prerequisites: | SLP 111, SLP 130, and SLP 140 | | | | |
| Corequisites: | SLP 211 | | | | |

This course introduces the preparation, use, and maintenance of selected communication equipment in the treatment of respective disorders. Emphasis is placed on the collaborative use of assistive equipment for speech, language, and hearing disorders. Upon completion, students should be able to instruct the patient and caregiver in the use and maintenance of assistive communication equipment.

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|----------------|----------------------|---|---|----|---|
| SLP 230 | SLP Fieldwork | 0 | 0 | 12 | 4 |
| Prerequisites: | SLP 211 | | | | |
| Corequisites: | SLP 212 and SLP 231 | | | | |

This course provides supervised fieldwork experience in speech-language pathology assisting in a minimum of two diverse sites. Emphasis is placed on the use of written protocols in providing patient care. Upon completion, students should be able to integrate ethical concepts into safe and effective clinical practice.

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|----------------|------------------------------|---|---|---|---|
| SLP 231 | SLP Fieldwork Seminar | 3 | 0 | 0 | 3 |
| Prerequisites: | SLP 211 | | | | |
| Corequisites: | SLP 212 and SLP 230 | | | | |

This course provides an opportunity to discuss fieldwork experiences with peers and faculty. Emphasis is placed on management of clinical problems, conflict resolution, and job seeking and retention skills. Upon completion, students should be able to meet entry-level requirements for speech-language pathology assistants.

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|----------------|----------------------------------|---|---|---|--|
| SOC 210 | Introduction to Sociology | 3 | 0 | 3 | |
| Prerequisites: | | | | | |
| 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: | | | | | |
| 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.*

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|--------------------|------------------------|---|---|---|
| SOC 220 | Social Problems | 3 | 0 | 3 |
| Prerequisites: | | | | |
| 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.*

| | | | | |
|--------------------|-------------------------|---|---|---|
| SOC 225 | Social Diversity | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: None | | | | |

This course provides a comparison of diverse roles, interests, opportunities, contributions, and experiences in social life. Topics include race, ethnicity, gender, sexual orientation, class, and religion. Upon completion, students should be able to analyze how cultural and ethnic differences evolve and how they affect personality development, values, and tolerance. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

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|--------------------|----------------------------------|---|---|---|
| SOC 230 | Race and Ethnic Relations | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: None | | | | |

This course includes an examination of the various aspects of race and ethnicity and how these lead to different experiences, opportunities, problems, and contributions. Topics include prejudice, discrimination, perceptions, myths, stereotypes, and intergroup relationships. Upon completion, students should be able to identify and analyze relationships among racial and ethnic groups within the larger society.

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|--------------------|--------------------------------|---|---|---|
| SOC 232 | Social Context of Aging | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: None | | | | |

This course provides an overview of the social implications of the aging process. Emphasis is placed on the roles of older adults within families, work and economics, politics, religion, education, and health care. Upon completion, students should be able to identify and analyze changing perceptions, diverse lifestyles, and social and cultural realities of older adults.

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|--------------------|--------------------------|---|---|---|
| SOC 240 | Social Psychology | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: None | | | | |

This course examines the influence of culture and social groups on individual behavior and personality. Emphasis is placed on the process of socialization, communication, conformity, deviance, interpersonal attraction, intimacy, race and ethnicity, small group experiences, and social movements. Upon completion, students should be able to identify and analyze cultural and social forces that influence the individual in a society. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

| | | | | |
|----------------|------------------------------|---|---|---|
| SOC 242 | Sociology of Deviance | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course provides an overview of deviant behavior and the processes involved in its definition, causation, prevention, control, and treatment. Topics include theories of causation, social control, delinquency, victimization, criminality, the criminal justice system, punishment, rehabilitation, and restitution. Upon completion, students should be able to identify and analyze issues surrounding the nature and development of social responses to deviance.

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|----------------|---------------------------------|---|---|---|
| SOC 244 | Soc of Death & Dying | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course presents sociological perspectives on death and dying. Emphasis is placed on analyzing the different death rates among various groups, races, and societies, as well as various types of death. Upon completion, students should be able to discuss the rituals of death, both cultural and religious, and examine current issues relating to death and dying.

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|----------------|------------------------------|---|---|---|
| SOC 250 | Sociology of Religion | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course examines religion from a sociological perspective as part and product of human society. Topics include the origins, development, and functions of belief systems; religious organizations; conversion; and interactions with politics, the economy, science, and the class system. Upon completion, students should be able to describe and analyze religious systems.

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|----------------|-----------------------------|---|---|---|
| SPA 111 | Elementary Spanish I | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

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: | None | | | |

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: | | | | |
| 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, students should be able to communicate at a functional level with native speakers and demonstrate cultural sensitivity.

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|----------------|---------------------------------|---|---|---|
| SPA 141 | Culture and Civilization | 3 | 0 | 3 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

This course provides an opportunity to explore issues related to the Hispanic world. Topics include historical and current events, geography, and customs. Upon completion, students should be able to identify and discuss selected topics and cultural differences related to the Hispanic world.

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|----------------|----------------------------|---|---|---|
| SPA 151 | Hispanic Literature | 3 | 0 | 3 |
| Prerequisites: | ENG 111 | | | |
| Corequisites: | None | | | |

This course includes selected readings by Hispanic writers. Topics include fictional and non-fictional works by representative authors from a variety of genres and literary periods. Upon completion, students should be able to analyze and discuss selected texts within relevant cultural and historical contexts.

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|----------------|---------------------------|---|---|---|
| SPA 161 | Cultural Immersion | 2 | 3 | 3 |
| Prerequisites: | SPA 111 | | | |
| Corequisites: | None | | | |

This course explores Hispanic culture through intensive study on campus and field experience in a host country or area. Topics include an overview of linguistic, historical, geographical, sociopolitical, economic, and/or artistic concerns of the area visited. Upon completion, students should be able to exhibit first-hand knowledge of issues pertinent to the host area and demonstrate understanding of cultural differences.

| | | | | |
|----------------|----------------------|---|---|---|
| SPA 181 | Spanish Lab 1 | 0 | 2 | 1 |
| Prerequisites: | | | | |
| Corequisites: | None | | | |

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: | None | | | |

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.

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|----------------|-------------------------------|---|---|---|
| SPA 211 | Intermediate Spanish I | 3 | 0 | 3 |
| Prerequisites: | SPA 112 | | | |
| Corequisites: | None | | | |

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: | None | | | |

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 221 | Spanish Conversation | 3 | 0 | 3 |
| Prerequisites: | SPA 212 | | | |
| Corequisites: | None | | | |

This course provides an opportunity for intensive communication in spoken Spanish. Emphasis is placed on vocabulary acquisition and interactive communication through the discussion of media materials and authentic texts. Upon completion, students should be able to discuss selected topics, express ideas and opinions clearly, and engage in formal and informal conversations.

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|----------------|--------------------------------|---|---|---|
| SPA 231 | Reading and Composition | 3 | 0 | 3 |
| Prerequisites: | SPA 212 | | | |
| Corequisites: | None | | | |

This course provides an opportunity for intensive reading and composition in Spanish. Emphasis is placed on the use of literary and cultural materials to enhance and expand reading and writing skills. Upon completion, students should be able to demonstrate in writing an in-depth understanding of assigned readings.

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|----------------|----------------------|---|---|---|
| SPA 281 | Spanish Lab 3 | 0 | 2 | 1 |
| Prerequisites: | SPA 182 | | | |
| Corequisites: | None | | | |

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.

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|----------------|----------------------|---|---|---|
| SPA 282 | Spanish Lab 4 | 0 | 2 | 1 |
| Prerequisites: | SPA 281 | | | |
| Corequisites: | None | | | |

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.

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|----------------|---------------------|---|---|---|
| SRV 110 | Surveying I | 2 | 6 | 4 |
| Prerequisites: | EGR 115 and MAT 121 | | | |
| Corequisites: | None | | | |

This course introduces the theory and practice of plane surveying. Topics include measuring distances and angles, differential and profile leveling, compass applications, topography, and mapping. Upon completion, students should be able to use/care for surveying instruments, demonstrate field note techniques, and apply the theory and practice of plane surveying.

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|----------------|---------------------|---|---|---|
| SRV 111 | Surveying II | 2 | 6 | 4 |
| Prerequisites: | SRV 110 | | | |
| Corequisites: | None | | | |

This course introduces route surveying and roadway planning and layout. Topics include simple, compound, reverse, spiral, and vertical curves; geometric design and layout; planning of cross-section and grade line; drainage; earthwork calculations; and mass diagrams. Upon completion, students should be able to calculate and lay out highway curves; prepare roadway plans, profiles, and sections; and perform slope staking.

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|----------------|----------------------|---|---|---|
| SRV 210 | Surveying III | 2 | 6 | 4 |
| Prerequisites: | SRV 110 | | | |
| Corequisites: | None | | | |

This course introduces boundary surveying, land partitioning, and calculations of areas. Topics include advanced traverses and adjustments, preparation of survey documents, and other related topics. Upon completion, students should be able to research, survey, and map a boundary.

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|----------------|----------------------|---|---|---|
| SRV 220 | Surveying Law | 2 | 2 | 3 |
| Prerequisites: | SRV 110 | | | |
| Corequisites: | None | | | |

This course introduces the law as related to the practice of surveying. Topics include surveyors' responsibilities, deed descriptions, title searches, eminent domain, easements, weight of evidence, riparian rights, and other related topics. Upon completion, students should be able to identify and apply the basic legal aspects associated with the practice of land surveying.

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|----------------|-------------------------------|---|---|---|
| SRV 230 | Subdivision Planning | 1 | 6 | 3 |
| Prerequisites: | SRV 111, SRV 210, and CIV 211 | | | |
| Corequisites: | None | | | |

This course covers the planning aspects of residential subdivisions from analysis of owner and municipal requirements to plat layout and design. Topics include municipal codes, lot sizing, roads, incidental drainage, esthetic considerations, and other related topics. Upon completion, students should be able to prepare a set of subdivision plans.

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|----------------|----------------------------|---|---|---|
| SRV 240 | Topo/Site Surveying | 2 | 6 | 4 |
| Prerequisites: | SRV 110 | | | |
| Corequisites: | None | | | |

This course covers topographic, site, and construction surveying. Topics include topographic mapping, earthwork, site planning, construction staking, and other related topics. Upon completion, students should be able to prepare topographic maps and site plans and locate and stake out construction projects.

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|----------------|---|---|---|---|---|
| SUR 110 | Intro to Surg Tech | 2 | 0 | 0 | 2 |
| Prerequisites: | Enrollment in the Surgical Technology Program | | | | |
| Corequisites: | SUR 111 | | | | |

This course provides a comprehensive study of the operative environment, professional roles, moral/legal/ethical responsibilities, and medical communication techniques used in surgical technology. Topics include historical development, medical terminology, physical environment and safety measures, interdepartmental/peer/patient relationships, and professional behaviors. Upon completion, students should be able to apply theoretical knowledge of the course topics to the operative environment.

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|----------------|---|---|---|---|---|
| SUR 111 | Periop Patient Care | 5 | 6 | 0 | 7 |
| Prerequisites: | Enrollment in the Surgical Technology program | | | | |
| Corequisites: | SUR 110 | | | | |

This course provides theoretical knowledge for the application of essential operative skills during the perioperative phase. Topics include surgical asepsis, sterilization/disinfection, and perioperative patient care. Upon completion, students should be able to demonstrate the principles and practices of aseptic technique, sterile attire, basic case preparation, and other relevant skills.

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|----------------|------------------------------|---|---|---|---|
| SUR 122 | Surgical Procedures I | 5 | 3 | 0 | 6 |
| Prerequisites: | SUR 110 and SUR 111 | | | | |
| Corequisites: | SUR 123 | | | | |

This course introduces surgical pharmacology, anesthesia, wound healing physiology, and general, gastrointestinal, obstetrical/gynecological, urological, ENT and plastic surgery specialties. Emphasis is placed on related surgical anatomy, pathology, and procedures thereby enhancing theoretical knowledge of patient care, instrumentation, supplies, and equipment. Upon completion, students should be able to correlate, integrate, and apply theoretical knowledge of the course topics.

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|----------------|--------------------------------|---|---|----|---|
| SUR 123 | SUR Clinical Practice I | 0 | 0 | 21 | 7 |
| Prerequisites: | SUR 110 and SUR 111 | | | | |
| Corequisites: | SUR 122 | | | | |

This course provides clinical experience with a variety of perioperative assignments to build upon skills learned in SUR 111. Emphasis is placed on the scrub and circulating roles of the surgical technologist including aseptic technique and basic case preparation for selected surgical procedures. Upon completion, students should be able to prepare, assist with, and dismantle basic surgical cases in both the scrub and circulating roles.

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|----------------|-------------------------------|---|---|---|---|
| SUR 134 | Surgical Procedures II | 5 | 3 | 0 | 6 |
| Prerequisites: | SUR 123 | | | | |
| Corequisites: | None | | | | |

This course introduces orthopedic, neurosurgical, peripheral vascular, thoracic, cardiovascular, and ophthalmology surgical specialties. Emphasis is placed on related surgical anatomy, pathology, and procedures thereby enhancing theoretical knowledge of patient care, instrumentation, supplies, and equipment. Upon completion, students should be able to correlate, integrate, and apply theoretical knowledge of the course topics.

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|----------------|---------------------------------|---|---|----|---|
| SUR 135 | SUR Clinical Practice II | 0 | 0 | 12 | 4 |
| Prerequisites: | SUR 123 | | | | |
| Corequisites: | None | | | | |

This course provides clinical experience with a variety of perioperative assignments to build skills required for complex perioperative patient care. Emphasis is placed on greater technical skills, critical thinking, speed, efficiency, and autonomy in the operative setting. Upon completion, students should be able to function in the role of an entry-level surgical technologist.

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|----------------|--------------------------|---|---|---|---|
| SUR 137 | Prof Success Prep | 1 | 0 | 0 | 1 |
| Prerequisites: | SUR 123 | | | | |
| Corequisites: | SUR 134 and SUR 135 | | | | |

This course provides job-seeking skills and an overview of theoretical knowledge in preparation for certification. Topics include test-taking strategies, résumé preparation, and interviewing techniques. Upon completion, students should be able to prepare a résumé, demonstrate appropriate interview techniques, and identify strengths and weaknesses in preparation for certification.

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|----------------|---------------------------------|---|---|---|---|
| TRE 110 | Intro to Therapeutic Rec | 3 | 0 | 0 | 3 |
| Prerequisites: | | | | | |
| Corequisites: | None | | | | |

This course covers the philosophy and goals of therapeutic recreation and how they relate to specific client groups. Topics include therapeutic recreation history and professional development, an introduction to the therapeutic recreation process, and a summary of therapeutic recreation effects on client functioning. Upon completion, students should be able to describe the professional development of therapeutic recreation and to explain the anticipated outcomes of therapeutic recreation service.

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|----------------|---------------------------|---|---|---|---|
| TRE 120 | Adapted Activities | 1 | 2 | 0 | 2 |
| Prerequisites: | | | | | |
| Corequisites: | None | | | | |

This course introduces activity and equipment adaptations used in recreation in order to improve access for people with disabilities. Topics include adaptations to make sports, games, outdoor activities, dance, and hobbies accessible. Upon completion, students should be able to adapt activities and equipment to fit individual clients' needs and strengths.

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|----------------|-----------------------------|---|---|---|---|
| TRE 122 | Activity Coordinator | 4 | 0 | 0 | 4 |
| Prerequisites: | | | | | |
| Corequisites: | None | | | | |

This course covers topics required by state regulations relating to the development of activity programs in nursing and domiciliary homes. Topics include human development in the late adult years and methods of recreation service delivery in the activity profession. Upon completion, students should be able to design and implement a program of activities that addresses functional and quality of life needs of clients.

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|----------------|--------------------------|---|---|---|--|
| 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.

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|----------------|--------------------------------|---|---|---|--|
| 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.

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|----------------|---------------------------|---|---|---|--|
| 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.

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|----------------|------------------------------|---|---|---|
| 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.

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|----------------|-------------------------|---|---|---|
| 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.

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|----------------|-------------------------------------|---|---|---|
| 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.

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|----------------|--------------------------------|---|---|---|
| WLD 261 | Certification Practices | 1 | 3 | 2 |
| Prerequisites: | WLD 115, 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.

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|----------------|---------------------------------|---|---|---|
| WLD 262 | Inspection & 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.



FACULTY AND STAFF

**Fayetteville Technical
Community College**

ADMINISTRATIVE OFFICERS AND STAFF

- Joe Alley Director of Media Services
B.A., Central Michigan University
- Robert W. Atkinson Director of Law Enforcement Training
B.A., Shaw University
M.A., Central Michigan University
- James C. Basnight Assistant to the Vice President for Academic Affairs
B.S., Atlantic Christian College
M.A., East Carolina University
Ed.D., North Carolina State University
- Hubert F. Bullard Associate Vice President for Continuing Education
B.S., Pembroke State University
M.S., North Carolina State University
- Sanford Cain Director of Facility Services
A.A.S., Fayetteville Technical Community College
- Robert L. Carter Vice President for Risk Management
B.S., UNC-Chapel Hill
M.B.A., UNC-Chapel Hill
- Valeria Collins Director of Counseling
B.S., S.C. State University
M.S., Troy State University
- Barbara Copeland Public Relations and Marketing Director
B.S., Northern Illinois University
M.S., Northern Illinois University
- Jan J. Crawford Director of Research and Planning
B.A., UNC-Chapel Hill
J.D., UNC-Chapel Hill
- Forrest H. Deshields Assistant to the Associate Vice President for Continuing Education
A.B., Atlantic Christian College
M.A., East Carolina University
Ed.S., East Carolina University

- Bob Ervin Dean of Business Programs
 B.A., Wake Forest University
 M.B.A., Campbell University
- John T. Fernald Associate Vice President for Student Services
 B.A., UNC-Chapel Hill
 M.Ed., North Carolina State University
 Ed.D., Nova University
- Tom Graves Director of Student Services, Fort Bragg
 B.S., Methodist College
 M.Ed., East Carolina University
- Shirley Greene Special Populations Coordinator
 B.A., North Carolina Central University
 M.S., North Carolina A & T University
- Annette Hackbarth Counselor
 B.S., University of Wisconsin
 M.S., University of Wisconsin
- Neal F. Hardison Associate Vice President for Curriculum Programs
 B.S., East Carolina University
 M.L.S., East Carolina University
- Carrie Heffney Director of Basic Skills/HRD Program
 B.S., Fayetteville State University
 M.Ed., North Carolina State University
- Sharmon Herring Director of Business Services
 B.S., Meredith College
 M.B.A., Campbell University
- Edward J. Jackson Dean of General and Service Programs
 B.S., Campbell University
 M.Ed., Campbell University
 Ed.D., Nova University
- Mary G. James Dean of Health Programs
 B.S.N., Florida A & M University
 M.Ed., North Carolina State University
 M.S.N., UNC - Greensboro

- Robbie Johnson Director of Industry Training
 B.S., Fayetteville State University
 M.A., Pembroke State University
- Mary Knutson Supervisor, Career Center
 B.S., Old Dominion University
 M.A., East Carolina University
- Charles E. Koonce Director of Small Business Center
 B.S., Campbell University
 M.Ed., North Carolina State University
- Donald La Huffman Director of Admissions
 B.A., North Carolina Central University
 M.A., North Carolina Central University
- Sheila B. Locklear Registrar
 A.A.S., Fayetteville Technical Community College
- Loutricia Nelson Counselor
 B.A., Winthrop University
 M.Ed., Winthrop University
- Larry B. Norris President
 B.A., Pembroke State University
 M.A., University of Arkansas
 Ed.D., North Carolina State University
- Mary Nour Counselor
 B.A., Louisiana Tech University
 M.A., Louisiana Tech University
- Patricia H. Nunalee Learning Lab Director
 B.S., East Carolina University
- George E. Pope Counselor
 B.S., Appalachian State University
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- Linwood Powell Vice President for Administrative Services
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 M.S., Troy State University
- Susan S. Rose Library Services Director
 B.A., North Carolina State University
 M.L.S., UNC - Chapel Hill
- Leonard Shaw Counselor
 B.S., Fayetteville State University
 M.Ed., East Carolina University
- J. B. Simpson Director of Curricular Data Management
 B.S., University of Tennessee
 M.B.A., University of Utah
- Betty Smith Controller
 B.S., Campbell University
 Certified Public Accountant
- Eddie S. Smith Counselor
 B.S., Florida Memorial College
 M.A., North Carolina Central University
 Ed.S., UNC - Greensboro
- Harold B. Thompson Vice President for Personnel
 B.S., Fayetteville State University
 M.Ed., North Carolina State University
- Butch Trimmer Director of Extension Education, Fort Bragg
 B.S., Methodist College
 M.P.S., Shippensburg University
- Sheridan Turpin Director of Community Services/Extension Education
 B.A., Pembroke State University
 M.Ed., North Carolina State University
- Rhonda Tyner Counselor
 B.A., UNC-Wilmington
 M.A., North Carolina Central University

- William Vile Director of Fire/Rescue/EMS Training
B.S., University of Nebraska
M.A., Webster University
- W. Stephen Wagoner Dean of Technical/Vocational Programs
B.S., North Carolina State University
M.A.Ed., East Carolina University
- Ben Watson Counselor
B.A., Barber-Scotia College
M.A., Appalachian State University
- John Wheelous Counselor
B.S., Appalachian State University
M.A., Appalachian State University

FACULTY

- Rachel AddisonSurgical Technology
B.B.A., Pennsylvania State Univesity
- Murray Alford Mathematics
B.S., East Carolina University
M.Ed., Pembroke State University
- Charles Averette Civil Engineering Technology
B.S., N. C. State University
P.E.N.C.
- Jinx Averitte Recreation and Leisure Studies
B.S., Colorado State University
M.Ed., Colorado State University
- Herbert B. Ayers Mathematics
B.A., Furman University
M.A., Pembroke State University
M.Ed., University of Miami
Ed.D., University of Florida
- Mary Bailey Physical Science
B.A., Fayetteville State University
M.S., Massachusetts Institute of Technology
- Joyce R. Bain Basic Skills
B.S., N. C. Central University
- Ruth Baldwin Respiratory Care
B.S., Medical College of Georgia
M.Ed., Fayetteville State University
- Iris Barbour English
B.A., University of Florida
M.A.Ed., Pembroke State University
M.A., North Carolina State University
- Carol W. Barker Biology
B.S., N.C. State University
M.A., University of Georgia
- Ellon S. Barlow Pharmacy Technology
B.S., UNC - Chapel Hill

| | |
|--|-----------------------------------|
| Charles Bell | Architectural Technology |
| N.C. State University | |
| Phyllis Bell | Drafting |
| A.A.S., Fayetteville Technical Community College | |
| Rennie P. Beyer | Information Systems/Programming |
| A.A.S., Fayetteville Technical Community College | |
| B.M., UNC - Greensboro | |
| M.M., UNC - Greensboro | |
| Donald G. Biggerstaff | Information Systems/Programming |
| A.A.S., Fayetteville Technical Community College | |
| B.S., Pembroke State University | |
| M.S., Nova University | |
| Elizabeth Black | Music |
| B.A., Meredith College | |
| M.A., Converse College | |
| James Black | Media Integration |
| B.S., U.S. Military Academy | |
| M.A., Webster University | |
| M.B.A., Campbell University | |
| Larry J. Black | English |
| B.A., Campbell University | |
| M.A., Campbell University | |
| James Blair | Electrical/Electronics Technology |
| A.A.S., Fayetteville Technical Community College | |
| Alvina Blanks | Mathematics |
| B.A., Pembroke State University | |
| M.A., Pembroke State University | |
| Janice A. Blum | Biology |
| B.S., Methodist College | |
| M.S., N.C. State University | |

- Mary Cam Boudreau Dental Hygiene
 A.A.S., Fayetteville Technical Community College
 B.S., Old Dominion University
 M.Ed., Campbell University
- Karron Boyles Practical Nursing
 B.S.N., Atlantic Christian College
- William Boyles Carpentry
 B.A., Pembroke State University
- Brenda K. Britt Business Administration
 B.A., St. Andrews Presbyterian College
 M.S., UNC - Greensboro
 M.B.A., Campbell University
- Roger Britt Instructor/Computer Lab Technician
 B.A., St. Andrews Presbyterian College
- Frankie Brock Associate Degree Nursing
 B.S.N., Lenoir Rhyne College
 M.S.N., UNC - Chapel Hill
- Mary Anne Brock English
 B.A., Furman University
 M.A., UNC-Wilmington
- Carmen F. Brown Dental Assisting
 Diploma, Fayetteville Technical Community College
- Jeri Brown Information Systems/Programming
 M.A., Austin Peay University
 M.S., University of Evansville
- Joseph Brum Business Administration
 B.A., Methodist College
 M.B.A., Campbell University
 Ed.D., Nova University
- David Brumble Criminal Justice
 A.A.S., Fayetteville Technical Community College
 B.A., Fayetteville State University
 M.C.J., University of South Carolina

| | |
|---|---|
| Cynthia Burns | Business Administration |
| B.A., N. C. State University | |
| M.Ed., N. C. State University | |
| William Butler | Welding |
| A.A.S., Fayetteville Technical Community College | |
| Granville C. Byrd | Electronics Engineering Technology |
| B.S., North Carolina State University | |
| M.S., Rochester Institute of Technology | |
| John Cade | Automotive Systems Technology |
| Diploma, Fayetteville Technical Community College | |
| A.A.S., Fayetteville Technical Community College | |
| A.A.S., Robeson Community College | |
| B.S., Western Carolina University | |
| Eleanor Cartledge | Associate Degree Nursing |
| B.A., East Carolina University | |
| M.A., UNC-Greensboro | |
| Marie Cash | Mathematics |
| B.S., Methodist College | |
| M.Ed., Campbell University | |
| Donald Chavis | Air Conditioning, Heating & Refrigeration |
| A.A.S., Fayetteville Technical Community College | |
| Tere Chipman | Criminal Justice |
| B.A., Eastern Kentucky University | |
| M.A., Webster University | |
| Nell R. Coates | Basic Skills |
| B.A., UNC-Charlotte | |
| William C. Copeland | Marketing & Retailing |
| B.S., University of North Alabama | |
| M.B.A., Golden Gate University | |
| Steven Core | Automotive Systems Technology |
| A.A.S., Fayetteville Technical Community College | |

- Thomas P. Coyne Political Science
 B.A., Campbell University
 M.S., North Carolina State University
 Ed.D., Nova University
- Walter C. Craver History
 B.S., Appalachian State University
 M.A., Appalachian State University
- Danny Cunningham Biology
 B.S., UNC-Chapel Hill
 M.S., Fayetteville State University
- Jean Curtin Information Systems/Programming
 B.S., Monmouth College
 M.S., University of Idaho
- Jeanette Darrigan Dental Assisting
 A.A.S., Fayetteville Technical Community College
 B.S., East Carolina University
- Polly B. Davis English
 B.S., University of Georgia
 M.Ed., University of Georgia
 Ed.D., North Carolina State University
- Paula de la Cerna Associate Degree Nursing
 B.S.N., Pace University
 M.P.H., UNC - Chapel Hill
- Cara DeLong Mathematics
 B.A., UNC-Chapel Hill
 M.A., Pembroke State University
- Carol Dickey Paralegal Technology
 B.A., UNC - Chapel Hill
 J.D., UNC - Chapel Hill
- Kenneth E. Digby General Occupational Technology
 B.S., Ohio State University
 M.B.A., University of Bridgeport
 Ed.D., Nova University
- Mary Dillon Basic Skills
 B.S., West Virginia State University

- Chris Diorietes Mathematics
 B.S., Campbell University
 M.Ed., Pembroke State University
- Stewart Ditch Plumbing
 A.A.S., Fayetteville Technical Community College
- Betty Dobbin Mathematics
 A.S., Chesterfield-Marlboro Technical College
 B.S., UNC-Charlotte
 M.S., Radford University
- Sarah Dunham English
 B.A., UNC - Greensboro
 M.Ed., Georgia State University
- Rita Eads Mathematics
 B.S., Pembroke State University
 M.Ed., Pembroke State University
- William L. Eanes Recreation and Leisure Studies
 B.S., Appalachian State University
 M.A.E., East Carolina University
- Elaine Eckel Physical Therapist Assistant
 B.S., University of Pennsylvania
 M.A., UNC - Chapel Hill
- Mary Ellenbogen Associate Degree Nursing
 A.A., Inter American University of Puerto Rico
 B.S.N., Incarnate Word College
 M.S.N., University of Texas at Austin
- Janice Elliott Nursing Assistant
 Diploma, Fayetteville Technical Community College
 A.A.S., Johnston Community College
- Donald Ellis Carpentry
 Master Carpenter
- Lelon Ellis Masonry
 Diploma, Fayetteville Technical Community College
 A.A.S., Fayetteville Technical Community College

- Sharon Ellis Nursing
B.S.N., East Carolina University
- Susan Ellis Dental Hygiene
B.S., UNC-Chapel Hill
- Karen Elsom Marketing and Retailing
B.S., UNC-Chapel Hill
M.B.A., UNC-Chapel Hill
- Richard E. Esslinger Industrial Management Technology
B.S., Carson-Newman College
M.B.A., University of Utah
- Carmella Fair Mathematics
B.S., UNC-Chapel Hill
- Anna Ferguson-Williams Associate Degree Nursing
B.S.N., Tuskegee University
M.S.N., Medical College of Virginia
- Linwood Fields Welding
Master Welder
- Douglas Fuller Physical Education
B.S., Florida State University
M.S., Florida State University
- Joyce Ricci Fuller Advertising and Graphic Design
B.A., Concord College
- Frank Galluccio Advertising and Graphic Design
A.A., Brookdale Community College
B.S., Utah State University
M.Ed., Utah State University
- Laura Galvan Business Administration
A.A.S., Del Mar Junior College
B.S., Corpus Christi College
- Terry Gause Horticulture
B.S., North Carolina State University
M.Ed., North Carolina State University

- Mary Jane Gentry Radiography
 B.S., University of Nebraska
 M.Ed., North Carolina State University
 Ed.D., North Carolina State University
- Hossein Gholami Business Administration
 B.S., Institute of Banking
 M.S., University of Detroit
- Kay A. Gilbert Culinary Technology
 B.S., East Carolina University
 M.Ed., UNC - Greensboro
- Sandra A. Gillikin English
 B.A., Methodist College
 M.A., East Carolina University
- Glenn Thomas Godwin Biology
 B.S., East Carolina University
 M.A., East Carolina University
- Collins G. Gray Biology
 B.A., UNC - Wilmington
 M.A., East Carolina University
- Mamie L. Griffin English
 B.A., St. Augustine's College
 M.S., N.C. A & T State University
 C.A.S., East Carolina University
- Arthur Hall Autobody Repair
 Diploma, Fayetteville Technical Community College
 A.A.S., Fayetteville Technical Community College
 B.S., Fayetteville State University
- Beverly R. Hall Mathematics
 B.S., Texas A & M University
 M.Ed., Campbell University
- Calton G. Hall Physics
 B.S., East Carolina University
 M.A., East Carolina University

- David Hall Funeral Service
 A.A.S., Fayetteville Technical Community College
 B.A.S., Methodist College
 M.A., Webster University
- Frederick Hall Air Conditioning, Heating & Refrigeration
 Certificate, University of Maryland
 A.A.S., Fayetteville Technical Community College
- William T. Hall Accounting
 B.S.B.A., East Carolina University
 M.B.A., East Carolina University
- James A. Hammer Basic Skills
 B.S., California State University
 M.A., Fayetteville State University
- William D. Harper Respiratory Care
 A.A.S., Fayetteville Technical Community College
- Karen Harris Early Childhood
 B.S., Fayetteville State University
 M.A., Fayetteville State University
- Tony P. Hayes Civil Engineering Technology/Surveying Technology
 B.S.C.E., University of Tennessee
 B.S.I.T., East Tennessee State University
- Mildred Herndon Associate Degree Nursing
 A.S.D., Sandhills Community College
 B.S.N., University of South Carolina
 M.S.N., University of Tennessee
- Robert M. Hill Electronics Engineering Technology/Electronic Servicing Technology
 A.A.S, Fayetteville Technical Community College
 B.E.T., UNC - Charlotte
- John Hoffmann Insurance
 B.A., St. Thomas University
 M.A.T., St. Thomas University
- James Hogan Real Estate
 B.S., Purdue University
 M.S., Purdue University
 Ph.D., Miami University

- Janis Holden-Toruno Basic Skills
 B.A., Rollins College
 M.A., Webster University
- Stanley Holgate Psychology
 B.A., Texas Technical University
 Ph.D., Texas Technical University
- Ingelore Holthe German/Sociology
 B.A., North Carolina State University
 M.Ed., North Carolina State University
 Ed.D., North Carolina State University
- Robin M. Horner Chemistry
 B.S., Methodist College
 M.Ed., East Carolina University
- Donald Hughes Industrial Maintenance
- Christy Hummer Basic Skills
 B.A., Marshall University
 M.A., Marshall University
- Bonnie A. Hunt Accounting
 B.A., Pembroke State University
 M.S., Radford College
 M.B.A., UNC - Chapel Hill
- Steven W. Hunter Information Systems/Programming
 A.A.S., Fayetteville Technical Community College
 B.M., UNC - Greensboro
 M.M., UNC - Greensboro
- Gerald J. Ittenbach Chemistry
 B.S., North Carolina State University
 M.Ed., East Carolina University
- Pamela Jackson Banking and Finance
 B.A., Albion College
 M.P.A., Troy State University
- Pamela K. James Associate Degree Nursing
 B.S.N., East Carolina University
 M.S.N., East Carolina University

- Richard C. Jarvies Accounting
 B.S., Fordham University
 M.A., American College
- Swaran Jawa Basic Skills
 B.A., Punjab University
 M.A., Punjab University
- George Jeffreys Electrical/Electronics Technology
 A.A.S., Fayetteville Technical Community College
- Doty B. Johnson Advertising and Graphic Design
 B.A., Purdue University
 M.S., Illinois Institute of Technology
- Barbara Hill-Jones Accounting
 B.S., North Carolina A & T State University
 M.B.A., University of Miami
- Dwain L. Joyce Office Systems
 B.S., Campbell University
 M.Ed., UNC - Greensboro
- Leslie Keenan Funeral Services
 B.S., South Carolina State College
 M.Ed., University of South Carolina
- Stella L. King Basic Skills
 B.S., Fayetteville State University
- William Kirchman Business Administration
 B.S., Virginia Polytechnic Institute
 M.A., Webster University
- Rose Kulich English
 B.A., St. Bernard College
 M.Ed., Georgia State University
- Claretha Lacy Basic Skills
 B.S., N. C. Central University
 M.A., Fayetteville State University
- Michael G. Landon Funeral Service
 B.S., Lock Haven State College
 M.A., Fayetteville State University

- Linda Rose Lee Office Systems
 A.B., Meredith College
 M.A., Appalachian State University
- Lynda S. Lennon Basic Skills
 B.A., UNC-Wilmington
- Gerald Lininger Business Administration
 A.A.S., Fayetteville Technical Community College
 B.S., The Citadel
 M.B.A., Campbell University
- David Martin Mathematics
 B.S., Fayetteville State University
 M.S., Fayetteville State University
- Jeffrey Martin Biology
 B.S., UNC-Charlotte
 M.S., UNC-Charlotte
- Peppi Masa Basic Law Enforcement Training
 A.A.S., Fayetteville Technical Community College
- Robert Massey History
 B.S., Fayetteville State University
 M.A., Catholic University of America
- Franklin McDonald Automotive Systems Technology
 Diploma, Fayetteville Technical Community College
 A.A.S., Fayetteville Technical Community College
- Jo McEwan English
 B.A., Fayetteville State University
 M.A., University of North Carolina at Chapel Hill
- Deborah B. McGrath Dental Assisting
 Diploma, Fayetteville Technical Community College
 B.S., Pembroke State University

- Kathleen McLaurin Emergency Medical Science
 RN Diploma, St. Louis Municipal School of Nursing
 A.A.S., Fayetteville Technical Community College
- Michael D. McLaurin Mathematics
 B.S., UNC - Chapel Hill
 M.A.T., Duke University
- David Miller English
 B.S., United States Military Academy
 M.A., University of Pennsylvania
 M.B.A., Fairleigh Dickinson University
- Michael Mills English
 B.A., UNC-Chapel Hill
 M.A., Temple University
 Ph.D., Temple University
- Sharon Mitchler English
 B.A., Iowa State University
 M.A., California State University
- Loretta M. Monk Mathematics
 B.S., Fayetteville State University
 M.M., Utah State University
- Sandra Monroe Practical Nursing
 Diploma, U.S. Army
 B.S.N., Hampton Institute
- Michael Moore Sociology
 B.A., Millsaps College
 M.A., Western Kentucky University
 Ph.D., Virginia Polytechnic Institute
- Rick Mumford Dental
 B.S., Austin Peay State University
 M.P.H., UNC-Chapel Hill
 D.M.D., University of Kentucky

- Janet Murphy Associate Degree Nursing
 B.S.N., East Carolina University
 M.S.N., East Carolina University
- Carolyn W. Nails Office Systems
 B.S., N.C. Central University
 M.B.A., N.C. Central University
- Krishna Nair Electronics Engineering Technology
 B.S., University of Kerala
 M.S., University of Rhode Island
 Ph.D., University of Rhode Island
- James D. New Criminal Justice
 B.S., Campbell University
- Renu K. Nijhawan Information Systems/Programming
 A.A.S., Fayetteville Technical Community College
 B.A., Fayetteville State University
 I.Sc., Raghu Nath College
- Ronald O'Brien Accounting
 B.A., Elon College
 M.A., Monmouth College
- Toni O'Dell Culinary Technology
 B.S., East Carolina University
- Charles M. Oldham Business Administration
 B.S., East Carolina University
 M.B.A., East Carolina University
- Pamolu E. Oldham English
 B.A., Sweetbriar College
 M.F.A., Columbia University
- Ronald D. Orban Mathematics
 B.A., Pfeiffer College
 M.S., Stephen F. Austin State University
- Carolyn Parish Criminal Justice
 B.A., Methodist College
 M.A., New Mexico State University

- Vicki Pate Sociology
 B.A., Auburn University
 M.S., North Carolina State University
- Cheryl Perkins Basic Skills
 B.S., Fayetteville State University
- John Philligan Electrical/Electronics Technology
 A.A.S., Fayetteville Technical Community College
- Weldon Phillips Mathematics
 B.S., University of Mississippi
 M.A., Central Michigan University
- Mary Pines Recreation and Leisure Studies
 A.A.S., Fayetteville Technical Community College
 B.S., Mount Olive College
- Karen Poppele English
 B.A., Trinity University
 M.S., Texas A & M University
 M.A., University of Florida
- Janice Powell Culinary Technology
 B.S., East Carolina University
 M.Ed., UNC - Greensboro
- Phillip Pugh Basic Skills
 B.S., North Carolina State University
 M.A., Abilene Christian University
- Marsha M. Ralph Mathematics
 B.A., UNC - Chapel Hill
 M.Ed., Campbell University
- Robert J. Ralph Information Systems/Programming
 B.S., University of Akron
 M.S., University of Akron
- Janie D. Raynor Basic Skills
 B.S., Fayetteville State University

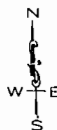
- Steve Reynolds English
 B.A., University of San Francisco
 M.A., California State University at Sanislaus
- Susan P. Ritter Mathematics
 B.S., UNC - Greensboro
 M.A., UNC - Greensboro
- James Robinson Sociology
 B.A., North Carolina A & T State University
 M.S., University of Georgia
- Gladys Rosser English
 B.S., Fayetteville State University
 M.S., North Carolina A & T State University
 Ed.D., Fayetteville State University
- Tina I. Royal Recreation and Leisure Studies
 B.S., North Carolina State University
 M.Ed., Fayetteville State University
- Joanne Schoen Associate Degree Nursing
 B.S.N., University of Tampa
 M.S.N., East Carolina University
- Sharon G. Seaford Basic Skills
 B.A., Methodist College
- Eugene H. Shannon Chemistry
 B.S., Western Carolina University
 M.S.P.H., UNC - Chapel Hill
- David Sholter Advertising and Graphic Design
 A.A.S., Fayetteville Technical Community College
 B.A., Fayetteville State University
- Benjamin Sloan English
 B.A., Washington University
 M.F.A., Brooklyn College
 Ph.D., CUNY Graduate School
- Ethel E. Smith Basic Skills
 B.A., Fayetteville State University

- Keith F. Smith Biology
 B.S., Campbell University
 M.A.Ed., East Carolina University
- Stephen Smith Public Administration
 B.S., Marian College
 M.P.S., Western Kentucky University
- James Speed English
 B.S., Jackson State University
 M.A.T., Jackson State University
- Charles Stone Machining Technology
 A.A.S., Fayetteville Technical Community College
- Beverly Strickland Criminal Justice
 A.A.S., Emman College
 B.S., Campbell University
 M.A., Webster University
- Peggy Stubbs CASAS
 B.S., Fayetteville State University
- Larry Sullivan Paralegal
 B.A., West Virginia University
 J.D., West Virginia University
- Margene E. Sunderland Business Administration
 A.B., College of Notre Dame
 M.A., Central Michigan University
- Lettie Sutton Radiography
 A.A.S., Fayetteville Technical Community College
 B.A.S., Methodist College
- Ann Taylor Paralegal
 B.A., Campbell University
 J.D., Campbell University
- Cheryl Thomas Paralegal
 B.S.C. J., Appalachian State University
 J.D., Mercer University

| | |
|--|------------------------------|
| Kenneth W. Thomson | Business Administration |
| A.A.S., Fayetteville Technical Community College | |
| B.S., Air Force Institute of Technology | |
| M.S., Air Force Institute of Technology | |
| M.B.A., Oklahoma City University | |
| Catherine Tilghman | Mathematics |
| B.S., Mars Hill College | |
| M.A., Wake Forest University | |
| M.A., Pembroke University | |
| Robert J. Timbers | Dental Hygiene |
| A.A.S., Fayetteville Technical Community College | |
| B.S., Southern Illinois University | |
| M.Ed., North Carolina State University | |
| Donna M. Turner | Office Systems |
| B.S., East Carolina University | |
| M.Ed, East Carolina University | |
| Daniel Underwood | Industrial Maintenance |
| A.A.S., Fayetteville Technical Community College | |
| Brian K. Wagoner | Basic Skills |
| B.A., Methodist College | |
| Gloria B. Walker | Business Administration |
| B.S., Hampton University | |
| M.B.A., Winthrop College | |
| Margaret Walter | Basic Skills |
| B.S., University of Pittsburgh | |
| M.Ed., University of Pittsburgh | |
| Phillip Warren | Physical Therapist Assistant |
| B.S., Barton College | |
| M.P.T., Baylor University | |
| M.P.H., UNC - Chapel Hill | |
| Jesse B. Waters | Physics |
| A.B., East Carolina University | |
| M.S., College of William & Mary | |

- Patricia Weaver Early Childhood
 B.A., Methodist College
 M.Ed., Campbell University
- Kathy Weeks Nursing
 B.S.N., Western Carolina University
 M.S.N., University of N.C. at Greensboro
- Robert E. West Mathematics
 B.S., Pembroke State University
 M.Ed., Campbell University
- Deborah Whaley Early Childhood
 B.S., Methodist College
 M.A.Ed., Fayetteville State University
 Ed.D., Nova University
- Jacqueline C. Whitbeck Basic Skills
 B.S., Pembroke State University
- Floyd D. Whitehead Psychology
 B.S., U.S. Military Academy
 M.Ed., Tufts University
 Ed.D., Duke University
- Donald Wilkinson Cabinetmaking
 Master Cabinetmaker
- Daphne M. Williams English
 B.A., East Carolina University
 M.A., Appalachian State University
- Randolph Williams Basic Skills
 B.A., Fayetteville State University
- Ronald Wilson Architectural Technology
 B.A., N.C. State University
 B.A., UNC - Charlotte
- Danny H. Wood Machining Technology
 A.A.S., Fayetteville Technical Community College
- Samuel Zahran English
 B.A., N.C. State University
 M.A., N.C. State University

GREENHOUSES



1. ADM. ADMINISTRATION BLDG.
(ROOMS 1-14)
2. LRC. PAUL H. THOMPSON LIBRARY
(ROOMS 100-204)
3. CUH. CUMBERLAND HALL
(ROOMS 101-133)
CHS. CUMBERLAND HALL ANNEX
(ROOMS 212-215)
4. LAH. LAFAYETTE HALL
(ROOMS 100-149)
5. HOS. HORACE SISK BLDG.
(ROOMS 651-669)
IHSC. CAFETERIA
(ROOMS 700-721)
HSG. GYMNASIUM
(ROOMS 800-814)
HSA. SISK ANNEX
(ROOMS 651-669)
6. NC. NEILL CURRIE
(ROOMS 14-122)
7. SC. STUDENT CENTER (RMS. 1-147)
ADMISSIONS (RM. 118)
BOOKSTORE (RM. 5)
COUNSEL SERV. (RMS. 101-110B)
FINANCIAL AID (RM. 130)
REGISTRARS OFFICE (RM. 114)
SECURITY (RM. 132)
VA OFFICE (RM. 119)
8. CBI. CENTER FOR BUSINESS & INDUSTRY
(ROOMS 101-105)
9. ATC. ADVANCED TECHNOLOGY CENTER
(ROOMS 10-251)
10. CEC. CONTINUING EDUCATION CENTER
(ROOMS 100-257)
11. HEALTH TECHNOLOGIES CENTER
(FUTURE CONSTRUCTION)
(ROOMS 101-253)

-MARKS LOCATION OF EMERGENCY CALL BOXES
H - HANDICAP PARKING

FAYETTEVILLE TECHNICAL COMMUNITY COLLEGE
FAYETTEVILLE, NORTH CAROLINA