ISOTHERMAL
COMMUNITY COLLEGE

1993-1995 CATALOG

MESSAGE FROM THE PRESIDENT

It is a pleasure to welcome you to Isothermal Community College. For the past quarter century, it has been our privilege to provide a wide range of educational services for thousands of citizens from Rutherford and Polk Counties.

The philosophical foundation for this service remains unchanged. Isothermal Community College maintains that the opportunity for higher education should be available to everyone and recognizes that varying individual needs make a wide array of programs and services necessary. The diversity of our offerings will become evident as you review this catalog.

Less evident, yet perhaps even more important, is the climate of the institution which is created by its faculty and staff. Our faculty, staff and administration believe that students are their primary concern and are enthusiastic in providing the academic and personal support services that will help students reach their goals. The college is committed to excellence in teaching and service and strives to be an institution wherein each student has the opportunity to attain the highest level of his or her capabilities.

Welcome to Isothermal Community College.

Willard L. Lewis

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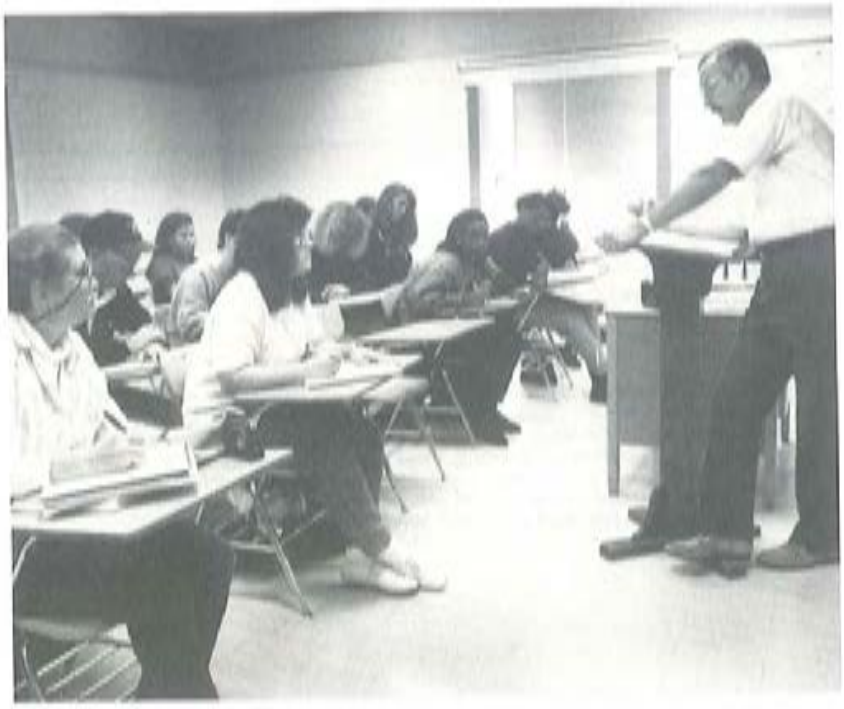
Although the editor of this catalog has made every reasonable effort to attain factual accuracy herein, no responsibility is assumed for editorial, clerical, or printing errors or errors occasioned by mistakes. The editor has attempted to present information which at the time of preparation for printing, most accurately describes the course offerings, faculty listing, policies, procedures, regulations, and requirements of the college. However, it does not establish contractual relationships. The college reserves the right to alter or change any statement contained herein without prior notice.



ISOTHERMAL COMMUNITY COLLEGE
1993-94 Calendar

Fall Quarter 1993 (55 days)

September 1	Wednesday	Faculty Workshop
September 2	Thursday	Orientation & Registration
September 3	Friday	Advising and Schedule Adjustments
September 6	Monday	Labor Day Holiday
September 7	Tuesday	First Day of Classes
September 7-8	Tuesday,Wednesday	Schedule Adjustments
October 11-15	Monday-Friday	Mid Term Week
November 5	Friday	Last Day to Drop with "W"
November 18, 19, 22	Thursday, Friday, Monday	Final Examinations
November 23	Tuesday (11:00 a.m.)	Faculty Checkout
November 23-26	Tuesday-Friday	Thanksgiving Holidays

Winter Quarter 1993-94 (55 days)

November 29	Monday	Orientation & Registration
November 30	Tuesday	First Day of Classes
November 30	Tuesday	Schedule Adjustments
December 1	Wednesday	Schedule Adjustments
December 17	Friday (4:30 p.m.)	Winter Holidays Begin
January 3	Monday (8:00 a.m.)	Classes Resume
January 17-21	Monday-Friday	Mid Term Week
February 4	Friday	Last Day to Drop with "W"
February 24, 25, 28	Thursday, Friday, Monday	Final Examinations
March 1	Tuesday (11:00 a.m.)	Faculty Checkout

Spring Quarter 1994 (55 days)

March 3	Thursday	Orientation & Registration
March 4	Friday	First Day of Classes
March 4, 7	Friday, Monday	Schedule Adjustments
March 31	Thursday (10:00 p.m.)	Spring Holidays Begin
April 11	Monday (8:00 a.m.)	Classes Resume
April 18-22	Monday-Friday	Mid Term Week
May 6	Friday	Last Day to Drop with "W"
May 25-26	Wednesday, Thursday	Final Examinations
May 27	Friday	Final Examinations
May 30	Monday (11:00 a.m.)	Faculty Checkout
May 31	Tuesday (7:30 p.m.)	Graduation

Summer Quarter 1994 (50 days)

June 2	Thursday	Orientation and Registration
June 3	Friday	First Day of Classes
June 3, 6	Friday, Monday	Schedule Adjustments
July 4	Monday	Independence Day Holiday
July 11-15	Monday-Friday	Summer Holidays
July 18	Monday (8:00 a.m.)	Classes Resume
August 5	Friday	Last Day to Drop with "W"
August 19	Friday	Last Day of Summer School
August 22	Monday (11:00 a.m.)	Faculty Checkout

1st Summer Session 1994 (25 days)

June 2	Thursday	Orientation and Registration
June 3	Friday	First Day of Classes
June 3, 6	Friday, Monday	Schedule Adjustments
July 4	Monday	Independence Day Holiday
July 8	Friday	Last Day of 1st Session
July 11-15	Monday-Friday	Summer Holidays

2nd Summer Session 1994 (25 days)

July 8	Friday	Registration
July 18	Monday	First Day of Classes
July 18-19	Monday, Tuesday	Schedule Adjustments
August 19	Friday	Last Day of 2nd Session
August 22	Monday (11:00 a.m.)	Faculty Checkout

1994-95 Calendar

Fall Quarter 1994 (55 days)

August 31	Wednesday	Faculty Workshop
September 1	Thursday	Orientation & Registration
September 2	Friday	Advising and Schedule Adjustments
September 5	Monday	Labor Day Holiday
September 6	Tuesday	First Day of Classes
September 6-7	Tuesday,Wednesday	Schedule Adjustments
October 10-14	Monday-Friday	Mid Term Week
November 4	Friday	Last Day to Drop with "W"
November 17, 18, 21	Thursday, Friday, Monday	Final Examinations
November 22	Tuesday (11:00 a.m.)	Faculty Checkout
November 22-25	Tuesday-Friday	Thanksgiving Holidays

Winter Quarter 1994-95 (55 days)

November 28	Monday	Orientation & Registration
November 29	Tuesday	First Day of Classes
November 29-30	Tuesday, Wednesday	Schedule Adjustments
December 16	Friday (4:30 p.m.)	Winter Holidays Begin
January 2	Monday (8:00 a.m.)	Classes Resume
January 16-20	Monday-Friday	Mid Term Week
February 3	Friday	Last Day to Drop with "W"
February 23, 24, 27	Thursday, Friday, Monday	Final Examinations
February 28	Tuesday (11:00 a.m.)	Faculty Checkout

Spring Quarter 1995 (55 days)

March 2	Thursday	Orientation & Registration
March 3	Friday	First Day of Classes
March 3, 6	Friday, Monday	Schedule Adjustments
April 10-13	Monday-Thursday	Mid Term Week
April 13	Thursday (10:00 p.m.)	Spring Holidays Begin
April 24	Monday (8:00 a.m.)	Classes Resume
May 5	Friday	Last Day to Drop with "W"
May 24-25	Wednesday, Thursday	Final Examinations
May 26	Friday	Final Examinations
May 29	Monday (11:00 a.m.)	Faculty Checkout
May 30	Tuesday (7:30 p.m.)	Graduation

Summer Quarter 1995 (50 days)

June 1	Thursday	Orientation and Registration
June 2	Friday	First Day of Classes
June 2, 5	Friday, Monday	Schedule Adjustments
July 4	Tuesday	Independence Day Holiday
July 10-14	Monday-Friday	Summer Holidays
July 17	Monday (8:00 a.m.)	Classes Resume
August 4	Friday	Last Day to Drop with "W"
August 18	Friday	Last Day of Summer School
August 21	Monday (11:00 a.m.)	Faculty Checkout

1st Summer Session 1995 (25 days)

June 1	Thursday	Orientation and Registration
June 2	Friday	First Day of Classes
June 2, 5	Friday, Monday	Schedule Adjustments
July 4	Tuesday	Independence Day Holiday
July 7	Friday	Last Day of 1st Session
July 10-14	Monday-Friday	Summer Holidays

2nd Summer Session 1995 (25 days)

July 7	Friday	Registration
July 17	Monday	First Day of Classes
July 17-18	Monday, Tuesday	Schedule Adjustments
August 18	Friday	Last Day of 2nd Session
August 21	Monday (11:00 a.m.)	Faculty Checkout

ISOTHERMAL COMMUNITY COLLEGE
BOARD OF TRUSTEES

APPOINTED BY RUTHERFORD COUNTY BOARD OF EDUCATION

Mr. Ivy Cowan – Spindale, NC
Mr. William T. Page – Rutherfordton, NC (2nd Vice Chairman)
Mrs. Robert Spratt – Caroleen, NC – Secretary
Mr. Thomas A. Roberts – Forest City, NC

APPOINTED BY RUTHERFORD COUNTY COMMISSIONERS

Mr. A. Jervis Arledge – Rutherfordton, NC
Mr. Walter Dalton – Rutherfordton, NC
Mr. Joe A. Miller – Cliffside, NC
Mrs. Vivian G. Watson – Rutherfordton, NC

APPOINTED BY THE GOVERNOR OF NORTH CAROLINA

Mrs. Lathelma Becknell – Forest City, NC
Mr. Al King – Rutherfordton, NC, 1st Vice Chairman
Burtchus R. Lathan – Spindale, NC
Mrs. Opal Sauve – Columbus, NC

APPOINTED BY THE POLK COUNTY COMMISSIONERS

Dr. C.W. McCall – Tryon N.C.
Mr. Howard Olson – Tryon, NC

RUTHERFORD COUNTY BOARD OF COMMISSIONERS

Mr. Russell Duncan
Mr. Franklin Goode, Chairman
Mr. Robert Hawkins
Mr. Aden Lynch
Mr. Tony Helton

POLK COUNTY BOARD OF COMMISSIONERS

Mr. Benny Smith, Chairman
Mr. Jesse Foy
Mr. Henry Huntsinger
Mr. Carson Deck
Mr. Tim McCormack

ADMINISTRATIVE OFFICES

Office of the President

Willard L. Lewis, III ..... President
Glenda Scruggs ..... Secretary to the President
Mary Burgin ..... Director of Development
Frankie McWhorter ..... Public Information Officer
Karen A. Noel ..... Director of Institutional Effectiveness and Research
Fred J. Eason ..... President Emeritus

Office of the Vice President for Administration

Dillard L. Morrow ..... Vice President for Administration
Catherine Jolley ..... Controller
Curtis Vance ..... Systems Administrator
Gene Green ..... Director, Plant Operations & Maintenance
Lujuanna Clayton ..... Secretary to the Vice Presidents

Office of the Vice President for Academic and Student Affairs

Robert E. Harrison ..... Vice President for Academic and Student Affairs
Helyn Lowery ..... Dean, Business Division
Nancy Womack ..... Dean, College Transfer Division
Donna Harrison ..... Director, Student Support Services
Bruce Waddingham ..... Dean, Vocational Technical Division
Wilbur Wright ..... Dean of Student Affairs
Betty Gabriel ..... Director of Counseling
Susan C. Monday, ... Admissions/Records Officer
Melanie P. Smith, ... Counselor and Recruiter
Edna Ann Silver ..... Counselor and Financial Aid Officer
Kelly Metcalf ..... Admissions/Records Specialist
Myra Woody ..... Financial Aid Technician
Fred Bayley ..... Dean, Continuing Education
Susan Vaughan ..... Director of Library

Office of Director of the Polk County Campus

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

INTRODUCTION

Historical Sketch

Interest in a community college for Rutherford and Polk Counties began even before a statewide community college system was established. In 1963 the General Assembly passed Chapter 115A, General Statutes of North Carolina, establishing the Department of Community Colleges, and shortly thereafter the Rutherford County Commissioners appointed a committee to study and promote plans for a community college in the County. Their preliminary report, submitted in March 1964, recommended that the proposed College serve Rutherford and Polk Counties, that a site south of Spindale be chosen, and that the College be financed by a bond issue and a special tax levy. On September 5, 1964, Rutherford County citizens voted by a margin of over 16 to 1 in favor of a $500,000 bond issue for construction of the College, to be matched by state funds, and a property tax increase to pay the County's portion of the operating costs.

The College was chartered on October 1, 1964, by the State Board of Education. The first meeting of the Board of Trustees was held on November 17, and on November 23 the Board approved the name "Isothermal Community College." Fred J. Eason was chosen by the Board as the College's first president on December 22. On July 1, 1965, the Industrial Education Center, which had been operating since 1962 as an extension of Gaston Technical Institute, became the vocational and technical division of Isothermal Community College. The College thus began operation with 66 students, some of whom received the first diplomas issued by Isothermal in exercises that August. August 1965 was also the culmination of a fund-raising drive by Rutherford and Polk County citizens and businesses for the purchase of land for the Spindale campus.

Until the new campus was ready, the vocational-technical, college transfer (begun in September 1966) and adult education divisions were scattered in a number of temporary locations in Avondale, Spindale, and Caroleen. College transfer and vocational-technical education each had about 100 students. The adult education program was boosted by the creation of the High School Diploma program in May 1967. That same year, I.C.C.'s Polk County program began with continuing education courses in Tryon.

The first three buildings on the Spindale campus opened on April 8, 1968, and the College's first full-fledged graduation exercises were held on August 30. The lake and initial landscaping of the campus were completed by April 27, 1969, when the College's charter was presented. By that time 554 full-time students were enrolled. On January 11, 1970, the College was accredited by the Southern Association of Colleges and Schools.

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

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

Isothermal Community College has continued to expand its special programs for the community as well as its physical plant. Some examples are Rutherford County's first Industrial Fair (April 1980), Community Arts Festival and Health Fair (both April 1982), Local History Week and opening of the Old Tryon Historical Collection in the Library (October 1982), and High Technology Week (April 1983), in addition to numerous other cultural and educational events.

Isothermal looks toward a bright future while continuing to strive for more complete fulfillment of its goal: to provide wider educational opportunities for all members of the community.

Dr. G. Herman Porter was appointed Acting President on August 1, 1985, upon the retirement of Dr. Fountain and served in that capacity until Dr. Willard L. Lewis III assumed the duties of President on June 9, 1986.

Mission Statement

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

Isothermal Community College faculty, staff and administration believe that students are their primary concern. Because of this concern, the college provides programs, schedules, and academic and personal support services according to the diverse needs of its students. In order to assist students in realizing their personal, educational and professional goals, the college is committed to excellence in teaching and service and strives to be an institution wherein each student has the opportunity to attain the highest level of his or her capabilities.

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

Accreditation

Isothermal Community College is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award the Associate of Arts Degree, Associate of Science, the Associate of Applied Science Degree, Diplomas and Certificates.

Office Hours

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

General Class Hours

In order to provide educational opportunities to the majority of the residents of Rutherford, Polk and contiguous counties, most academic programs are offered during both day and evening hours.

Day classes are normally scheduled from 8:00 a.m. through 4:45 p.m. Monday through Friday. Evening classes usually are scheduled from 5:30 p.m. through 10:15 p.m. Monday through Thursday evenings. A limited number of special classes are offered on Friday evening and on Saturday.

Library

The library provides a variety of books, audio-visuals, and other materials to accommodate many kinds of learning. The collection supports and reflects the teaching/learning process for students and faculty; however, the local communities are welcome to use these resources as well. A friendly and competent staff is available to offer its services to help students, faculty, and the community.

Library hours:
8:00 a.m.-9:00 p.m. Monday-Thursday
8:00 a.m.-4:15 p.m. Friday
Holiday and Quarter Break Hours as Posted

Visits To The Campus

Visitors are always welcome. An information desk is maintained on the main floor of the administration building Monday through Friday. The receptionist will contact the Dean of Student Affairs to provide general information and a tour of the campus.

You may arrange a tour of the campus by writing or calling the Dean of Student Affairs. When writing, please specify the time and the number of persons in your party.

Nondiscrimination Statement

Isothermal Community College is dedicated to equality of opportunity for its staff, students, and community. Isothermal Community College does not discriminate against students, employees or applicants on the grounds of race, color, religion, age, sex, national origin, or handicap. Isothermal Community College is committed to this policy.

Isothermal Community College supports the protection available to members of its community under all applicable Federal Laws including Title VI and Title VII of the Civil Rights Act of 1964, Equal Pay Act of 1963, Title IX of the 1972 Education Amendments, Executive Order 11246 as amended by 11375, Title VI (section 799A) and Title VIII (section 8451) of the Public Health Service Act, Age Discrimination Act, and the Rehabilitation Act of 1973.

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

Dr. Dillard Morrow
Affirmative Action/Title IX Coordinator
Isothermal Community College
P.O. Box 804
Spindale, NC 28160-0804

Sexual Harassment Policy

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

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

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

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

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

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

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

Handicapped Services **(see page 146)**

GENERAL ADMISSION REQUIREMENTS FOR CREDIT COURSES

Isothermal operates an "Open Door" admission policy. Applicants are normally required to have a high school diploma or its equivalent. Exceptions are made in some vocational programs based on the age of the applicant (18 years of age or older). The following are specific requirements for each program.

College Transfer and Technical Applicants:

1. Complete an application for admission.
2. Official transcripts from high school and college (if applicable).
3. ASSET Placement Test.
4. Orientation Program with review of test scores and other helpful preregistration information.
5. North Carolina high school graduates must have passed the N.C. Competency Test.

Vocational Applicants:

1. Complete an application for admission.
2. Official transcript(s) from high school and college (if applicable).
3. ASSET Placement Test
4. Orientation Program.
5. North Carolina high school graduates must pass the N.C. Competency Test.

Associate Degree in Nursing applicants are required to:

1. Complete an application for admission.
2. Provide a minimum SAT score of 450 on verbal and 450 on math or a composite score of 17 on the ACT. If the applicant has not had the SAT or the ACT, they must take the ASSET Placement Test and complete the requirements, if necessary, prior to Fall quarter acceptance. Applicants may submit official college transcripts showing successful completion of comparable courses in math, algebra and English.
3. Provide an official High School transcript or GED Equivalency Certificate and official transcript(s) from previous education above the high school level.
4. Provide evidence of a basic high school or college course in biology, chemistry, and algebra with a grade of "C" or above prior to entering the program.
5. Obtain (3) references (other than family) and have them complete Isothermal Community College Reference Forms.
6. Must submit acceptable report of physical and mental examinations.

7. Must score satisfactorily on the PSB-Nursing School Aptitude Examination-R.N.
8. Must schedule an interview with Nursing faculty and a Student Affairs counselor.

Practical Nursing applicants are required to have a high school diploma or its equivalent and:

1. Complete an application for admission.
2. Take the ASSET Placement Test and complete the requirements, if necessary, prior to Fall quarter enrollment in the Nursing Curriculum.
3. Provide a completed physical examination.
4. Obtain three (3) references (other than family) and have them complete Isothermal Community College Reference Forms.
5. Provide official high school transcript or GED Equivalency Certificate and official transcript(s) from previous education above the high school level.

Final selection is made after a personal interview with the Nursing faculty.

Child Care Worker Program applicants are required to have a high school diploma or its equivalent and meet the requirements for vocational applicants.

Cosmetology applicants must have completed the ninth grade. They must meet the requirements for vocational applicants.

Veterans and Veterans' Dependents receiving veterans' educational benefits must provide transcripts (high school and college, if applicable) of all education.

ADMISSION PROCEDURE FOR FOREIGN STUDENTS

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

1. to receive a satisfactory score of 500 or better on the Test of English as a Foreign Language (TOEFL) or
2. to complete the English 109 course at an English Language School or a course comparable to ENG 0109.
3. to demonstrate the ability to support themselves for the entire period of stay in the United States while pursuing a **full** course of study. Documented evidence of these means is required.

TRANSFER ADMISSION REQUIREMENTS

Transfer applicants must also meet the general admission requirements outlined above. Students transferring 30 quarter hours of credit from a regionally accredited post-secondary institution are not required to submit a high school transcript. Students transferring a grade of C or better in

college English and math may be exempt from the placement test. Each applicant requesting transfer of credits from another institution will be considered on an individual basis (see Transfer of Credit under Academic Procedures and Policies).

TRANSIENT STUDENTS

Transient Students who are enrolling at Isothermal Community College need only to submit an application to the Admissions Officer and a letter granting approval to attend Isothermal from the college they are attending or plan to attend.

CONDITIONAL ADMISSIONS

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

READMISSION

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

SPECIAL CREDIT

Students may enroll in the college as special credit students. These students will only be required to complete an application for admissions. However, their enrollment is restricted to courses that do not have a prerequisite that is determined by test scores. Upon the accumulation of 15 quarter hours of credit the student must meet General Admission Requirements. After 15 quarter hours of credit have been earned, a student may continue to enroll in courses solely for self-enrichment without declaring a degree program. Hours earned beyond the 15 hour limit may not be used at a later date for credit toward degree requirements.

ADMISSION OF HIGH SCHOOL STUDENTS (DUAL ENROLLMENT)

Isothermal Community College has an agreement with the Rutherford County Board of Education and the Polk County Board of Education to permit high school students to attend the College. Students enrolled in high school may be admitted to the College under one of two programs. The Dual Enrollment Program allows selected students to enroll part time (two courses) with the approval of their high school principal. Students may also

enroll under the Cooperative Agreement Program which is designed for the more advanced high school student. This program also requires the approval of the principal and the Admissions Office of the College. Dual enrollment students who are planning to enroll in math or English classes are required to take the ASSET placement test.

DEVELOPMENTAL PLACEMENT POLICY

Students entering Isothermal Community College in the College Transfer, Technical, and selected Vocational programs will be required to take one or more developmental courses in the areas of English, reading or mathematics as a result of any one of the following conditions:

1. A scaled score below the cut-off scores established by the college on any of the ASSET placement tests (Writing Skills, Reading Skills, Numerical Skills, Elementary, Intermediate, or College Algebra).
2. Late registration without taking the above placement tests. During the late registration period, students who have not taken the placement tests will be given the opportunity to take the tests to determine the appropriate placement in courses.
3. Referral by a faculty member to developmental courses when a student's work in curriculum courses demonstrates academic skill deficiencies in one or more of the areas of English, reading or mathematics.

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

Students who place into three (3) developmental courses will be limited to a twelve (12) credit hour class load. Students desiring to take twelve (12) credit hours may choose additional elective developmental courses or courses in another division approved by the Director of Student Support Services. Any exception to the overall policy or course policy must be approved by the Director of Student Support Services.

Regulations and Requirements

In publishing these regulations, the College does not recognize any implied contract as having validity beyond the present academic catalog year. The President reserves the right to make changes in curricula and in regulations when, in his judgment, such changes are for the best interest of the students and the College. Ordinarily a student may expect to receive a degree by meeting the requirements of a curriculum, as specified in the catalog in force when he entered the College or in any one subsequent catalog published while he is a student, but the College is not obligated to fulfill this exception or to offer in any particular year a course listed in the catalog.

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

Registration

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

Deficiency List—Students are responsible for obtaining registration clearance for unpaid fines or loans from previous quarters prior to registration.

Student Records

Isothermal Community College in the execution of its responsibilities to students, must maintain accurate and confidential student records. The Student Affairs Division has the responsibility for maintaining these records in accordance with existing state laws, college policy, and the **Family Educational Rights and Privacy Act of 1974** as amended.

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

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

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

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

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

to review their education records must make written requests to the Dean of Students listing the item or items of interest.

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

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

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

The above is a general statement concerning Student Records. The complete policy and the guidelines and procedures used to enforce the policy are located in the Student affairs Office and may be examined upon request.

Program Changes

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

Withdrawal From College

All Official Withdrawals Must:

1. Be made through the Division, Student Affairs or the Director of the Polk County Campus.
2. Be made in person if possible.
3. Be recorded by the Registrar's Office to be official.
4. Receive a grade of "W". Students who leave class without officially withdrawing will receive a grade of "F" on all courses. See college calendar for last day to receive a "W".

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

Tuition Refund for students shall not be made unless the student is, in the judgment of the institution, compelled to withdraw for unavoidable reasons. In such cases, two-thirds of the student's tuition may be refunded if the student withdraws within 10 calendar days after the first day of classes as published in the school calendar. Tuition refund requests must be made in writing.

Tuition Credit. Where a student, having paid the required tuition and fees for a quarter, withdraws from the institution before the end of the quarter and the reasons for withdrawal are found excusable by the institution's administration, the student may be allowed credit for unrefunded tuition and fees if he/she applies for readmission during any of the next four calendar quarters and petitions in writing to be allowed such credit. The petition must state the reason for withdrawal.

Approval for refund/credit must be determined by the Dean of Students or his designee.

Academic Probation and Suspension

Probation. A student performing below the minimum satisfactory level as determined by the schedule detailed below for any quarter, will be placed on academic probation for the following quarter. Suspension. A student, at the end of the academic probation quarter, who's GPA falls below the minimum satisfactory level as outlined in the probation policy below will be suspended.

The Grade Point Average Schedule for the ASSOCIATE OF ARTS DEGREE, ASSOCIATE OF SCIENCE DEGREE, and the ASSOCIATE OF APPLIED SCIENCE DEGREE follows:

Cumulative Qtr. Hrs. Attempted	GPA
6-25	1.50
26-40	1.70
41-60	1.90
61-85	1.95
85-95	2.00
96-more	2.00

FOR THE DIPLOMA PROGRAMS

Cumulative Qtr. Hrs. Attempted	GPA
6-25	1.50
26-40	1.65
41-60	1.80
61-more	2.00

Length of Suspension. All academic suspensions are for a minimum of one quarter except for those students enrolled in a curriculum in which the subject matter is taught in specific quarters and not repeated until a year later.

Re-Entry

Before re-entry, a student on suspension (one who has been un-enrolled for one quarter or more) must have a program of study approved by the Dean of Students or the committee on Admissions and Academic Continuation. The student may request or be asked to appear before the committee. The action of the Committee is final.

Academic Probation and Suspension Policy for the Practical Nurse Education Program

Probation. The program defines a 2.0 grade point average for each subject as the minimum satisfactory level. Thus a grade of "F" is given in all nursing courses for an average of less than "C" as designated by the nursing curriculum. Any student performing below this academic level in related courses, specifically with a grade of "D" in such courses as English or Psychology will be placed on academic probation for the following quarter. A 2.0 grade point average must be attained in the following quarter in order to remain in the Practical Nurse Education Program.

Suspension. A student, at the end of the academic probation quarter, whose GPA falls below the minimum satisfactory level as outlined in the probation policy will be suspended. Any practical Nurse Education student receiving a grade of "F" in any course or receiving a grade of "D" for a second quarter in a related course will be suspended from the program.

Re-Admission. Any Practical Nurse Education student (with the exception of students who have failed more than two courses or have failed Nursing Fundamentals, NUR 1101 may be considered for Re-admission after successful completion with a minimum grade of "C" in at least three college level courses taken simultaneously, as approved by the faculty of the Practical Nurse Education Program.

Appeal. A suspended student has the right to appeal his suspension through the following procedure. The suspended student must be prepared to present a compelling case by showing a justifiable reason for his poor academic standing or by demonstrating GPA computation error. The student must initiate his appeal by filing a written request for review of the suspension with a counselor or the Dean of Students. The counselor will advise the Dean of Student Affairs who will take appropriate steps to establish a hearing for the suspended student by the Admissions and Academic Continuation Committee.

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

Grade Appeals

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

Student Classifications

Freshman—Earned less than 45 credit hours
Sophomore—Earned 45 credit hours or more
Part-time—Enrolled for less than 12 credit hours

Academic Load	Maximum Hours
College Transfer	19 credit hours
Vocational	21 credit hours
Technical	21 credit hours

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

Repeating Courses

Courses with earned grades of "D" or "F" may be repeated. Courses with earned grade of "C" or better may be repeated only by special permission from the Vice President for Academic and Student Affairs. When a course has been repeated the higher grade will be counted.

Physical education credit classes may not be taken for a grade of "audit." Credit students may not receive more than five physical education credits. Exceptions for physical education majors may be granted by the Vice President for Academic and Student Affairs. Non-credit recreation classes offered through the Division of Continuing Education may be repeated at will. Courses taken as audit may be repeated for credit only. No course may be audited more than once.

Class Attendance

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

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

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

Examinations

Final examinations in all subject areas are held at the end of each quarter. The examination record combined with the record made in class constitutes the student's final grade.

Grading System

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

The grading system is as follows:

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

An asterisk beside a letter grade indicates no credit or grade points for that course.

Progress Policy

*The "P" (PROGRESS) grade allows a student in an individualized instruction course, who has attended regularly and made satisfactory progress, to continue the course in a subsequent quarter until all the course

requirements are met. The student must register for the course in the subsequent quarter. The hours credit and hours attempted will not be given until the course is completed. The grade of "P" may be assigned only the first quarter the student enrolls in an individualized course. Exceptions to continue the "P" into a third quarter must have the written permission of the instructor and the Division Dean.

A grade of "P" may not be awarded to veterans nor to veterans' dependents receiving DVA educational benefits.

Records of Progress

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

Incomplete Policy

A grade of "I" is assigned where the course work is incomplete. This grade must be removed by completing the course before the end of the following quarter or the grade automatically becomes an "F" on the permanent record. Instructors may extend the time for removing the incomplete by written notification to the Registrar.

Drop/Add

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

1. Secure a Schedule Change form from the Division Secretary.
2. Have a Drop/Add approved by faculty advisor and instructor.
3. Record the Drop/Add in the computer at the division.
   NOTE: Students will not be allowed to add or change sections after the deadline listed in the Academic Calendar and Quarterly Schedule book. Students may officially drop a course(s) without academic penalty and receive a grade of "W". However, this drop must be made before the drop deadline as published in the college calendar. The Vice President for Academic and Student Affairs may approve a drop after the deadline.

Auditing Courses

Students who wish to audit courses must register through the regular procedure. Audits will be charged the same fee as students taking courses for credit. AN AUDIT CANNOT BE CHANGED TO CREDIT OR CREDIT TO AUDIT AFTER THE DEADLINE FOR ADDING COURSES. (See "Repeating Courses" page 25)

AWARDING OF CREDIT

Transfer of Credit From Other Institutions

Educational work taken at a regionally accredited institution will be accepted. Credit will normally be allowed for applicable courses in which a grade of "C" or higher has been earned. Grades of "D" may be considered for transfer in sequence courses or special cases. In all cases the cumulative grade point average on all courses accepted must be at least 2.0 ("C" equivalent). Grades of previous enrollments will not be used in the grade point calculation of Isothermal Community College. Course work over fifteen (15) years old will be evaluated on an individual basis. Previous course work must be submitted on an official transcript sent directly to the Admissions Office from the transferring institution.

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

Course work taken at non-accredited institutions may be considered for credit on a course by course basis.

Transfer of Credit Within the Institution

Vocational curriculum courses are not transferable to the Technical or College Transfer curriculums. Transferable technical curriculum courses are accepted into the College Transfer curriculum and Technical courses are accepted into the Vocational curriculum. College Transfer curriculum courses are transferable into the Technical and Vocational curriculums. Cumulative grade point averages are normally continued when changing programs within a curriculum but not when changing from program to program. (Example: College Transfer to Technical or to Vocational)

Other Credit

Credit may also be given in the occupational areas for noncollegiate and military educational experiences. These experiences will be evaluated on the basis of the current editions of College Credit Recommendations and The Guide To Evaluation of Educational Experiences in The Armed Services. A maximum of 24 quarter hours may be awarded for these experiences. (Also see requirements for the Associate Degree for Vocational Instructor Program.)

CREDIT BY EXAMINATION

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

Challenge Exam:

Any student may petition through the Division Dean for permission to challenge a course through a comprehensive exam for credit. Only those courses for which tests have been developed and have been filed in the Division Dean's office may be challenged. The procedures for challenging is as follows:

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

CLEP Exam:

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

CLEP CHART

Exam	Minimum Score for awarding Credit	ICC Course(s) Comparable	Quarter Hours Credit Award
Accounting Introduction	47	BUS 210, 211, 212	12
Afro-American History	49	HIS 170	3
American Government	47	POL 260	3
American History	46	HIS 260, 261, 262	9
American Literature	46	ENG 253	3
Biology, General	46	BIO 151, 152, 153	12
Calculus, with Elementary Functions	47	MAT 161, 162, 163	15
Chemistry, General	47	CHM 101, 102, 103	12
College Algebra	45	MAT 151	5
Trigonometry	50	MAT 152	5
College Algebra & Trigonometry	45	MAT 151, 152 or 153	10
College Composition	47	ENG 151, 152 153	9
College French Level I	41	FRE 160, 161, 162	9
*Level II	53	FRE 260, 261, 262	9
College German Level I	40	GER 160, 161, 162	9
*Level II	48	GER 260, 261, 262	9
College Spanish Level I	41	SPA 160, 161, 162	9
*Level II	50	SPA 260, 261, 262	9
Computers & Data Processing	47	CSC 151, or CAS 101	3
English Literature	46	ENG 251, 252	6
Freshman English	47	ENG 151, 152, 153	9
Marketing	47	MKT 120	4
Macroeconomics, Intro.	48	ECO 201, 202, 203	9
Microeconomics, Intro	47		
Psychology, General	47	PSY 260	3
Sociology, Intro	47	SOC 160	3
Statistics	49	MAT 170	5
Western Civilization	50	HIS 151, 152, 153	9

* If Level II of a Foreign Language is taken without taking Level I then credit for both levels (i.e., 24 quarter hours) will be awarded if the necessary minimum score is attained.

Advanced Placement (AP) Examination

If a student has taken Advanced Placement courses in high school and the respective exam, with a grade of (3) or higher on the exam, then he can receive college credit for that score. (Example: A score of at least 3 on the biology AP exam would entitle a student to receive 12 quarter hours credit for BIO 151, 152, 153.)

Dean's List with Highest Honors

The Dean's List is designed to recognize all students whose academic performance is outstanding. In order to qualify for the Dean's List with Highest Honors, a student must carry at least twelve (12) quarter hours of credit during the quarter and maintain a 4.0 grade point average for the quarter.

Dean's List

In order to qualify for the Dean's List, a student must carry at least twelve (12) quarter hours of credit during the quarter and maintain a 3.25 grade point average for the quarter.

GRADUATION

Requirements

Requirements for the degree or diploma will vary according to the curriculum. Students should refer to the required courses in the catalog which apply to their programs so that they can ascertain the course requirements for graduation.

In the case of students transferring into Isothermal Community College, at least half of the credits required for graduation and at least two of the last three quarters of course work must be earned at Isothermal Community College.

Course Substitutions

Course substitutions may be approved to fulfill graduation requirements provided the substitution is appropriate to the student's program and a comparable course(s) if offered. In all cases course substitutions must be consistent with the program requirements as outlined in the Curriculum Standards published by The Department of Community Colleges. Each student is limited to twelve (12) credit hours of substitutions; however, cases where courses have been discontinued additional substitutions may be approved. All course substitutions must be approved by the Division Dean and the Vice President for Academic and Student Affairs and recorded in the Registrar's Office.

Graduation Procedures

Students are expected to file graduation applications with the Registrar's Office at least one quarter preceding the completion of degree requirements. Commencement exercises to award degrees, diplomas, and certificates to students in respective divisions are at the conclusion of the Spring quarter. A diploma fee is charged to each graduating student. The specific date of the commencement exercise is listed in the College Calendar in the front of this catalog. All students who have completed degree requirements since the previous commencement are expected to participate in the exercises. Diplomas must be ordered through the bookstore.

Graduation With Honors

Students who complete a degree or diploma program with a grade point average of 4.0 will be graduated with High Honors. The student who earns a grade point average of 3.50 to 3.99 will be graduated with Honors.

Class Rings

All orders for class rings, caps and gowns, and graduation invitations will be handled through the book store. Notices will be posted relevant to dates for measurements. Students who are graduating should see that their orders are placed on the date specified in the bulletin.

Transcript of Record

The transcript is a statement of official academic record of the student while attending this College. The College will not release an official transcript unless all tuition, fees, and other obligations due the College have been cleared.

Transcript(s) will not be released without the written consent of the student. (See section entitled Student Records)

HONORS

Awards Day

Awards Day is an annual assembly held to recognize students whose scholarship, leadership, citizenship and service have been meritorious and noteworthy. Each division as well as departments of Isothermal Community College is entitled to give recognition to those students whose achievements have evinced the highest level. Appropriate certificates, trophies, or plaques and letters of citation are presented to the winners.

Who's Who Among Students in American Junior Colleges

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

STUDENT AFFAIRS

The Student Affairs Division of Isothermal Community College is centrally involved in implementing the philosophy and objectives of the college and in meeting the educational needs of Rutherford and Polk County

citizens. A professional staff and faculty, varied services and programs, and modern, attractive facilities are provided to assist students in meeting their educational goals.

The Student Affairs programs and services are essential to the achievement of the goals of the institution and contribute to the cultural, social, moral, intellectual and physical development of students. The mission of the Student Affairs Division is to maximize student success by providing the leadership, coordination, and management necessary to ensure that the functions of the division are used as effectively as possible to help students identify, pursue, and achieve their individual goals.

Students are our primary concern, and all programs and services are open to those who can benefit regardless of age, sex, socio-economic status, ethnic origin, race, religion or handicap. On a regular basis, the division will develop, evaluate, and disseminate goals that are consistent with the mission and goals of the institution.

The Student Center

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

Orientation

Orientation of all new students is a major goal of the Student affairs division. the Orientation Program is composed of a series of activities involving administration, faculty, staff, and students. These activities introduce students to the services and resources available at the college, provide information, answer questions and, in general, help solve problems normally faced by students.

Orientation activities include Pre-Enrollment Programs (PEP Groups) led by counselors after ASSET testing on campus and in area high schools. In addition, all new students are required to participate in an Orientation Program which is scheduled twice each Registration Day and once during the summer.

The Orientation process is further extended for all full-time technical and college transfer students who are required to take ORI 100: Student Orientation Seminar.

Counseling, Career Development and Testing Center (CCDT)

Counseling

Counseling services at Isothermal Community College are provided by the Student Affairs Division and are available to the total institution and its communities in its active Counseling center. Viewed as an educational and supportive service, counseling takes place on an individual basis or, when appropriate, in groups.

Counselors offer assistance with the development of self-management skills, self-concept building, educational planning, and improvement of interpersonal relationships.

Counselors are available in the Student Services Building from 8 AM to 9 PM Monday through Thursday and 8 AM to 4:30 PM on Friday. Students may call 286-3636, exts. 244 or 239 for an appointment, or they may drop in to talk with a counselor.

Career Development

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

- A Career Resource Area staffed by a Counselor Associate and secretary.
- A Career Development Counselor qualified to help individuals assess and understand their abilities, aptitudes, and interests in the process of career decision-making.
- Interest testing:
  Strong-Campbell Interest Inventory: Cost $5.00. Uses 325 items to measure person's interest in a wide range of occupations, leisure activities, hobbies, school subjects, and types of people.
  Self-Directed Search: Provides an extensive personalized report that includes a comprehensive list of careers.
- TIPS: A computerized instructional system for teaching job search, employability, and life skills.
- "Please Understand Me": A computerized program that provides insight into temperament with a printout report.
- Career information: Books, film strips, videos, and cassettes related to job search preparation, interviewing, negotiating job offers, and self-help.
- Undergraduate and graduate information: catalogs and applications.
- Transfer information: Course equivalencies, transfer agreements, NC Transfer Counselors' Network.

- Mini-workshops
  - Interest inventory assessment
  - Brain dominance theory
  - Study skills
  - Resume writing and interviewing skills
  - Communication skills

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

Testing Services

Placement Testing:

ASSET is a testing/advising program designed to gather information about a student's skills, needs, and plans as an important step in developing and implementing a sound program of study. ASSET identifies basic skill levels of students in reading, English, and mathematics.

All College Transfer, Technical, and Vocational program applicants are required to take ASSET.

Counselors, faculty, or staff discuss test results, course placement, and college resources immediately following testing or during Pre-Enrollment Programs on Orientation/Registration Days.

A student transferring from another institution who has successfully completed a freshman English, reading, or mathematics course is exempt from placement testing in reading, English, and mathematics.Prior to each quarter, a schedule of test dates is available, and prospective students may call extensions 244 or 266 for further information. No fee is charged for ASSET testing.

GED Testing:

The General Educational Development Program (GED) test is available to persons who have not completed their high school education. A North Carolina High School Equivalency Diploma will be awarded upon completion of the series of tests in Writing Skills, Social Studies, Science, Literature, and Math. Testing is offered weekly in the CCDT Center and schedules are available in the Learning Place and CCDT Center.

Job Placement

The Employment Security Commission representative, located in the Career Center, provides job referral services to Isothermal students and graduates.

In addition, the Career Center and instructional staff in each division in conjunction with the Employment Security Commission assist students as requested.

Health Services

The College has no facilities for medical treatment other than for minor first aid and assumes no responsibility for injuries or sickness of students.

First aid supplies are located at secretaries' desks in each building and in the shop areas.

Students suffering from acute illness or injury requiring more than minor first aid treatment will be taken to the emergency room of the Rutherford Hospital, Inc. The student will be responsible for all costs incurred in such treatment.

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

Building construction on campus permits the use of a wheelchair in each building. Inter-building movement by wheelchair is possible, but slightly more difficult.

Veterans Affairs

Veterans entitled to educational assistance from the Veterans Affairs should visit the Student Affairs Office as early as possible for the purpose of making application to the Veterans Affairs. Veterans are required to provide the Veterans Affairs Office copies of their DD-214, and the following, if applicable: marriage license, birth certificates for all children, and any separation papers for either the veteran or his spouse, if either was previously married. The veterans' representative in the Office of Student Affairs will assist in completing the Veterans Affairs application, and will submit the required Certificate of Enrollment for each student.

Members of the N.C. National Guard and/or the U.S. Armed Forces Reserve Component(s) who are eligible for the Selected Reserve Educational Assistance Program and are applying for educational benefits under this bill should contact this office for assistance in completing their application to the Veterans Affairs Office.

Veterans Affairs educational benefits are authorized in accordance with credit or contact hours established by the Veterans Affairs are listed as follows:

Courses Leading To A Standard Degree

College Transfer and Technical

Full time ..... 12 or more quarter hours of credit
3/4 time .....9-11 quarter hours of credit
1/2 time .....6-8 quarter hours of credit

Courses Not Leading To A Standard Degree

Vocational Programs

Full time ..... 22 clock hours
3/4 time ..... 16-21 clock hours
1/2 time ..... 11-15 clock hours

Veterans and other eligible persons certified for Veterans Affairs Educational Benefits who fail to maintain satisfactory progress as defined in the Academic Probation and Suspension Section of this catalog, will have their DVA educational assistance benefits terminated.

The veterans' coordinator and/or faculty advisor will assist students with academic matters that affect DVA Educational Benefits; however, the final responsibility for compliance with DVA educational directives remains with the student.

Housing

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

Student Activities

The College encourages student participation in student organizations and activities. The following are available on campus:

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

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

The following clubs and activities are chartered on the campus:

Afro-American Club
Baptist Student Union
CARDS
Child Care Club
College Singers
Collegiate Secretaries International
Cosmetology - Day
Cosmetology - Evening
Electronics Engineering Club
Intramurals
Isotones
Karate Club
Nursing Club
Phi Beta Lambda
Phi Theta Kappa
Publications — Sentinel (Yearbook)
Patriot (Newspaper)
Anuran (Poetry Magazine)
Student Practical Nurses' Club
Students of Free Enterprise
Video Ventures Club

SCHOOL COLORS: Blue and White

SCHOOL MASCOT: Patriot

Conduct

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

Drug and Alcohol Policy

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

Communicable Disease Policy

Isothermal Community College shall not exclude individuals with communicable diseases unless a determination is made that the individual presents a health risk to himself or others. It is the policy of Isothermal Community College to consider the educational or employment status of those with a communicable disease on an individual basis.

Communicable diseases as defined in this policy include but are not limited to acquired immunodeficiency syndrome (AIDS), chicken pox, hepatitis, measles, tuberculosis, meningitis, mononucleosis and whooping cough.

Communicable Diseases: Administrative Procedures

1. All information and records that identify a person as having a communicable disease shall be strictly confidential.
2. Disclosure of medical information shall be by the President only to those on a need-to-know basis to protect the welfare of persons infected with a communicable disease or the welfare of other members of the college community.
3. Unauthorized disclosure of medical information by an employee of the college is prohibited. Violation of this prohibition may result in the suspension from or termination of employment at Isothermal Community College.

4. Persons who know or have a reasonable basis for believing, that they are infected with a communicable disease are expected to seek expert advice about their health circumstances and are obligated, ethically and legally, to conduct themselves responsibly toward other members of the college community.
5. Faculty and staff of Isothermal Community College and employees of contractors or contracted services who are infected with a communicable disease are urged to notify the appropriate Vice President so that the college can respond appropriately to their health needs. Students are urged to share information with the Dean of Student Services for the same reason.
6. Persons infected with a communicable disease (including the AIDS virus whether active AIDS, AIDS-Related Complex, or zero positive to virus) will not be excluded from enrollment or employment or restricted in their access to the college's services or facilities unless medically-based judgements in individual cases establish that exclusion or restriction is necessary.
   Included in making decisions in individual cases which restrict access to enrollment or employment shall be the college President, the college attorney, the department head, the individual's personal physician, the local health director (or designee), and if necessary, another physician with expertise in managing communicable disease cases.
7. The college shall communicate the most current information regarding communicable diseases, especially AIDS.

Students' Rights

It is the duty of the President to exercise full authority in the regulation of student affairs and discipline in the institution. Delegation of this authority is normally made to the Dean of Students. Nevertheless, it is the 2duty of the President to insure to every student the right of due process and fair hearing, the presumption of innocence until found guilty, the right to know the evidence and to face witnesses testifying against him and the right to such advice and assistance in his own defense as may be allowable under the regulations of the college. In those instances where denial of any of these rights is alleged, it shall be the duty of the President to review the procedures of the disciplinary hearing. A complete policy of **Students' Rights, Responsibilities and Judicial Procedures** is available for review in the Student Affairs Office.

Dress

One of the purposes of college experience is to afford a student the opportunity to practice effective personal grooming. Appropriate dress is encouraged and required. While the College aims to honor the individuality

of each student, it reserves the prerogative to announce and implement regulations concerning dress.

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

Traffic Regulations

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

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

Bookstore

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

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

All students should attend class before buying books. A student who does not attend class before buying books for a course could easily buy the wrong book.

THE BOOKSTORE POLICY IS: BOOKS SOLD CANNOT BE EXCHANGED OR REPURCHASED.

Student Identification Cards

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

This ID card will admit students to social, cultural, educational and athletic events sponsored by the College. Lost ID cards may be replaced in the Student Affairs Office. There will be a charge for the replacement.

TUITION AND FEES

Isothermal Community College receives financial support from local, state, and federal sources, allowing each student an educational opportunity at a minimum cost. **Tuition is set by the State Board of Community Colleges and is subject to change without notice.** Cost of textbooks and supplies are additional expenses which vary according to the program of study. The payment of all fees is required at the time of registration. If a student cannot pay his fees during registration, he is required to make some arrangements with the Business Manager's Office PRIOR to the registration date. Payment of fees will not be deferred unless there is extreme hardship and very good indication that the student will be able to pay the fees within the ten-day limit authorized by the Board of Trustees.

Student Activity Fee

A student activity fee of $10, $10, $8 is charged Fall, Winter, and Spring quarters, respectively, for students registering for nine hours or more on the Spindale campus. Enrollees in mini courses and other off-campus courses will not be charged the Student Activity Fee. Any student not required to pay the fee can, however, elect to do so if they desire. There is no Student Activity Fee for Summer quarter.

The proceeds from this fee are budgeted cooperatively by students and administration in support of co-curricular activities. Students are advised that, without the activity card, admission charges may be assessed at certain student activity functions.

Residence Status For Tuition Payment

To qualify for in-state tuition a legal resident must have maintained his/her domicile (one's permanent dwelling place of indefinite duration) in North Carolina for at least 12 months immediately prior to his/her classification as a resident for tuition purposes. The burden of establishing facts which justify classification of a student as a resident entitled to in-state tuition rates is on the applicant.

Senior Citizens

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

Refund Policy

Tuition refund for students shall not be made unless the student is, in the judgment of the institution, compelled to withdraw for unavoidable reasons. In such cases, two-thirds of the student's tuition may be refunded if the student withdraws within 10 calendar days after the first day of classes as published in the College calendar. Tuition refunds will not be considered after that time. A full refund will be granted when a course or curriculum fails to materialize.

When a student , having paid the required tuition and fees for a quarter, withdraws from the institution before the end of the quarter and the reasons for the withdrawal are found excusable by the institution's administration, the student may be allowed credit for unrefunded tuition and fees.

The student must request such credit in writing. If the credit is granted it must be used within the next four quarters (1 year).

All requests for refunds or credits must be in writing.

STUDENT FINANCIAL AID

Isothermal Community College offers a comprehensive program of financial aid for students who, without such aid, would be unable to continue their education. The program is committed to the philosophy that no eligible student should be denied access to a higher education because of a lack of financial resources. The college provides assistance in the form of grants, part-time employment, loans and scholarships. Financial aid awards may include one or more of these.

Application Procedures

The student is responsible for completing the following procedures in applying for aid:

1. Submit a completed application for admission to the college. Submit transcripts of credit from all secondary and postsecondary schools attended. Complete the placement tests administered by the college.
2. Complete and submit an Isothermal Community College Application for Financial Aid. 3. Complete and mail the Free Application for Federal Student Aid which is circulated by the U. S. Department of Education. It will take the federal processor approximately four - six weeks to generate and mail a Student Aid Report.
4. Submit all three copies of the Student Aid Report (SAR) to the Financial Aid Office. The report, which is developed from information entered on the Free Application for Federal Student Aid, is mailed to the student's address. It is the student's responsibility to bring the SAR to the Financial Aid Office.

5. Request and submit applications for other aid programs in which you feel you can establish eligibility. A number of financial aid programs require separate applications. Please note these under the "Types of Aid Available" section.
6. Submit a Financial Aid Transcript from each postsecondary school that you have attended previously.

Further information regarding application procedures, as well as applications, may be obtained from the Isothermal Community College Financial Aid Office. The Free Application for Federal Student Aid forms are also made available through high school guidance offices. All students enrolled or accepted for enrollment may apply for aid. **Applications must be filed annually for an academic year (September thru August).** It is recommended that applications for aid be submitted by July 1 preceding fall enrollment at the college. For winter, spring, or summer term enrollment, applications should be submitted twenty-one calendar days prior to the beginning of the term. In order to be considered for the North Carolina Student Incentive Grant, the application must be submitted by March 15 preceding fall enrollment. Funding for many programs is limited. Late applicants may find that many funds are obligated. An enrolled student must reapply in order to receive aid during the second year of attendance.

Eligibility for Aid

The basic eligibility requirements for federal student financial aid require that the applicant:(1) be a U. S. citizen or eligible noncitizen, (2) be registered with Selective Service (if required), (3) be working toward a degree or certificate, (4) be making satisfactory academic progress, (5) not be in default or owe a refund on a Federal grant or Federal education loan, and (6) have financial need. In addition, conviction of drug distribution or possession may make a student ineligible.

Most financial aid at Isothermal Community College is awarded on the basis of proven financial need. Financial need, defined as the difference between a family's resources and the total expense of attending the college, is calculated by a national processing center. In determining the student's need, the federal government assumes that the student and/or the family of the student has the primary responsibility for paying postsecondary educational costs. Financial assistance from the college and other sources is intended to be supplementary to the efforts of the family. To establish initial eligibility, a student may be required to verify or document taxable income, federal income taxes paid, untaxed income, number in the household, number attending postsecondary institutions, and independent student status, as well as other information reported on the aid application.

To remain eligible for most financial aid, a student must be enrolled in an eligible program of study on at least a half-time basis and maintain satisfactory academic progress (see Satisfactory Progress Standards for Financial Aid). Funds received must be spent on educational expenses.

Types of Aid Available

Federal Pell Grant

The Pell Grant is a federally sponsored aid program for low-income families. It is intended to be the first and basic component of a financial aid package. As a condition of receiving a Pell Grant, federal regulations require students to sign a statement certifying that they will not engage in the manufacture, distribution, dispensation, possession, or use of controlled substances while receiving Pell Grant funds. Repayment is not required.

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

Federal Supplemental Educational Opportunity Grant (SEOG)

SEOG is also sponsored by the federal government. A limited number of these grants are awarded to students who have exceptional financial need. Any student who completes the Free Application for Federal Student Aid is considered for this grant. Repayment is not required. Undergraduate students who have a Bachelor's degree are not eligible for Federal SEOG's.

North Carolina Student Incentive Grant (NCSIG)

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

Federal Work Study

Part-time jobs are available to students demonstrating unmet need beyond the Pell Grant. Those wishing to earn a portion of their college expenses will work a supervised schedule, usually 8-15 hours per week, in an on campus job. This type of aid is for hours worked in the form of wages; consequently, there is no repayment. Students apply for work study on the Isothermal Community College Application for Financial Aid.

Federal Stafford Loan Program (formerly Guaranteed Student Loan)

The Federal Stafford Loan Program provides a means for eligible students to borrow funds. To be considered for the loan, students must first apply for and receive a determination of eligibility or ineligibility for a Pell Grant. Second, they must complete a loan application. Applications are available in the Financial Aid Office. Maximum yearly loan limits are established by the federal government. Students may not borrow more than an amount equal to the cost of attendance minus other estimated financial assistance received minus the expected family contribution. Repayment is required to begin no later than six months following graduation or termination of at least half-time study. Interest rates on the loans are established by the federal government.

North Carolina Prospective Teachers Scholarship Loan (NCPTSL)

North Carolina residents preparing to teach in public schools within the state are eligible to apply. For each full school year a recipient teaches in North Carolina public schools, one year of the loan amount and the accrued interest is forgiven. Applications may be obtained from the Financial Aid Office or from NCPTSL, N.C. Dept. of Public Instruction, 116 W. Edenton St., Raleigh, NC 27603-1712.

Nurse Education Scholarship Loan Program (NESLP)

North Carolina residents enrolled in a nurse education program who plan to obtain full-time employment as a nurse in North Carolina are eligible to apply. For each six months of employment as a nurse, a portion of the recipient's obligation will be cancelled. All PNE and ADN applicants

who are accepted in the nursing program and who apply for federal student aid are considered.

J. D. Cooley Technical Education Loan Fund

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

Student Emergency Loan Fund

The Student Government Association has established a loan fund to assist students having a minor financial crisis by providing monies that will enable students to continue their education. A minor financial crisis generally is defined as needing money for books, an unpaid medical bill, or a car repair. The maximum loan amount is $100.00. Applications may be obtained from the Student Affairs Office. Documentation may be required. Repayment is required.

Scholarships

A number of scholarships are available to Isothermal Community College students. Criteria for selection most often include academic promise/standing and financial need. Other special requirements may be set by the donor. For on campus scholarships, defined as scholarships in which college personnel participate in the selection of recipients, an institutional scholarship application is required. Application deadlines vary according to the scholarship. For some, completed applications must by filed as early as April 15 preceding fall enrollment. Contact the Isothermal Community College Financial Aid Office for applications, information regarding application deadlines, and information on specific eligibility requirements for each scholarship. Scholarships do not have to be repaid.

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

Listed below are on campus scholarships which are usually available:

Jack E. Buchanan Scholarship
T. D. Carson Scholarship
Robert W. Conley III Memorial Scholarship
Herbert L. Downey Memorial Scholarship
Dr. W.M. Elliott Scholarship

First Union/Jack Buchanan Scholarship
A.J. Fletcher Music Scholarship
Charles A. Holcombe Scholarship
Isothermal Community College Alumni Scholarship
Robert A. Jones Memorial Scholarship
William V. Lee Memorial Scholarship
Lovelace Nursing Scholarship
G. K. McClure Educational Fund
James Monroe McDonald Memorial Scholarship
W. H. "Shorty" McDonald Scholarship
Dillard L. Morrow Sentinel Scholarship
N.C. Department of Community Colleges Scholarship
Lee L. Powers Scholarship
Putnam Scholarship
Ruppe Bible Class-Forest City First Baptist Church
Southern Bell Telephone and Telegraph Community College Scholarship
Robert R. Spratt Memorial Scholarship
Wachovia Technical Scholarship
Frank and Mabel West Scholarship
Dr. J. F., Sr. and Ola H. Whisnant Scholarship

Job Training Partnership Act

The Job Training Partnership Act provides funds to students who are enrolled in a Technical or Vocational Program. Eligibility is determined by JTPA income guidelines and other criteria. Funds may be provided for one or more of the following: books, travel, needs-based allowance, tuition, and fees. A limited number of openings are available. Required applications may be obtained in the HRD Office and at the Polk County campus.

Vocational Rehabilitation

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

Satisfactory Academic Progress Standards for Financial Aid Recipients

Federal law requires students receiving federal student aid to maintain satisfactory academic progress as defined by the institution. Federal student aid includes the Federal Pell Grant, Federal Supplemental Educational Opportunity Grant, Federal Work Study, Federal Stafford Loan, and North Carolina Student Incentive Grant.

Satisfactory progress is defined as meeting two requirements: (1) The student must maintain a cumulative grade point average at or above the minimum in chart A below. GPA requirements must be met quarterly. (2) The student must successfully earn the minimum number of hours shown in chart B-1, B-2, or B-3 below. This requirement will be monitored at the end of each spring quarter.

Chart A - GPA Requirements

Credit Hours Attempted	Minimum GPA
6 - 25	1.50
26 - 40	1.70
41 - 60	1.90
61 - over	2.00

Chart B-1: Minimum Credit Hour Requirements - College Transfer

Enrollment Status	Earned Hours Required Each Academic Year	Average Earned Hours Per Quarter
Full - time (12 hrs. +)	24	8
3/4 - time (9 - 11 hrs.)	18	6
1/2 - time (6 - 8 hrs.)	12	4

Chart B-2: Minimum Credit Hours Requirements - Technical

Enrollment Status	Earned Hours Required Each Academic Year	Average Earned Hours Per Quarter
Full - time (12 hrs. +)	27	9
3/4 - time (9 - 11 hrs.)	21	7
1/2 - time (6 - 8 hrs.)	15	5

Chart B-3: Minimum Credit Hour Requirements - Vocational

Enrollment Status	Earned Hours Required Each Academic Year	Average Earned Hours Per Quarter
Full - time (12 hrs. +)	24	8
3/4 - time (9 - 11 hrs.)	18	6
1/2 - time (6 - 8 hrs.)	12	4

NOTE: Enrollment status will be determined by the number of hours for which the student is enrolled at the end of the 20% point of the quarter.

Grades of A, B, C, or D will be counted as earned hours. Grades such as F, I, W, P, Y, and NS will not be counted as earned hours.

Exception: A grade of P in ENG 090, MAT 090, MAT 095, RED 085, and RED 090 will qualify as hours earned provided that: (1) the remedial coursework is recommended by placement testing (2) the student is taking the remedial course for the first or second time.

Financial Aid Probation

Any student who fails to meet the requirements (in chart A) will be placed on Financial Aid Probation. He/She can receive financial aid for one more quarter of enrollment, consecutive or otherwise. If the student fails to meet the minimum GPA requirement at the end of the probationary quarter, he/she will be placed in Unsatisfactory Progress Status, and all aid will be cancelled.

Failure to meet the minimum credit hour requirement (in chart B-1, chart B-2, or chart B-3) places the student directly into Unsatisfactory Progress Status. She/he may attend summer school, at her/his own expense, to earn the necessary number of hours to be considered for financial aid.

Exception: A student who has attended only one quarter during the academic year will not be placed directly into Unsatisfactory Progress Status. He/she will have one more quarter, consecutive or otherwise, to receive financial aid and earn the required number of hours.

Unsatisfactory Progress Status

Unsatisfactory progress occurs when financial aid recipients fail to meet the Standards of Satisfactory Academic Progress as defined. While in unsatisfactory progress status, a student will have his/her financial aid terminated.

Procedure for Reinstatement

Students who have had their aid terminated for unsatisfactory progress may reestablish eligibility for financial aid in one of two ways: (1) By the appeals process, if approved by the committee. (2) By enrolling at the institution at his/her own expense and reestablishing satisfactory progress. Retroactive payments of financial aid for periods a student is in unsatisfactory progress status are prohibited.

Financial Aid Appeals Process

Students may appeal a decision to terminate financial assistance. The appeal must be made in writing to the Financial Aid Officer within two weeks after notification letters of unsatisfactory progress status are mailed. The appeal must be accompanied by appropriate documentation. It will be reviewed by the Financial Aid Committee and the student will be notified of the results.

Maximum Program Time Frames

All students receiving financial aid will be expected to complete their academic programs within the following number of quarters:

Enrollment Status	College Transfer	Technical	Vocational
Full - Time (12 hrs. +)	12	14	10
3/4 - Time (9 - 11 hrs.)	16	18	13
1/2 - Time (6 - 8 hrs.)	24	25	20

Students who change divisions will assume the time limit for the new division minus the number of quarters already attended. Financial aid will be terminated following completion of the maximum time limit. All quarters in which the student attended on at least a half-time basis, not just those in which aid was received, will count in the maximum time frame.

Exception: Time limits may be extended from 1 - 3 quarters for students required to take remedial coursework.

Effects of Previous Credits

Transfer Students - Incoming transfer students will be considered to be making satisfactory progress at the time of their enrollment. Their maximum time frames will depend on the equivalent quarters of credit accepted for credit toward their degree.

Returning Students - Returning students will have their cumulative GPA and completed portion of maximum time frame carried forward.

Other Information

Financial aid may not be used to pay for a remedial course which is not recommended through placement testing. Aid may be used to pay for each recommended remedial course only three times.

THIS POLICY IS SUBJECT TO CHANGE BASED ON INSTITUTIONAL AND FEDERAL GUIDELINES. IF ADDITIONAL INFORMATION REGARDING THIS POLICY IS NEEDED, PLEASE CONTACT THE FINANCIAL AID OFFICE.

CONTINUING EDUCATION

Continuing Education's flexibility provides the opportunity to meet a wide variety of individual and group needs. Adults can study a high tech skill, learn to read, sharpen their sewing skills, or develop quality management techniques. Some courses are offered on a continuing basis while others are given in response to requests of individuals or groups. Groups meet in schools, churches, community clubs, fire stations, and industry throughout Rutherford and Polk Counties and on campus. Class hours, the

length of the course, and the number of meetings per week can be arranged for the convenience of the participants.

Anyone interested in a class can call the Continuing Education office, 286-3636 in Spindale or 894-3092 in Columbus. Classes are often set up for individual interest or in an organization: industry, church, or community group.

Admission and Registration

Adults 18 years of age or older are eligible to participate in Continuing Education classes. High school students from Rutherford and Polk Counties, age 16 to 18, may enroll in a course if the hours do not conflict with the student's regular school program. (This does not apply to students interested in the Adult Basic Education or Adult High School Program.) Preregistration is taken over the phone for most courses. This reserves their place and they will be notified of any course change. Registration and fee payment is completed at the first class meeting.

Registration Fees

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

The fee for Occupational courses is $35. Course fee for Community Services courses typically range $7 - $35.

Continuing Education Units

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

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

The CEU is used in three ways.

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

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

A permanent record of the students' participation will be maintained by Isothermal Community College.

See section on release of permanent records.

New and Expanding Industry

Iverson Smith, Director: Occupational Extension

Training is available to any new or expanding manufacturing employer creating a minimum of 12 new productive jobs in North Carolina. Training may be conducted on campus or at the company's facility. If neither site is available adequate space may be leased. These programs are customized to meet the existing needs of the employer with no tuition fees.

Occupational Extension Program

Donna Wylie, Coordinator: Fire/Health
Iverson Smith, Director: Occupational Extension

Occupational classes help adults build their job skills or knowledge. These classes are held on campus or in the workplace. Business, industry and public service organizations have benefited from their employee's development through occupational courses. Here are some examples of occupational oriented courses.

Advanced Spinning
Advanced Winding
Auto Inspection
Aviation Ground School
Blueprints & Measurements
Building Contractor's Code
Emergency Medical Service
Fire Fighting
Geriatric Care
Industrial Fire Brigade
ISO 9000
Law Enforcement
Nursing Assistant
Teacher Renewal Credit
Total Quality Management
Truck Driver Training

Community Services

Karen Murphy, Coordinator: Lifelong Learning

Community Services courses help adults broaden their talents, stimulate their creativity, develop new skills, improve themselves, and just have fun. Examples of these courses include:

Antiques
Cake Decorating
Ceramics
Conversational Languages
Cooking & Nutrition
Crafts
Creative Writing
Gardening
Guitar
Health & Wellness
Investing
Painting
Pottery
Quilting
Sewing
Sign Language
Stress

Adult Basic Education

Mike Davis, Coordinator: Adult Basic Education

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

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

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

HRD Program

DeLane Davis, Coordinator: HRD

The HRD (Human Resources Development) Program helps the unemployed, underemployed or dislocated worker with motivation, attitudinal changes and pre-job orientation. It is presently operating in 45 Community Colleges and Technical Institutes in the state. There is no registration fee.

Participants learn to properly complete applications, write a resume and prepare for job interviews. The HRD students are encouraged to set personal goals and to define the steps to reach these goals. Individual follow-up is given to help each participant achieve success.

Students learn how to be better employees through individual/group interaction, discussion, and counseling, HRD encourages their sense of self worth, improves their communication skills and develops their ability and attitude to attain and keep a better employment level. At times, skills such as operating different computer programs and nurse's aide are included to help the student be more employable.

Compensatory Education

Carol Lieurance, Coordinator: Compensatory Education

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

The education programming includes the skill areas of basic academics (grades 1-8), high school academics, and vocational skills. The program consists of task-analyzed lesson plans field-tested by a team over a three-year period which include: language, math, social science, community living, consumer education, health, and vocational education.

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

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

Adult High School

Mary Ann Head, Coordinator: Adult High School

Two high school completion programs, Adult High School Diploma (AHSD) and General Educational Development (GED), are offered to Rutherford and Polk County residents. The AHSD program is available through a cooperative agreement with the Polk County Board of Education, the Rutherford County Board of Education, and Isothermal Community College.

The GED program is also offered in Rutherford and Polk Counties. It follows guidelines suggested by the Department of Community Colleges and the American Council on Education.

A variety of adult-oriented reading, writing, grammar, arithmetic, science, and social studies material is supplied for self-paced instruction. This allows a student to work individually and progress at his or her own pace. Individualized instruction by an instructor, aide, and/or tutor is supplied to each student during class time.

Any 18 year old or older adult whose class has graduated may enroll in either program. Sixteen and seventeen year olds may enroll with special written permission from proper authorities.

Adult High School Diploma

Requirements include:

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

Credit for units may be given by one (or all) of the following methods:

1) A student may transfer credit from high school via a transcript.
2) A student, who is eligible, may elect to take challenge tests and receive credit by scoring 50th percentile or higher on selected standardized achievement tests.
3) A student may complete the course(s) in an adult high school class.

General Educational Development (GED)

GED practice tests and GED study material are available through the high school completion program. A student's score on the practice GED test shows if the student should study and the subject(s) to review before attempting the actual test.

Class Locations and Hours

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

The Learning Place, on both campuses, offers classes throughout the day and evening as follows:

Learning Place (Spindale)

Monday, Thursday	9-12 noon; 1-4 pm; 5:30-8:30 pm
Tuesday, Wednesday	9:00 am-8:30 pm
Friday	9-12 noon

Learning Place (Polk)

Monday	9-2 pm; 5:30-8:30 pm
Tuesday	9-12 noon; 5:30-8:30 pm
Wednesday	9-2 pm; 5:30-8:30 pm
Thursday	9-12 noon

Telecourses

A student can prepare for the GED test by watching weekly courses on public television. These courses usually begin in September. English, reading, and math lessons are telecast in 30 minute segments.

Travel/Study Programs

Augusta M. Hyde, Coordinator

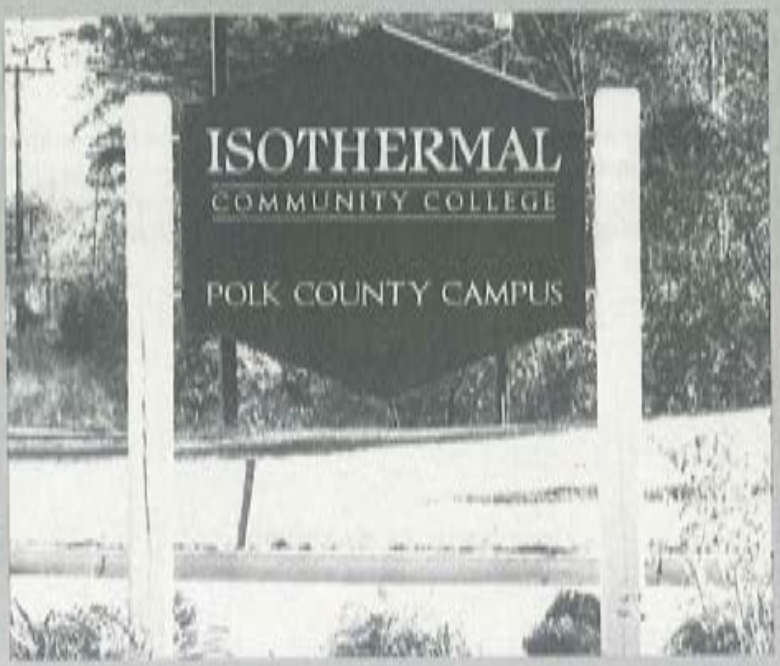
The travel/study program provides stimulating opportunities for study through travel. Study tours are planned because of popular demand and are escorted by Isothermal Community College faculty and staff. Prior to each study tour a mini-course is conducted. While on tour the students, not only have the benefit of the expertise of our Isothermal Community College faculty members, but expert on-site guides.

Visiting Artist Program

Augusta M. Hyde, Coordinator

The Visiting Artist Program brings professional artists to the community, as it exposes, in a unique way a variety of art disciplines. The artist provides workshops, consultations and special programs in the community, public school and college. To arrange a program or for more information, contact Augusta Hyde.

Polk County Campus



POLK COUNTY CAMPUS

The Polk County Campus offers a wide selection of both credit and non-credit courses. Business and college transfer classes are offered for credit. Students may choose to complete specialized coursework at the Spindale campus or transfer to another college to complete a four-year degree. Non-credit (continuing education) courses range from self-enrichment classes to those which offer training to volunteer firemen, rescue personnel, and nursing assistants. Courses to improve occupational skills are offered as well. Adult Basic Education, General Educational Development (GED) and Adult High School programs are available.

Services offered at the Polk County Campus include placement testing, academic counseling, and financial aid assistance. The Polk Campus library is available for use by students as well as other members of the community.

Bulletins listing credit and non-credit courses are mailed out periodically. News releases of the curriculum and special events are placed in local papers and announced on radio station WTYN, Tryon.

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

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

Polk County Campus
Isothermal Community College
902 Hwy 108 West
Columbus, NC 28722

Continuing Education

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

Adult High School Diploma Program

Isothermal Community College, in cooperation with the Polk County School Board and the North Carolina State Board of Education, has developed an Adult High School Diploma Program which provides an adult the opportunity to complete high school. There are no fees for these classes.

Requirements for an adult high school diploma include:

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

Credit for the required courses can be obtained by one (or all) of the following methods:

(1) A student may transfer credit from high school via a transcript.
(2) A student who makes seventy-five (75) or above on the reading placement test may elect to take challenge tests and receive credit by scoring 50th percentile or higher on selected standardized achievement tests.
(3) A student may complete the course(s) in an adult high school class

Students may choose to study at the Polk Campus or at other locations in the county. Each student in the program arranges his own study schedule and proceeds at his own individual pace. Diplomas earned are valid for those who wish to continue their studies in institutions of higher learning.

Adult Basic Education

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

Classes meet four days a week on the Polk Campus. Also, there are night classes offered on campus and at other locations in the county. There is no charge for these classes.

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

General Educational Development Program (GED)

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

CURRICULUM PROGRAMS

College Transfer Programs
Technical Programs
Vocational Programs
Certificate Programs
Student Support Services

Curriculum programs at Isothermal Community College fall into two major categories—college transfer and occupational. Transfer programs are those designed primarily for the students who are planning to attend a four-year college or university; occupational programs are divided into one-year or less (vocational) or two-year (technical) programs which allow the students to enter business or industry in their own or in other communities. Programs leading to the various degrees are offered both day and night.

College Transfer

C-004 Pre-Business Administration
C-026 Pre-Business Education
C-040 Pre-Computer Science
C-007 Pre-Engineering
C-031 Pre-Health and Physical Education
C-009 Pre-Journalism
C-010 Pre-Law
C-011 Pre-Liberal Arts
C-012 Pre-Math
C-013 Pre-Medical
C-014 Pre-Ministerial
C-015 Pre-Music
C-016 Pre-Optometry
C-017 Pre-Pharmacy
C-018 Pre-Science
C-019 Pre-Social Work
C-035 Pre-Teaching—Early Childhood
C-020 Pre-Teaching—Elementary
C-028 Pre-Teaching—Secondary
C-033 Pre-Textile Technology
C-021 Pre-Veterinary Medicine
C-024 General Curriculum

Technical

T-030 Administrative Office Technology
T-109 Associate Degree for Vocational Instructors
T-059 Associate Degree Nursing Program
T-018 Business Administration
T-022 Business Computer Programming
T-068 Commercial Graphics
T-129 Criminal Justice
T-043 Drafting and Design Technology
T-045 Electronics Engineering Technology
T-201 General Technology Curriculum Core
T-049 Industrial Management Technology
T-051 Mechanical Engineering Technology
T-192 Microcomputer Systems Technology
T-179 Radio and TV Broadcasting Technology
T-166 Real Estate Technical Specialty
T-088 Teacher Associate

Vocational

V-001 Automotive Body Repair
V-003 Automotive Mechanics
V-067 Child Care Worker
V-009 Cosmetology
V-018 Electrical Installation and Maintenance
V-111 Geriatric Care Specialist
V-032 Machinist
V-072 Nurse Assistant
V-038 Practical Nurse Education
V-050 Welding

COLLEGE TRANSFER PROGRAMS

Objectives

To provide opportunities for students to complete the general education requirements leading to an Associate of Arts Degree (A.A.) or to an Associate of Science Degree (A.S.). Courses in these programs transfer to senior (4-year) institutions; however, the final decision on transferability rests with the institution to which the student transfers.

Graduation Requirements

A student wishing to complete the requirements for the A.A. or A.S. degree must earn 96 quarter hours of credit with an overall grade point average of 2.0 or better.

The number of hours of required courses and elective courses vary with each of these degrees and are outlined on the following pages. A student's choice of electives should be decided through consultation with his/her advisor in a patterned way toward the student's future major area of concentration and in compliance with requirements at the school to which the student intends to transfer.

Course Number System

College transfer courses are indicated by a three (3) digit number. Any such numbered course may be taken for graduation requirements. No course with a four-digit number may be taken for college transfer graduation requirements.

GRADUATION COURSE REQUIREMENTS

ASSOCIATE OF ARTS

The Associate of Arts degree will be awarded to those students completing the general liberal arts requirements listed below. While foreign language is not currently included on this list, students should be aware that a language requirement is under consideration. Many schools, including UNC-Ch, UNCC, UNCG, and UNCA, have language requirements that should be met before transfer.

Subject	Course	Credit Hours
History	History 151, 152, 153	9
Communications	*English 151, 152, 153 (Must be taken in sequence)	9
Literature	English 250, 251, 252, 253, 254 (Any three of the five)	9
Mathematics	Any 10 hours numbered 151 or above	10
Computer Science	Any CSC or CAS course 3 or more credits	3
Natural Science	Any three-quarter sequence of the same lab science.	12
Physical Education	PED 150 and two physical education activity courses.	4
Humanities	See the Humanities section of the course descriptions for the list of courses that can be used to meet this requirement.	6
Social Science	May be taken from among any Psychology, Sociology, Anthropology, Economics, History, Geography, or Political Science courses.	3
Electives	May be chosen from among approved three digit courses.	31

*ENG 161, 162, 163 will also satisfy this requirement.

GRADUATION COURSE REQUIREMENTS

ASSOCIATE OF SCIENCE

The Associate of Science degree will be awarded to those students completing the general liberal arts requirements prescribed for the Associate of Arts degree and any additional requirements for pre-science/pre-medical, pre-engineering/pre-math, or pre-textile technology programs as follows:

Pre-Science/Pre-Medical (C-018/C-013) must include:

20 hours math (MAT 151, 152, 161, 162) or
(MAT 153, 161, 162, 163)
24 hours Natural Science
4-6 additional hours math, science, and/or computer science
Additional science hours can be substituted for MAT 163 in Pre-Medical.

Pre-Engineering/Pre-Math (C-007/C-012) must include:

MAT 161, 162, 163, 261 and
PHY 251, 252, 253 and
CHM 151, 152, 153 or
BIO 151, 152, 153

Pre-Textile Technology (C-033) must include:

CHM 151, 152, 153
PHY 251, 252, 253
Any 30 hours of math courses numbered 151 or above.

These requirements are reflected in the program outlines which follow.

COLLEGE TRANSFER PROGRAM OUTLINES

The following program outlines are recommended for students who wish to complete a program in two academic years without attending summer school. Students who work or who attend in the evenings may choose to deviate from these outlines to accommodate individual needs. Those programs indicated with an asterisk (*) are available in the evenings.

PRE-BUSINESS ADMINISTRATION C-004*

		Course Title	Class Hours	Lab Hours	Credit Hours
FIRST QUARTER					
ENG	151	Freshman Composition I	3	0	3
MAT	151	College Algebra & Trigonometry I	5	0	5
		Natural Science	3	3	4
HIS	151	World Civilization	3	0	3
PED	150	Concepts in Physical Education	1	2	2
ORI	100	Student Orientation Seminar	1	0	1
			16	5	18
SECOND QUARTER					
ENG	152	Freshman Composition II	3	0	3
MAT	152	College Algebra & Trigonometry II	5	0	5
		Natural Science	3	3	4
HIS	152	World Civilization	3	0	3
PED		Selection	0	3	1
			14	6	16
THIRD QUARTER					
ENG	153	Freshman Composition III	3	0	3
		Natural Science	3	3	4
HIS	153	World Civilization	3	0	3
PED		Selection	0	3	1
		Humanities Requirement	3	0	3
		Humanities Requirement	3	0	3
			16	6	17
FOURTH QUARTER					
		Literature Selection	3	0	3
ACC	210	Principles of Accounting	3	2	4
		Computer Requirement	3	0	3
ECO	201	Principles of Economics	3	0	3
			12	2	13
FIFTH QUARTER					
		Literature	3	0	3
ACC	211	Principles of Accounting	3	2	4
ECO	202	Principles of Economics	3	0	3
		Electives	6	0	6
			15	2	16
SIXTH QUARTER					
		Literature Selection	3	0	3
ACC	212	Principles of Accounting	3	2	4
ECO	203	Principles of Economics	3	0	3
		Electives	6	0	6
			15	2	16
		TOTAL HOURS	89	23	96

PRE-BUSINESS EDUCATION C-026*

		Course Title	Class Hours	Lab Hours	Credit Hours
FIRST QUARTER					
ENG	151	Freshman Composition I	3	0	3
MAT	151	College Algebra & Trigonometry I	5	0	5
OSC	101	Keyboarding/Document Formating I	2	3	3
		Science Selection	3	3	4
HIS	151	World Civilization	3	0	3
ORI	100	Student Orientation Seminar	1	0	1
			17	6	19
SECOND QUARTER					
ENG	152	Freshman Composition II	3	0	3
MAT	152	College Algebra & Trigonometry II	5	0	5
		Science Selection	3	3	4
HIS	152	World Civilization	3	0	3
PED	150	Concepts in PE	1	2	2
			15	5	17
THIRD QUARTER					
ENG	153	Freshman Composition III	3	0	3
		Computer Requirement	3	0	3
		Science Selection	3	3	4
HIS	153	World Civilization	3	0	3
		Elective	3	0	3
PED		Selection	0	3	1
			15	9	17
FOURTH QUARTER					
		Literature Selection	3	0	3
ACC	210	Principles of Accounting	3	2	4
ECO	201	Principles of Economics	3	0	3
		Humanities Requirement	3	0	3
		Social Science Requirement	3	0	3
			15	2	16
FIFTH QUARTER					
		Literature Selection	3	0	3
		Humanities Requirement	3	0	3
ACC	211	Principles of Accounting	3	2	4
ECO	202	Principles of Economics	3	0	3
			12	2	13
SIXTH QUARTER					
		Literature Selection	3	0	3
ACC	212	Principles of Accounting	3	2	4
ECO	203	Principles of Economics	3	0	3
PED		Selection	0	3	1
		Social Science Requirement	3	0	3
			12	5	14
		TOTAL HOURS	87	29	96

PRE-COMPUTER SCIENCE C-040

		Course Title	Class Hours	Lab Hours	Credit Hours
FIRST QUARTER					
ENG	151	Freshman Composition I	3	0	3
CAS	160	Microcomputer Operating Systems	2	2	3
MAT	153	Pre-Calculus	5	0	5
HIS	151	World Civilization	3	0	3
ORI	100	Student Orientation Seminar	1	0	1
			14	2	15
SECOND QUARTER					
ENG	152	Freshman Composition II	3	0	3
MAT	161	Calculus and Analytic Geometry I	5	0	5
HIS	152	World Civilization	3	0	3
CSC	151	Introduction to Computer Programming	3	0	3
			14	0	14
THIRD QUARTER					
ENG	153	Freshman Composition III	3	0	3
MAT	162	Calculus and Analytic Geometry II	5	0	5
CSC	152	Pascal Programming	3	0	3
HIS	153	World Civilization	3	0	3
PED	150	Concepts in Physical Education	1	2	2
			15	2	16
FOURTH QUARTER					
		Literature Selection	3	0	3
MAT	163	Calculus and Analytic Geometry III	5	0	5
CHM	151	General Chemistry I	3	3	4
		or			
PHY	251	Analytical Physics I			
PED		Selection	0	3	1
		Elective	3	0	3
			14	6	16
FIFTH QUARTER					
		Literature Selection	3	0	3
CSC	252	Assembly Language and Machine Operation	3	0	3
CHM	152	General Chemistry II	3	3	4
		or			
PHY	252	Analytical Physics II			
		Social Science Requirement	3	0	3
MAT	261	Calculus and Analytic Geometry IV	5	0	5
			17	6	18
SIXTH QUARTER					
		Literature Selection	3	0	3
CSC	253	Data Structures	3	0	3
CHM	153	General Chemistry III	3	3	4
		or			
PHY	223	Analytical Physics III			
		Humanities Requirements	6	0	6
PED		Selection	0	3	1
			15	6	17
		TOTAL HOURS	89	22	96

PRE-ENGINEERING AND PRE-MATH C-007/C-012

		Course Title	Class Hours	Lab Hours	Credit Hours
FIRST QUARTER					
CHM	151	General Chemistry	3	3	4
ENG	151	Freshman Composition I	3	0	3
HIS	151	World Civilization	3	0	3
MAT	153	Pre-Calculus	5	0	5
ORI	100	Student Orientation Seminar	1	0	1
			15	3	16
SECOND QUARTER					
CHM	152	General Chemistry	3	3	4
ENG	152	Freshman Composition II	3	0	3
HIS	152	World Civilization	3	0	3
MAT	161	Calculus & Analytic Geometry I	5	0	5
			14	3	15
THIRD QUARTER					
CHM	153	General Chemistry	3	3	4
ENG	153	Freshman Composition III	3	0	3
HIS	153	World Civilization	3	0	3
MAT	162	Calculus & Analytic Geometry II	5	0	5
PED	150	Concepts in Physical Education	1	2	2
			15	5	17
FOURTH QUARTER					
		Literature Selection	3	0	3
MAT	163	Calculus & Analytic Geometry III	5	0	5
PED		Selection	0	3	1
PHY	251	Analytical Physics I	3	3	4
		Social Science (Economics)	3	0	3
			14	6	16
FIFTH QUARTER					
		Literature Selection	3	0	3
PHY	252	Analytical Physics II	3	3	4
MAT	261	Calculus & Analytic Geometry IV	5	0	5
		Elective	2	0	2
			13	3	14
SIXTH QUARTER					
		Literature Selection	3	0	3
CSC	161	FORTRAN Programming	3	2	4
PHY	253	Analytical Physics III	3	2	4
		Humanities Requirement	3	0	3
		Humanities Requirement	3	0	3
PED		Selection	0	3	1
			15	8	18
		TOTAL HOURS	86	28	96

PRE-HEALTH AND PHYSICAL EDUCATION C-031

		Course Title	Class Hours	Lab Hours	Credit Hours
FIRST QUARTER					
ENG	151	Freshman Composition I	3	0	3
HIS	151	World Civilization	3	0	3
MAT	151	College Algebra & Trigonometry I	5	0	5
PED	150	Concepts in Physical Education	1	2	1
		Natural Science (Biology)	3	3	4
ORI	100	Student Orientation Seminar	1	0	1
			16	5	17
SECOND QUARTER					
ENG	152	Freshman Composition II	3	0	3
HIS	152	World Civilization	3	0	3
MAT	152	College Algebra & Trigonometry II	5	0	5
SAF	151	First Aid	3	0	3
		Natural Science (Biology)	3	3	4
			17	3	18
THIRD QUARTER					
ENG	153	Freshman Composition III	3	0	3
HIS	153	World Civilization	3	0	3
HEA	250	Personal & Community Health	5	0	5
PED		Selection	0	3	1
		Natural Science (Biology)	3	3	4
			14	6	16
FOURTH QUARTER					
		Literature Selection	3	0	3
HUM	160	Introduction to Humanities	3	0	3
PSY	260	General Psychology	3	0	3
BIO	270	Anatomy & Physiology I	3	3	4
PED		Selection	0	3	1
PED		Selection	0	3	1
			12	9	15
FIFTH QUARTER					
		Literature Selection	3	0	3
ENG	170	Public Speaking	3	0	3
BIO	271	Anatomy & Physiology II	3	3	4
		Computer Requirement	3	0	3
			12	3	13
SIXTH QUARTER					
		Literature Selection	3	0	3
BIO	272	Anatomy & Physiology III	3	3	4
CHM	100	Introduction to Chemistry	3	3	4
PSY	261	Developmental Psychology	3	0	3
		Elective	3	0	3
			15	6	17
		TOTAL HOURS	86	32	96

PRE-JOURNALISM C-009

		Course Title	Class Hours	Lab Hours	Credit Hours
FIRST QUARTER					
ENG	151	Freshman Composition I	3	0	3
HIS	151	World Civilization	3	0	3
MAT	151	College Algebra & Trigonometry I	5	0	5
ENG	180	Journalism	3	0	3
		Science Selection	3	3	4
ORI	100	Student Orientation Seminar	1	0	1
			18	3	19
SECOND QUARTER					
ENG	152	Freshman Composition II	3	0	3
HIS	152	World Civilization	3	0	3
MAT	152	College Algebra & Trigonometry II	5	0	5
		Journalism Practice	0	3	1
PED		Selection	0	3	1
		Science Selection	3	3	4
			14	9	17
THIRD QUARTER					
ENG	153	Freshman Composition III	3	0	3
HIS	153	World Civilization	3	0	3
		Computer Requirement	3	0	3
ENG	181	Journalism Practice	0	3	1
		Science Selection	3	3	4
		Social Science Requirement (Economics)	3	0	3
			15	6	17
FOURTH QUARTER					
		Literature Selection	3	0	3
ENG	260	Creative Writing I	3	0	3
ENG	181	Journalism Practice	0	3	1
HUM	160	Introduction to the Humanities	3	0	3
PED	150	Concepts in Physical Education	1	2	2
SOC	160	Introduction to Sociology	3	0	3
			13	5	15
FIFTH QUARTER					
		Literature Selection	3	0	3
ENG	261	Creative Writing II	3	0	3
ENG	181	Journalism Practice	0	3	1
PED		Selection	0	3	1
SOC	161	Social Problems	3	0	3
PSY	261	Developmental Psychology	3	0	3
ENG	100	Writing with the Computer	0	2	1
			12	8	15
SIXTH QUARTER					
		Literature Selection	3	0	3
ENG	181	Journalism Practice	0	3	1
		Elective	3	0	3
PSY	260	General Psychology	3	0	3
ENG	170	Public Speaking	3	0	3
			12	3	13
		TOTAL HOURS	84	34	96

PRE-LAW C-010*

		Course Title	Class Hours	Lab Hours	Credit Hours
FIRST QUARTER					
ENG	151	Freshman Composition I	3	0	3
HIS	151	World Civilization	3	0	3
		Natural Science (Biology, Chemistry, or Geology)	3	3	4
MAT	151	College Algebra & Trigonometry I	5	0	5
PED	150	Concepts in Physical Education	1	2	2
ORI	100	Student Orientation Seminar	1	0	1
			16	5	18
SECOND QUARTER					
ENG	152	Freshman Composition II	3	0	3
HIS	152	World Civilization	3	0	3
		Natural Science	3	3	4
MAT	152	College Algebra & Trigonometry II	5	0	5
PED		Selection	0	3	1
			14	6	16
THIRD QUARTER					
ENG	153	Freshman Composition III	3	0	3
HIS	153	World Civilization	3	0	3
		Natural Science	3	3	4
		Humanities Requirement	3	0	3
PED		Selection	0	3	1
		Elective	3	0	3
			15	6	17
FOURTH QUARTER					
		Literature Selection	3	0	3
HIS	260	History of U.S.	3	0	3
POL	260	American Government	3	0	3
		Humanities Requirement	3	0	3
		Computer Requirement	3	0	3
			15	0	15
FIFTH QUARTER					
		Literature Selection	3	0	3
HIS	261	History of the U.S.	3	0	3
POL	261	Problems & Policies of American Government	3	0	3
		Electives	6	0	6
			15	0	15
SIXTH QUARTER					
		Literature Selection	3	0	3
HIS	262	History of U.S.	3	0	3
POL	262	State & Local Government	3	0	3
		Electives	6	0	6
			15	0	15
		TOTAL HOURS	90	17	96

Electives should be taken from the social science area.

PRE-LIBERAL ARTS C-011*

		Course Title	Class Hours	Lab Hours	Credit Hours
FIRST QUARTER					
ENG	151	Freshman Composition I	3	0	3
HIS	151	World Civilization	3	0	3
		Science Selection	3	3	4
MAT	151	College Algebra & Trigonometry I	5	0	5
PED	150	Concepts in Physical Education	1	2	2
ORI	100	Student Orientation Seminar	1	0	1
			16	5	18
SECOND QUARTER					
ENG	152	Freshman Composition II	3	0	3
HIS	152	World Civilization	3	0	3
		Science Selection	3	3	4
MAT	152	College Algebra & Trigonometry II	5	0	5
PED		Selection	0	3	1
			14	6	16
THIRD QUARTER					
ENG	153	Freshman Composition III	3	0	3
HIS	153	World Civilization	3	0	3
		Science Selection	3	3	4
		Social Science Requirement	3	0	3
PED		Selection	0	3	1
		Computer Requirement	3	0	3
			15	6	17
FOURTH QUARTER					
		Literature Selection	3	0	3
		Humanities Requirement	3	0	3
		Electives	9	0	9
			15	0	15
FIFTH QUARTER					
		Literature Selection	3	0	3
		Humanities Requirement	3	0	3
		Electives	9	0	9
			15	0	15
SIXTH QUARTER					
		Literature Selection	3	0	3
		Electives	12	0	12
			15	0	15
		TOTAL HOURS	90	17	96

PRE-SCIENCE/PRE-MEDICAL C-018/C-013

		Course Title	Class Hours	Lab Hours	Credit Hours
FIRST QUARTER					
ENG	151	Freshman Composition I	3	0	3
HIS	151	World Civilization	3	0	3
MAT	153	Pre-Calculus	5	0	5
		Science Selection	3	3	4
PED	150	Concepts in Physical Education	1	2	2
Ori	100	Student Orientation Seminar	1	0	1
			16	5	18
SECOND QUARTER					
ENG	152	Freshman Composition II	3	0	3
HIS	152	World Civilization	3	0	3
MAT	161	Calculus and Analytic Geometry I	5	0	5
		Science Selection	3	3	4
PED		Selection	0	3	1
			14	6	16
THIRD QUARTER					
ENG	153	Freshman Composition III	3	0	3
HIS	153	World Civilization	3	0	3
		Science Selection	3	3	4
MAT	162	Calculus and Analytic Geometry II	5	0	5
			14	3	17
FOURTH QUARTER					
		Literature Selection	3	0	3
		Social Science Requirement	3	0	3
		Natural Science	3	3	4
		Natural Science	3	3	4
			12	6	14
FIFTH QUARTER					
		Literature Selection	3	0	3
		Humanities Requirement	3	0	3
		Natural Science	3	3	4
		Natural Science	3	3	4
			12	6	14
SIXTH QUARTER					
		Literature Selection	3	0	3
		Natural Science	3	3	4
		Computer Science	3	0	3
		Humanities Requirement	3	0	3
PED		Selection	0	3	1
		Elective	3	0	3
			15	6	17
		TOTAL HOURS	83	32	96

This is only a suggested outline for a pre-science/pre-medical student to secure the Associate of Science degree. Science courses can be chosen to best suit the student's area of concentration.

PRE-MINISTERIAL C-014*

		Course Title	Class Hours	Lab Hours	Credit Hours
FIRST QUARTER					
ENG	151	Freshman Composition I	3	0	3
HIS	151	World Civilization	3	0	3
MAT	151	College Algebra & Trigonometry I	5	0	5
		Science Selection	3	3	4
ORI	100	Student Orientation Seminar	1	0	1
			15	3	16
SECOND QUARTER					
ENG	152	Freshman Composition II	3	0	3
HIS	152	World Civilization	3	0	3
MAT	152	College Algebra & Trigonometry II	5	0	5
		Science Selection	3	3	4
PED	150	Concepts in PE	1	2	2
			15	5	17
THIRD QUARTER					
ENG	153	Freshman Composition III	3	0	3
HIS	153	World Civilization	3	0	3
REL	162	World Religions	3	0	3
		Computer Requirement	3	0	3
		Science Selection	3	3	4
			15	3	16
FOURTH QUARTER					
		Literature Selection	3	0	3
SOC	160	Introduction to Sociology	3	0	3
PHI	260	Introduction to Philosophy	3	0	3
PSY	260	General Psychology	3	0	3
HUM	160	Introduction to Humanities	3	0	3
REL	160	Old Testament	3	0	3
			18	0	18
FIFTH QUARTER					
		Literature Selection	3	0	3
SOC	161	Social Problems	3	0	3
PHI	261	Introduction to Logic	3	0	3
PSY	261	Developmental Psychology	3	0	3
PED		Selection	0	3	1
REL	161	New Testament	3	0	3
			15	3	16
SIXTH QUARTER					
		Literature Selection	3	0	3
SOC	262	Family Sociology	3	0	3
PSY	263	Abnormal Psychology	3	0	3
PED		Selection	0	3	1
ENG	170	Public Speaking	3	0	3
			12	3	13
		TOTAL HOURS	88	17	96

PRE-MUSIC C-015

		Course Title	Class Hours	Lab Hours	Credit Hours
FIRST QUARTER					
ENG	151	Freshman Composition I	3	0	3
HIS	151	World Civilization	3	0	3
		Science Selection	3	3	4
MUS	151	Intro. to Music History I	3	0	3
PED	150	Concepts in Physical Education	1	2	2
		Ensemble	0	3	1
MUS	173/177*	Piano/Voice	0	3	1
ORI	100	Student Orientation Seminar	1	0	1
			12	11	18
SECOND QUARTER					
ENG	152	Freshman Composition II	3	0	3
HIS	152	World Civilization	3	0	3
		Science Selection	3	3	4
MUS	152	Intro. to Music History II	3	0	3
PED		Selection	0	3	1
		Ensemble	0	3	1
MUS	174/178	Piano/Voice	0	3	1
			12	12	16
THIRD QUARTER					
ENG	153	Freshman Composition III	3	0	3
HIS	153	World Civilization	3	0	3
		Natural Science	3	3	4
		Elective	3	0	3
PED		Selection	0	3	1
		Ensemble	0	3	1
MUS	175/179	Piano/Voice	0	3	1
			12	12	16
FOURTH QUARTER					
		Literature Selection	3	0	3
MAT	151	College Algebra & Trigonometry I	5	0	5
		Computer Requirement	3	0	3
MUS	160	Music Theory I	3	2	4
		Ensemble	0	3	1
			14	3	16
FIFTH QUARTER					
		Literature Selection	3	0	3
MAT	152	College Algebra & Trigonometry II	5	0	5
		Humanities Requirement	3	0	3
MUS	161	Music Theory II	3	2	4
		Ensemble	0	3	1
			14	5	16
SIXTH QUARTER					
		Literature Selection	3	0	3
		Humanities Requirement	3	0	3
		Social Science Requirement	3	0	3
MUS	162	Music Theory III	3	2	4
		Ensemble	0	3	1
			12	5	14
		TOTAL HOURS	78	49	96

All music majors must also take applied music.

PRE-OPTOMETRY C-016
PRE-PHARMACY C-017
PRE-VETERINARY MEDICINE C-021

		Course Title	Class Hours	Lab Hours	Credit Hours
FIRST QUARTER					
ENG	151	Freshman Composition I	3	0	3
HIS	151	World Civilization	3	0	3
BIO	151	Principles of Biology I	3	3	4
MAT	151	College Algebra & Trigonometry I	5	0	5
		or			
MAT	153	Pre-Calculus			
ORI	100	Student Orientation Seminar	1	0	1
			15	3	16
SECOND QUARTER					
ENG	152	Freshman Composition II	3	0	3
HIS	152	World Civilization	3	0	3
BIO	152	Principles of Biology II	3	3	4
MAT	152	College Algebra & Trigonometry II	5	0	5
		or			
MAT	161	Calculus and Analytic Geometry I			
PED		Selection	0	3	1
PED	150	Concepts in PE	1	2	2
			15	8	18
THIRD QUARTER					
ENG	153	Freshman Composition III	3	0	3
HIS	153	World Civilization	3	0	3
BIO	153	Principles of Biology III	3	3	4
MAT	161	Calculus & Analytic Geometry I	5	0	5
		or			
MAT	162	Calculus & Analytic Geometry II			
PED		Selection	0	3	1
			14	6	16
FOURTH QUARTER					
		Literature Selection	3	0	3
CHM	151	General Chemistry I	3	3	4
PHY	151	General Physics I	3	3	4
		or			
PHY	251	Analytical Physics I			
		Humanities Requirement	3	0	3
PED		Selection	0	3	1
			12	9	15

FIFTH QUARTER

		Literature Selection	3	0	3
CHM	152	General Chemistry II	3	3	4
PHY	152	General Physics II			
		or			
PHY	252	Analytical Physics II	3	3	4
MAT	162	Calculus & Analytic Geometry II			
		or			
		Electives	4	0	4
			13	6	15

SIXTH QUARTER

		Literature Selection	3	0	3
CHM	153	General Chemistry III	3	3	4
		Computer Requirement	3	0	3
		Humanities Requirement	3	0	3
		Social Science Requirement	3	0	3
			15	3	16
		TOTAL HOURS	85	32	96

PRE-SOCIAL WORK C-019*

		Course Title	Class Hours	Lab Hours	Credit Hours
FIRST QUARTER					
ENG	151	Freshman Composition I	3	0	3
HIS	151	World Civilization	3	0	3
		Science Selection	3	3	4
MAT	151	College Algebra & Trigonometry I	5	0	5
SOC	160	Introduction to Sociology	3	0	3
ORI	100	Student Orientation Seminar	1	0	1
			17	3	19
SECOND QUARTER					
ENG	152	Freshman Composition II	3	0	3
HIS	152	World Civilization	3	0	3
		Science Selection	3	3	4
MAT	152	College Algebra & Trigonometry II	5	0	5
SOC	161	Social Problems	3	0	3
			17	3	18
THIRD QUARTER					
ENG	153	Freshman Composition III	3	0	3
HIS	153	World Civilization	3	0	3
		Natural Science	3	3	4
SOC	162	Sociology of the Family	3	0	3
		Humanities Requirement	3	0	3
PED		Selection	0	3	1
			15	6	17
FOURTH QUARTER					
		Literature Selection	3	0	3
PSY	260	General Psychology	3	0	3
PED	150	Concepts in Physical Education	1	2	2
		Humanities Requirement	3	0	3
		Computer Requirement	3	0	3
		Electives	3	0	3
			16	2	17
FIFTH QUARTER					
		Literature Selection	3	0	3
PSY	261	Developmental Psychology	3	0	3
PED		Selection	0	3	1
		Electives	6	0	6
			12	3	13
SIXTH QUARTER					
		Literature Selection	3	0	3
PSY	262	Applied Psychology	3	0	3
		Electives	6	0	6
			12	0	12
		TOTAL HOURS	90	17	96

***Electives to be considered should include Foreign Language, Anthropology, Religion, U.S. History, Political Science, Philosophy, and Public Speaking.**

PRE-TEACHING (Elementary) C-020*
PRE-TEACHING (Secondary) C-028*
PRE-TEACHING (Early Childhood) C-035)*

		Course Title	Class Hours	Lab Hours	Credit Hours
FIRST QUARTER					
ENG	151	Freshman Composition I	3	0	3
HIS	151	World Civilization	3	0	3
		Biological Science	3	3	4
MAT	151	College Algebra & Trigonometry I	5	0	5
PED	150	Concepts in Physical Education	1	2	2
ORI	100	Student Orientation Seminar	1	0	1
			16	5	18
SECOND QUARTER					
ENG	152	Freshman Composition II	3	0	3
HIS	152	World Civilization	3	0	3
		Biological Science	3	3	4
MAT	152	College Algebra & Trigonometry II	5	0	5
PED		Selection	0	3	1
			14	6	16
THIRD QUARTER					
ENG	153	Freshman Composition III	3	0	3
HIS	153	World Civilization	3	0	3
		Biological Science	3	3	4
PED		Selection	0	3	1
		Electives	5	0	5
			14	6	16
FOURTH QUARTER					
		Literature Selection	3	0	3
GEO	160	Physical Geography	3	2	4
		A Physical Science	3	3	4
		Humanities Requirement	3	0	3
		Computer Requirement	3	0	3
			15	5	17
FIFTH QUARTER					
PED	150	Concepts in PE	1	2	2
		Literature Selection	3	0	3
GEO	161	Economic Geography	3	0	3
		or			
HIS	299	NC History			
		A Physical Science	3	3	4
		Humanities Requirement	3	0	3
			13	5	15
SIXTH QUARTER					
		Literature Selection	3	0	3
GEO	162	World Regions	3	0	3
		A Physical Science	3	3	4
		Electives	4	0	4
			13	6	14
		TOTAL HOURS	86	33	96

*Electives should be taken from Humanities, Foreign Language, Social Science, and Science courses to suit individual interest and senior institution requirements.

PRE-TEXTILE TECHNOLOGY C-033

		Course Title	Class Hours	Lab Hours	Credit Hours
FIRST QUARTER					
ENG	151	Freshman Composition I	3	0	3
MAT	151	College Algebra & Trigonometry I	5	0	5
		or			
MAT	153	Pre-Calculus			
CHM	151	General Chemistry I	3	3	4
HIS	151	World Civilization	3	0	3
		Humanities Requirement	3	0	3
ORI	100	Student Orientation Seminar	1	0	1
			18	3	19
SECOND QUARTER					
ENG	152	Freshman Composition II	3	0	3
MAT	155	College Algebra & Trigonometry II	5	0	5
		or			
MAT	161	Calculus & Analytic Geometry I			
CHM	152	General Chemistry II	3	3	4
HIS	152	World Civilization	3	0	3
		Humanities Requirement	3	0	3
			17	3	18
THIRD QUARTER					
ENG	153	Freshman Composition III	3	0	3
MAT	162	Calculus & Analytic Geometry II	5	0	5
		or			
MAT	163	Calculus & Analytic Geometry III			
PED	150	Concepts in Physical Education	1	2	2
CHM	153	General Chemistry III	3	3	4
HIS	153	World Civilization	3	0	3
			15	5	17
FOURTH QUARTER					
		Literature Selection	3	0	3
MAT	163	Calculus & Analytic Geometry III	5	0	5
		or			
MAT	261	Calculus & Analytic Geometry IV			
PHY	251	Analytical Physics I	3	3	4
PED		Elective	0	3	1
		Social Science Requirement	3	0	3
			14	6	16

FIFTH QUARTER					
		Literature Selection	3	0	3
		Computer Requirement	3	0	3
PHY	252	Analytical Physics II	3	3	4
PED		Elective	0	3	1
		Elective	3	0	3
			12	6	14
SIXTH QUARTER					
		Literature Selection	3	0	3
MAT	261	Calculus & Analytic Geometry IV	5	0	5
		or			
MAT	170	Introductory Statistics			
PHY	253	Analytical Physics III	3	3	4
			11	3	12
		TOTAL HOURS	87	26	96

***MAT 170 (Statistics) also recommended**

TECHNICAL PROGRAMS

Associate of Applied Science Degree (A.A.S.) Graduation Requirements

An Associate of Applied Science (A.A.S.) degree will be awarded to those students completing the requirements for a technical degree with a minimum of a 2.0 grade point average.

BUSINESS DIVISION
A.A.S. Degree Program

T-030 Administrative Office Technology
T-018 Business Administration
T-022 Business Computer Programming
T-049 Industrial Management Technology
T-192 Microcomputer Systems Technology

VOCATIONAL-TECHNICAL DIVISION
A.A.S. Degree Program

T-059 Associate Degree Nursing, Registered Nursing
T-109 Associate Degree for Vocational Instructors
T-068 Commercial Graphics
T-129 Criminal Justice
T-043 Drafting & Design Technology
T-045 Electronics Engineering Technology
T-051 Mechanical Engineering Technology
T-179 Radio/TV Broadcasting Technology
T-088 Teacher Associate

TECHNICAL CERTIFICATE PROGRAMS

A certificate of achievement may be awarded to a student who completes the required courses in the following areas. The student should apply to the Registrar's Office for the certificate.

T-030 Administrative Office Technology Certificate
T-018 Business Administration Certificate
T-201 General Technology Curriculum Core
T-049 Industrial Management Technology Certificate
T-166 Real Estate Technical Specialty
T-179 Radio/TV Broadcasting Certificate

ADMINISTRATIVE OFFICE TECHNOLOGY T-030

This curriculum prepares individuals to perform secretarial and administrative support duties in a variety of offices including those offices with computerized, automated functions.

Students in this curriculum study keyboarding and word/information processing to develop skills in the preparation of business correspondence, reports, statistical copy, manuscripts and business forms. Administrative support courses emphasize typical office tasks such as scheduling appointments, composing correspondence and performing reprographic duties. Training is also provided in analyzing and coordinating office duties and systems. Skills and knowledge are taught in the areas of electronic document storage and retrieval and computer software utilization.

Graduates of the program may be employed in offices in private business establishments involved in retailing, marketing, advertising, and manufacturing as well as offices in local, state, and federal government.

ADMINISTRATIVE OFFICE TECHNOLOGY T-030
(Day)

			CLASS	LAB	CREDIT
FIRST QUARTER (Fall)					
BUS	100	Introduction to Business	3	0	3
OSC	101	Keyboarding/Document Formatting I	2	3	3
MAT	107	Mathematics Principles	3	0	3
OSC	108	Records Management	3	0	3
COE	100	Employment Seeking Skills	1	0	1
CAS	101	Computer Applications & Concepts	3	0	3
ORI	100	Student Orientation Seminar	1	0	1
			16	3	17
SECOND QUARTER (Winter)					
OSC	102	Document Formatting II	3	2	4
CAS	163	Word Perfect	3	2	4
BUS	239	Business Mathematics	3	2	4
BUS	201	Industrial Psychology	3	0	3
COE	101	Work Experience/Related Elective	0/2	20/0	2
			12/14	26/6	17
THIRD QUARTER (Spring)					
OSC	103	Document Formatting III	3	2	4
OSC	165	Word Processing Applications	3	2	4
CAS	248	Advanced Wordperfect	3	2	4
ENG	151	Freshman Composition I	3	0	3
BUS	101	Professional Development	3	0	3
			15	6	18
FOURTH QUARTER (Fall)					
MKT	120	Marketing	3	0	3
ACC	210	Principles of Accounting I	3	2	4
BUS	225	Business Law	3	0	3
BUS	257	Applied Business Communications I	3	0	3
		Elective	3	0	3
CAS	252	dBASE	3	2	4
			18	4	20
FIFTH QUARTER (Winter)					
ECO	260	Consumer Economics	3	0	3
OSC	109	Transcription Skills	3	2	4
ACC	211	Principles of Accounting II	3	2	4
ENG	152	Freshman Composition II	3	0	3
BUS	258	Applied Business Communications II	3	0	3
CAS	241	Lotus 1-2-3	3	2	4
			18	6	21
SIXTH QUARTER (Spring)					
MKT	132	Sales Development	3	0	3
OSC	213	Secretarial Administration	3	0	3
BUS	214	Principles of Management	3	0	3
ENG	153	Freshman Composition III	3	0	3
ENG	170	Public Speaking	3	0	3
		Elective — Social Science or Humanities/ Fine Arts	3	0	3
OSC	205	Machine Transcription	3	2	4
			21	2	22
		TOTAL CREDIT HOURS			115

ADMINISTRATIVE OFFICE TECHNOLOGY T-030
(EVENING) FIRST QUARTER (Fall)

			CLASS	LAB	CREDIT
FIRST QUARTER (Fall)					
BUS	100	Introduction to Business	3	0	3
OSC	101	Keyboarding/Document Formatting I	2	3	3
MAT	107	Mathematics Principles	3	0	3
COE	100	Employment Seeking Skills	1	0	1
CAS	101	Computer Applications & Concepts	3	0	3
ORI	100	Student Orientation Seminar	1	0	1
			13	3	14
SECOND QUARTER (Winter)					
OSC	102	Document Formatting II	3	2	4
BUS	239	Business Mathematics	3	2	4
ECO	260	Consumer Economics	3	0	3
BUS	201	Industrial Psychology	3	0	3
			12	4	14
THIRD QUARTER (Spring)					
CAS	163	Word Perfect	3	2	4
COE	101	Work Experience/Related Elective	0/2	20/0	2
OSC	108	Records Management	3	0	3
MKT	132	Sales Development	3	0	3
BUS	101	Professional Development	3	0	3
			12/14	22/2	15
FOURTH QUARTER (Summer)					
OSC	103	Document Formatting III	3	2	4
ENG	151	Freshman Composition I	3	0	3
CAS	241	Lotus 1-2-3	3	2	4
OSC	165	Word Processing Applications	3	2	4
			12	6	15
FIFTH QUARTER (Fall)					
ACC	210	Principles of Accounting I	3	2	4
BUS	225	Business Law	3	0	3
BUS	257	Applied Business Communications	3	0	3
MKT	120	Marketing	3	0	3
			12	2	13
SIXTH QUARTER (Winter)					
ACC	211	Principles of Accounting II	3	2	4
BUS	258	Applied Business Communications II	3	0	3
CAS	248	Advanced Wordperfect	3	2	4
ENG	152	Freshman Composition II	3	0	3
			12	4	14
SEVENTH QUARTER (Spring)					
OSC	213	Secretarial Administration	3	0	3
BUS	214	Principles of Management	3	0	3
ENG	153	Freshman Composition III	3	0	3
OSC	109	Transcription Skills	3	2	4
			12	2	13

EIGHTH QUARTER (Summer)					
ENG	170	Public Speaking	3	0	3
CAS	252	dBASE	3	2	4
OSC	205	Machine Transcription	3	2	4
			9	4	11
NINTH QUARTER (Fall)					
		Elective	3	0	3
		Elective-Social Science or Humanities/Fine Arts	3	0	3
			6	0	6
		TOTAL CREDIT HOURS			115

ADMINISTRATIVE OFFICE TECHNOLOGY CERTIFICATE T-030

A certificate of achievement will be awarded upon successful completion (average of "C"-2.00 GPA) of a minimum of 42 credit hours from requirements listed below.

			Credit Hours
ENG	151	Freshman Composition I	3
BUS	257	Applied Business Communications	3
OSC	101	Keyboard/Document Formatting I	3
OSC	102	Document Formatting II	4
MAT	107	Mathematics Principles	3
BUS	239	Business Mathematics	4
CAS	101	Computer Applications & Concepts	3
BUS	101	Professional Development	3
ACC	210	Principles of Accounting	4
OSC	165	Word Processing Applications	4
CAS	163	Word Perfect	4
OSC	213	Secretarial Administration	3
ORI	100	Student Orientation Seminar	1
		TOTAL CREDIT HOURS	42

ASSOCIATE DEGREE NURSING, REGISTERED NURSING T-059

			Hours Per Week Class	Lab	Clinical	Quarter Hours Credit
FIRST YEAR						
First Quarter (Fall)						
BIO	270	Anatomy and Physiology I	3	3	0	4
NUR	101	Basic Concepts in Nursing	6	4	3	9
NUR	102	Pharmacological Concepts in Nursing	3	0	0	3
NUT	160	Basic Nutrition	3	0	0	3
			15	7	3	19
Second Quarter (Winter)						
BIO	271	Anatomy and Physiology II	3	3	0	4
NUR	103	Nursing Care of Adults I	4	2	12	9
PSY	260	General Psychology	3	0	0	3
			10	5	12	16
Third Quarter (Spring)						
BIO	272	Anatomy and Physiology III	3	3	0	4
PSY	261	Developmental Psychology	3	0	0	3
NUR	104	Nursing Care of Adults II	4	0	12	8
			10	3	12	15
Fourth Quarter (Summer)						
BIO	280	Microbiology Qt. - 1st session	2	3	0	3
BIO	281	Microbiology Qt. - 2nd session	2	3	0	3
SOC	160	Introduction to Sociology	3	0	0	3
NUR	105	Mental Health Nursing	5	0	12	9
			12	6	12	18
SECOND YEAR						
Fifth Quarter (Fall)						
ENG	151	Freshman Composition I	3	0	0	3
NUR	201	Nursing Care of Older Adults	4	0	12	8
CAS	101	Microcomputer Applications and Concepts	2	2	0	3
			9	2	12	14
Sixth Quarter (Winter)						
ENG	152	Freshman Composition II	3	0	0	3
NUR	202	Nursing Care of the Childbearing Family (1/2 quarter)	5	0	12	9
NUR	203	Nursing Care of Children (1/2 quarter)	5	0	12	9
		Free elective	3	0	0	3
			16	0	24	24
Seventh Quarter (Spring)						
ENG	153	Freshman Composition III	3	0	0	3
NUR	204	Nursing Care of Adults III	5	0	15	10
NUR	205	Nursing Perspectives and Issues	3	0	0	3
			11	0	15	16
NUR	100	Nursing Role Transition (LPNs only on demand)	3	2	0	4

ASSOCIATE DEGREE PROGRAM FOR VOCATIONAL INSTRUCTORS T-109

INTRODUCTION:

The program is designed for persons who have developed a skill or trade or technical specialty or who have a desire to do so, and would like to teach or pursue a degree. Successful graduates of the program may find employment in the public high schools, community colleges, and technical institutes vocational or career programs. It is also designed for those already teaching in such programs who have not had the opportunity to acquire training in educational methods.

The program offers the opportunity to earn an Associate in Applied Science Degree allowing credit for previous training, experience, and formal study in the student's area of expertise, supplemented by course work to broaden the student personally and develop professional competence in the techniques of teaching. Students may enter this program any quarter.

PROGRAM:

Credit will be awarded to skilled craftsmen based on educational experience and work experience. Credit will be allowed for no more than two fields of specialization.

Part I:

A. In the specialty area, credits will be earned by the following criteria:
   1. Twenty-four quarter hours credit for full-time trade school, twelve months (1440 hours) in one special skilled area certified by diploma or letter by trade school officials.

      and/or

   2. One quarter hour credit per sixty hours of full-time trade instruction for programs of less than one-year duration certified by diploma or letter by trade school officials.

B. One quarter hour credit per forty hours of special short course instruction—company sponsored school, certified diploma, certificate, or letter by company school.

C. Five quarter hours credit for each full year of employment in a teaching situation. This must be certified by a notarized letter from the employer. Teaching must be the primary responsibility of employment.

D. Two quarter hours credit for each full year of employment in the specialty occupation qualified to teach. This must be certified by a notarized letter from the employer.

   and/or

Part II:

A. Credits earned in industrial and/or vocational programs offered at regionally accredited collegiate level institutions.

The maximum number of hours awarded for specialty skills toward an Associate in Applied Science Degree is 45 quarter hours.

A minimum of 30 quarter hours credit must be earned through course work at Isothermal Community College. In order to earn an Associate in Applied Science Degree at Isothermal Community College, the general education requirements must be met either through transfer credit, challenge examination, or formal course work.

A program of study will be prepared for each individual vocational instructor or potential instructor who makes application for the program. The Dean of Vocational/Technical Education will serve as advisor.

Following are minimum requirements for an Associate in Applied Science Degree for this curriculum.

Three areas of development and the hours required for each are:

A. Specialty Area 45
   1. Through work experience and/or informal course work.
   2. Through formal instruction toward a specific vocation.

B. Personal Area (Sciences, Humanities) 41
   Minimum:
   English 12
   Social Sciences 6
   Math 7
   Science 4
   Related Elective 12

C. Professional Area (Educational Methods) 22
   EDU 110, 111, 112, 113, 114, 117, 234, CAS 118

D. Elective 3

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ASSOCIATE DEGREE PROGRAM
FOR VOCATIONAL INSTRUCTORS
T-109

		Course Title	Class Hours	Lab Hours	Credit Hours
ENGLISH					
ENG	151	Freshman Composition I	3	0	3
ENG	152	Freshman Composition II	3	0	3
ENG	153	Freshman Composition III	3	0	3
ENG	170	Public Speaking	3	0	3
			12	0	12

SOCIAL SCIENCE:
Any advisor-approved six credit hours of social science.

MATHEMATICS:
May select at least 7 hours of Mathematics.

MAT	111	Technical Math	3	0	3
MAT	150	Intermediate Algebra	5	0	5
MAT	151	College Algebra & Trigonometry I	5	0	5
MAT	152	College Algebra & Trigonometry II	5	0	5

SCIENCE:
Any advisor-approved four credit hours of physical or biological science.

EDUCATION:

ORI	100	Student Orientation Seminar	1	0	1
EDU	110	Introduction to Trade/Industrial Education	3	0	3
EDU	111	Occupational Analysis & Course Development	3	0	3
EDU	112	Instructional Methods	3	0	3
EDU	113	Shop Organization & Planning	3	0	3
EDU	114	Shop Safety	3	0	3
EDU	117	Instructional Television	1	0	1
CAS	118	Computer Applications	2	3	3
EDU	234	AV Materials/Equipment	3	0	3
			22	3	23

ELECTIVES:
Any advisor approved twelve hours of electives selected from the following technical prefixes: CJC, DES, DFT, EDU,ELC, ELN, GRA, MEC, RTV, WLD.

BUSINESS ADMINISTRATION T-018

The Business Administration curriculum is designed to prepare an individual for entry into management positions.

The curriculum develops competencies in the application of management principles. Emphasis is placed on skill development in the areas of management functions, computer applications and analysis, critical thinking and decision making techniques, marketing, finance, legal aspects of business, oral and written communications, and the utilization of human resources.

Through the development of management competencies, the graduate will be able to function as a contributing member of a management team.

BUSINESS ADMINISTRATION T-018 (DAY)

			CLASS	LAB	CREDIT
FIRST QUARTER (Fall)					
BUS	100	Introduction to Business	3	0	3
OSC	101	Keyboard/Document Formatting I	2	3	3
MAT	107	Mathematics Principles	3	0	3
ACC	210	Principles of Accounting I	3	2	4
COE	100	Employment Seeking Skills	1	0	1
CAS	101	Computer Applications & Concepts	3	0	3
ORI	100	Student Orientation Seminar	1	0	1
			16	5	18
SECOND QUARTER (Winter)					
BUS	112	Business Finance	3	0	3
ACC	211	Principles of Accounting II	3	2	4
BUS	239	Business Mathematics	3	2	4
COE	101	Work Experience/Elective	0/2	20/0	2
		Elective - Related	3	0	3
BUS	201	Industrial Psychology	3	0	3
			15/17	24/4	19
THIRD QUARTER (Spring)					
ACC	212	Principles of Accounting III	3	2	4
BUS	214	Principles of Management	3	0	3
BUS	260	Leadership Development	3	0	3
COE	102	Work Experience/Elective	0/2	20/0	2
MKT	132	Sales Development	3	0	3
		CAS or CSC Elective	3	0	3
ENG	151	Freshman Composition I	3	0	3
			18/20	22/2	21
FOURTH QUARTER (Fall)					
BUS	224	Human Resource Management	3	0	3
BUS	225	Business Law	3	0	3
BUS	257	Applied Business Communications	3	0	3
MKT	120	Marketing	3	0	3
ECO	201	Principles of Economics	3	0	3
CAS	241	Lotus 1-2-3	3	2	4
			18	2	19
FIFTH QUARTER (Winter)					
ACC	217	Taxes I	3	2	4
BUS	226	Business Law	3	0	3
MKT	243	Advertising	3	0	3
ECO	202	Principles of Economics	3	0	3
ENG	152	Freshman Composition II	3	0	3
		Elective — Social Science or Humanities/ Fine Arts	3	0	3
			18	2	19
SIXTH QUARTER (Spring)					
BUS	216	Principles of Supervision	3	0	3
BUS	227	Business Law	3	0	3
ECO	203	Principles of Economics	3	0	3
ENG	153	Freshman Composition III	3	0	3
ENG	170	Public Speaking	3	0	3
		Elective — Related	3	0	3
			18	0	18
		TOTAL CREDIT HOURS			114

BUSINESS ADMINISTRATION T-018
(EVENING)

			CLASS	LAB	CREDIT
FIRST QUARTER (Fall)					
BUS	100	Introduction to Business	3	0	3
OSC	101	Keyboard/Document Formatting I	2	3	3
ACC	210	Principles of Accounting I	3	2	4
MKT	120	Marketing	3	0	3
ORI	100	Student Orientation Seminar	1	0	1
			12	5	14
SECOND QUARTER (Winter)					
BUS	112	Business Finance	3	0	3
ACC	211	Principles of Accounting II	3	2	4
MKT	243	Advertising	3	0	3
BUS	201	Industrial Psychology	3	0	3
			12	2	13
THIRD QUARTER (Spring)					
ACC	212	Principles of Accounting III	3	2	4
BUS	214	Principles of Management	3	0	3
COE	100	Employment Seeking Skills	1	0	1
MKT	132	Sales Development	3	0	3
ENG	151	Freshman Composition I	3	0	3
			13	2	14
FOURTH QUARTER (Summer)					
MAT	107	Mathematics Principles	3	0	3
CAS	101	Computer Applications & Concepts	3	0	3
		Elective - Related	3	0	3
			9	0	9
FIFTH QUARTER (Fall)					
BUS	225	Business Law	3	0	3
BUS	239	Business Mathematics	3	2	4
BUS	257	Applied Business Communications	3	0	3
COE	101	Work Experience/Elective	0/2	20/0	2
ECO	201	Principles of Economics	3	0	3
			12/14	22/2	15
SIXTH QUARTER (Winter)					
ACC	217	Taxes I	3	2	4
BUS	226	Business Law	3	0	3
COE	102	Work Experience/Elective	0/2	20/0	2
ECO	202	Principles of Economics	3	0	3
ENG	152	Freshman Composition II	3	0	3
			12/14	22/2	15
SEVENTH QUARTER (Spring)					
BUS	216	Principles of Supervision	3	0	3
BUS	227	Business Law	3	0	3
ECO	203	Principles of Economics	3	0	3
ENG	153	Freshman Composition III	3	0	3
			12	0	12

EIGHTH QUARTER (Summer)					
CAS	241	Lotus 1-2-3	3	2	4
		CAS or CSC Elective	3	0	3
ENG	170	Public Speaking	3	0	3
		Elective – Social Science or Humanities/ Fine Arts	3	0	3
			12	2	13
NINTH QUARTER (Fall)					
BUS	224	Human Resource Management	3	0	3
BUS	260	Leadership Development	3	0	3
		Elective – Related	3	0	3
			9	0	9
		TOTAL CREDIT HOURS			114

BUSINESS ADMINISTRATION CERTIFICATE T-018

A certificate of achievement will be awarded upon successful completion (average of "C"=2.00 GPA) of 36 credit hours from the requirements listed.

Required			**Credit Hours**
ENG	151,	ENG 152, ENG 170 (any two courses)	6
BUS	239	Business Math	4
ACC	210	Principles of Accounting	4
BUS	214	Principles of Management	3
BUS	225	Business Law	3
ECO	201	Principles of Economics	3
ORI	100	Student Orientation Seminar	1
		*Electives	12

***Elect 12 hours from courses within the Business Administration curriculum. Any course with a grade of below "C" cannot be applied toward the certificate.**

TOTAL CREDIT HOURS 36

BUSINESS COMPUTER PROGRAMMING T-022

The primary objective of the Business Computer Programming curriculum is to prepare individuals for gainful employment as computer programmers. The objective is fulfilled through study and application in areas such as computer and systems theories and concepts, data processing techniques, business operations, logic, flow charting, programming procedures and languages and types, uses and operation of equipment.

Entry level jobs as computer programmer and computer programmer trainee are available. With experience and additional education, the individual may enter jobs such as data processing manager, computer programmer manager, systems analyst and systems manager.

BUSINESS COMPUTER PROGRAMMING T-022
(DAY)

			CLASS	LAB	CREDIT
FIRST QUARTER (Fall)					
CAS	163	Word Perfect	3	2	4
CSC	106	Principles of Problem Solving	3	2	4
CAS	160	Microcomputer Operating Systems	2	2	3
OSC	101	Keyboard Document Formatting I	2	3	3
*MAT	107	Mathematics Principles	3	0	3
ORI	100	Student Orientation Seminar	1	0	1
			14	9	18
SECOND QUARTER (Winter)					
CAS	200	Operating System/400	2	2	3
CAS	241	Lotus 1-2-3	3	2	4
CSC	210	BASIC Programming	3	2	4
*BUS	239	Business Mathematics	3	2	4
COE	100	Employment Seeking Skills	1	0	1
ACC	210	Principles of Accounting I	3	2	4
			15	10	20
THIRD QUARTER (Spring)					
CAS	201	Advanced Operating System/400	2	2	3
CAS	243	Advanced Lotus 1-2-3	3	2	4
CSC	230	COBOL Programming	3	3	4
ACC	211	Principles of Accounting II	3	2	4
COE	101	Work Experience/Related Elective	0/2	20/0	2
ENG	151	Freshman Composition I	3	0	3
			14/16	29/9	20
FOURTH QUARTER (Fall)					
CSC	231	Advanced COBOL Programming	3	3	4
CAS	240	Systems Analysis	3	2	4
CSC	225	Control Language Programming	3	2	4
BUS	257	Applied Business Communications	3	0	3
		Elective —	3	0	3
			15	7	18
FIFTH QUARTER (Winter)					
CSC	220	RPG/400 Programming	3	2	4
CAS	252	DBASE	3	2	4
BUS	201	Industrial Psychology	3	0	3
ECO		Elective	3	0	3
COE	102	Work Experience/Related Elective	0/1	10/0	1
ENG	152	Freshman Composition II	3	0	3
ENG	170	Public Speaking	3	0	3
			18/19	14/4	21
SIXTH QUARTER (Spring)					
CSC	253	Advanced DBASE	3	2	4
ACC	242	Computerized Accounting	3	2	4
CAS	255	Data Communications.	3	2	4
ENG	153	Freshman Composition III	3	0	3
CSC	221	Advanced RPG/400 Programming	3	2	4
			15	8	19
		TOTAL CREDIT HOURS			116

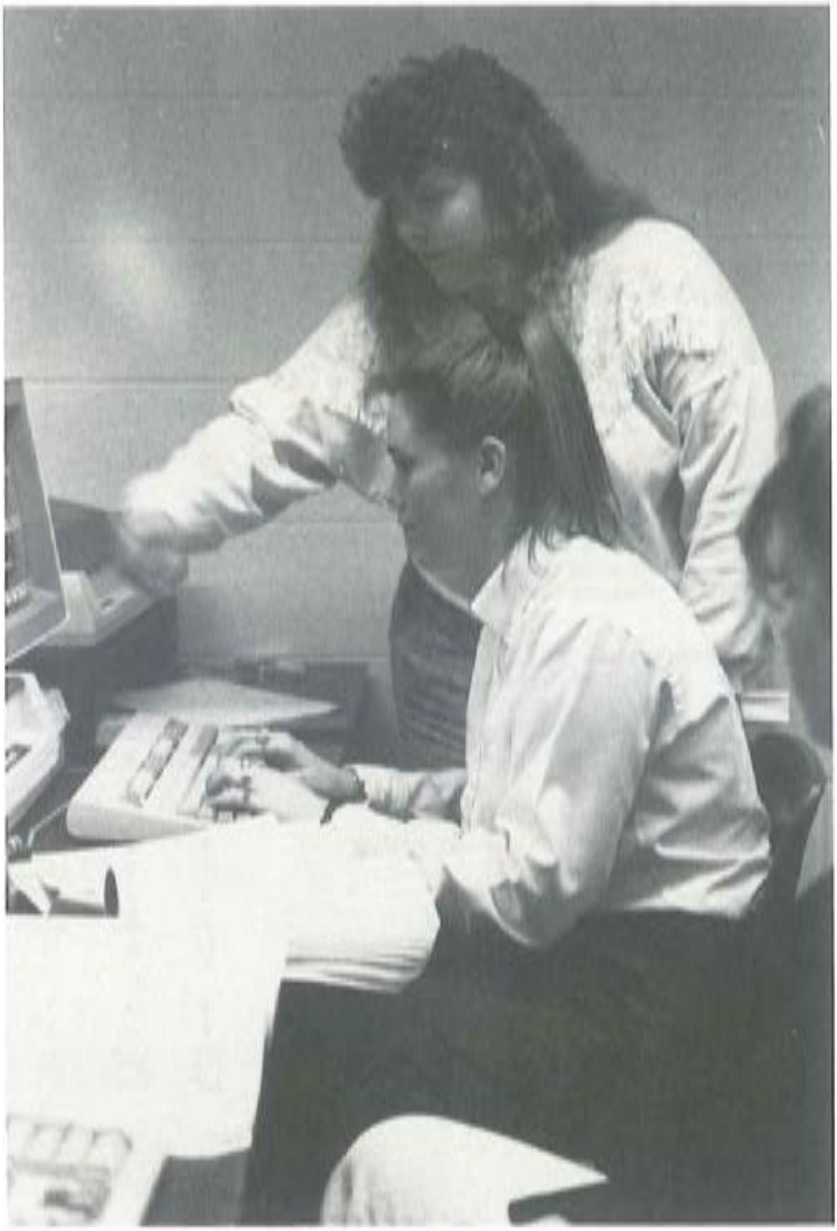
***student may elect to take MAT 130/MAT 131 or MAT 131/132 in lieu of MAT 107/BUS 239**

BUSINESS COMPUTER PROGRAMMING T-022
(EVENING)

			CLASS	LAB	CREDIT
FIRST QUARTER (Fall)					
*MAT	107	Mathematics Principles	3	0	3
CSC	106	Principles of Problem Solving	3	2	4
CAS	160	Microcomputer Operating Systems	2	2	3
OSC	101	Keyboarding/Document Formatting I	2	3	3
ORI	100	Student Orientation Seminar	1	0	1
			11	7	14
SECOND QUARTER (Winter)					
CAS	200	Operating System/400	2	2	3
CSC	210	BASIC Programming	3	2	4
*BUS	239	Business Mathematics	3	2	4
COE	100	Employment Seeking Skills	1	0	1
			9	6	12
THIRD QUARTER (Spring)					
CAS	201	Advanced Operating System/400	2	2	3
CSC	230	COBOL: Programming	3	3	4
CAS	163	WordPerfect	3	2	4
ACC	210	Principles of Accounting I	3	2	4
			11	9	15
FOURTH QUARTER (Summer)					
ACC	211	Principles of Accounting II	3	2	4
ACC	242	Computerized Accounting	3	2	4
CAS	241	Lotus 1-2-3	3	2	4
			9	6	12
FIFTH QUARTER (Fall)					
CSC	231	Advanced Cobol Programming	3	3	4
CAS	240	Systems Analysis	3	2	4
CAS	243	Advanced Lotus 1-2-3	3	2	4
ENG	151	Freshman Composition I	3	0	3
			12	7	15
SIXTH QUARTER (Winter)					
CSC	220	RPG/400 Programming	3	2	4
CAS	252	DBASE	3	2	4
BUS	201	Industrial Psychology	3	0	3
ENG	152	Freshman Composition II	3	0	3
			12	4	14
SEVENTH QUARTER (Spring)					
CSC	221	Advanced RPG/400 Programming	3	2	4
CAS	253	Advanced DBASE	3	2	4
CAS	255	Data Communications	3	2	4
ENG	153	Freshman Composition III	3	0	3
			12	6	15
EIGHTH QUARTER (Summer)					
ENG	170	Public Speaking	3	0	3
		Elective	3	0	3
COE	101	Work Experience/Related Elective	0/1	10/0	1
			6/7	10/0	7

NINTH QUARTER (Fall)					
BUS	257	Applied Business Communications I	3	0	3
ECO		Elective	3	0	3
CSC	225	Control Language Programming	3	2	4
COE	102	Work Experience/Related Elective	0/2	20/0	2
			9/11	22/2	12
		TOTAL CREDIT HOURS			116

*Student may elect to take MAT 150/MAT 151 or MAT 151/MAT 152 in lieu of MAT 107/BUS 239.



COMMERCIAL GRAPHICS
T-068

The Commercial Graphics curriculum is designed to provide students with knowledge and skills necessary for employment in the graphic communications profession which deals with the design, illustration, and mechanical preparation of printed promotional material. This curriculum provides the student with a sound, competitive foundation in the creative and/or technical and mechanical areas of this profession.

The student is trained in the development of the concept and physical design for promotional materials such as newspaper or magazine ads, posters, folders, letterheads, corporate symbols, brochures, booklets, or package illustration. The program of study emphasizes design, advertising, preparation of art for printing, lettering, typesetting, photography, screen printing, and offset printing.

Graduates of this curriculum will find employment opportunities with graphic design and commercial art studios, advertising agencies, printing companies, department stores, a wide variety of manufacturing industries, newspapers, and businesses with in-house graphic operations.

Entry Level
Graphic Designer/Artist
Illustrator
Layout Artist
Paste-Up/Mechanical Artist
Typographer
Graphic Arts Technician
Screen Process Technician
Small Offset Press Operator
Photographic Lab Technician
Print Shop Technician

Advanced Level
Art Director
Creative Director/Coordinator
Advertising Manager
Advanced Type Composer
Media Coordinator
Art Production Coordinator
Free Lance Artist
Advance Production Technician
Production Manager

COMMERCIAL GRAPHICS T-068

		Course Title	Class Hours	Lab Hours	Credit Hours
FIRST QUARTER					
ART	151	Fundamentals of Two-Dimensional Design (DES 1)	2	4	3
ENG	151	Freshman Composition I	3	0	3
CAS	118	Computer Applications	2	3	3
PHO	101	Introduction to Photography I	2	3	3
DES	110	Introduction to Commercial Graphics	2	3	3
ORI	100	Student Orientation Seminar	1	0	1
			12	13	16
SECOND QUARTER					
DES	102	Graphic Layout & Design (DES 2)	3	3	4
ENG	152	Freshman Composition II	3	0	3
DFT	101	Engineering Drawing I	0	6	3
GRA	103	Typesetting & Typography	2	3	3
MKT	210	Advertising, Sales & Promotion	3	2	4
DES	220	Computer Graphics	2	3	3
			13	17	20
THIRD QUARTER					
DES	104	Creative Visual Design (DES 3)	3	3	4
ENG	153	Freshman Composition III	3	0	3
ART	152	Drawing & Composition I	2	4	4
PHO	105	Photography II	3	3	4
		Social Science Elective	3	0	3
			14	10	18
FOURTH QUARTER					
DES	106	Commercial Art I	5	3	6
MAT	111	Technical Mathematics	3	0	3
DES	107	Graphic Arts	1	6	3
PHO	108	Photography III	3	3	4
			12	12	16
FIFTH QUARTER					
DES	201	Commercial Art II	5	3	6
		Humanities Elective	3	0	3
DES	212	Illustration I	3	3	4
GRA	205	Offset Printing I	2	3	3
			13	9	16
SIXTH QUARTER					
DES	204	Commercial Art III	5	3	6
GRA	208	Offset Printing II	2	3	3
PSY	260	General Psychology	3	0	3
DES	214	Illustration II	3	3	4
			13	9	16
SEVENTH QUARTER					
DES	207	Commercial Art IV	5	3	6
GRA	209	Silkscreen Printing	1	6	3
DES	203	Portfolio Preparation	1	6	3
		*Elective	3	0	3
			10	15	15
		TOTAL CREDIT HOURS			117

*Cooperative education internship (COE 100, 106) may be used for credit toward degree requirements.

CRIMINAL JUSTICE T-129

The Criminal Justice Technology curriculum is designed so that it may be a multifaceted program of study. It may consist of study options in correction, law enforcement and security services.

The curriculum is designed with a core of courses to afford one the opportunity to acquire basic knowledge, skills and attitudes in the generally accepted subject areas associated with a two-year study of correctional services, law enforcement services and security services. It includes subjects such as interpersonal communications, law psychology and sociology.

In addition to core subjects, the correctional services option provides an opportunity to study other generally accepted subjects indigenous to a two-year correctional services program such as confinement facility administration, correction law, counseling, probation-parole services and rehabilitation options. Similarly, the law enforcement option provides an opportunity to study other generally accepted subjects included in a two-year law enforcement services program such as criminal behavior, criminal investigation, patrol operation, traffic management, and other aspects of law enforcement administration and operations. The security services option provides an opportunity to study other generally accepted subjects related to a two-year security services program such as accident prevention and safety management, common carrier protection, fire prevention, private security, industrial security, retail security, security systems and surveillance.

Job opportunities are available with federal, state, county and municipal governments. In addition, knowledge, skills and attitudes acquired in this course of study qualify one for job opportunities with private enterprise in such areas as industrial, retail and private security.

CRIMINAL JUSTICE T-129

		Course Title	Class Hours	Lab Hours	Shop/ Clin Hours	Credit Hours
FIRST QUARTER						
CJC	101	Nature and History of Law	5	0	0	5
CJC	102	Introduction to Criminal Justice System	5	0	0	5
ENG	151	Freshman Composition I	3	0	0	3
SOC	160	Introduction to Sociology	3	0	0	3
ORI	100	Student Orientation Seminar	1	0	0	1
			17	0	0	17

SECOND QUARTER						
CJC	103	The Law Enforcement Officer's Function in Criminal Justice	5	0	0	5
CJC	104	The Court's Function in Criminal Justice	3	0	0	3
MAT	111	Technical Mathematics	3	0	0	3
ENG	152	Freshman Composition II	3	0	0	3
CJC	105	Corrections in Criminal Justice	3	0	0	3
			17	0	0	17
THIRD QUARTER						
CJC	106	Juvenile Justice	5	0	0	5
CJC	107	Introduction to Criminology	5	0	0	5
SAF	151	First Aid/Community CPR	3	0	0	3
CJC	108	N.C. Juvenile Code	3	0	0	3
		Elective	3	0	0	3
			19	0	0	19
FOURTH QUARTER						
SOC	161	Social Problems	3	0	0	3
ENG	170	Public Speaking	3	0	0	3
HIS	260	History of United States I	3	0	0	3
CHM	100	Introduction to Chemistry	3	3	0	4
CAS	160	Microcomputer Operations	2	0	2	3
			14	3	2	16
FIFTH QUARTER						
CJC	201	Criminal Law I	3	0	0	3
CJC	203	Motor Vehicle Laws of N.C.	5	0	0	5
POL	260	American Government	3	0	0	3
PSY	260	General Psychology	3	0	0	3
CJC	211	Constitutional Law	3	0	0	3
			17	0	0	17
SIXTH QUARTER						
CJC	202	Criminal Law II	3	0	0	3
CJC	204	Criminal Evidence	3	0	0	3
CJC	207	Law of Arrest, Search and Seizure	3	0	0	3
HIS	261	History of United States II	3	0	0	3
CJC	205	Criminal Investigation	5	0	0	5
			17	0	0	17
SEVENTH QUARTER						
POL	262	American State & Local Government	3	0	0	3
PSY	262	Introduction to Applied Psychology	3	0	0	3
CJC	206	Introduction to Criminalistics	4	0	3	5
CJC	208	Use of Deadly Force	3	0	0	3
CJC	209	Law Enforcement Organization and Administration	3	0	0	3
			16	0	3	17
		TOTAL CREDIT HOURS				120

**Cooperative Education Internship (0100-0106) may be used for credit toward degree requirements.

BASIC LAW ENFORCEMENT TRAINING T-189

The Basic Law Enforcement Training curriculum certificate program prepares individuals to take the Basic Training — Law Enforcement Officers certification examination mandated by the North Carolina Criminal Justice Education and Training Standards Commission, and/or it prepares individuals to take the Justice Officers Basic Training certification examination mandated by the North Carolina Sheriffs' Education and Training Standards Commission. Successful completion of this curriculum certificate program requires that the student satisfy the minimum requirements for certification by the Criminal Justice Commission and the Sheriffs' Commission. The student satisfactorily completing this program should possess at least the minimum degree of general attributes, knowledge, and skills to function as an inexperienced law enforcement officer.

Job opportunities are available with state, county, and municipal governments in North Carolina. In addition, knowledge, skills, and abilities acquired in this course of study qualifies one for job opportunities with private enterprises in such areas as industrial, retail, and private security.

The following topics are examples of the topics offered in the Basic Law Enforcement Training Course.

Constitutional Law
Laws of Arrest, Search, Seizure
Mechanics of Arrest
Elements of Criminal Law
Defense Tactics
Juvenile Laws
Emergency Medical Training
Firearms
Patrol Techniques
Motor Vehicle Laws
Criminal Investigation
Deviant Behavior
ABC Laws
Controlled Substances
Traffic Accident Investigation
Driver Training
Testifying in Court
Crisis Management

Students who satisfactorily complete the Basic Law Enforcement Training Course may be given credit for CJC 211, CJC 207, CJC 205, SAF 151 in the Criminal Justice Curriculum, T-129.

DRAFTING AND DESIGN TECHNOLOGY T-043

The Mechanical Drafting and Design curriculum is designed to prepare students for mechanical draftsmen. Emphasis is placed upon ability to think and plan, as well as upon drafting procedures and techniques used by mechanical draftsmen.

Mechanical drafting and design technicians perform many aspects of drafting such as developing the drawing of a section, sub-assembly or major component. Investigating design factors and availability of material and equipment, production methods and facilities are frequent assignments. They assist in the design of units and controls from specifications by utilizing drawings of existing units and reports on functional performance. They may draw components in industrial fields based on engineers' original design concepts or specific ideas. Also, they may be assigned as coordinators for the execution of related work or other design, production, tooling, material and planning groups. Technicians with experience in this classification may often supervise the preparation of working drawings. These technicians are employed in many types of manufacturing, fabrication, research development and service industries. Substantial numbers also are employed in communications, transportation, public utilities, consulting engineering firms, and in federal, state, and local governments. Students may enter this program any quarter.

DRAFTING & DESIGN TECHNOLOGY T-043

		Course Title	Class Hours	Lab Hours	Credit Hours
FIRST QUARTER					
DFT	101	Engineering Drawing I	0	6	3
ISC	118	Industrial Safety	3	0	3
MAT	150	Intermediate Algebra	5	0	5
MEC	110	Machine Processes	3	3	4
ORI	100	Student Orientation Seminar	1	0	1
			12	9	16
SECOND QUARTER					
DFT	102	Engineering Drawing II	0	6	3
MAT	151	College Algebra & Trigonometry I	5	0	5
MEC	117	Industrial Material & Processes	3	3	4
MEC	112	Introduction to Manufacturing	3	3	4
			11	12	16
THIRD QUARTER					
DFT	103	Engineering Drawing III	0	6	3
MEC	119	Applied Metallurgy	3	3	4
DFT	220	Computer Aided Drafting & Design I	2	3	3
MAT	152	College Algebra & Trigonometry II	5	0	5
			10	12	15

FOURTH QUARTER					
PSY	260	General Psychology	3	0	3
DDF	201	Design Drafting I	2	6	4
DFT	221	Computer. Aided Drafting & Design II	2	3	3
PHY	100	Principles of Technology	3	3	4
			10	12	14
FIFTH QUARTER					
ELC	205	Applied Electricity	3	3	4
ENG	151	Freshman Composition I	3	0	3
DFT	211	Mechanisms	3	3	4
CAS	118	Computer Applications	2	3	3
PLA	220	Introduction to Plastics	3	0	3
			14	9	17
SIXTH QUARTER					
ENG	152	Freshman Composition II	3	0	3
DDF	212	Jig and Fixture Design	3	3	4
HYD	235	Hydraulics and Pneumatics	3	0	3
		Social Science Elective	3	0	3
MEC	113	Numerical Control Principles	3	3	4
			15	6	17
SEVENTH QUARTER					
ENG	153	Freshman Composition III	3	0	3
MEC	240	Computer Numerical Control Programming	3	3	4
DDF	202	Design Drafting II	2	6	4
		Elective	3	0	3
			11	9	14
EIGHTH QUARTER					
ENG	170	Public Speaking	3	0	3
		Related Elective	3	0	3
DFT	209	Industrial Systems Schematics	2	3	3
MEC	208	Machine Design	3	3	4
			11	6	13
		TOTAL CREDIT HOURS			122

Cooperative Education Internship (0100-0106) may be used for credit toward degree requirements.

ELECTRONICS ENGINEERING TECHNOLOGY T-045

The Electronics Engineering Technology curriculum provides the student with instruction in the areas of electrical fundamentals, circuit analysis, and the characteristics and application of electrical and electronic devices. This comprehensive course of study will prepare the graduate for career opportunities in a wide variety of business and industries including:

Communications	Computers
Field Service	Industrial Electronics
Instrumentation	Medical Electronics
Quality Control	Research and Development
Robotics	Technical Sales and Service

Modern laboratory equipment is provided to enable the students to obtain "hands-on" experience in the construction, testing and repair of electronic circuits and in the proper care and use of test equipment.

There is a bright future for the Electronics Engineering Technology graduate in the design, manufacturing, testing, installation, sales, and maintenance of the electronic equipment that is now considered essential to so many phases of our industrial society.

ELECTRONICS ENGINEERING TECHNOLOGY T-045

		Course Title	Class Hours	Lab Hours	Shop Hours	Credit Hours
FIRST QUARTER						
ELC	100	DC and AC Fundamentals	5	4	3	8
ELN	110	Technical Documentation	2	0	3	3
ENG	151	Freshman Composition I	3	0	0	3
MAT	150	Intermediate Algebra	5	0	0	5
ORI	100	Freshman Orientation Seminar	1	0	0	1
			16	4	6	20
SECOND QUARTER						
ELN	104	Semiconductor Circuits & Applications	5	8	3	10
MAT	151	College Algebra & Trigonometry I	5	0	0	5
ENG	152	Freshman Composition II	3	0	0	3
ELN	111	Fabrication Techniques	1	2	3	3
			14	10	6	21
THIRD QUARTER						
ELN	105	Semiconductor Control Devices	4	4	0	6
PHY	101	Technical Physics I	3	0	3	4
MAT	152	College Algebra & Trigonometry II	5	0	0	5
ENG	154	Technical Report Writing	3	0	0	3
			15	4	3	18

FOURTH QUARTER						
ELN	217	Linear Integrated Circuits	4	12	0	10
ENG	170	Public Speaking	3	0	0	3
PHY	102	Technical Physics II	3	0	3	4
			10	12	3	17
FIFTH QUARTER						
ELN	207	Digital Electronics	5	6	3	9
CAS	160	Microcomputer Applications	2	2	0	3
ECO	201	Principles of Economics	3	0	0	3
		Humanities Elective	3	0	0	3
			13	8	3	18
SIXTH QUARTER						
ELN	208	Microprocessor Fundamentals	2	4	3	5
ELN	215	Industrial Electronics	2	4	3	5
CSC	227	"C", Programming	3	2	0	4
BUS	201	Industrial Psychology	3	0	0	3
			10	10	6	17
SEVENTH QUARTER						
		Elective	3	0	0	3
ELN	209	Microprocessor Interfacing	2	4	3	5
ELN	211	Analytic Troubleshooting	2	4	0	4
			7	8	3	12
		TOTAL CREDIT HOURS				123

ELECTRONICS ENGINEERING TECHNOLOGY
CERTIFICATE PROGRAM T-045
DESCRIPTION:

The Basic Electronics Certificate curriculum provides instruction in circuit theory and circuit analysis techniques as well as familiarization with the documentation and fabrication skills required to design, construct, and maintain all types of analog electronic equipment.

Basic Electronics Certificate			Credit Hours
ELC	100	DC and AC Fundamentals	8
ELN	110	Technical Documentation	3
ELN	104	Semiconductor Circuits & Applications	10
ELN	111	Fabrication Techniques	3
ELN	105	Semiconductor Control Devices	6
ELN	217	Linear Integrated Circuits	10
		Total hours	40

The Digital Electronics Certificate curriculum provides advanced instruction in digital control circuits and in microprocessor interfacing applications.

Digital Electronics Certificate			Credit Hours
ELN	207	Digital Electronics	9
ELN	208	Microprocessor Fundamentals	5
ELN	209	Microprocessor Interfacing	5
		Total Hours	19

GENERAL TECHNOLOGY CURRICULUM CORE T-201

General Technology Curriculum Core is designed as a career mobility program for technical students

to acquire the general education and related courses in subject areas such as humanities, communications, social sciences, and theoretical and applied sciences such as biology, chemistry, physics, mathematics, general computer studies and general graphics (drafting) that are foundation courses to specific curriculums in the technical field. After completion of this certificate curriculum the student has job skills for occupations requiring communications skills and/or science and mathematics. The student may take this program as the first level in a specific technical curriculum as an intended objective component of that technical curriculum. Students may also take this program for transfer to a technical curriculum at another community college system institution either prior to or concurrently with enrollment at the institution at which they intend to pursue or are pursuing a technical curriculum degree.

		Course Title	Class Hours	Lab Hours	Shop/ Clin Hours	Credit Hours
FIRST QUARTER						
		MAJOR COURSES	0	0	0	0
		RELATED COURSES				
BIO	151	Principles of Biology I	3	3	0	4
CAS	160	Microcomputer Operations	2	2	0	3
MAT	150	Intermediate Algebra	5	0	0	5
		*Electives	9	0	0	9
		Totals	19	5	0	21
GENERAL EDUCATION						
ENG	151	Freshman Composition I	3	0	0	3
ENG	152	Freshman Composition II	3	0	0	3
ENG	153	Freshman Composition III	3	0	0	3
PSY	260	General Psychology	3	0	0	3
SOC	160	Introduction to Sociology	3	0	0	3
ENG	170	Public Speaking	3	0	0	3
		Totals	18	0	0	18
ELECTIVES			6	0	0	6
		TOTAL CREDITS				45

***Related electives may be taken from curriculum of choice**

INDUSTRIAL MANAGEMENT TECHNOLOGY T-049

The Industrial Management Curriculum is designed to provide an individual with the ability to function effectively in supervisory and middle-management positions in industry. This program emphasizes study and application in areas such as business and industrial management, production methods and schedules, inventory control, work analysis, motivation techniques, and human relations.

This curriculum is designed to prepare the individual to enter supervisory or middle-management positions, to provide an educational program for upgrading or retraining, and to provide an opportunity for the individual wanting to fulfill professional or general interest needs.

INDUSTRIAL MANAGEMENT TECHNOLOGY T-049
(EVENING)

			CLASS	LAB	CREDIT
FIRST QUARTER (Fall)					
ISC	121	Industrial Engineering Applications	3	0	3
BUS	100	Introduction to Business	3	0	3
MAT	107	Mathematics Principles	3	0	3
ACC	210	Principles of Accounting I	3	2	4
ORI	100	Student Orientation Seminar	1	0	1
			13	2	14
SECOND QUARTER (Winter)					
BUS	112	Business Finance	3	0	3
ACC	211	Principles of Accounting II	3	2	4
BUS	239	Business Mathematics	3	2	4
BUS	201	Industrial Psychology	3	0	3
			12	4	14
THIRD QUARTER (Spring)					
BUS	214	Principles of Management	3	0	3
COE	100	Employment Seeking Skills	1	0	1
ENG	151	Freshman Composition I	3	0	3
BUS	216	Principles of Supervision	3	0	3
		*Elective	3	0	3
			13	0	13
FOURTH QUARTER (Summer)					
ECO	261	Labor Economics	3	0	3
CAS	101	Computer Applications Concepts	3	0	3
		Elective — Social Science or Humanities/ Fine Arts	3	0	3
		*Elective	3	0	3
			12	0	12
FIFTH QUARTER (Fall)					
BUS	224	Human Resource Management	3	0	3
BUS	225	Business Law	3	0	3
BUS	257	Applied Business Communications	3	0	3
COE	101	Work Experience/Related Elective	0/2	20/0	2
MKT	120	Marketing	3	0	3
			12/14	20/0	14

SIXTH QUARTER (Winter)					
ISC	111	Occupational Safety & Health	3	0	3
ECO	225	Business & Economic Statistics	3	0	3
COE	102	Work Experience/Related Elective	0/2	20/0	2
ECO	250	Managerial Economics	3	0	3
ENG	152	Freshman Composition II	3	0	3
			12/14	20/0	14
SEVENTH QUARTER (Spring)					
ISC	221	Production Planning & Management	3	0	3
BUS	217	Advanced Supervision	3	0	3
ISC	113	Statistical Quality Control	3	0	3
ENG	153	Freshman Composition III	3	0	3
			12	0	12
EIGHTH QUARTER (Summer)					
BUS	218	Wage & Salary Administration	3	0	3
BUS	170	Business & Social Environment	3	0	3
CAS	241	Lotus 1-2-3	3	2	4
			9	2	10
NINTH QUARTER (Fall)					
BUS	260	Leadership Development	3	0	3
ENG	170	Public Speaking	3	0	3
			6	0	6
		TOTAL CREDIT HOURS			109

*Co-op may be used for these electives.

INDUSTRIAL MANAGEMENT TECHNOLOGY CERTIFICATE T-049

			Credit Hours
ENG	151	Freshman Composition I	3
ENG	152	Freshman Composition II	3
BUS	239	Business Math	4
ISC	113	Statistical Quality Control	3
ISC	221	Production Planning and Management	3
BUS	216	Principles of Supervision	3
BUS	214	Principles of Management	3
ISC	111	Occupational Safety and Health	3
CAS	101	Computer Applications & Concepts	3
BUS	257	Applied Business Communications	3
BUS	201	Industrial Psychology	3
		Elective	2

Any course with a grade of below "C" cannot be applied toward the certificate.

TOTAL CREDIT HOURS 36

MECHANICAL ENGINEERING TECHNOLOGY T-051

The Mechanical Engineering Technology curriculum prepares technicians to assist engineers in the design and development of machinery and other mechanical equipment and parts and to perform other activities which require technical knowledge of factors such as tolerances, stresses, strains, friction and vibration. The scope of subject matter covered prepares the graduate for employment in greatly diversified branches of the mechanical field.

The graduate may wish to work with testing experimental machinery and equipment and analyzing the results. Typical of such devices are internal combustion engines, steam turbines, jet and rocket engines, nuclear reactors, refrigeration and air conditioning equipment, missiles, spacecraft, marine equipment, motor vehicles, railroad equipment and machines for specialized industries such as textile mills. Another specialty area graduates may wish to pursue is that of tool designer. Tool designers design tools and devices for the mass production of manufactured articles. They may also work with the instrumentation and design of machine tools or in equipping plants or mills which require special construction to accommodate power-producing or transmitting machinery.

MECHANICAL ENGINEERING TECHNOLOGY T-051

		Course Title	Class Hours	Lab Hours	Credit Hours
FIRST QUARTER					
MEC	101	Manufacturing Processes I	3	9	6
MAT	150	Intermediate Algebra	5	0	5
ISC	118	Industrial Safety	3	0	3
ORI	100	Student Orientation Seminar	1	0	1
			12	9	15
SECOND QUARTER					
MEC	102	Manufacturing Processes II	3	9	6
DFT	101	Engineering Drawing I	0	6	3
MAT	151	College Algebra & Trigonometry I	5	0	5
MEC	117	Industrial Materials & Processes	3	3	4
			11	18	18
THIRD QUARTER					
MEC	103	Manufacturing Processes III	3	9	6
DFT	102	Engineering Drawing II	0	6	3
MEC	119	Applied Metallurgy	3	3	4
MAT	152	College Algebra & Trigonometry II	5	0	5
			11	18	18
FOURTH QUARTER					
MEC	104	Manufacturing Processes IV	3	9	6
PLA	220	Introduction to Plastics	3	0	3
PSY	260	General Psychology	3	0	3
		Humanities Elective	3	0	3
			12	9	15

FIFTH QUARTER					
ELC	205	Applied Electricity	3	3	4
PHY	101	Technical Physics I	3	3	4
ENG	151	Freshman Composition I	3	0	3
		Elective	3	0	3
CAS	118	Computer Applications	2	3	3
			14	9	17
SIXTH QUARTER					
MEC	113	Numerical Control Principles	3	3	4
PHY	102	Technical Physics II	3	3	4
ENG	152	Freshman Composition II	3	0	3
HYD	235	Hydraulics and Pneumatics	3	0	3
			12	6	14
SEVENTH QUARTER					
ENG	153	Freshman Composition III	3	0	3
MEC	204	Applied Mechanics	5	0	5
MEC	240	Computer Numer. Cont. Prog.	3	3	4
DFT	220	Computer Aided Dft. & Design I	2	3	3
			13	6	15
EIGHTH QUARTER					
MEC	208	Machine Design	3	3	4
MEC	205	Strength of Materials	5	0	5
ENG	170	Public Speaking	3	0	3
ISC	236	Manufacturing Quality Control	3	0	3
			14	3	15
		TOTAL CREDIT HOURS			127

****Cooperative Education Internship (0100-0106) may be used for credit toward degree requirements.**

MICROCOMPUTER SYSTEMS TECHNOLOGY T-192

The purpose of the Microcomputer Systems Technology curriculum is to prepare graduates for employment with business, industry, and government organizations that use or are planning to use computers to process and manage information.

Using microcomputers or other small computer systems, students will learn to apply a variety of commonly used business applications and systems software; set up microcomputer hardware and install software; develop user training programs and user documentation; evaluate and recommend hardware and software; assist users in resolving hardware and software problems; and develop control and security procedures. Students will also learn the fundamentals of microcomputer networking.

MICROCOMPUTER SYSTEMS TECHNOLOGY T-192
(Day)

			CLASS	LAB	CREDIT
FIRST QUARTER (Fall)					
OSC	101	Keyboarding/Document Formatting I	2	3	3
*MAT	107	Mathmatics Principles	3	0	3
CAS	205	Software Applications	3	3	4
CAS	160	Microcomputer Operating Systems	2	2	3
CSC	106	Principles of Problem Solving	3	2	4
ORI	100	Student Orientation Seminar	1	0	1
			14	10	18
SECOND QUARTER (Winter)					
CAS	163	Wordperfect	3	2	4
CAS	241	Lotus 1-2-3	3	2	4
CSC	210	Basic Programming	3	2	4
		Economics Elective	3	0	3
*BUS	239	Business Mathematics	3	2	4
COE		Employment Seeking Skills	1	0	1
			16	8	20
THIRD QUARTER (Spring)					
CAS	248	Advanced Wordperfect	3	2	4
CAS	243	Advanced Lotus 1-2-3	3	2	4
CAS	214	Microsoft Windows	3	0	3
ENG	151	Freshman Composition I	3	0	3
		Elective	3	0	3
COE	101	Work Experience/Related Elective	0/2	20/0	2
			15/17	24/4	19
FOURTH QUARTER (Fall)					
CAS	240	Systems Analysis	3	2	4
CAS	224	The Electronic Office	3	2	4
CAS	250	Computer Training & Support	3	0	3
ACC	210	Principles of Accounting I	3	2	4
BUS	257	Applied Business Communications	3	0	3
		Related Elective	3	0	3
			18	6	21
FIFTH QUARTER (Winter)					
CAS	252	DBASE	3	2	4
CAS	208	Desktop Publishing	3	2	4
CAS	212	PC Installation and Maintenance	3	2	4
ACC	211	Principles of Accounting II	3	2	4
ENG	152	Freshman Composition II	3	0	3
			15	8	19
SIXTH QUARTER (Spring)					
CAS	253	Advanced DBASE	3	2	4
CAS	255	Data Communications	3	2	4
ACC	242	Computerized Accounting	3	2	4
ENG	153	Freshman Composition III	3	0	3
ENG	170	Public Speaking	3	0	3
COE	102	Work Experience/Related Elective	0/2	20/0	2
			15/17	26/6	20
		TOTAL CREDIT HOURS			117

*Student may elect MAT 150/MAT 151 or MAT 151/MAT 152 in lieu of MAT 107/BUS 239.

MICROCOMPUTER SYSTEMS TECHNOLOGY T-192
(Evening)

			CLASS	LAB	CREDIT
FIRST QUARTER (Fall)					
OSC	101	Keyboarding/Document Formatting I	2	3	3
CAS	160	Microcomputer Operating Systems	2	2	3
CSC	106	Principles of Problem Solving	3	2	4
ORI	100	Student Orientation Seminar	1	0	1
			8	7	11
SECOND QUARTER (Winter)					
CAS	163	Wordperfect	3	2	4
CAS	241	Lotus 1-2-3	3	2	4
CSC	210	BASIC Programming	3	2	4
		Economics Elective	3	0	3
			12	6	15
THIRD QUARTER (Spring)					
CAS	248	Advanced Wordperfect	3	2	4
CAS	243	Advanced Lotus 1-2-3	3	2	4
CAS	214	Microsoft Windows	3	0	3
*MAT	107	Mathematics Principles	3	0	3
			12	4	14
FOURTH QUARTER (Summer)					
*BUS	239	Business Mathematics	3	2	4
ENG	151	Freshman Composition I	3	0	3
CAS	205	Software Applications	3	3	4
COE	100	Employment Seeking Skills	1	0	1
			10	5	12
FIFTH QUARTER (Fall)					
CAS	224	The Electronic Office	3	2	4
ACC	210	Principles of Accounting	3	2	4
BUS	257	Applied Business Communications	3	0	3
COE	101	Work Experience/Related Elective	0/2	20/0	2
			9/11	24/4	13
SIXTH QUARTER (Winter)					
CAS	252	DBASE	3	2	4
CAS	208	Desktop Publishing	3	2	4
CAS	212	PC Installation and Maintenance	3	2	4
ACC	211	Principles of Accounting II	3	2	4
			12	8	16
SEVENTH QUARTER (Spring)					
CAS	253	Advanced DBASE	3	2	4
CAS	255	Data Communications	3	2	4
ACC	242	Computerized Accounting	3	2	4
ENG	152	Freshman Composition II	3	0	3
			12	6	15

EIGHTH QUARTER (Summer)					
ENG	153	Freshman Composition III	3	0	3
		Elective	3	0	3
ENG	170	Public Speaking	3	0	3
		Related Elective	3	0	3
			12	0	12
NINTH QUARTER (FAll)					
CAS	240	Systems Analysis	3	2	4
CAS	250	Computer Training & Support	3	0	3
COE	102	Work Experience/Related Elective	0/2	20/0	2
			6/8	22/2	9
		TOTAL CREDIT HOURS			117

*Student may elect MAT 150/MAT 151 or MAT 151/MAT 152 in lieu of MAT 107/BUS 239.

RADIO AND TV BROADCASTING TECHNOLOGY T-179

Students enrolled in the Radio and TV Broadcasting Technology curriculum have a variety of careers from which to choose. They learn to speak well on microphone and on camera with and without scripts. They learn how to operate the camera, run the audio control board and direct the whole program. Courses in the curriculum also teach students the legal aspects of broadcasting, how to manage a broadcast operation, how to troubleshoot equipment, and how to write and produce both audio and video programming. Technical courses included are designed to give students an understanding of electronics and broadcast equipment.

Upon completion they are well prepared to write, produce, perform and direct production. They can also function as technicians and have an understanding of how their equipment works.

Graduates of the curriculum may find employment in radio or television stations, cable TV companies, public relations and advertising agencies, recording studios, production houses, and industrial or educational media.

Program Director
Music Director
Music Librarian
Production Manager
Production Assistant
Copy Writer
Producer
Director
Audio Engineer
Traffic Director
Traffic Assistant
Public Service Director
Announcer
Reporter
Newswriter
Newscaster
Camera Operator
Floor Manager
Technical Director
Account Executive
Videotape Operator
Media Coordinator

A certificate in Radio Broadcasting may be obtained by taking a total of 76 hours consisting of:

RTV 116, 201, 203, 204, 205, 206, 208, 211, 212, 218, 221, 223, 226, 227.
ENG 151, 152, 170
OSC 101, CAS 118, MKT 210

RADIO-TV BROADCASTING TECHNOLOGY T-179

		Course Title	Class Hours	Lab Hours	Credit Hours
FIRST QUARTER					
OSC	101	Keyboarding Document Formatting I	2	3	3
RTV	201	Introduction to Broadcasting	5	0	5
RTV	203	Expression in the Media	5	0	5
ENG	151	Freshman Composition I	3	0	3
ORI	100	Student Orientation Seminar	1	0	1
			16	3	17
SECOND QUARTER					
RTV	204	Audio Production I	3	8	7
RTV	206	Writing for Broadcasting	3	2	4
RTV	220	Intro to TV Systems	5	4	7
ENG	152	Freshman Composition II	3	0	3
			14	14	21
THIRD QUARTER					
RTV	116	Broadcasting Announcing	3	3	4
RTV	222	Industrial Instructional TV	4	0	4
MAT	111	Technical Math	3	0	3
RTV	208	Audio Production II	2	8	6
			12	11	17
FOURTH QUARTER					
		Elective/Humanities	3	0	3
RTV	207	Video Production I	3	8	7
RTV	205	Broadcast Programming	3	0	3
MAT	150	Intermediate Algebra	5	0	5
			14	8	18
FIFTH QUARTER					
RTV	209	Video Production II	2	8	6
RTV	211	Broadcast Journalism	3	6	6
MKT	210	Advertising Sales and Promotion	3	2	4
ELC	205	Applied Electricity	3	3	4
			11	19	20
SIXTH QUARTER					
		Elective/Social Science	3	0	3
ENG	170	Public Speaking	3	0	3
PSY	260	General Psychology	3	0	3
RTV	226	Supervised Work Experience I	1	10	2
CAS	118	Computer Applications	2	3	3
			12	13	14
SEVENTH QUARTER					
RTV	212	Broadcast Operations	3	0	3
RTV	223	Broadcast Management	3	0	3
RTV	218	Broadcast Law	3	0	3
RTV	221	Troubleshooting Broadcast Equipment	2	3	3
RTV	227	Supervised Work Experience II	1	10	2
		Elective	3	0	3
			15	13	17
		TOTAL CREDIT HOURS			124

RADIO CERTIFICATE PROGRAM T-179

The Radio and Television curriculum is designed to offer the student the opportunity to acquire basic skills and the related technical information necessary to gain employment in the non-technical areas of professional broadcasting.

The program of study provides the students with sufficient training to perform such duties as announcing, advertising sales, copy writing, commercial and program production, studio and control room equipment operation, traffic and log maintenance, news gathering, writing and reporting. The graduate will find employment in the broadcasting industry.

		Course Title	Class Hours	Lab Hours	Credit Hours
FIRST QUARTER					
RTV	116	Broadcast Announcing	3	3	4
RTV	201	Introduction to Broadcasting	5	0	5
RTV	203	Expression in the Media	5	0	5
RTV	204	Audio Production I	3	8	7
RTV	205	Broadcast Programming	3	0	3
RTV	206	Writing for Broadcasting	3	2	4
RTV	208	Audio Production II	2	8	6
RTV	211	Broadcast Journalism	3	6	6
RTV	212	Broadcast Operations	3	0	3
RTV	218	Broadcast Law	3	0	3
RTV	221	Troubleshooting Broadcast Equipment	2	3	3
RTV	223	Broadcasting Management	3	0	3
RTV	226	Supervised Work Experience I	1	10	2
RTV	227	Supervised Work Experience II	1	10	2
OSC	101	Keyboarding Document Formatting I	2	3	3
MKT	210	Advertising, Sales and Promotion	3	2	4
CAS	118	Computer Applications	2	3	3
ENG	151	Freshman Composition I	3	0	3
ENG	152	Freshman Composition II	3	0	3
ENG	170	Public Speaking	3	0	3
		TOTAL CREDIT HOURS			75

REAL ESTATE TECHNICAL SPECIALTY T-166

		Course Title	Class Hours	Lab Hours	Credit Hours
FIRST QUARTER					
RLS	121	Real Estate Math	3	0	3
RLS	230	Real Estate Fundamentals	6	0	6
			9	0	9
SECOND QUARTER					
RLS	122	Real Estate Brokerage	3	0	3
RLS	231	Real Estate Finance	3	0	3
RLS	238	Real Estate Law	3	0	3
			9	0	9
		TOTAL CREDIT HOURS			18

TEACHER ASSOCIATE T-088

The Teacher Associate curriculum prepares individuals as assistants to classroom teachers. The curriculum is designed to provide the course of study for individuals who have the desire and capability to work with primary and elementary school children under the supervision of the classroom teacher. Study and application will be employed in areas such as communication skills, human relationships, human growth and development, curriculum activities, school records, preparation of instructional materials and audiovisual aids, and the role of the aide.

The graduate of this curriculum will be qualified to enter the field of education as a paraprofessional, performing all duties required of a teacher aide. The role of the teacher aide will vary from school to school. The aide may be assigned as a general instructional aide, clerical aide or tutorial aide, depending on the particular needs of the school. Employment opportunities exist with public school systems and with private schools.

TEACHER ASSOCIATE T-088

		Course Title	Class Hours	Lab Hours	Credit Hours
FIRST QUARTER					
EDU	107	Administration, Supervision & Standards	3	0	3
SAF	151	First Aid/Community CPR	3	0	3
EDU	208	Art and Music	1	3	2
EDU	240	Practicum	0	15	5
EDU	241	Seminar	1	0	1
NUT	110	Nutrition	1	6	3
ORI	100	Student Orientation Seminar	1	0	1
			10	24	18
SECOND QUARTER					
PSY	115	Human Growth & Development I	3	0	3
EDU	109	Learning Activities	2	3	3
EDU	101	Intro. to Education	3	0	3
		**Elective	4	0	4
EDU	242	Practicum	0	15	5
EDU	243	Seminar	1	0	1
			13	18	19
THIRD QUARTER					
PSY	116	Human Growth & Development II	3	0	3
EDU	203	Exceptional Child	3	0	3
PED	242	Physical Activities for Children	3	3	4
EDU	108	Math & Science for Children	3	0	3
EDU	244	Practicum	0	15	5
EDU	245	Seminar	1	0	1
			13	18	19
FOURTH QUARTER					
ENG	170	Public Speaking	3	0	3
EDU	115	Language Arts	2	3	3
EDU	213	Children's Literature	4	0	4
EDU	246	Practicum	0	9	3
EDU	247	Seminar	1	0	1
			10	12	14

FIFTH QUARTER

EDU	102	Methods, Materials, and Techniques of Reading I	3	0	3
ENG	151	Freshman Composition I	3	0	3
CAS	118	Computer Applications	2	3	3
EDU	248	Practicum and Supervision	1	6	3
EDU	249	Supervision Seminar	2	0	2
			11	9	14

SIXTH QUARTER

EDU	103	Methods, Materials, and Techniques of Reading II	3	0	3
BUS	147	Small Business Management	3	0	3
ENG	152	Freshman Composition. II	3	0	3
EDU	204	Parent Education	3	0	3
REC	102	Recreational Activities I	2	3	3
MAT	111	Technical Math	3	0	3
			17	3	18

SEVENTH QUARTER

REC	105	Arts & Crafts	1	3	2
EDU	234	A/V Materials and Equipment	3	0	3
ENG	153	Freshman Composition III	3	0	3
EDU	206	Discipline	3	0	3
EDU	214	Instructional Resources	3	0	3
			13	3	14
		TOTAL CREDIT HOURS			116

****Cooperative Education Internship (0100-0106) may be used for credit toward degree requirements.**

Vocational Programs

Isothermal Community College offers various programs in the professions and trades which require from one to four quarters to complete. Students may earn either a diploma or certificate depending upon their choice of program. All students, regardless of program, must complete the following requirements for graduation:

1. A minimum of 2.0 grade point average.
2. All specifically designated courses in each program must be taken. These may be found in the program outlines in the following section.
3. A Certificate of Achievement may be obtained through the day and/or evening programs by completing the designated courses in the outlines in the certificate section. *The student must apply to the Registrar's Office for this certificate.*

The Vocational Programs offered are:

V001 Automotive Body Repair
V003 Automotive Mechanic
V067 Child Care Worker
V009 Cosmetology
V018 Electrical Installation and Maintenance
V111 Geriatric Care Specialist
V032 Machinist
V072 Nurse Assistant
V038 Practical Nursing
V050 Welding

AUTO BODY REPAIR V-001

	Course Title	Class Hours	Lab Hours	Credit Hours
FIRST QUARTER				
AUT 1120	Auto Body Repair I	4	0	4
AUT 1130	Auto Body Repair Shop I	0	15	5
WLD 1123	Auto Body Welding I	2	6	4
MAT 1101	Math Fundamentals	3	0	3
		9	21	16
SECOND QUARTER				
AUT 1121	Auto Body Repair II	4	0	4
AUT 1131	Auto Body Repair Shop II	0	15	5
WLD 1124	Auto Body Welding II	2	6	4
AUT 1106	Automotive Wiring	2	6	4
		8	27	17
THIRD QUARTER				
AUT 1122	Auto Body Repair III	4	0	4
AUT 1132	Auto Body Repair Shop III	0	15	5
PSY 1100	Human Relations	3	0	3
AUT 1124	Painting Materials & Practice	5	3	6
		12	18	18

FOURTH QUARTER					
AUT	1123	Auto Body Repair IV	4	0	4
AUT	1133	Auto Body Repair Shop IV	0	15	5
ENG	1101	Communication Skills	3	0	3
PHY	100	Principles of Technology	3	3	4
			10	18	16
		TOTAL CREDIT HOURS			67

AUTO BODY REPAIR CERTIFICATE V-001

		Course Title	Class Hours	Lab Hours	Credit Hours
FIRST QUARTER					
AUT	1201	Auto Body Repair I	2	15	7
SECOND QUARTER					
AUT	1202	Auto Body Repair II	2	15	7
THIRD QUARTER					
AUT	1203	Auto Body Repair III	2	15	7
FOURTH QUARTER					
AUT	1204	Auto Body Repair IV	2	15	7

AUTOMOTIVE MECHANICS V-003

The Automotive Mechanics curriculum provides a training program for developing the basic knowledge and skills needed to inspect, diagnose, repair and adjust automotive vehicles. Manual skills are developed in practical shop work and the technical understanding of the operating principles involved in the modern automobile as taught through class assignments, discussions, and shop practice.

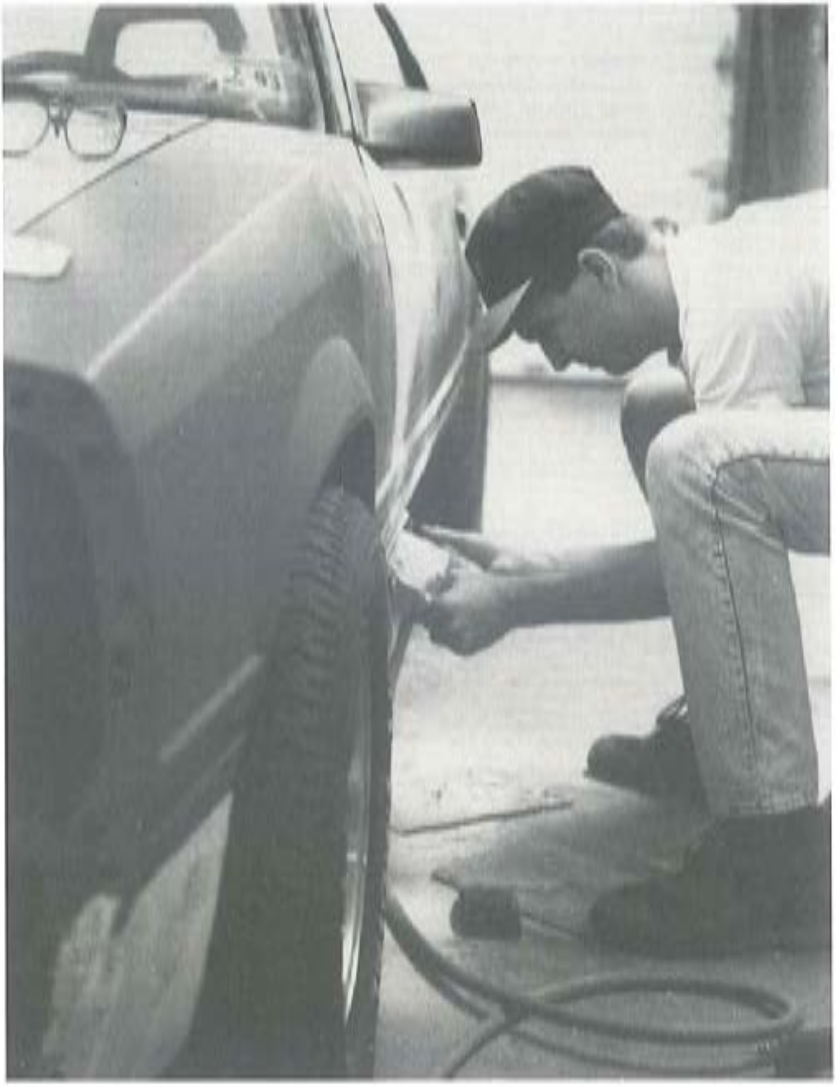
Automobile mechanics maintain and repair mechanical, electrical, and body parts of passenger cars, trucks, and buses. In some communities and rural areas, they also may service tractors or marine engines and other gasoline-power equipment. Mechanics inspect and test to determine the causes of faulty operation. They repair or replace defective parts to restore the vehicle or machine to proper operating condition and use shop manuals and other technical publications as references for technical data. Students may enter this program any quarter.

AUTOMECHANICS V003

		Course Title	Class Hours	Lab Hours	Credit Hours
FIRST QUARTER					
AUT	1101	Automotive Engine, Electrical Fuel Systems	2	15	7
AUT	1111	Automotive Schematics and Diagrams	2	3	3
AUT	1118	Automotive Problems	3	3	4
MAT	1101	Math Fundamentals	3	0	3
			10	21	17
SECOND QUARTER					
AUT	1102	Automotive Brakes, Chassis and Suspension	2	15	7
AUT	1112	Automotive Schematics and Diagrams: Power Mechanics (Electrical and Fuel systems)	2	3	3
MAT	111	Technical Math	3	0	3
AUT	1126	Automobile Servicing I	1	3	2
			8	21	15
THIRD QUARTER					
AUT	1103	Automotive Internal Combustion Engines	2	15	7
AUT	1113	Automotive Schematics and Diagrams	1	3	2
BUS	1100	Small Business Operations	2	0	2
PSY	1100	Human Relations	3	0	3
			8	18	14
FOURTH QUARTER					
AUT	1104	Automotive Power Train Systems	2	15	7
ENG	1101	Communication Skills	3	0	3
AUT	1125	Automotive Air Conditioning	3	3	4
PHY	100	Principles of Technology	3	3	4
			11	21	18

AUTOMOTIVE MECHANICS
CERTIFICATE
V-003

	Course Title	Class Hours	Lab Hours	Credit Hours
FIRST QUARTER				
AUT 1101	Automotive Engine, Electrical Fuel Systems	2	15	7
SECOND QUARTER				
AUT 1102	Automotive Brakes, Chassis & Suspension	2	15	7
THIRD QUARTER				
AUT 1103	Automotive Internal Combustion Engines	2	15	7
FOURTH QUARTER				
AUT 1104	Automotive Power train Systems	2	15	7



CHILD CARE WORKER V-067

The Child Care Worker curriculum prepares individuals to work as assistants with early childhood specialists in day care centers, nursery schools, kindergartens, child development centers, hospitals, institutions, camps and recreation centers. This curriculum provides course work to meet the requirements for entry level employment and upgrading or retraining of staff in child care facilities.

Instruction includes theory and application in child care, growth and development of children, behavior patterns of children, health practices and how to deal with the emotional and physical problems of children.

CHILD CARE WORKER V-067

		Course Title	Class Hours	Lab Hours	Credit Hours
FIRST QUARTER					
EDU	107	Administration, Supervision & Standards	3	0	3
SAF	151	First Aid/Community CPR	3	0	3
EDU	208	Art and Music	1	3	2
EDU	240	Practicum	0	15	5
EDU	241	Seminar	1	0	1
NUT	110	Nutrition	1	6	3
			9	24	17
SECOND QUARTER					
PSY	115	Human Growth & Development I	3	0	3
EDU	109	Learning Activities	2	3	3
EDU	101	Intro. to Education Fundamentals	3	0	3
MAT	1101	Math Fundamentals	3	0	3
EDU	242	Practicum	0	15	5
EDU	243	Seminar	1	0	1
			12	18	18
THIRD QUARTER					
PSY	116	Human Growth & Development II	3	0	3
EDU	203	Exceptional Child	3	0	3
PED	242	Physical Activities for Children	3	3	4
EDU	108	Math & Science for Children	3	0	3
EDU	244	Practicum	0	15	5
EDU	245	Seminar	1	0	1
			13	18	19
FOURTH QUARTER					
ENG	151	Freshman Composition I	3	0	3
		or			
ENG	1101	Communication Skills	3	0	3
EDU	115	Language Arts	2	3	3
EDU	213	Children's Literature	4	0	4
EDU	246	Practicum	0	9	3
EDU	247	Seminar	1	0	1
			10	12	14

**Cooperative Education Internship (0100-0106) may be used for credit toward degree requirements.

COSMETOLOGY V-009

Modern Cosmetology is a highly specialized career field involving the use of cosmetics based on scientific principles. The Cosmetologist performs a variety of functions in providing beauty services for customers. He or she is called upon to advise and provide services to men and women concerning make-up, care and treatment of the hair, skin, and hands, including the nails, and also in matters of diet. Accordingly, the Cosmetology curriculum is designed to prepare the student to enter employment and progress in this field. The curriculum provides instruction and practice in manicuring, shampooing, permanent waving, facials, hair pressing, massages, scalp treatments, hair cutting, coloring, and styling. The Cosmetology student is also involved in a continuous program of related study which includes grooming, hygiene, professional ethics, anatomy, related chemistry, skin and scalp disorders, and the other phases of cosmetic art.

The curriculum is approved by the North Carolina State Board of Cosmetic Art examiners.

The Cosmetology Program provides 1500 hours of supervised instruction and practice.

All students desiring to graduate from the cosmetology program must successfully complete the program of studies attaining 1500 hours of instruction for advanced diploma and 1200 hours of instruction for diploma in addition to the College's Graduation Requirements. Students may enter this program any quarter.

Students registering for Cosmetology are required to take the following courses listed in the curriculum before graduation. Six hours of general courses, Psychology, Art, and English; six hours of related courses, Small Business Management and Trichology and Hair Chemistry; and 67 credit hours of major courses for day, afternoon, and evening students for advanced diploma and 59 credit hours of major courses, 6 general, and 6 related courses are required for a diploma.

Isothermal Cosmetology is an approved Pivot Point member school, 1985, and a Redken SES school, (Scientific Educational System) 1986. Isothermal adopted the Pivot Point Scientific Approach to Hair Design and Redken SES Systems to update and standardize the program and to give the students the best education possible. Isothermal is the second community college and one of 250 private colleges in the nation offering the Pivot Point Educational System.

COSMETOLOGY CURRICULUM (V-009)
(Day Program for Diploma and Advanced Diploma)

			Theory	Lab	Clinical	Quarter Credit Hours
FIRST QUARTER						
COS	1001	Introduction to Cosmetology	5	0	0	5
COS	1011	Mannequin Practice	2	0	21	9
PSY	1100	Human Relations	3	0	0	3
			10	0	21	17
SECOND QUARTER						
COS	1002	Cosmetology Theory I	5	0	0	5
COS	1022	Cosmetology Skills I	2	0	21	9
ENG	1101	Communication Skills	3	0	0	3
			10	0	21	17
THIRD QUARTER						
COS	1003	Cosmetology Theory II	5	0	0	5
COS	1033	Cosmetology Skills II	2	0	21	9
MAT	1101	Math Fundamentals	3	0	0	3
			10	0	21	17
FOURTH QUARTER						
COS	1004	Cosmetology Theory III	5	0	0	5
COS	1044	Cosmetology Skills III	2	0	21	9
BUS	147	Small Business Management	3	0	0	3
			10	0	21	17
		TOTAL	40	0	84	68
		TOTAL CREDIT HOURS				68
TOTAL COSMETOLOGY CONTACT HOURS 1364						
FIFTH QUARTER (Optional)						
COS	1055	Advanced Cosmetology skills	3	0	21	10
ART	1100	Art Awareness	2	0	0	2
			5	0	21	12
ADVANCED DIPLOMA TOTAL			45	0	105	80

TOTAL CREDIT HOURS 80
TOTAL COSMETOLOGY CONTACT HOURS 1496

GRAND TOTAL 1650 CONTACT HOURS

EVENING COSMETOLOGY

			Theory	Lab	Clinical	Quarter Credit Hours
FIRST QUARTER						
COS	1101	Cosmetology Theory I	4	0	0	4
COS	1111	Cosmetology Skills I	1	0	18	7
PSY	1100	Human Relations	3	0	0	3
			8	0	18	14
SECOND QUARTER						
COS	1102	Cosmetology Theory II	4	0	0	4
COS	1112	Cosmetology Skills II	1	0	18	7
ENG	1101	Communication Skills	3	0	0	3
			8	0	18	14
THIRD QUARTER						
COS	1103	Cosmetology Theory III	4	0	0	4
COS	1113	Cosmetology Skills III	1	0	18	7
MAT	1101	Math Fundamentals	3	0	0	3
			8	0	18	14
FOURTH QUARTER						
COS	1104	Cosmetology Theory IV	4	0	0	4
COS	1114	Cosmetology Skills IV	1	0	18	7
BUS	147	Small Business Management	3	0	0	3
			8	0	18	14
FIFTH QUARTER						
COS	1105	Cosmetology Theory V	4	0	0	4
COS	1115	Cosmetology Skills V	1	0	18	7
ART	1100	Art Awareness	2	0	0	2
			7	0	18	13

REGULAR DIPLOMA

TOTAL CREDITS 69
TOTAL COSMETOLOGY HOURS 1419

SIXTH QUARTER						
COS	1106	Cosmetology Theory VI	4	0	0	4
COS	1116	Cosmetology Skills VI	1	0	18	7
			5	0	18	11

ADVANCED DIPLOMA

TOTAL CREDITS 80
TOTAL COSMETOLOGY 1518

GRAND TOTAL 1672

ELECTRICAL INSTALLATION AND MAINTENANCE

The Electrical Installation and Maintenance curriculum is designed to provide a training program in the basic knowledge, fundamentals, and practices involved in the electrical trades. A large portion of the program is laboratory and shop instruction designed to give the student practical knowledge and application experience in the fundamentals taught in class.

The graduate of this curriculum is qualified to enter an electrical trade as an on-the-job trainee or apprentice, assisting in the planning, layout, installation, checkout, and maintenance of systems in residential, commercial, or industrial plants. Students may enter this program any quarter.

ELECTRICAL INSTALLATION AND MAINTENANCE V-018

		Course Title	Class Hours	Lab Hours	Credit Hours
FIRST QUARTER					
ELC	1101	Fundamentals of Electricity	4	12	8
ELN	1118	Basic Electronics	3	3	4
BPR	1111	Blueprints – Electrical	0	3	1
MAT	1101	Math Fundamentals I	3	0	3
			10	18	16
SECOND QUARTER					
ELC	1102	Residential Wiring	4	12	8
ELC	1119	National Electrical Codes-Residential	6	0	6
BPR	1112	Advanced Electrical Blueprint Reading	0	3	1
MAT	111	Technical Math	3	0	3
			13	15	18
THIRD QUARTER					
ELC	1103	AC-DC Machines	4	12	8
ELC	1120	Troubleshooting Methods	5	3	6
PSY	1100	Human Relations	3	0	3
BUS	1100	Small Business Operations	2	0	2
			14	15	19
FOURTH QUARTER					
ELC	1104	Controls of AC-DC Machines	4	12	8
ELC	1121	Industrial Wiring	3	3	4
ENG	1101	Communication Skills	3	0	3
PHY	100	Principles of Technology	3	3	4
			13	18	19
		TOTAL CREDIT HOURS			72

**Cooperative Education Internship (0100-0106) may be used for credit toward degree requirements.

ELECTRICAL INSTALLATION AND MAINTENANCE CERTIFICATE V-018

	Course Title	Class Hours	Lab Hours	Credit Hours
FIRST QUARTER				
ELC 1101	Fundamentals of Electricity	4	12	8
SECOND QUARTER				
ELC 1103	AC-DC Machines	4	12	8
THIRD QUARTER				
ELC 1102	Residential Wiring	4	12	8
FOURTH QUARTER				
ELC 1104	Controls of AC-DC Machines	4	12	8

GERIATRIC CARE SPECIALIST V-111

The Geriatric Assistant curriculum prepares graduates to provide basic health and personal care for older persons. The curriculum emphasizes the processes of aging, communication, nutrition, therapeutic activities (music, dance, exercise, games, and arts and crafts), accident and fire safety, death and dying, drug usage, human sexuality, resources and services for the aged, and employment skills. Clinical experiences may be obtained in skilled nursing and intermediate care facilities, family care homes and homes for the aged and disabled, adult day care centers, and other long-term care settings.

Graduates may be employed in skilled nursing and intermediate care facilities, senior centers, adult day care centers, family care homes and homes for the aged and disabled, private homes, retirement homes, life-care facilities, and social services organizations which primarily serve older persons. In some clinical settings, the graduates will work under the supervision of licensed personnel.

GERIATRIC CARE SPECIALIST V-111 (DAY)

	Course Title	Class Hours	Lab Hours	Clinic Hours	Credit Hours
FIRST QUARTER					
NUR 3023	Nursing Assistant I	2	2	6	5
NUR 3024	Nursing Assistant II	3	4	9	8
NUR 3025	Home Care	2	2	0	3
		7	8	15	16
SECOND QUARTER**					
NUR 1003	Basic Nursing Assistant Procedures II	4	0	3	5
NUR 1004	Geriatric Care II	3	0	0	3
NUR 1006	Recreation & Activities for the Elderly Patient	3	0	0	3
NUR 1005	Geriatric Care Practicum I	0	0	21	7
		10	0	24	18

**Geriatric Care Specialist is advanced training for Nursing Assistant. Geriatric Care is only offered if there is adequate enrollment carried over from the first quarter.

MACHINIST V-032

This curriculum was prepared to meet the need for trained machinists. Existing industries in North Carolina and new industries moving into the state express the need for skilled craftsmen to have the background, knowledge, and potential to advance in the machine trades. This curriculum is designed to prepare the individual, through theory and practice of various machining operations and related courses, to obtain paid employment in the metal machining occupations.

The machinist is a skilled metal worker who shapes metal parts by using machine tools and hand tools. Training and experience enable him to plan and carry through all the operations needed in turning out a machined product and to switch readily from one kind of product to another. A machinist is able to select the proper tools and material required for each job and to plan the cutting and finishing operations in their proper order so that he can complete the finished work according to blueprint or written specifications. He makes standard shop computations relating to dimensions of work, tooling, feeds, and speeds of machining. He often uses precision measuring instruments such as micrometers and gauges to measure the accuracy of his work to thousandths of an inch.

This skilled worker must be able to set up and operate most types of machine tools. The machinist also must know the composition of metals so that he can heat and quench cutting tools and parts to improve machinability. His knowledge enables him to turn a block of metal into an intricate, precise part.

The machinist may start in one or more of the following areas: machine operator, machine setup operator, machinist apprentice, tool/die/mold apprentice, maintenance helper, machine tool technician, machine and tool salesman, or quality control technician. Advanced jobs in the field include: production foreman, tool/die/mold maker, general machinist, maintenance machinist, tape control programmer, or self-employment in one of the above fields.

MACHINIST V-032

		Course Title	Class Hours	Lab Hours	Credit Hours
FIRST QUARTER					
MEC	1101	Machine Shop Theory & Practice I	4	12	8
MAT	1101	Math Fundamentals	3	0	3
BPR	1101	Blueprint Reading	0	3	1
ISC	118	Industrial Safety	3	0	3
			10	15	15

SECOND QUARTER (Winter)					
MEC	1102	Machine Shop Theory & Practice II	4	12	8
BPR	1105	Blueprint Reading: Mechanical	0	3	1
MAT	111	Technical Math	3	0	3
PSY	1100	Human Relations	3	0	3
MEC	118	Introduction to Metals	3	3	4
			13	18	19
THIRD QUARTER (Spring)					
MEC	1103	Machine Shop Theory & Practice III	4	12	8
MAT	1123	Machinist Math	3	0	3
MEC	119	Applied Metallurgy	3	3	4
BPR	1106	Advanced Mechanical Blueprint Reading Sketching	1	3	2
		Elective	1	0	1
			12	18	18
FOURTH QUARTER (Summer)					
MEC	1104	Machine Shop Theory & Practice IV	4	12	8
PHY	100	Principles of Technology	3	3	4
ENG	1101	Communication Skills	3	0	3
WLD	1135	Basic Gas Welding & Cutting	2	3	3
			12	18	18

MACHINIST CERTIFICATE V-032

	Course Title	Class Hours	Lab Hours	Credit Hours
FIRST QUARTER				
MEC 1101	Machine Shop Theory and Practice I	4	12	8
SECOND QUARTER				
MEC 1102	Machine Shop Theory and Practice II	4	12	8
THIRD QUARTER				
MEC 1103	Machine Shop Theory and Practice III	4	12	8
FOURTH QUARTER				
MEC 1104	Machine Shop Theory and Practice IV	4	12	8

NURSE ASSISTANT
(Day—Certificate)

The Nursing Assistant Curriculum prepares graduates to assist registered and practical nurses and physicians in carrying out nursing care and services to patients. The nursing assistant performs simple health care procedures such as bathing and feeding patients, providing comfort measures, positioning patients, preparing patients for physical examinations and special tests, observing and recording vital signs; admitting, transferring and discharging patients, and collecting specimens.

Graduates may be employed in hospitals, clinics, doctors' offices, nursing homes and extended care facilities.

Individuals desiring a career in nursing assistant should, if possible, take English, biology and social science courses prior to entering the program.

NURSE ASSISTANT V-072 (DAY)

	Course Title	Class Hours	Lab Hours	Clinic Hours	Credit Hours
FIRST QUARTER					
NUR 3023	Nursing Assistant I	2	2	6	5
NUR 3024	Nursing Assistant II	3	4	9	8
NUR 3025	Home Care	2	2	0	3
		7	8	15	16

PRACTICAL NURSE EDUCATION V-038

The Practical Nursing curriculum graduates are prepared to take the National Council Licensure Examination required to practice as a licensed practical nurse. The Practical Nursing curriculum is designed to develop competencies in practicing the following five components of practice as defined by the North Carolina **Nursing Practice Act**, 1981: (1) participating in assessing the client's physical and mental health including the client's reaction to illnesses and treatment regimens; (2) recording and reporting the results of the nursing assessment; (3) participating in implementing the health care plan developed by the registered nurse and/or prescribed by any person authorized by State law to prescribe such a plan, by performing tasks delegated by and performed under the supervision or under orders or directions of a registered nurse, physician licensed to practice medicine, dentist, or other person authorized by State law to provide such supervision; (4) reinforcing the teaching and counseling of a registered nurse, physician licensed to practice medicine in North Carolina, or dentist; and (5) reporting and recording the nursing care rendered and the client's response to that care.

Licensed practical nurses may be employed in hospitals, nursing homes, clinics, doctors' offices, industry, and public health agencies.

Individuals desiring a career in practical nursing should be encouraged to take math and science courses in high school.

PRACTICAL NURSE EDUCATION V-038

		Course Title	Hours Per Week			Qtr Hours Credit
			Class	Lab	Clinical	
FIRST QUARTER (Fall)						
BIO	270	Anatomy/Physiology I	3	3	0	4
NUR	1109	Nutrition& Diet Therapy	3	0	0	3
NUR	1101	Nursing Fundamentals	6	4	3	9
NUR	1105	Pharmacology I	3	0	0	3
ENG	151	Freshman Composition I	3	0	0	3
			18	7	3	22
SECOND QUARTER (Winter)						
BIO	271	Anatomy & Physiology II	3	3	0	4
NUR	1102	Med-Surg I	9	0	12	13
NUR	1107	Pharmacology II	1	0	0	1
PSY	260	General Psychology	3	0	0	3
			16	3	12	21
THIRD QUARTER						
BIO	272	Anatomy/Physiology III	3	3	0	4
NUR	1104	Med-Surg II	8	0	18	14
PSY	261	Developmental Psychology	3	0	0	3
			14	3	18	21
FOURTH QUARTER (Summer)						
NUR	1103	Maternity Nursing	5	0	9	8
NUR	1108	Pediatrics	5	0	9	8
			10	0	18	16
		TOTAL CREDIT HOURS				80

WELDING V-050

The Welding curriculum is designed to give students sound understanding of the principles, methods, techniques, and skills essential for successful employment in the welding field and metals industry. Welders join metals by applying intense heat, and sometimes pressure to form a permanent bond between intersecting sections.

Welding offers employment in practically any industry: shipbuilding, automotive, aircraft, guided missiles, heavy equipment, railroads, construction, pipefitting, production ship, job shop, and many others. Students may enter this program any quarter.

WELDING V-050

		Course Title	Class Hours	Lab Hours	Credit Hours
FIRST QUARTER					
WLD	1101	Welding I	4	12	8
WLD	1118	Welding Problems I	2	6	4
BPR	1101	Blueprint Reading	0	3	1
MAT	1101	Math Fundamentals	3	0	3
			9	21	16
SECOND QUARTER					
WLD	1102	Welding II	4	12	8
WLD	1119	Welding Problems II	2	6	4
MEC	1140	Metallurgy for Welders	3	0	3
MAT	1102	Measurements	3	0	3
			12	18	18
THIRD QUARTER					
WLD	1103	Welding III	4	12	8
WLD	1120	Welding Problems III	2	6	4
BPR	1103	Blueprint Reading & Pattern Sketching	1	3	2
PSY	1100	Human Relations	3	0	3
			10	21	17
FOURTH QUARTER					
WLD	1104	Welding IV	4	12	8
MEC	1112	Machine Shop Processes	1	3	2
ENG	1101	Communication Skills	3	0	3
PHY	100	Principles of Technology	3	3	4
			11	18	17
		TOTAL CREDIT HOURS			68

**Cooperative Education Internship (0101-0106) may be used for credit toward degree requirement.

WELDING CERTIFICATE

	Course Title	Class Hours	Lab Hours	Credit Hours
FIRST QUARTER				
WLD 1101	Welding I	4	12	8
SECOND QUARTER				
WLD 1102	Welding II	4	12	8
THIRD QUARTER				
WLD 1103	Welding III	4	12	8
FOURTH QUARTER				
WLD 1104	Welding IV	4	12	8

ONE PLUS ONE PROGRAMS

Physical Therapy Assistant and Dental Hygiene

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

INDIVIDUALIZED INSTRUCTION

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

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

Specific course requirements for these courses are available in the Individualized Instruction Center. Feel free to drop by at any time during the quarter and examine any course materials in which you might be interested.

COLLEGE TRANSFER OFFERINGS

*HIS	151	World Civilization
*HIS	152	World Civilization
*HIS	153	World Civilization
*HIS	260	History of United States
*HIS	261	History of United States
*HIS	262	History of United States
*POL	260	American Government
*PSY	260	General Psychology
RED	260	Speed Reading
*SOC	160	Introduction to Sociology

*These courses are also available in the traditional classroom.

COOPERATIVE EDUCATION PROGRAM

Cooperative Education is an alternative college program in which students are employed for specific periods of on- or off-campus work. This employment is related as closely as possible to each student's course of

study and individual interest. The blend of classroom theory and practical on-the-job training adds a vital dimension to learning experiences. Numerous advantages accrue from the Cooperative Education approach to learning, such as career direction and financial assistance for participating students, a source of manpower for employers, and an avenue to better relate the college to the community.

There is a one credit hour Cooperative Education course entitled "Employment Seeking Skills" that is required of all students desiring to participate in the Cooperative Education program. A student may participate in the Co-op Program and earn credit toward degree requirements depending on his/her major.

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

1. Be enrolled in a curriculum program, carrying a minimum of 6 credit hours.
2. Have been at Isothermal for at least 1 quarter.
3. Have at least a 2.0 GPA.
4. Be employable. Any student meeting these eligibility requirements who wishes to be placed in a part-time or full-time job related to his/her academic major should contact the Director of Cooperative Education in Building 6 (Business Education) and make application to the program.

STUDENT SUPPORT SERVICES

Student Support Services is a college level educational support program designed to help students complete their chosen curriculum by increasing options for academic success for all students.

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

Student Support Services has established a program of accommodations for students with disabilities who are registered for curriculum courses. Among those who have already attended or are currently attending are students with vision or hearing impairments, orthopedic impairments, chronic illnesses and learning disabilities. When registering for college, students have the opportunity to indicate the presence of a handicapping condition. Should accommodations be required, students should call Mrs. Ruth Boehning Coordinator of Services For Students with Disabilities, Ext. 268, or come to Room 208 in the Administration Building. A special brochure detailing these services is available through Admissions or through the Coordinator.

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

A. Academic Support Courses:

ENG	090	Enrichment English
ORI	164	Study Skills
MAT	090	Basic Math
MAT	095	Basic Algebra
RED	085	Basic Reading
RED	090	Reading Proficiency
PSY	150	Human Potential Seminar
PSY	155	Stress Management

B. Other Support Services Available:

Supplemental Instruction
Computer Assisted Learning
Personal, Career, and Financial Aid Counseling
Free Tutoring
Biofeedback
Study Skills Workshops
Stress Management Workshops
Math Anxiety Workshops
Test-Taking Workshops
Standardized Test Preparation
Values Clarification

COURSE DESCRIPTIONS

ISOTHERMAL COMMUNITY COLLEGE

The courses listed on the following pages represent the current curriculum offerings in the College Transfer, Technical, and Vocational programs.

1. The courses are listed in alphabetical order by a 3-letter prefix (example—BUS for Business; ANT for Anthropology).
2. The courses are numbered as follows (example—BUS 201).
   A. College Transfer and Technical Courses are 3 digit
   B. Vocational Courses are 4 digit
3. Any course number less than 100 will not give credit hours for graduation.
4. The course title follows the number (example—BUS 201 Industrial Psychology).
5. The number of contact and credit hours follow the title (example—BUS 201 Industrial Psychology 3-0-3).
   A. The first number represents the number of lecture hours per week.
   B. The second number represents the number of lab, shop, clinical, or practicum hours per week.
   C. The last number represents the number of credit hours assigned to the course.
6. Indicated at the end of the course descriptions is the quarter the course is normally offered. This is subject to change. The following are abbreviations for the quarters—Fall (F), Winter (W), Spring (Sp), Summer (Su).

For Example:

BUS 201 Industrial Psychology **3-0-3**
A study of the principles of psychology that will be of assistance in the understanding of...on the job. Attention is also given to...the general community. (W, Su)

COURSE DESCRIPTIONS

ACCOUNTING

ACC 157 Federal Income Tax for Small Business **3-0-3**
This course is an introduction to Federal Income Tax for small business. Included will be a step-by-step process for preparing income tax returns with an emphasis on tax form 1040 and all supplemental schedules as they apply to the small business owner.

ACC 162 Bookkeeping for Small Business **3-0-3**
Emphasis is placed upon the art of recordkeeping in the business world. The student will learn the proper techniques and application of bookkeeping in the business world.

ACC 210 Principles of Accounting I 3-2-4
A study of basic accounting principles and procedures related to proprietorships where students will complete the accounting cycle for both service and merchandising enterprises. (F,W,Sp,Su)

ACC 211 Principles of Accounting II 3-2-4
A continuation of basic accounting principles and procedures including the study of notes, uncollectible accounts, inventories, depreciation, and systems and control. Prerequisite: ACC 210. (F,W,Sp,Su)

ACC 212 Principles of Accounting III 3-2-4
A continuation of basic accounting principles and procedures including partnerships, corporations, and manufacturing concerns. Prerequisites: ACC 211. (F,W,Sp,Su)

ACC 217 Taxes I 3-2-4
Concepts and methods of determining federal tax liability of individuals. Topics include ordinary income, capital gains and losses, and net operating loss. The student will also be introduced to estate, gift and partnership taxation. (W)

ACC 218 Taxes II 3-2-4
In this study of federal laws and regulations, students will demonstrate satisfactory competency in preparing business returns and fiduciary returns. Topics include: income tax withholding; reporting business or professional income for individuals, partnerships and corporations; researching and solving tax problems; applying federal and state laws for gifts and estates. Prerequisite: ACC 217.

ACC 242 Computerized Accounting 3-2-4
This course is designed to provide the student with the operational skills needed to implement and use accounting software packages to provide accounts receivable, accounts payable, payroll, and general ledger services in a business. Prerequisites: CAS 160 and ACC 211. (ACC 211 may be taken simultaneously with this course). (Sp)

ACC 244 Intermediate Accounting I 3-0-3
A comprehensive study of accounting principles introduced in earlier courses with special emphasis placed on the preparation of financial statements, cash and temporary investments, receivables and inventories. Prerequisites: ACC 212.

ACC 245 Intermediate Accounting II 3-0-3
A comprehensive study of accounting principles introduced in earlier courses with special emphasis placed on liabilities, owners equity accounts, cash flow, and financial statement analysis. Prerequisite: ACC 244.

ACC 246 Auditing 3-0-3
An introduction to auditing theory and practice covering audits as conducted by independent public accountants. Included are auditing standards, procedures, professional ethics, and review and evaluation. Prerequisite: ACC 212.

ACC 248 Managerial Accounting 3-0-3
This course is designed as a survey for both nonfinancial and financial manager. This fast-paced course will give participants a quick understanding of the most important tools and techniques of general accounting, statement preparation, statement analysis and an introduction to cost. Students will learn how balance sheets, income statements and statement of owners equity help in reaching a company's objectives and how these and other accounting and financial functions relate to their department.

ACC 250 Cost Accounting 3-0-3
Nature and purposes of cost accounting; accounting for direct labor, materials, and factory burden; job costs, and standard cost principles and procedures; selling and distribution cost; budgets, and executive use of cost figures. Prerequisite: ACC 212.

ACC 253 Local Government Accounting 3-0-3
Emphasis is placed upon the accounting theory used in local government. The student is given an inside look at the practice of accounting in local government.

ANTHROPOLOGY

ANT 160 Celtic Culture 2-0-2
This course will study the culture of the Celts, their origin, and their impact upon humanity at large. We will emphasize all facets of the Celtic world from religion to music culminating the course with an excursion to a Scottish-Irish gathering appropriate to our localized area.

ANT 260 Introduction to General Anthropology 3-0-3
A survey of the major fields and basic principles in the comparative study of mankind, human development, fossil evidence and cultural origins. (F)

ANT 261 Introduction to Cultural Anthropology 3-0-3
The evolution of culture is emphasized in the areas of cultural innovations, languages, mores, customs, and anthroarchaeological techniques.

ANT 262 Comparative Cultures and World Development 3-0-3
Comparison of selected primitive, pre-literate or nonindustrial cultures from different regions of the world.

ANT 263 Archaeological Methodology 1-3-2
This course focuses on those aspects of Archaeology that promote practical application of field techniques. The training will consist of proven methodology utilized by professional archaeologists from the time a site is selected to its final usefulness as a source of cultural material. Mapping, photography, surveying, proper excavation techniques, cataloging are but a few of the areas to be covered in this unique approach to the study of mankind. There will be a special emphasis placed upon this immediate Western North Carolina section both from a pre-historic and historic viewpoint.

ART

ART 151 Fundamentals of Two-Dimensional Design 2-4-4
Exploration of basic studio problems in the visual arts through a variety of art media with emphasis on the elements and principles of art as they relate to two-dimensional space.

ART 152 Drawing and Composition I 2-4-4
Introduction to and exploration of the drawing process through improvisational, perceptual, and conceptual experiences. Emphasis on the structural elements and organizational principles of arts as they relate to the drawing process.

ART 160 Survey of Western Art 3-0-3
This course is a historic survey of painting, sculpture and architecture from approximately 10,000 B.C. to the twentieth century. It is designed to give the student an appreciation and understanding of how visual arts reflect civilization.

ART 251 Fundamentals of Three-Dimensional Design 2-4-4
Study and application of the elements and principles of art as they relate to three-dimensional space.

ART 252 Introduction to Sculpture 1-4-3
Exploration of three-dimensional form through the application of diverse sculptural media. Prerequisite: ART 251.

ART 253 Drawing and Composition II 2-4-4
Confrontation of the figure, landscape, and still life through a variety of drawing concepts and media. Prerequisite: ART 151 or ART 153.

ART 260 Painting I **1-4-3**
Introduction to the painting experience through exploration of various painting media.

ART 261 Painting II **1-4-3**
Development of original work in various painting media through an individual problem-solving approach. Prerequisites: ART 151 and 153 or 260.

ART 262 Painting III **1-4-3**
Further development with the painting process. Emphasis on individual exploration, technical understanding, and compositional resolutions. Prerequisite: ART 261.

ART 264 Printmaking **1-4-3**
Introduction to the printmaking process through exploration of various printmaking techniques. Prerequisite: ART 151 or ART 153.

ART 265 Constructive Design: Clay **1-4-3**
Exploration of clay as a sculptural medium. Prerequisite: ART 251.

ART 270 Selected Topics in Art **variable**
This course is designed to deal with any heretofore uncatalogued topics which are of timely and/or special interest. Prerequisites and credit hours will vary with each of the numerous art topics which may be offered under this description.

ART 1100 Art Awareness **2-0-2**
Designed for cosmetology students, this course emphasizes art fundamentals including line, color, and form.

AUTOMOTIVE

AUT 1101 Automotive Engine, Electrical Fuel System **2-15-7**
A thorough study of the electrical and fuel systems of the automobile. Battery cranking mechanism, generator, ignition, accessories and wiring; fuel pumps, carburetors, and fuel injectors. Characteristics of fuels, types of fuel systems, special tools, and testing equipment for the fuel and electrical system.

AUT 1102 Automotive Brake, Chassis, and Suspension **2-15-7**
A complete study of various braking systems employed on automobiles and light weight trucks. Emphasis is placed on how they operate, proper adjustment and repair. Also, the servicing of parking brakes is emphasized. Principles and functions of the components of automotive chassis. Practical job instruction in adjusting and repairing of suspension systems.

AUT 1103 Automotive Internal Combustion Engines **2-15-7**
Development of a thorough knowledge and ability in using, maintaining, and storing the various hand tools and measuring devices needed in engine repair work. Study of the construction and operation of components of internal combustion engines. Testing of engine performance; servicing and maintenance of pistons, valves, cams and camshafts, fuel and exhaust systems, cooling systems; proper lubrication; and methods of testing, diagnosing and repairing.

AUT 1104 Automotive Power Train Systems **2-15-7**
Principles and functions of automotive power train systems; clutches, transmission gears, torque converters, drive shaft assemblies, rear axles and differentials. Identification of troubles, servicing, and repair.

AUT 1105 Automotive Inspection **3-3-4**
this course is designed to teach the student how to inspect the automobile for the State of North Carolina.

AUT 1106 Automotive Wiring **2-6-4**
Basic instruction in automotive wiring will be studied. Emphasis will be placed on removing, replacing and splicing of automotive electrical components and wiring. Preventing damage to computerized accessories during repair work will be explained.

AUT 1111 Automotive Schematics and Diagrams **2-3-3**
Interpretation and reading of schematics and diagrams. Development of ability to read and interpret blueprints, charts, instruction and service manuals, and wiring diagrams. Information on the basic principles of lines, views, dimensioning procedures, and notes.

AUT 1112 Automotive Schematics and diagrams: Power Mechanics (Electrical and Fuel systems) **2-3-3**
Interpretation and reading of schematic prints and diagrams. Making sketches of electrical wiring and fuel system components for automotive engines and other internal combustion engines. Learning to identify the various components of the systems by sketching and labeling parts. Practice in tracing wiring systems and diagnosing trouble by using schematics and diagrams found in the automotive service manuals.

AUT 1113 Automotive Schematics and diagrams **1-3-2**
Interpretation of prints, schematics and diagrams pertaining to automotive chassis and braking systems. A study of components that make up the front suspension, differential assembly and brake assemblies.

AUT 1118 Automotive Problems **3-3-4**
The purpose of this course is to broaden the students' experiences in the areas of mechanics. Problems involving experimentation, investigation and writing of a research report involving automobiles, mechanical operations, and general maintenance and repair required for machinery may be basis for investigation.

AUT 1120 Auto Body Repair I **4-0-4**
A lecture course designed to familiarize students with basic shop procedures and shop layout. Also covered will be safety, basic straightening techniques, tools and equipment.

AUT 1121 Auto Body Repair II **4-0-4**
A lecture course designed to inform students how to analyze collision damage and determine correct repair procedure. The correct way to hook up the Blackhawk in floor pulling system. Measuring procedures will also be discussed.

AUT 1122 Auto Body Repair III **4-0-4**
The procedures which apply to complete auto refinishing, spot, panel and touch up work will be discussed in the classroom. Sanding, masking, cleaning and compounding will be covered. Also, removing and replacing glass and trim.

AUT 1123 Auto Body Repair IV **4-0-4**
Proper procedure for determining damage, usage of Mitchell Collision Repair manual and writing of formal estimates will be studied. Also shop operations and dealing with customers and insurance adjusters.

AUT 1124 Painting Materials and Practice **5-3-6**
A thorough study of latest paint and clear-coat finishes, as well as maintenance of spray equipment will be studied in classroom and lab situations. Differences between OEM and refinish type materials will be covered.

AUT 1125 Automotive Air Conditioning **3-3-4**
General introduction to the principles of refrigeration; study of the assembly of the components and connections necessary in the mechanisms, the methods of operation, and control; proper handling of refrigerants in charging the system. Use of testing equipment in diagnosing trouble, conducting efficiency tests and general maintenance work.

AUT 1126 Automobile Servicing I **1-3-2**
Emphasis is on the shop procedures necessary in "troubleshooting" the various component systems of the automobile. "Troubleshooting" automotive systems, provides a full range of experience in testing, adjusting, repairing and replacing components. A close simulation to an actual automotive shop situation will be maintained.

AUT 1130 Auto Body Repair Shop I **0-15-5**
The student applies the basic principles of straightening, aligning, and painting of damaged areas. Automobile construction will be studied through the use of project vehicles.

AUT 1131 Auto Body Repair Shop II **0-15-5**
Unitized body repair will be studied in a lab situation. The student will straighten damaged vehicles using hydraulic pulling equipment, remove damaged body parts and use measuring equipment to determine extent of damage. Replacement of structural components and exterior sheet metal will be performed.

AUT 1132 Auto Body Repair Shop III **0-15-5**
Principles of cleaning, masking, spraying and compounding will be covered in a lab situation. Students will be given ample time to develop proper usage of spray equipment.

AUT 1133 Auto Body Repair Shop IV **0-15-5**
All phases of repair work will be put to use in the lab. Students will perform work on vehicles with emphasis on industry standards and time to complete work.

AUT 1201 Auto Body Repair I **2-15-7**
Basic principles of automobile construction, design, and manufacturing. A thorough study of angles, crown, and forming of steel into the complex contour of the present-day vehicles. The student applies the basic principles of straightening, aligning, and painting of damaged areas. (F)

AUT 1202 Auto Body Repair II **2-15-7**
A thorough study of the requirements for a metal worker, including the use of essential tools, forming fender flanges and beads, and straightening typical auto body damage. The student begins acquiring skills such as shaping angles, crowns, and contour of the metal of the body and fenders. Metal working and painting. (W)

AUT 1203 Auto Body Repair III **2-15-7**
Development of the skill to shrink stretched metal, soldering and leading, and preparation of the metal for painting. Straightening of doors, hoods, and deck lids; fitting and aligning. Painting fenders and panels, spot repairs, and complete vehicle painting; the use and application of power tools. The student gains a thorough knowledge of the engine cooling system and repairs and replaces damaged cooling system components. Tests are made to insure normal engine cooling operation. (Sp)

AUT 1204 Auto Body Repair IV **2-15-7**
General introduction and instruction in the automotive frame and front-end suspension systems, the methods of operation and control, and the safety of the vehicle. Unit job application covers straightening of the frames and front wheel alignment. The student applies all phases of training. Repair order writing, parts purchasing, estimates of damage, and developing the final settlement with adjuster. (Su)

BIOLOGY

BIO 151 Principles of Biology I **3-3-4**
Principles, problems and basic similarities of all living organisms with emphasis on the chemistry of living organisms, metabolism, cytology, and genetics. Three laboratory hours per week.

BIO 152 Principles of Biology II 3-3-4
Principles of reproduction, development, organic maintenance, organization and integration, and behavior in plants and animals. A study of the principles of evolution and the concept of species. Three laboratory hours per week.

BIO 153 Principles of Biology III 3-3-4
A systematic study of living organisms with emphasis on the vertebrates and angiosperms. The principles of ecology and taxonomy will be included as they relate to the study of living organisms. This course also includes an oral communication component via debates. Three laboratory hours per week.

BIO 165 Special Topics in Biology variable
This course is designed to deal with any heretofore uncatalogued topics which are of timely and/or special interest. Prerequisites and credit hours will vary with each of the numerous biological topics which may be offered under this "Special Topics in Biology" description.

BIO 270 Anatomy and Physiology I 3-3-4
The first quarter considers basic chemistry, cells and tissues with a strong emphasis on the structure and physiology of the skeletal and muscular systems. (F)

BIO 271 Anatomy and Physiology II 3-3-4
This quarter deals with the respiratory, digestive and urogenital systems. Emphasis is placed on metabolism, excretion, fluid and electrolyte balance. (W)

BIO 272 Anatomy and Physiology III 3-3-4
This quarter covers the nervous system's organization along with the structure and physiology of the sense organs. The endocrine system, blood and cardiovascular physiology are also covered. Emphasis is given to the nervous system's organization and the cardiovascular systems. (SP)

BIO 280, 281 Microbiology 2-3-3
each A general introduction to morphology, physiology and pathogenicity of viruses, bacteria, algae, fungi and protozoa. The fundamentals of laboratory techniques concerning isolation, reproduction, metabolism and taxonomy are included. Prerequisite: BIO 151 or 270; Prerequisite for BIO 281 is BIO 280. (Su)

BLUEPRINT READING

BPR 1101 Blueprint Reading 0-3-1
Interpreting and reading shop drawings and sketches. What to expect in a drawing: lines, views, dimensions, tolerances, symbols, and notes. (F)

BPR 1103 Blueprint Reading & Pattern Sketching 1-3-2
Study of sheet metal layout techniques; sketching and modeling; pipe and angle layouts; pattern and template applications; and jigs and fixtures applications. (Sp)

BPR 1105 Blueprint Reading: Mechanical 0-3-1
Further practice in interpretation of blueprints as they are used in industry; study of prints supplied by industry; making plans of operations; introduction to drafting room procedures; sketching as a means of passing on ideas, information and processes.

BPR 1106 Advanced Mechanical Blueprint Reading/Sketching 1-3-2
Advanced blueprint reading and sketching as related to detail and assembly drawings used in machine shops. The interpretation of drawings of complex parts and mechanisms for features of fabrication, construction, and assembly.

BPR 1111 Blueprints: Electrical 0-3-1
Study and exercise in reading and interpreting drawings and specifications used in the building trades. Applications of sketching to construction detail and to deviations from existing specifications. (F)

BPR 1112 Advanced Electrical Blueprint Reading 0-3-1
Reading and interpreting drawings, diagrams, and schematics applicable to all electrical installations. Sketching as an aid in installation and maintenance including application of symbols, notes and applicable codes. Estimating job cost including materials, overhead. (W)

BUSINESS

BUS 100 Introduction to Business 3-0-3
An introductory course in the organization, functions, operations, controls, and problems of business enterprises. (F,W,Su)

BUS 101 Professional Development 3-0-3
This course reflects the concern for the development of successful work habits and personality traits in all workers. Learning about oneself, dealing with attitudes, coping and communicating at work. (Sp)

BUS 112 Business Finance 3-0-3
A study of the monetary and credit systems and policies in relation to the financing of sole proprietorships, corporations, and governments and a detailed study of short-term, long-term, and consumer financing. (W)

BUS 130 Materials Requirements Planning 3-0-3
This course covers the fundamental concepts and principles in time-phased material requirements planning. The key functions of inventory management.

BUS 131 Inventory Management 3-0-3
Major course objectives will cover the proper balance to maintain in order to achieve the desired level of customer service, investment in inventories, and proper timing in the management and purchasing requirements.

BUS 133 Capacity Management 3-0-3
The course will cover the functions of manufacturing schedules. The process of determining the number of employees, machines, and physical resources to meet the production objectives.

BUS 134 Master Planning 3-0-3
This course is divided into two major sections: forecasting and master production scheduling. The techniques and terminology used in a principles of forecasting will be presented. Master production scheduling activities of demand management, production planning, final assembly scheduling, and master production scheduling will be covered.

BUS 135 Production Activity Control 3-0-3
This course covers the most important principles and techniques of a shop floor control. The student will have a working knowledge of the approaches used by managers to plan, schedule, control, and evaluate the effectiveness of shop production operating. The course covers process plants, volume production lines, and industries that operate a shop floor control environment.

BUS 147 Small Business Management (Voc-Tech) 3-0-3
Upon completion of this course, students should be able to understand the techniques and principles of planning, organizing, directing, controlling, and operating a small business. The three basic types of small businesses – retail stores, manufacturing, and service organizations – will be discussed also. Students will also be made aware of opportunities and risks involving a small business.

BUS 150 Introduction to Small Business 3-0-3
This course is designed for persons already in a small business, for persons committed to starting one, or for people who operate a business from home. The course includes skills for home-based business, marketing, recordkeeping for tax purposes, licensing, permit requirements, and financial planning.

BUS 151 Small Business Management Skills 2-0-2
This course is designed to develop managerial skills in problem identification, problem solving, decision making, and negotiating. Participants will learn how to plan, replan, organize, and control their businesses through the use of special techniques, as well as how to cope effectively with time and stress. The course emphasizes the importance of effective personnel management through the use of goal setting, rewards, and consistency.

BUS 152 Managing a Services Business 2-0-2
This course is designed for people who operate a service business or who want to explore the possibility of doing so. The participants will be able to write a business plan; design a recordkeeping system for tax purposes; determine insurance needs; develop a financial plan, marketing strategy, and advertising plan; and project start-up costs.

BUS 153 Small Business Financial Management 2-0-2
This course is designed for people already in a small business or for those committed to starting one. The course includes financial management and determining ways to maximize profits through controlling costs and identifying positive cash flow.

BUS 154 Small Business Advertising 2-0-2
This course is designed for owners or managers of small businesses who want to develop an advertising program. The participants will study advertising and its goals, develop advertising budgets, plan advertising schedules, evaluate appropriate media, and design advertising messages.

BUS 155 Microcomputer Use for Small Business 1-2-2
This course is designed for persons committed to starting small business or for those already in one. The participants will determine their business needs of a microcomputer, select software and hardware.

BUS 156 Small Business Inventory Management 2-0-2
This course is designed for people already in a small business or for those committed to starting one. The course covers the necessity of inventory control, identifying key elements of inventory management, establishing guidelines for suitable inventory levels, and identifying inventory losses through theft and ineffective handling.

BUS 158 Purchasing & Cost Control for Small Business 2-0-2
This course is created for persons committed to starting a small business or for those already in one. The course covers purchasing operations for management, how to negotiate effectively with suppliers, and how to implement effective cost control measures.

BUS 161 Business Law for Small Business 2-0-2
This course is designed for persons committed to starting a small business or those already in one. The course covers the basic concerns of how to operate legally both prior to and after startup, safeguarding the business through wise choices of legal, accounting, and insurance expertise, and understanding how federal, state, and local laws and regulations directly affect small businesses.

BUS 170 Business and Social Environment 3-0-3
A study of the economic, moral, and political environment in which business and industry operate today. The course examines relationships among business and its social influences, its moral and political institutions, and how business responds to the goals of society. (Su)

BUS 201 Industrial Psychology 3-0-3
A study of principles of psychology that will be of assistance in the understanding of interpersonal relations on the job. Motivation, feelings, and emotions are considered with particular reference to on-the-job problems. Other topics investigated are the following: employee selection, supervision, job satisfaction, and industrial conflicts. (W)

BUS 214 Principles of Management 3-0-3
This course is designed to introduce students to the field of management. Emphasis will be placed on the evolution of the management concept and the functions of management: planning, organizing, directing and controlling. (Sp)

BUS 215 Office Management 3-0-3
Presents the fundamental principles of office management with emphasis on the role of office management, including its functions, office automation, planning, controlling organizing, and actuating the office.

BUS 216 Principles of Supervision 3-0-3
Introduces the basic responsibilities and duties of the supervisor and his relationship to superiors, subordinates, and associates with emphasis on securing an effective work force, the role of the supervisor and methods of supervision. (Sp)

BUS 217 Advanced Supervision 3-0-3
This course is designed to improve supervisory manager effectiveness in several areas of responsibility which are of critical importance to the organization and often the most difficult to manage. (Sp)

BUS 218 Wage and Salary Administration 3-0-3
Basic systems and plans of compensating employees. Wages and salaries, structures, incentive plans, and fringe benefits such as holiday pay, pension, sick leave, life and hospitalization insurance are included. (Su)

BUS 224 Human Resource Management 3-0-3
A study of basic personnel policies, practices, objectives, functions and the organization of personnel programs. Emphasis is placed on recruiting, selection, placement, training and development, and employee evaluation. (F)

BUS 225 Business Law 3-0-3
A general course designed to acquaint the student with law, the court system, and certain fundamentals of principles of business law. The principal emphasis is contract law. (F)

BUS 226 Business Law 3-0-3
Legal principles pertaining to bailments, sales contracts, commercial paper, responsibilities of hotel keepers, regulation of common carriers and insurance. (W)

BUS 227 Business Law 3-0-3
A study of the law of agency, the law of employment, labor relations, partnerships and corporations, property rights, and wills and estates. (Sp)

BUS 239 Business Mathematics 3-2-4
A course designed to provide students with a vocational advantage of math competency by application of number and calculator skills to business problems. Topics will include percentage, trade and cash discounts, markup and markdown, and the use of metric terms in a practical context. Prerequisite: MAT 107 or satisfactory placement test score. (F,W,Sp,Su)

BUS 257 Applied Business Communications I 3-0-3
This course is designed to integrate traditional business communication principles with current communication technology. Emphasis is on written and oral communication, listening skills and perception. (F)

BUS 258 Applied Business Communications II 3 0 3
Further study of traditional business communication principles integrated with current communication technology. Emphasis on grammar, oral communication skills, letter, memo and report writing. Prerequisite: BUS 257 (W)

BUS 260 Leadership Development 3-0-3
This course deals with winning commitment and cooperation. A leader can learn how to focus the interests and expectations of his followers effectively as he uses a successful leadership style. The course involves looking at leadership characteristics and developing one's own style. (Sp)

BUS 1100 Small Business Operations 2-0-2
An introduction to the business world, problems of small business operations, basic business law, business forms and records, financial problems, ordering and inventorying, layout of equipment and offices, methods of improving business, and employer-employee relations. (Sp)

BUSINESS COMPUTER PROGRAMMING ..... see CAS and CSC course descriptions.

COMPUTER APPLICATIONS

CAS 101 Computer Applications and Concepts 3-0-3
Fundamental concepts and operational principles of data processing systems as an aid in developing a basic knowledge of computers. Prerequisite to the detailed study of particular computer problems and programming courses. (F,W,Sp,Su)

CAS 102 Industrial Computer Applications 3-0-3
A study of the concepts and applications of computers in industry. Topics include: computer concepts, robotics, statistical quality control, CAD/CAM, computerized equipment production and inventory. (Su)

CAS 118 Computer Applications 2-3-3
This course is designed to acquaint the Vocational/Technical student with some of the applications of the microcomputer, both in and out of the classroom. It introduces basic microcomputer architecture, general operating procedures, word processing, spreadsheets and database. "Hands-on" laboratory experiences are emphasized.

CAS 119 Survey of Computers 1-0-1
This class is a survey of how the computer has affected many vocations, such as auto body, welding, machine shop, and electrical work. The student will learn of the many types, uses, and applications of the computer.

CAS 160 Microcomputer Operating Systems 2-2-3
The concepts and principles of disk operating systems such as MS/PC DOS will be explored. Practical applications will be explored by completing a series of assigned laboratory exercises using IBM microcomputers. (F,W,Sp)

CAS 163 Word Perfect 3-2-4
This course is designed to teach the student to efficiently operate a word processor. Emphasis is placed on using a menu, creating and storing documents, making changes and corrections on documents, and retrieval and printing of documents. Prerequisite: OSC 102 or permission from instructor. (F,W,Sp,Su)

CAS 164 DisplayWrite 4 3-0-3
This course is designed to give the student thorough word processing concepts and practical applications using DisplayWrite 4. Topics include editing, printing, formatting, use of headers and footers, spelling, math, and document merging.

CAS 200 Operating System/400 2-2-3
This course is designed to introduce the student to the operation and control of the IBM AS/400. Laboratory exercises and computer-assisted training software will be used in practical situations to demonstrate file creation, on-line date entry, updating, and processing. Prerequisite: CAS 101. (W)

CAS 201 Advanced Operating System/400 2-2-3
This course is designed to explore in detail the use of operator control language, procedures, and more complex concepts of system utilities. Computer-assisted training is augmented with analysis and synthesis of practical problems into workable systems. Prerequisite: CAS 200. (Sp)

CAS 204 Introduction to the AS/400 3-0-3
This course is designed to introduce the student to the IBM Application System/400. Topics include features, available software and hardware, available education, and methods for incorporating these into the business environment.

CAS 205 Software Applications 3-3-4
This course is designed to introduce the student to widely used office software packages. The course is hands-on intensive and concentrates on word processing, spreadsheet and database applications. The student will use IBM microcomputers to demonstrate the principles discussed in classroom lectures. (F,Su)

CAS 208 Desktop Publishing 3-2-4
This course will teach the student to electronically design, layout, edit, and produce a photo-ready document using the personal computer and word processing, graphic, and page-layout software. The student will use PFS: First Publisher and be introduced to Aldus PageMaker software. Prerequisite: CAS 160 or personal computer experience.

CAS 212 PC Installation and Maintenance 3-2-4
This is an introductory course in the initial hardware setup and loading of software on an IBM PC, IBM PS/2, or Compatible microcomputer systems. Maintenance and upgrading of both hardware and software will be covered. Prerequisite: CAS 160.

CAS 214 Microsoft Windows 3-0-3
Microsoft Windows is a software package that has the ability to run more than one application at a time and transfer information between applications. The superior way it uses the full power of a microcomputer, and its rich graphical interface provide a more intuitive and efficient work environment than ever before on a personal computer. This course teaches the student to effectively use Windows. Prerequisite: CAS 160.

CAS 218 AS/400 Data File Utility and Screen Design Aid 3-0-3
This course is designed to explore two AS/400 utilities. These are the Data File Utility (DFU) and the Screen Design Aid (SDA). The Data File Utility will be used to create typical data files, update them, add to them. General concepts of file design will be discussed as data files relate to actual applications. The Screen Design Aid will be used to design and create menus and entry displays. Hands-on projects will be completed to illustrate the concepts discussed.

CAS 222 AS/400 Query 3-0-3
This course is designed to explore AS/400 Query. Query for selection, joining, and displaying / printing / database file creation. Changing a query, storing a query, and calling a query from a command line will also be explored.

CAS 224 The Electronic Office 3-2-4
A course designed to present methods of conducting normal office activities such as scheduling, calendaring, handling of mail, sending and receiving messages, and word processing electronically. Practical hands-on experience will be provided. Prerequisites: CAS 160 and CAS 163, or permission of the instructor.

CAS 220 Database on the AS/400 3-0-3
This course is designed to enable the student to create, access, and maintain a database on the AS/400. Topics of discussion include physical and logical files, join files, coding and entry of DDS Specifications, and access through Query, DFU and applications programs.

CAS 232 AS/400 PC Support 3-0-3
This course is designed to enable the student to install and use PC Support Utility on the AS/400 to provide terminal access using a PS/2 with 5250 emulation.

CAS 240 Systems Analysis 3-2-4
A study of the concepts and steps involved in conducting a major systems project. A case study will be closely followed through all phases of a project with emphasis on the solutions to advanced data processing situations. Prerequisites: CSC 210, CSC 220 or CSC 230. (F)

CAS 241 Lotus 1-2-3 3-2-4
This class will cover all basic and intermediate aspects of the IBM PC spreadsheet program including cell entries, formulas, formatting of cells, organization of a spreadsheet, Lotus functions, special function keys, saving and printing of spreadsheets and 1-2-3 commands. Also selected advanced topics will be covered such as keystroke macros. Prerequisite: CAS 160. (W,Sp)

CAS 243 Advanced Lotus 1-2-3 3-2-4
This course is designed to explore the more advanced features of Lotus 1-2-3 as they apply to business applications. The student should have taken CAS 160 and CAS 241 or should be familiar with the IBM or compatible PC's and be able to use Lotus 1-2-3.

CAS 248 Advanced WordPerfect 3-2-4
This course is designed to teach the student advanced commands and features of word processing software that allows you to perform complex operations, develop and work with large documents easily, and save time. Emphasis is placed on special print features, macros, styles, tables, spreadsheets, and an introduction to desktop publishing and graphics. Prerequisite: CAS 163 or permission of the instructor.

CAS 249 Data Entry Internship 2-4-4
This course is designed to provide the student an opportunity to use data processing skills in a job training environment and develop the discipline required to accept and complete assigned projects on time with a minimum of supervision. Assigned projects are based on practical need. Typical projects include the building of databases, production data entry, lab assistant duty and computer program development. (On demand)

CAS 250 Computer Training and Support 3-0-3
This course is designed to equip the student with the knowledge needed to plan and coordinate training for the computer. Topics include location of resources, methods of training, documentation, purchase of hardware, and development of procedure manuals.

CAS 252 DBASE 3-2-4
This course will present the concepts and applications of database design,maintenance, and processing. Students will utilize Database software of the IBM PC. Prerequisite: CAS 160. (W)

CAS 253 Advanced DBASE 3-2-4
This course is designed to teach the student such database topics as dbase programming, an introduction to Structured Query Language (SQL), the applications generator, and other advanced topics. Prerequisites: CAS 252 or permission of the instructor.

CAS 255 Data Communications 3-2-4
This course is designed to familiarize the student with the concepts and terminology of data communications. The student will be introduced to data communications equipment and will also explore various methods of data communication. Prerequisites: CSC 210, CAS 201, CSC 221, and CSC 230. (Sp)

CHEMISTRY

CHM 100 Introduction to Chemistry 3-3-4
Study of the physical and chemical properties of substances, chemical changes, elements, compounds, gases, chemical combinations; weights and measurements; theory of metals; acids, bases, salts, solvents, solutions, and emulsions. Introduction to organic chemistry is included. Three laboratory hours per week.

CHM 110 General Chemistry for the Health Sciences 3-3-4
This is a brief presentation of the basic principles of chemistry. Emphasis will be on application of these principles to the Allied Health fields. Topics covered will include the following: systems of measurement, structure of matter, chemical bonding, stoichiometric, reactions, solutions, chemical equilibrium, and basic organic chemistry. (Su)

CHM 151 General Chemistry 3-3-4
An intensive treatment of basic principles with emphasis upon atomic and molecular theory. Special attention is given to quantitative topics. Three laboratory hours per week. Prerequisites: Currently taking MAT 151 or higher. (F)

CHM 152 General Chemistry 3-3-4
A continued study of basic principles with emphasis on solutions, the solid and liquid states of matter, and oxidation-reduction reactions. The laboratory considers the separation and identification of the more common cations and anions. Three laboratory hours per week. Prerequisite: CHM 151. (W)

CHM 153 General Chemistry 3-3-4
A continuation of general chemistry with major emphasis on stoichiometric chemistry, equilibrium reactions, electro-chemistry, acid-base reactions, and a brief introduction to organic chemistry. Three laboratory hours per week. Prerequisite: CHM 152. (Sp)

CHM 250 Organic Chemistry I 4-5-6
A study of the properties and reactions of aliphatic and aromatic hydrocarbon compounds with emphasis on mechanisms and structural influences. Laboratory exercises will deal with extraction/purification and synthesis. Prerequisite: 1 year of General Chemistry. (Su, Upon request)

CHM 251 Organic Chemistry II 4-5-6
Deals with the major functional group compounds, their synthesis and reactions. Laboratory will consider major reaction types. Prerequisite: CHM 250. (Su, Upon request)

CRIMINAL JUSTICE

CJC 100 Basic Law Enforcement Training 17-27-26
The North Carolina Criminal Justice Education and Training Standards Commission requires all law enforcement officers to complete a Commission-approved training course. CJC 0100 satisfies that requirement and prepares the student for the state comprehensive examination administered by the Commission at the conclusion of the course. This course is limited to sworn law enforcement personnel.

CJC 101 Nature and History of Law 5-0-5
The study of pre-political organizations of society; pre-legal means of social control; beginnings of potentially organized society; and beginnings and development of law as a means of social control in politically organized society.

CJC 102 Introduction to the Criminal Justice System 5-0-5
A survey designed to familiarize the student with the criminal justice system; history of law enforcement, its legal limitations in a democratic republic, the court system from incident to final disposition, principles of constitutional law and an evaluation of the current status of law enforcement with orientation to law enforcement as a vocation.

CJC 103 The Law Enforcement Officer's Function in Criminal Justice 3-0-3
History of law enforcement officers in criminal justice system. The military's early role, the sheriff, police departments, state and federal agencies. Review of current issues in police officers' duties and functions.

CJC 104 The Court's Function in Criminal Justice 3-0-3
This course familiarizes the student with the structure of the Federal and State Court systems and criminal process. The course includes the role of the court personnel—judge, bailiff, court clerk, prosecutor and defense counsel. Emphasis is placed on the judicial process from initial appearance to post conviction remedies; jurisdiction, venue, bail, release on recognizance, preliminary hearings, grand jury, plea negotiations, arraignment, pretrial motions, discovery, jury trial, sentencing, appeal, and juvenile court and process are discussed.

CJC 105 Corrections in Criminal Justice 3-0-3
History of punishments; development of prisons; development of ideas relating to purposes of criminal sentences, punishment, safety, example and rehabilitation.

CJC 106 Juvenile Justice 3-0-3
A review of history of law regarding juveniles and current developments distinguishing abused and neglected juveniles from delinquent juveniles. An overview of the juvenile delinquency phenomenon and the process involved in its causation, prevention, and control. Emphasis is placed on a multi-disciplinary approach to the problem, variables related to delinquency; duties, responsibilities, and functions of the agencies in the Juvenile Justice System that deal with juvenile delinquents.

CJC 107 Introduction to Criminology 3-0-3
The study primarily concerned with scientific efforts to understand crime and to understand man in relation to crime phenomena. The course examines the theories behind the "whys" of criminal behavior and seeks to find solution for criminal behavior of groups and individuals in society.

CJC 108 N.C. Juvenile Code 3-0-3
A study of N.C. Juvenile code, and procedures to be followed in handling juvenile cases in North Carolina.

CJC 201 Criminal Law I 3-0-3
An introduction to study of courses of defined crimes, parties to crime, mental states of mind involved, and defenses to crime.

CJC 202 Criminal Law II 3-0-3
A study of elements of crimes with particular emphasis on N.C. crimes.

CJC 203 Motor Vehicle Laws of North Carolina 3-0-3
A study of current North Carolina Motor Vehicle law, the organization and administration of laws by DMV and the courts, and review of crime and criminal loss of motor vehicle privilege for motor vehicle violators.

CJC 204 Criminal Evidence 3-0-3
Instruction covers the kinds and degrees of evidence and the rules governing the admissibility of evidence in court.

CJC 205 Criminal Investigation 3-0-3
This course introduces the student to fundamentals of investigation; crime scene search, recording, collection and preservation of evidence; sources of information; interview and interrogation; case preparation and court presentation; and the investigation of specific offenses such as arson, narcotics, sex, larceny, burglary, robbery, and homicide.

CJC 206 Introduction to Criminalistics 4-3-5
Continuation of the study of criminal investigation including a general survey of the methods and techniques used in modern scientific investigation of crime, with emphasis upon the practical use of these methods by the students. Laboratory techniques will be demonstrated and the student will participate in actual use of the scientific equipment.

CJC 207 Law of Arrest, Search and Seizure 3-0-3
A review of law governing jurisdiction of law enforcement officers; requirements for probable cause to arrest; arrest with and without a warrant; probable cause for searches both with and without warrants; and rule on "pat downs."

CJC 208 Use of Deadly Force 3-0-3
Review of rules of law governing use by law enforcement and correctional officers in applying deadly force to: protect self; protect others; consummate arrests; effect searches and prevent escapes.

CJC 209 Law Enforcement Organization and Administration 3-0-3
Introduction principles of organization and administration; discussion of departmentalized functions, e.g., personal management, administrative management training, communications, records, property maintenance and miscellaneous services.

CJC 211 Constitutional Law 3-0-3
This course explores the impact of constitutional law on the criminal justice system in the United States. More than a study of Supreme Court decisions, this course provides in-depth review of the dynamic relationship between the judiciary and the law enforcement agencies who protect and serve.

COOPERATIVE EDUCATION

COE 100 Employment Seeking Skills 1-0-1
A course designed to help prepare the student for the world of work. The Cooperative Education Program is explained with emphasis on employee responsibilities and employer expectations in a job situation. The student receives instruction in interview techniques and develops a resume.

COE 101-106 Co-Op Parallel Work Experience
Through the Cooperative Education Program, the student works in a position related to his or her program of study and for an employer selected and/or approved by the College. The student attends classes and works on a parallel plan. Grades will be determined by the evaluations by employers, students, and the Co-op office.

Credit	1-2 Hours/Quarter
Contact	10-20 Hours/Quarter
Prerequisite	Full Admission to the Co-op Program; a minimum of one quarter at ICC with minimum G.P.A. of 2.0.

*Course numbers designation for registration:
COE 101 - 1st quarter student has parallel work assignment
COE 102 - 2nd quarter of parallel work assignment, etc.

COE 201-202 Co-Op Alternate Work Experience
Through the Cooperative Education Program, the student works in a full-time position directly related to his or her program of study and for an employer selected and/or approved by the College. The student attends classes full-time one quarter then works full-time the next quarter and does not attend classes. Grades will be based primarily on evaluation of the student's progress on the job by the employer, the student, and the Co-op office.

Credit	4 Quarter Hours
Contact	40 Quarter Hours
Prerequisite	Full admission to the Co-op Program

COSMETOLOGY
BEGINNER'S DEPARTMENT

Students shall spend three hundred (300) hours in this department before entering the advanced department and shall not work on members of the public during this 300 hours. The hours earned in the department shall be devoted to the following: Scientific Study and Mannequin Practice. Manicuring practice in this department shall be done on students enrolled in the school during the first 300 hours.

COS 1001 Introduction to Cosmetology **5-0-0-5**
This course introduces the beginning student to various aspects of cosmetology, ethics, interpersonal relationships, and orientation. The course includes the study of the hair and skin; the effects of cosmetics and chemicals upon the hair and skin, cleansing, conditioning, cutting of the hair; the basics of hairstyling; cosmetology law and first aid; and sterilization and sanitizing of implements and equipment. Students will also learn conduct in relation to coworkers and others. Corequisite: COS 1001.

COS 1011 Mannequin Practice **2-0-21-9**
Mannequin practice allows the student to develop cosmetological skills that will be needed when providing services to the public in a full service salon. The practical work is devoted to draping, fingerwaving, hairstyling, haircutting, hair relaxing and permanent waving, pincurling, roller placement, thermal pressing, and curling. After demonstration by a faculty member, hair and scalp treatments, shampooing, facials with massage, makeup, airwaving, hair color, and manicures will be practiced on other students. Emphasis is placed on first aid skills and sanitary and safety precautions. Corequisite: COS 1001.

ADVANCED DEPARTMENT

The hours earned in the advanced department shall be devoted to the study and live model completions. Work in the department may be done on the public. Students with less than 300 hours shall not work in this department.

COS 1002 Cosmetology Theory I **5-0-0-5**
This is a classroom study of advanced principles: chemical reformation (permanent waving, chemical relaxers); the basic principles of haircutting to achieve the various styles; how to style hair according to bone and body structure, facial features, lifestyle and customer preference; selection, care and styling of wigs and hairpieces; thermal pressing and styling; and various scalp treatments. Prerequisite: COS 1001.

COS 1022 Cosmetology Skills I **2-0-21-9**
This course is a continuation of the application of skills learned in COS 1001. Laboratory skills will be practiced on mannequins and live models on the clinical floor in the areas of pincurling, fingerwaving, roller placement, permanent waving, chemical relaxing, thermal pressing and curling, hair analysis, cutting and scalp treatments, facials and makeup, manicuring and pedicuring, and hair color. Prerequisite: COS 1011.

COS 1003 Cosmetology Theory II **5-0-0-5**
This is a classroom study of the theory concept, application, and history of haircoloring; nails and disorders of the nails; anatomy of the arm and hand; and manicuring and pedicuring. Prerequisite: COS 1001.

COS 1033 Cosmetology Skills II **2-0-21-9**
This course is a continuation of instructor demonstrations and student live-model performances in the application of temporary haircolor, semi-permanent haircolor, permanent haircolor, hair lightening products and toners. The practice of pressing, curling, and shaping the hair, airwaving, perming, relaxing, hairstyling, manicuring, and pedicuring are also presented in this course. Prerequisite: COS 1011.

COS 1004 Cosmetology Theory III **5-0-0-5**
This classroom study includes fundamentals of skin and its care; basics of facial massages, makeup application and corrective contouring; electricity and light therapy; professional business relationships and successful salon retailing; operating a beauty salon; and review of laws that govern cosmetologists. Prerequisite: COS 1001.

COS 1044 Cosmetology Skills III **2-0-21-9**
This course is a continuation of advanced demonstrations and clinical practices in all phases of beauty salon applications including sculptured nails and nail artistry. Students develop speed and accuracy in cosmetological skills which will enable them to be more effective and successful. Prerequisite: COS 1011.

COS 1055 Advanced Cosmetology Skills **3-0-22-10**
This course is designed for the student who wishes to complete the additional hours and live model projects, as set forth by the North Carolina State Board of Cosmetic Art Examiners, so that one may take the Cosmetologist Exam without serving the six-month apprenticeship. Students will review theories and concepts and will explore advanced methods of hairstyling, haircutting, and creative concepts in hair coloring, sculptured nails and nail art. Prerequisite: COS 1044.

COS 1101 Cosmetology Theory I **4-0-0-4**
This course is designed to introduce the freshman student to the theory of Cosmetic Art. Subjects to be learned include: professional development; sterilization and sanitation; bacteriology; first aid; cosmetology law; anatomy; introduction to hair chemistry, nails, hair, skin and scalp; disorders of the nail, hair, skin, and scalp, and manicuring. Prerequisites: None.

COS 1111 Cosmetology Skills I **1-0-18-7**
This course is designed to introduce the freshman student to all the services given in the full service salon. Each procedure will be explained verbally, followed by a review of a written task analysis, a live demonstration and/or audio/visual, guided practice of the task on a mannequin supervised by the instructor and, finally, a written evaluation of the student's skill by the instructor. The procedures learned this quarter include an introduction to: fingerwaving, pincurling, draping, wet construction hairstyling, airwaving, marcelling, chemical reconstruction, shampooing and rinsing, scalp treatments, hair designing, hair sculpting, hair coloring, waxing, nail care, skin care, and wig care and styling. The student will begin preparation for the North Carolina State Board of Cosmetic Art Exam and for employment in the full service salon. Prerequisites: None.

COS 1102 Cosmetology Theory II **4-0-0-4**
A classroom study of skin, scalp, hair and their disorders, salesmanship, permanent waving, marcelling, relaxing, hairdressing, wigs and hair coloring. Prerequisite: COS 1101.

COS 1112 Cosmetology Skills II **1-0-18-7**
This course is designed for the student who has completed one quarter of mannequin practice of services given in the full service salon. The student will begin lab experience on live models, supervised by the instructor. The student will learn and review practical application of the following subjects: bacteriology, wet construction designs, chemical reconstruction services, airwaving, marcelling, hair designing, wiggery, nail care, hair coloring, and hair sculpting. Prerequisite: COS 1111.

COS 1103 Cosmetology Theory III **4-0-0-4**
This course is designed for the student who has completed 2 quarters of the cosmetology program. Theory subjects to be mastered include: anatomy review, manicuring review, chemistry, chemistry of cosmetics, skin care and makeup, theory of hair design, theory of massage, theory of scalp treatments, superfluous hair removal and professional development review. Prerequisite: COS 1101.

COS 1113 Cosmetology Skills III **1-0-18-7**
This course is designed for the cosmetology student who has completed 3 quarters of lab experience in the cosmetology program. The subjects in this course include application of chemistry, sanitation and sterilization review, hair coloring, lash and brow tinting, creative hair designing, chemical reformation review and hair sculpting. The student will review and practice all basic procedures in preparation for the comprehensive final exam on all practical procedures and the State Board Practical Exam. Prerequisite: COS 1111.

COS 1104 Cosmetology Theory IV **4-0-0-4**
This is a classroom study of advanced principles: chemical reformation (permanent waving, chemical relaxers); the basic principles of haircutting to achieve the various styles; how to style hair according to bone and body structure, facial features, lifestyle and customer preference; selection, care and styling of wigs and hairpieces; thermal pressing and styling and various scalp treatments. Prerequisite: COS 1101.

COS 1114 Cosmetology Skills IV **1-0-18-7**
This course is a continuation of advanced demonstrations and clinical practices in all phases of beauty salon applications including sculptured nails and nail artistry. Students develop speed and accuracy in cosmetological skills which will enable them to be more effective and successful. Prerequisite: COS 1111.

COS 1105 Cosmetology Theory V **4-0-0-4**
This course is designed for the student who wishes to complete the additional hours and live model projects, as set forth by the North Carolina State Board of Cosmetic Art Examiners, so that one may take the Cosmetologist Exam without serving the six-month apprenticeship. Students will review theories and concepts and will explore advanced methods of hairstyling, haircutting, and creative concepts in hair coloring, sculptured nails and nail art. Prerequisite: COS 1101.

COS 1115 Cosmetology Skills V **1-0-18-7**
This course is designed to introduce the junior student to all the services given in the full service salon. Each procedure will be explained verbally, followed by a review of a written task analysis, a live demonstration and/or audio/visual, guided practice of the task on a mannequin supervised by the instructor and, finally, a written evaluation of the student's skill by the instructor. The procedures learned this quarter include an introduction to: fingerwaving, pincurling, draping, wet construction hairstyling, airwaving, marcelling, chemical reconstruction, shampooing and rinsing, scalp treatments, hair designing, hair sculpting, hair coloring, waxing, nail care, skin care, wig care, styling, and will be a review and advanced, in-depth technique in preparing the student work in the salon. Prerequisite: COS 1111.

COS 1106 Cosmetology Theory VI **4-0-0-4**
This course is designed for the student who wishes to complete the additional hours and live model projects, as set forth by the North Carolina State Board of Cosmetic Art Examiners, so that one may take the Cosmetologist Exam without serving the six-month apprenticeship. Students will review theories and concepts and will explore advanced methods of hairstyling, haircutting, and creative concepts in hair coloring, sculptured nails and nail art. Prerequisite: COS 1101.

COS 1116 Cosmetology Skills VI **1-0-18-7**
This course is designed for the student who wishes to complete the additional hours and live model projects, as set forth by the North Carolina State Board of Cosmetic Art Examiners, so that one may take the Cosmetologist Exam without serving the six-month apprenticeship. Students will review theories and concepts and will explore advanced methods of hairstyling, haircutting, and creative concepts in hair coloring, sculptured nails and nail art. Prerequisite: COS 1111.

CSC 106 Principles of Problem Solving **3-2-4**
This course is a prerequisite to all programming courses. Approved structured methods of problem definition, logic development, flowcharting and modularization will be explored to introduce the student to fundamentals of business computer programming solutions. The BASIC programming language will be used to develop, test and verify typical problem solutions. (F)

CSC 151 Introduction to Computer Programming **3-0-3**
This course emphasizes problem solving through the use of algorithms and pseudocode. The pseudocode will be translated into a high level computer language. Languages introduced are BASIC, Logo and Pascal. Topics to be covered include basic input-output operations, simple control statements and looping. Related computer lab required.

CSC 152 Pascal Programming **3-0-3**
This course provides a more detailed study of structured programming techniques, data types, procedures, functions, arrays, files and data structures. Related computer lab required. Prerequisite: CSC 151.

CSC 161 FORTRAN Programming **3-0-3**
The student will learn the fundamental programming rules of the FORTRAN (FORmula TRANslation) language, and its applications to numerical computation and file manipulation. Emphasis will be placed on developing programming techniques to translate problem statements into workable programs. A variety of business and scientific problems will be programmed and tested on the IBM S/36 computer or the TRS-80 microcomputer. Prerequisite: CSC 151. (Sp)

CSC 210 BASIC Programming **3-2-4**
The student will study the BASIC programming language with applications including decisions and loops, arrays, file manipulation, menus and reports, sorting, tree structures, and graphics. Prerequisite: CSC 106. (F)

CSC 220 RPG/400 Programming **3-2-4**
This course is a study of the RPG II (Report Program Generator) programming language. Emphasis will be placed on the study of RPG II fixed logic, editing, calculations, control breaks, multiple control breaks, multiple record types, and the writing and debugging of business-related programs. Prerequisite: CSC 106 or permission from the instructor. (W)

CSC 221 Advanced RPG/400 Programming **3-2-4**
The student will study advanced RPG II programming techniques, including tables, matching records, sequential and indexed sequential files. Applications will include the writing and debugging of complex business-related programs. Prerequisite: CSC 220. (SP)

CSC 225 Control Language Programming **3-2-4**
This course is designed to explore AS/400 Control Language Programming (CL). General concepts of programming and specific applications of CL Programming will be discussed.

CSC 227 C Programming **3-2-4**
The student will study the C programming language with applications containing calculations, loops, decisions, functions, arrays and strings, and basic file manipulation. Prerequisite: CAS 160 or permission of the instructor.

CSC 228 Advanced C Programming **3-2-4**
A continuation of CSC 227, this course will include advanced C programming applications, including pointers, keyboard and cursor manipulation, structures, unions, and ROM BIOS, memory and character display operations, color graphics, and in-depth file manipulations. Prerequisite: CSC 227.

CSC 230 COBOL Programming 3-3-4
The COmmon Business Oriented Language (COBOL) is presented in detail, including structured programming concepts, report writing, editing, calculations and comparisons, if-then-else structures, nested if-then-else structures, control breaks, and multiple control breaks. A variety of business and commercial applications are programmed and tested by the students on the IBM AS/400 computer. Prerequisites: CSC 106 or permission from the instructor. (W)

CSC 231 Advanced COBOL Programming 3-3-4
As a continuation of CSC 230, this course will present more complex techniques and features of the COBOL programming language including sorting, file handling, tables, edit programs, and report writer concepts. Prerequisite: CSC 230. (S)

CSC 251 Algorithms & Programming 3-0-3
A course in various programming concepts, including computer characteristics and operating systems as needed, but with emphasis on algorithms using pseudocode. Original algorithms are developed, programmed and documented. Use is made of subroutines, disc files, arrays and the various programming paraphernalia during the course. Related computer lab required. Prerequisite: CSC 152.

CSC 252 Assembly Language and Machine Operation 3-0-3
This course includes data representation in the computer, computer logic, and a brief look at circuits, hexadecimal and binary numbers and arithmetic with emphasis on the study and practice of assembly language programming. Related computer lab required. Prerequisite: CSC 251.

CSC 253 Data Structures 3-0-3
The use and implementation of various information structures, including arrays, records, stacks, queues, linked lists and trees. Related computer lab required. Prerequisite: CSC 251.

DANCE

DAN 151 Introduction to Modern Dance 1-2-2
This course will introduce the student to the basic principles of dance and will include philosophy and some early history of dance as an art form. No previous experience in dance is needed.

DAN 152 Beginning Modern Dance and Improvisation 1-2-2
This course will continue training in modern dance technique and movement and will include specific history of modern dance from the 1920's to 1990's.

DAN 153 Beginning Modern Dance and Composition 1-2-2
This course will continue the technique started in Dance 151 and 152 with more emphasis on original work. The course will end with a workshop at which students' works will be presented.

DRAFTING DESIGN

DDF 201 Design Drafting I 2-6-4
Charts and graphs, design layouts and working drawings of gears, gear train drives, belt and pulley drives, and chain and sprocket drives. Prerequisite: DFT 103.

DDF 202 Design Drafting II 2-6-4
Assignment of mechanical design requiring use of research; application of basic engineering principles, calculations, and use of various manuals, catalogues, and periodicals. Preliminary design sketches layout drawings, detail drawings, sub-assembly drawings, assembly drawings specifications, patent drawings and simplified drawing practices will be required. Prerequisite: DDF 201.

DDF 212 Jig and Fixture Design 3-3-4
Commercial standards, principles, practices and tools of jig fixture design. Individual project and design work to acquaint students with the types of jig fixtures and their design. Prerequisites: DDF 201 and DDF 202.

DESIGN (CREATIVE AND AESTHETIC)

DES 102 Graphic Layout & Design 3-3-4
Application of the elements and principles of two-dimensional design problems. Student will become familiar with basic steps in producing a design layout, including the thumbnail, rough and comprehensive. Also become familiar with design equipment such as drafting tools and type gauges, introduction to offset printing.

DES 104 Creative Visual Design 3-3-4
Begin to deal with more complex visual design problems using techniques learned in the graphic layout and design class. Will begin to direct designs toward advertising, poster, brochure and logo design. Offset printing will be utilized with designs. Prerequisite: DES 102.

DES 106 Commercial Art I 5-3-6
Continuation of the design series with emphasis on individual development of ideas. Student will be given assignments based upon actual design problems. Will carry a concept through all the stages of a design to the camera-ready art work. Prerequisites: DES 102, 104.

DES 107 Graphic Arts 1-6-3
Will learn the skills and techniques necessary to prepare a design for printing. Covered will be copy camera operation, halftones, screen tints, line art, preparing negatives to mask (stripping) paste-up and plate-making.

DES 110 Introduction to Commercial Graphics 2-3-3
A class covering the basic procedures of commercial graphics such as design, typesetting, photography and offset printing. Allows students to become familiar with the various aspects of commercial graphics and how they are related.

DES 111 Airbrushing I 1-6-3
This class will be an exploration of the many uses of the airbrush. The first meetings will serve as an introduction where the fundamentals of airbrush techniques will be covered extensively. Upon completion of the first two assignments, students will be encouraged to go into whichever area of airbrushing interests them most, whether it be freehand or controlled.

DES 112 Airbrushing II 1-6-3
This class will be an advance study of the practice of airbrushing. The student will be expected to paint creative designs, geometric shapes, life figures, and other advanced figures. Prerequisite: DES 111.

DES 201 Commercial Art II 5-3-6
Refine skills of design and layout. Students will work individually on entire projects and as part of a group on large projects. Begin to look at the responsibilities of an art director. Prerequisite: DES 106.

DES 203 Portfolio Preparation 1-6-3
This course will guide students in the selection of their best work and arrangement of it in their portfolio. Will include interview techniques and preparation of a resume. Prerequisites: DES 102, 104, 106, 201, PHO 105, 108, 202.

DES 204 Commercial Art III 5-3-6
Emphasis on the development of professional skills and attitudes and the ability to meet deadlines. Will allow students to explore areas of interest further such as typography, photography, illustration, and printing. Prerequisites: DES 106, 201.

DES 207 Commercial Art IV 5-3-6
By the time the commercial graphics students reach this class, they should be able to complete design and preparation for printing as well as actual printing. Must be able to demonstrate competency in development of design, preparation for printing as well as actual printing of design work. Prerequisites: DES 102, 104, 106, 201, 204.

DES 212 Illustration I 3-3-4
To be covered are several varieties of artwork including pen and ink, acrylic painting, mixed media and airbrush as a means of visual communication.

DES 214 Illustration II 3-3-4
This course will offer further practice in the varieties of artwork including pen and ink, acrylic painting, mixed media and airbrush as a means of visual communication. This course is a continuation of DES 212.

DES 220 Computer Graphics 2-3-3
An introduction to the generation of graphics with the aid of a computer. Particular attention will be given to 2-D and 3-D forms, advertising, logos, typography and related design features. Prerequisite: Computer knowledge preferred, but not required.

DRAFTING

DFT 101 Engineering Drawing I 0-6-3
The field of drafting is introduced as the student begins study of drawing principles and practices for print reading and describing objects in the graphic language. Basic skills and techniques of drafting are included and use of drafting equipment, lettering, freehand orthographic instrument drawing of principal views, and standards and practices of dimensioning. The principles of isometric, oblique, and perspective are introduced. This course may be taken in a regular class or an independent study.

DFT 102 Engineering Drawing II 0-6-3
The application of orthographic projection principles to the more complex drafting problems, primary and secondary auxiliary views, simple and successive revolutions, and sections and conventions will be studied. Most important is the introduction of the graphical analysis of space problems. Problems of practical design elements involving points, lines, planes, and a combination of these elements shall be studied. Dimensioning practices approved by the American Standards Association will also be included. Introduction is given to intersections and developments of various types of geometrical objects. This course may be taken in a regular class or as an independent study. Prerequisite: DFT 0101.

DFT 103 Engineering Drawing III 0-6-3
This course is a continuation of DFT 0102. Design and working drawings, isometric drawings, and perspectives will be studied. A special emphasis will be given to the specific interest of the student. Prerequisite: DFT 0101 and DFT 0102.

DFT 107 Surveying and Mapping 2-3-3
A general overview of surveying will be presented. How to locate information about property will be discussed. How to read deeds and lay out property on paper will be presented. Demonstration of surveying equipment and an actual survey will be done by the class.

DFT 203 Architectural Drafting 1-6-3
Complete set of working drawings, plot plan, floor plan, elevations, wall sections, details, electrical plan, plumbing, foundation, dimensioning practice, symbols and materials schedule. Prerequisite: DFT 103.

DFT 209 Industrial System Schematics 2-3-3
The student will read and draw schematic representations of water and gas plumbing, hydraulic and pneumatic circuits and electrical circuits. A brief overview of each area will be given to provide the student with a basic knowledge of the physical phenomena associated with each of these energy transport systems.

DFT 211 Mechanisms **3-3-4**
Mathematical and drafting room solutions of problems involving the principles of machine elements. Study of motions of linkages, velocities, and acceleration of points within a link mechanism, layout methods for designing cams, belts, pulleys, gears and gear trains.

DFT 220 Computer Aided Drafting and Design I **2-3-3**
A study of the basic concepts that a drafter or potential drafter needs to know about CAD. The course will address several areas pertaining to CAD, such as why computer-aided drafting is used; types of CAD equipment; techniques used in the operations of CAD equipment.

DFT 221 Computer Aided Drafting and Design II **2-3-3**
Further practice in Computer Aided Drafting (CAD) for the advanced student. At the completion of this class, the student should be able to do any type of drawing on the computer, such as electronics, mechanical, architectural, and schematic. Prerequisite: DFT 0220.

DFT 222 Technical Illustration **3-3-4**
The techniques of design and illustration using isometric, oblique, and perspective drawings. Including: sketching, inking, shading, airbrush techniques, renderings, and finished illustrations. Prerequisite: Permission of instructor.

DFT 240 Advanced Architectural Drafting **2-3-3**
An advanced study of residential and commercial drafting. The student will receive a thorough review of floor plans, elevations, wall sections, foundation plans, and general drafting practices. The majority of coursework will be concentrated on electrical plans, plumbing plans, details, bills of materials, perspectives, and renderings. Prerequisite: DFT 0203 or permission of instructor.

ECONOMICS

ECO 201 Principles of Economics **3-0-3**
An introduction to economic principles, problems, and policies, the nature of economic concepts, the principles and problems involved in national incomes, employment and prices, and aggregate demand. (F)

ECO 202 Principles of Economics **3-0-3**
A continuation of Economics 201 with emphasis on the market and price system, the allocation of resources, business cycles, monetary and fiscal policy. (W)

ECO 203 Principles of Economics **3-0-3**
A continuation of Economics 202 with emphasis on a study of the international economy and perspectives on economic change and comparative systems. (Sp)

ECO 204 Free Enterprise Economics **3-0-3**
This course will include a study of basic micro-economics, economic principles and legislation that affects the natural levels of unemployment, income and prices.

ECO 225 Business and Economic Statistics **3-0-3**
An introduction to basic modern statistics for those new to the subject. The study uses real-life situations and applications to describe what statistics is, how and when to apply statistical techniques to managerial situations, and how to interpret the results. (W)

ECO 250 Managerial Economics **3-0-3**
This course is designed to acquaint the manager with various economic concepts which include: opportunity cost, supply and demand, cost, comparative advantage, competition, monopoly, pricing, monetary policy, fiscal policy, and international economics. (W)

ECO 260 Consumer Economics **3-0-3**
A study of personal financial problems in such areas as housing, budgeting, loans, banking, taxes, credit and insurance. (W)

ECO 261 Labor Economics 3-0-3
Emphasis is placed on the history of the labor movement in the United States, the development of methods and strategies by labor organizations and management, the shift in the means of public control, and the factors of income and economic security. (Su)

EDUCATION

EDU 101 Introduction to Education 3-0-3
An introduction to the philosophy, history, nature, and aims of Early Childhood Education. Attention will be given to philosophical foundation, cultural differences, routine activities, records, and parent-teacher relationships. (F)

EDU 102 Methods, Materials, and Techniques of Reading I 3-0-3
The student will study basic phonic rules related to reading as well as methods and materials used in readiness activities. Linguistics and evaluation of readiness for reading will be studied. (F)

EDU 103 Methods, Materials, and Techniques of Reading II 3-0-3
The student will study the methods, theories, and use of materials in teaching reading. Children's literature, basic reading skills and diagnostic testing of reading skills will be studied. (W)

EDU 104 Child Care Credential I 3-0-3
This course provides the first half of instruction necessary to qualify for the N.C. Child Care Credential. This credential prepares an individual for entry level employment as a teacher in a child care setting. Areas of study include introduction to the child care profession, child growth and development, and getting to know the whole child.

EDU 105 Child Care Credential II 3-0-3
This course provides the final half of the instruction necessary to qualify for the N.C. Child Care Credential. This credential prepares an individual for entry level employment as a teacher in a child care setting. Areas of study include developmentally appropriate practices, positive guidance, and providing a safe and healthy environment.

EDU 107 Administration, Supervision, and Standards 3-0-3
The student will learn skills necessary to supervise and organize an effective day care center. Licensing procedures and program planning will be emphasized. This course is designed for students completing the programs of Child Care Worker or Early Childhood Specialist. (Su)

EDU 108 Math and Science for Children 3-0-3
Students will learn how to incorporate science and math activities into everyday curriculum. Methods, materials, and concepts essential for the young child will be stressed. This course is designed for students completing the programs of Child Care Worker or Early Childhood Specialist. (Su)

EDU 109 Learning Activities 2-3-3
The use of art media, music puppetry, and creative drama will be emphasized. The student will learn how to incorporate the creative process in the total curriculum. Designed for students completing the Child Care Worker or Early Childhood Specialist Program. (Su)

EDU 110 Introduction to Trade & Industrial Education 3-0-3
The primary purpose of this course is to give students an overview of the history and philosophy of vocational education.

EDU 111 Occupational Analysis and Course Development 3-0-3
Principles and techniques of selecting and analyzing suitable teaching activities and arranging such material into a functional instructional order. Instructional units prepared will be based on an analysis of vocational occupation or activity.

EDU 112 Instructional Methods 3-0-3
This course includes the various instructional methods in vocational education with emphasis on behavioral objectives and individualized instruction.

EDU 113 Shop Organization and Planning 3-0-3
A study of problems related to vocational shop layout, planning and management, supplies and equipment handling, textbooks, and sources of materials, will be made. The study will be required to design a shop or lab for his/her particular vocation.

EDU 114 Shop Safety 3-0-3
Basic principles of school shop safety will be studied. The OSHA regulations pertaining to educational institutions will be emphasized. Good housekeeping and fire prevention will be studied as well as machine guarding and personal protective equipment for various types of school shops. The importance of safety planning will be stressed.

EDU 115 Language Arts 2-3-3
A study of content, method, and materials of language arts skills. The student will collect a resource file of games and activities designed to strengthen the Language Arts Program. (F)

EDU 117 Instructional TV 1-0-1
This course is designed to teach the use of color portable cameras in educational and industrial settings. Students will learn the use of the equipment and the development of informational video tapes. Students will learn how to use storyboards and script writing in order to give direction and meaning to their video programs.

EDU 203 Exceptional Child 3-0-3
The study of children with developmental variations who need modifications in various areas of education. Special emphasis is given to the mental, emotional, and physical development of the child. (Sp)

EDU 204 Parent Education 3-0-3
Students will study the influences of the family in classroom and home settings. The importance of values, parent-school relationships, individual rights, and family life styles will be studied. (W)

EDU 206 Discipline 3-0-3
This course is designed to present information and resources to help students take a look at the philosophy of discipline as an educational tool. They examine their own attitudes about discipline, discuss children's feelings and review age-appropriate expectations of children's behavior.

EDU 208 Art and Music 1-3-2
The student will have the opportunity to work in a variety of art and music media and develop skills in instructional techniques suitable for working with young children. (W)

EDU 213 Children's Literature 4-0-4
A critical study of classical and current books and materials used with young children on the K-3 level. A study of dramatics, reading styles, poetry and prose will be included. (S)

EDU 214 Instructional Resources 3-0-3
The student will study the resources available in the community and school testing, report writing, and roles of school personnel will be studied. (F)

EDU 234 AV Materials/Equipment 3-0-3
Instruction in the use of AV equipment and materials. Emphasis is given to the selection, integration, and evaluation of materials used. Special attention is given to the variety of materials available. (W)

EDU 240/242/244 Practicum **0-15-5**
The student will observe and develop skills working with children in classroom and day care situations. This course is designed for students completing the Child Care Worker Program or Early Childhood Specialist Program. (Sp,Su)

EDU 246 Practicum **0-9-3**
The student will observe and develop skills working with children in classroom and day care situations. This course is designed for students completing the Child Care Worker Program or Teacher Associate Program.

EDU 241/243/245/247 Seminar **1-0-1**
Theories, techniques, and methods observed in day care centers and classroom settings will be discussed. Students will integrate ideas related in course work and practicum situations. This course is designed for students completing the Child Care Worker or Early Childhood Specialist Program. (Sp,Su)

EDU 248 Practicum and Supervision **1-6-3**
A practicum experience for the teacher associate which allows the student to observe and develop skills in an actual classroom situation under the supervision of an instructor. The seminary correlating with the practicum must be taken the same quarter.

EDU 249 Supervision Seminar **2-0-2**
A seminar for the teacher associate gives the student an opportunity to express practicum experiences. Emphasis is placed on special learning techniques, communications, and lesson and unit planning. The practicum correlating with the seminar must be taken the same quarter. Seminar credit is reported in practicum.

ELECTRICITY

ELC 100 DC and AC Fundamentals **5-4-3-8**
An introduction to passive electronic components such as resistors, capacitors and inductors is presented. Ohm's Law and Kirchoff's voltage and current laws are introduced. The concepts of power and energy in electrical circuits are covered. The sine wave as it relates to voltages and currents in electrical circuits is studied. Series, parallel and series-parallel circuit design, analysis and troubleshooting are emphasized with theory and with a concentration on hands-on, supervised laboratory exercises. Laboratory exercises also provide instruction and extensive hands-on experience in using analog and digital multimeters, function generators, oscilloscopes, impedance analyzers, frequency counters, and AC/DC power supplies.

ELC 205 Applied Electricity **3-3-4**
A qualitative study of units of measurement, electrical quantities, simple circuits, electromotive forces, current power, laws, basic electrical instruments and measurements, resistance, impedance, and basic circuit components. Concepts taught are generally limited to fundamentals with very little emphasis placed on quantitative aspects. Laboratory work will teach the proper use and care of basic hand tools and the basic manual skills used in working with electricity. Measurement techniques and safety practices will be stressed throughout.

ELC 1101 Fundamentals of Electricity **4-12-8**
A study of the electrical structure of matter and electron theory, the relationship between voltage, current, and resistance in series, parallel and series-parallel circuits. An analysis of direct current circuits by Ohm's Law and Kirchoff's Law. A study of the courses of direct current voltage potentials. Fundamental concepts of alternating current flow, reactance, impedance, phase angle, power and resonance.

ELC 1102 Residential Wiring **4-12-8**
Provides instruction and application in the fundamentals of blueprint reading, planning, layout, and installation of wiring in residential applications such as: services, switchboards, lighting, fusing, wire sizes, branch circuits, conduits, and National Electrical Code regulations in actual building mock-ups. Prerequisites: ELC 1101, BPR 1111, or permission from the instructor.

ELC 1103 AC/DC Machines **4-12-8**
Provides fundamental concepts in single and polyphase alternating current circuits, voltages, currents, power measurements, transformers, and motors. Instruction in the use of electrical test instruments in circuit analysis.

ELC 1104 Controls of AC/DC Machines **4-12-8**
Provides instructions and applications in basic controls of AC/DC machines, including various push-button stations, float switches, timers, sequencing switches, pressure switches and thermostats.

ELC 1119 National Electrical Code—Residential **6-0-6**
A study of the National Electrical Code and its relationship to state and local electrical codes with residential wiring.

ELC 1120 Troubleshooting Methods **5-3-6**
Provides instruction and application in various methods of troubleshooting both single phase, three-phase, and DC motors and generators.

ELC 1121 Industrial Wiring **3-3-4**
A study of layout, planning, and installation of wiring systems in commercial and industrial complexes. Also, a study of various raceways used in industry, including types of conduit and the preparation and installation of each type.

ELECTRONICS

ELN 104 Semiconductor Circuits and Applications **5-0-3-10**
The theory of operation of the P-N junction is explained. Diodes and their applications in power supply rectifiers, clamping and limiting circuits, and voltage multipliers are studied. Special diodes such as zedner diodes, varactors, schottky diodes, tunnel diodes, LED's, photodiodes, and PIN diodes are covered. The P-N junction theory is expanded to cover bipolar and FET transistor theory. Biasing of bipolar and FET devices and the application of these devices in small signal and power amplifier circuits are explored. Amplifier frequency response is also covered. Extensive hands-on exercises are done in the laboratory where analysis and troubleshooting of the circuits are stressed. Prerequisite: ELN 100.

ELN 105 Semiconductor Control Devices **4-4-0-6**
A study of thyristors, unijunction transistors and optoelectronic control devices. Silicon-Controlled Rectifiers (SCR's), Silicon-Controlled Switches (SCS's), DIAC's, TRIAC's, and the Unijunction Transistor (UJT and PUT) are examples of the thyristors covered. Optoelectronic theory and devices such as photodiodes, phototransistors, light activated thyristors, optocouplers, and laser diodes are studied. Emphasis is placed on practical industrial application of these devices. Supervised laboratory experiments are coupled with troubleshooting exercises in providing hands-on experience for the student. Prerequisite: ELN 104.

ELN 110 Technical Documentation **2-0-3-3**
The course introduces the student to basic software associated with the electronics profession. Various hardware and component catalogs are explored. The proper use of these publications is emphasized in shop sessions where students simulate actual requisitioning procedures by ordering from specifications on a bill of materials. Procedures for documenting reports, maintenance actions and equipment maintenance histories are studied. Methods of drawing technician's rough sketches and schematic diagrams are presented and practiced in shop sessions. Various sources of reference materials valuable to electronics technicians are explored. Familiarization with basic computer operations is included.

ELN 111 Fabrication Techniques **1-2-3-3**
This course contains a potpourri of subjects critical to the development of those manipulatory skills required of the well rounded electronics technician. Practical hands-on experience will be gained in this primarily laboratory and shop course. One segment includes extensive training in soldering, desoldering and printed circuit board repairs using the latest in high reliability interconnection technology. Other subjects include, but are not limited to; breadboarding techniques; printed circuit board layout, design and fabrication; care and preservation of electronic components and hardware.

ELN 207 Digital Electronics **5-6-3-9**
A comprehensive course covering aspects of digital electronics from number systems through integrated combinational logic circuits. Subjects included are codes, Boolean Algebra, Karnaugh mapping, logic families, flip-flops/multivibrators, counters, registers, memories, and other digital circuits leading up to a study of the microprocessor/microcomputer. A heavy emphasis is placed on hands-on projects in lab. Design, analysis and troubleshooting techniques are covered in lecture and experienced in lab/shop projects.

ELN 208 Microprocessor Fundamentals **2-4-3-5**
The microprocessor is first introduced in general terms using a generic model. The 6502 microprocessor is then covered in depth, stressing architecture, machine language programming and associated subjects. The student will then transfer his/her knowledge of the 6502 microprocessor to learn the differences in programming various other microprocessors. Emphasis is placed on student programming and troubleshooting projects in the lab. The peripheral interface adapter is introduced and applications are explored in the lab. Prerequisite: ELN 207.

ELN 209 Microprocessor Interfacing **2-4-3-5**
This course is designed to give the student an in-depth understanding of various methods for interfacing the microprocessor to external devices. Projects in lab/shop will give the student experience in positive microprocessor control of stepper motors, relays, thyristor controls, robotics and other industrial devices. Student designed projects will use input sensors such as optoelectronic devices, limit switches, and other industrial devices interfaced to the microprocessor as control elements. Methods of using the I/O capabilities of commercial microcomputers to control industrial devices are explored. Prerequisite: ELN 208

ELN 211 Analytic Troubleshooting **2-4-0-4**
This course is designed to bring together all the concepts of troubleshooting that have been covered by the instructor and experienced by the student during the course of the curriculum. Troubleshooting techniques and problem-solving theories will be explored. A scheme for learning from past fault corrections to develop preventative maintenance methodologies is presented for "troubleshooting in advance of the fault."

ELN 215 Industrial Electronics **2-4-3-5**
Provides instruction in the selection and application of sensors, process control devices, transducers and other hardware used to control industrial equipment. An introduction to pneumatic and hydraulic actuators and controls is included. A segment on programmable logic controllers covers relay ladder logic and PLC ladder logic diagram analysis, design and troubleshooting. Extensive hands-on experience in lab/shop includes projects requiring programming of industrial PLC's in industrial applications such as conveyor systems, and AC/DC motor control. Tours of local industrial sites will be included as time permits. Prerequisite: ELN 105 or permission of instructor.

ELN 217 Linear Integrated Circuits **4-12-0-10**
A presentation of linear integrated circuits with an emphasis on the operational amplifier and its applications. Types of applications include op-amp, comparators, summing amplifiers, integrators and differentiators, instrumentation amplifiers, oscillators, phase locked loops, active filters, and voltage regulators. Extensive laboratory experimentation concentrates on circuit design, analysis and troubleshooting. Prerequisite: ELN 104.

ELN 220 Communication Systems **4-4-0-6**
A study of the concepts of generation and amplification of carrier signals, various modes of modulation (AM, FM, SSB, Pulse, and Multiplexing) transmission lines and antennas. Various types of receivers, including AM, FM, and Single Sideband will be studied. With the use of schematic diagrams and lab experiments, the proper methods of testing, adjusting and troubleshooting will be studied. Also an overview of communication systems such as broadcast, mobile, marine, radar, navigation, cable, microwave, cellular telephones, and satellites is provided. Prerequisites: ELN 104 and ELN 217.

ELN 221 Advanced Programmable Logic Controllers **4-4-0-6**
An in-depth study of the programmable logic controller. Special emphasis is placed on practical industrial applications. Students will design and implement several projects which will require programming, interfacing, program debugging and system troubleshooting. Prerequisite: Permission of the instructor.

ELN 1118 Basic Electronics **3-3-4**
An introduction to semiconductor diodes and transistors. A study will be made of their operation, characteristics, testing procedures, and applications.

ENGLISH

ENG 090 Enrichment English **2-3-3***
This course provides basic English identified as necessary to succeed in the freshman composition sequence. A study of major structural errors, grammar, mechanics, punctuation, spelling, journal-keeping, and paragraph and essay writing are components of the course. This course is oriented toward student success.

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

ENG 150 Writing With The Computer **0-2-1**
This course is designed to teach students how to use the personal computer for writing, editing, and printing college essays, reports, and research papers. The majority of this class will be hands-on experience with the computer. Students will be required to complete study packets, lab assignments, and writing assignments for other college courses. (F,W,Sp,Su)

ENG 151 Freshman Composition I **3-0-3**
A writing and reading intensive course which emphasizes writing as process and includes a study of the elements of the essay, library use, language study, and the development of word processing skills. Rhetorical strategies for writing illustration, narration, and description are studied as well as strategies for such typical college writing assignments as the critical book review and the essay examination. Prerequisite: ENG 090 and/or RED 090 or satisfactory scores on placement test. (F,W,Sp,Su)

ENG 152 Freshman Composition II **3-0-3**
A writing and reading intensive course which emphasizes the writing process and includes critical reading and thinking, library use and language study. Rhetorical strategies for writing expository and persuasive essays are studied. Prerequisite: ENG 151. (W, Sp, Su)

ENG 153 Freshman Composition III **3-0-3**
An introduction to writing the research paper and to analyzing selected works of literature. Library research, the proper procedures for planning and writing the research paper, and correct documentation are studied. In addition, the course involves a study of selected short stories, poems, and plays, and the conventions of each genre. Prerequisite: ENG 152. (F,Sp,Su)

ENG 154 Technical Report Writing **3-0-3**
A course for technical students who seek training in letter writing, report writing, and oral and written communications skill in business and industry. Prerequisite: ENG 152.

ENG 161 Honors English I **3-0-3**
An advanced freshman composition course which emphasizes critical thinking and reading, essay writing, and library research. Prerequisite: Above satisfactory scores on the placement test. (F)

ENG 162 Honors English II **3-0-3**
A continuation of English 161. The course is organized thematically around relevant issues. Writing assignments include the expository essay, persuasive essay, and research paper. Prerequisite: ENG 161 or recommendation of an English instructor. (W)

ENG 163 Honors English III **3-0-3**
An advanced course that emphasizes reading, analyzing and writing about selected works of literature. Additional objectives include becoming knowledgeable of the conventions of fiction, poetry, and drama; responding both through discussion and writing about selected works; and gaining a deeper appreciation for good literature and its relevance. Writing assignments include several short analytical papers and one researched and documented longer paper. Prerequisites: ENG 0111 and 0112, or ENG 0101 and 0112. (Sp)

ENG 170 Public Speaking **3-0-3**
A course in oral communication which includes instruction in effective public speaking. The course emphasizes the preparation and presentation of speeches for various occasions, along with the opportunity to listen and evaluate other's speeches. Prerequisite: None. (F,W,Sp,Su)

ENG 171 Advanced Public Speaking **3-0-3**
A continuation of ENG 170, a course recommended for students transferring to four-year schools that require a full semester of public speaking. Prerequisite: ENG 170. (F,W,Sp,Su)

ENG 180 Journalism **3-0-3**
A course on techniques of identifying news, gathering information, writing effective accurate news and feature stories. (F)

ENG 181 Journalism Practice **0-2-1**
A course on how to prepare news copy for the press. It is primarily for the preparation of the school newspaper. This course can be taken as many as six times.

ENG 182 Photo Journalism **0-2-1**
A course on layout design, documentation, graphics, and copy preparation. It is primarily for the preparation of the school yearbook and can be taken as many as six times. (F,W,Sp)

ENG 250 World Literature I **3-0-3**
A study of some of the principal authors and literary works of ancient Greece and Rome. In addition to the literary works themselves, various elements of classical literature, such as epic, tragedy, comedy, etc., will be emphasized, along with historical background of the classical period. Prerequisite: Successful completion of freshman English courses.

ENG 251 British Literature I **3-0-3**
A reading and writing intensive survey of major British writers from the Old English through the neo-classic period, their works, and the historical events and philosophical movements which influenced them. Term papers and projects, optional. Prerequisites: Successful completion of freshman English courses. (F,Sp,Su)

ENG 252 British Literature II **3-0-3**
A reading and writing intensive survey of major British writers from the romantic through the modern periods, their works, and the historical events and philosophical movements which influenced them. Term papers and projects, optional. Prerequisites: Successful completion of freshman English courses. (W,Su)

ENG 253 American Literature I **3-0-3**
A reading and writing intensive survey of American literature primarily of the nineteenth century, highlighting major literary figures and their representative writings. Special emphasis is placed on the unique contributions of each author toward the formulation of an american identity. Term papers and projects, optional. Prerequisites: Successful completion of freshman English courses. (F,Sp,Su)

ENG 254 American Literature II **3-0-3**
A reading and writing intensive survey of modern American literature beginning with a unit on the turn-of-the century movement of Realism, and continuing through major authors and movements of the twentieth century. Term papers and projects, option. Prerequisites: Successful completion of freshman English courses. (W,Su)

ENG 260 Creative Writing I 3-0-3
A course designed to develop the student's potential as a creative writer, consisting of a study of basic fundamentals, selected contemporary models, and a variety of practical classroom exercises. The student will experiment in three types of original composition: poetry, the short story, and the personal essay.

ENG 261 Creative Writing II 3-0-3
Continued guidance and experience in producing various forms of literary expression – poetry, short fiction, the essay – including the procedures involved in getting published. Prerequisite: ENG 260.

ENG 265 Special Topics in Literature variable
A course designed around timely and/or special interest topics in literature. The credit hours and the quarter in which the course will be offered will vary depending upon the situation.

ENG 1101 Communication Skills 3-0-3
A course for vocational students designed to promote the practical application of effective communication in speaking, listening and writing.

FOREIGN LANGUAGES ..... **see FRE, GER, SPA for course descriptions.**

FRENCH

FRE 150 Travel French 2-0-2
For the person who wishes to travel in French-speaking countries. The part of the language needed to communicate basic needs will be emphasized.

FRE 160, 161, 162 Fundamentals of French I, II, III 3-2-4
This is a program of study designed to teach understanding, speaking, reading and writing of French and to grant an awareness of France and its people. Prerequisite: Must be taken in sequence. (F,W,Sp)

FRE 260, 261, 262 Intermediate French I, II, III 3-2-4
In this course of study, the fundamentals of French are used as the background for a basic study of the culture, civilization, and literature of France with a further development of language skills. Prerequisites: Fundamentals of French I, II, III or two years of high school French. (F,W,Sp)

GEOGRAPHY

GEO 160 Physical Geography 3-2-4
The earth's astronomical relations, factors of weather and climate, and physiographic features. Two lab hours per week. (F)

GEO 161 Economic Geography 3-0-3
Geographic factors involved in production, distribution, consumption, and conservation of the major crops, minerals, and industries of the world. This course emphasizes oral communication via a seminar format. (W)

GEO 162 World Regions 3-0-3
Relation of human activities to the larger geographic regions of the world. (Sp)

GEOLOGY

GEL 151 Physical Geology I 3-3-4
The nature and occurrence of rocks and minerals, together with crustal features of the earth's surface. Laboratory work devoted to a study of rocks and minerals and their structure and occurrence. (F)

GEL 152 Physical Geology II 3-3-4
A continuation of Geology 0101 with major emphasis upon glaciation and glacial deposits, deserts, oceans, mountains and mountain building, and the earth's interior. Laboratory work will consist of topographic map interpretation. (W)

GEL 153 Historical Geology 3-3-4
Emphasis in this course is on the statiographic and fossil history of the earth as found in the earth's crust together with the necessary information on both plant and animal kingdoms to trace the evolution of life down through the ages. Laboratory work will be devoted to experience with fossils, geologic maps, and aerial photographs. (Sp)

GEL 160 Topics in Geology 3-0-3
This course is designed to acquaint elementary and high school teachers with some of the major concepts in geology and to study some of the common minerals and rocks found in Rutherford and surrounding counties. A portion of the course will be devoted to working with minerals, rock types, and fossils.

GERMAN

GER 150 Travel German 2-0-2
For the person who wishes to travel in German-speaking countries. The part of the language needed to communicate basic needs will be emphasized. (Su)

GER 160, 161, 162 Fundamentals of German I, II, III 3-2-4
This is a program of study designed to teach understanding, speaking, reading and writing of German and to grant an awareness of Germany and its people. Prerequisite: Must be taken in sequence. (F,W,Sp)

GRAPHICS

GRA 103 Typesetting & Typography 2-3-3
This course will provide instruction in the use of an electronic photo typesetter. The student will become familiar with selecting typefaces to be used in a design and then how to set type, edit, and correct errors before type is generated. Will learn to specify type and determine the space needed for the type or how to fit type into a given space.

GRA 205 Offset Printing I 2-3-3
Students will be given time to become more familiar with press operation and begin producing more complex assignments with the press.

GRA 208 Offset Printing II 2-3-3
Continuation of Offset Printing I which will allow students additional time on operating the offset press, and producing various types of work. Prerequisite: GRA 205.

GRA 209 Silkscreen Printing 1-6-3
Basic serigraphy or color stencil printing. Designs are created and prepared for production, using various techniques including cut-stencil, direct, and photo emulsion.

HEALTH

HEA 250 Personal and Community Health 5-0-5
A study of physical, emotional, mental, and environmental health problems as they relate to man's internal environment and his relationship with the community. Emphasis is placed on current health problems.

HEA 260 Special Topics in Health Variable
This course will deal with timely and/or special interest topics in the health area. The credit and the time in which the course will be offered will vary depending upon the subject and specific situation.

HISTORY

HIS 151, 152, 153 World Civilization I, II , III **3-0-3(each)**
A study of historical events, cultures, societies and beliefs in a global context covering three time periods: Ancient and Medieval; Renaissance through 18th Century; 19th and 20 Century. (F-Su, W-Su, Sp-Su)

HIS 170 Black History **3-0-3**
A study of the history of the American Negro from his ancient African beginnings to the present. In addition to essential historical facts, the course will emphasize a critical interpretation of the forces which have influenced the Negro's interaction with his American environment.

HIS 260, 261, 262 History of the United States I, II, III **3-0-3(each)**
A survey of the history of the United States: 1492-1840; 1840-1896; 1896 to the present. (F,W,Sp)

HIS 265 Special Topics **variable**
This course deals with any history topics which are of timely and/or special interest. Prerequisites and credit hours will vary depending on the nature of the course. Various areas of study have been offered under this course title. Examples are History via Drama and Southern Afro-Americans Since Reconstruction. These or others will be given as the need or interest develops.

HIS 299 History of North Carolina **3-0-3**
This course is designed to acquaint the students with the history of North Carolina from the inception to the modern day. It is designed for the student who has an interest in how North Carolina came about and what problems it has faced down through the years since its settlement. Students will be involved in classroom discussions and group and written projects during the quarter.

HUMANITIES

The following courses, in addition to specified humanities courses, can be taken to fulfill the humanities requirements for the A.A., A.S., and A.A.S. degrees. If a specific course is required for a College Transfer degree, then it cannot be used to satisfy the humanities requirement. ENG 170 (Public Speaking) cannot be used to fulfill the humanities requirement in College Transfer programs.
ENG 250, 251, 252, 253, 254, 260, 261, 265,
ART 160
MUS 151, 152, 153, 181, 182
PHI 260, 261, 262
REL 160, 161, 162, 170*
DAN 151, 152, 153
ENG 171 (Technical Programs)
Foreign language courses may also be used to fulfill humanities requirements.
Students should check catalogs at transfer institutions regarding transferability of these courses.

HUM 160 Introduction to the Humanities **3-0-3**
Introduction to the humanities is a course designed to acquaint students with those disciplines which are ordinarily associated with the humanities—art, music, literature, philosophy and religion—but more importantly, it is a course designed to explore what makes life good, enriched, ennobled—in short, what makes life worth living. It will deal with the "art of being human" and will emphasize an appreciation for human accomplishments in the humanities. (F,Su)

HUM 161 Special Topics in the Humanities **variable**
The course will deal with timely and/or special interest topics in the humanities. The credit hours and the time in which the course will be offered will vary depending upon the situation.

HYDRAULICS

HYD 235 Hydraulics and Pneumatics 3-0-3
The basic theories of hydraulic and pneumatic systems. Combinations of systems in various circuits. Basic designs and functions of circuits and motors, controls, electrohydraulic servomechanisms, plumbing, filtration, accumulations and reservoirs.

INSURANCE

INS 273 Life, Accident, and Health Insurance 4-0-4
This course includes a study of life insurance from the following points of view; life exposure, types of life insurance and life policy provisions. Health insurance will be discussed on the following points: health exposure, types of health insurance and health policy provisions. Social insurance topics will cover social security, unemployment compensation, and disability insurance. Approved by the N.C. Department of Insurance for licensing.

INS 274 Property and Liability Insurance 4-0-4
This course includes a study of property insurance, types of automobile insurance, general liability, commercial fire, homeowners, crime insurance, and government fire and casualty insurance. Approved by the N.C. Department of Insurance for licensing.

INS 275 Medicare Supplement & Long-Term Care 1-0-1
Upon successful completion of this course, the student should be knowledgeable of the basic health care benefits provided under Medicare and Long-Term Care.

INS 278 Personal Risk Management and Insurance II-CLU 4-0-4
A study of risk management as it applies to life insurance, retirement income, investments, business health insurance, estate planning and personal insurance cases.

INS 280 Income Taxation-CLU 4-0-4
The federal income tax system with particular reference to the taxation of life insurance and annuities. The income taxation of individuals, sole proprietorships, partnerships, corporations, trusts, and estates. The way income tax laws apply to transactions of individuals and businesses is important to financial services professionals in planning that can result in minimization or deferral of taxation. (W)

INDUSTRIAL SCIENCE

ISC 111 Occupational Safety and Health 3-0-3
Problems of accidents and fire in industry. Management and supervisory responsibility for fire and accident prevention. Additional topics cover accident reports and the supervisor; good housekeeping and fire prevention; machine guarding and personnel protective equipment; state industrial accident code and fire regulations; the first aid department and the line of supervisory responsibility; job instruction and safety instruction; company rules and enforcement; use of safety committees; insurance carrier and the Insurance Rating Bureau; and advertising and promoting a good safety and fire prevention program. (W)

ISC 113 Statistical Quality Control 3-0-3
An introduction to probability, statistics, and quality control techniques. Includes graphs, measures of central tendency, grouped and ungrouped data, and problem solving. (Sp)

ISC 114 Advanced Statistical Quality Control 3-0-3
This course is designed for those who have taken Statistical Quality Control (ISC 113), quality control people, and managers. Material used in this course will be more in depth, with extensive charting and involved projects. The class will be limited to 20 students.

ISC 118 Industrial Safety 3-0-3
A study of the development of industrial safety; accident occurrence and prevention; safety education and training; accident reporting and records; employer/employee responsibility; safety organizations; first aid; mechanical safeguards; personal protective equipment use; materials handling; fire prevention; safety codes; and accident statistics.

ISC 121 Industrial Engineering Applications 3-0-3
To give supervisors, department heads, and staff managers an appreciation of the value of time study principles and methods engineering in a company; the approaches used, and likely applications. (F)

ISC 216 Job Analysis and Evaluation 3-0-3
This study is an integral part of Wage and Safety Administration. The job, as well as the person performing the job, are analyzed and evaluated in order to determine a job's relative worth to a company.

ISC 221 Production Planning and Management 3-0-3
Modern concept in the control of manufacturing production. Students will have an opportunity to study a production system with the specific purpose of identifying unnecessary costs. Making sound decisions through a common sense approach. Day-to-day plant direction, forecasting, product planning and control, scheduling, dispatching, routing, and inventory control. Case histories are discussed and actual layouts are utilized for planning and control. (Sp)

ISC 236 Manufacturing Quality Control 3-0-3
Modern concepts of the quality function in industry to maximize customer satisfaction at optimum product cost. Special attention will be given to statistical process control.

MATHEMATICS

MAT 090 Basic Math 2-3-3*
This is a course designed to provide a strong background in the fundamental arithmetic skills necessary for further study in any area of mathematics. Detailed attention is given to addition, subtraction, multiplication, and division of whole numbers, fractions, and decimals. Percentage, ratio, proportion, and applications of these skills are also covered. (F,W,Sp,Su)

MAT 095 Basic Algebra 2-3-3*
This course is designed to provide background in the fundamentals of algebra required of students planning to take MAT 0150. Topics include integers and rational numbers, operations of polynomials, the solution and graphing of linear equations and inequalities, factoring. Prerequisite: MAT 0090 or satisfactory placement test score. (F,W,SP,Su)

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

MAT 107 Mathematics Principles 3-0-3
A course designed to expand basic math concepts while developing proficiency on a ten-key electronic calculator to provide students with entry level business math skills. Prerequisite: Satisfactory placement test score in arithmetic or MAT 090. (F,W,Sp,Su)

MAT 111 Technical Mathematics 3-0-3
A course in basic applied geometry and right triangle trigonometry for students in management, police science, and other technical areas. Topics include: angles, triangles and other plane figures, solid figures, areas, volumes, trigonometric ratios, triangle solving, and vectors. Prerequisite: MAT 0090 or satisfactory placement test score in algebra. (W,Sp)

MAT 150 Intermediate Algebra 5-0-5
A course designed for students who plan to take College Algebra and Trigonometry (MAT 151) but who do not have an adequate background in algebra. The course includes a detailed study of: factoring; rational expressions; graphing; linear, quadratic, and linear absolute value equations; linear and quadratic inequalities; rational exponents and radicals. MAT 150 is developmental in nature and carries elective credit only. A student who has received credit (with at least a "C") for MAT 151,or MAT 152 may not take MAT 150 for credit. Prerequisite: Satisfactory placement test scores in arithmetic (or MAT 090) and algebra (or MAT 095). (F,W,Sp,Su)

MAT 151 College Algebra and Trigonometry I 5-0-5
The first in a two-quarter sequence of courses in algebra and trigonometry designed to provide thorough preparation for study in calculus, physics, chemistry, and other areas of technology. Topics include: polynomials, exponents, radicals, equations and inequalities, relations and functions, systems of equations and inequalities, exponential and logarithmic functions, and an introduction to trigonometry. A student who has received credit (with at least a "C") for MAT 161 (Calculus) may not take MAT 151 for credit except by special permission. Prerequisite: Satisfactory placement test scores or MAT 150. (F,Sp,Su)

MAT 152 College Algebra and Trigonometry II 5-0-5
A continuation of MAT 151. Topics include: trigonometric functions and their inverses, trigonometric identities and equations, triangle solving and vectors, complex numbers, theory of equations, polynomial and rational functions, sequences and series, and an introduction to probability. Prerequisite: MAT 151 or permission of instructor. (W,Sp,Su)

MAT 153 Pre-Calculus 5-0-5
An overview of algebraic concepts and an intense treatment of functions, including polynomial, rational, logarithmic, exponential, and trigonometric. A thorough study of analytic geometry and systems of equations is also included. This course is recommended for those students planning to take MAT 161. Credit cannot be given for MAT 153 and both MAT 151 and MAT 152.

MAT 160 Calculus with Business Applications 5-0-5
A course using the concepts of differentiation and integration placing particular emphasis upon their applications to solving problems that arise in business and economics. This course is designed primarily for business, economics, and social science majors and is not open to mathematics majors and cannot be used to satisfy the 10 hour math requirement. Prerequisite: MAT 152.

MAT 161 Calculus and Analytic Geometry I 5-0-5
A first course in calculus and analytic geometry. Topics include: functions, limits and continuity, the derivative, curve sketching and other applications of the derivative, anti-derivatives, and the definite integral. Prerequisite: MAT 152 or satisfactory placement test scores. (F,Sp)

MAT 162 Calculus and Analytic Geometry II 5-0-5
A second course in calculus and analytic geometry with emphasis on the calculus of transcendental functions and methods of integration. Topics include: differentiation and integration of trigonometric, inverse trigonometric, logarithmic, exponential, and hyperbolic functions, methods of integration and applications of the integral. Prerequisite: MAT 161. (F,W)

MAT 163 Calculus and Analytic Geometry III 5-0-5
A third course in calculus and analytic geometry, with emphasis on analytic geometry and series. Topics include: vectors in the plane and in space, polar coordinates, conic sections, parametric equations, indeterminate forms, and infinite series. Prerequisite: MAT 162. (Sp)

MAT 170 Introductory Statistics 5-0-5
A course dealing with collecting, representing, analyzing, and interpreting data. Topics include: measures of central tendency and dispersion; an introduction to probability, permutations, and combinations; binomial and normal distributions; large and small sample theory and hypothesis testing; correlation and regression; and chi-square. Problems and applications from several disciplines are included. The course is especially recommended for students who plan to major in mathematics, science, medicine, psychology, sociology, and business administration. Prerequisite: MAT 151. (Sp,Su)

MAT 261 Calculus and Analytic Geometry IV 5-0-5
A course in solid analytic geometry and multivariate calculus. Topics include: three-dimensional coordinates, vectors, directional derivatives, partial derivatives, quadratic surfaces, multiple integrals, line integrals, and differential equations. Prerequisite: MAT 163. (Su)

MAT 265 Linear Algebra 5-0-5
A study of vectors, matrices and linear transformations including systems of linear equations and determinants. Prerequisite: MAT 163.

MAT 270 Differential Equations 5-0-5
A study of the theory, methods of solution, and applications of ordinary differential equations with emphasis on first order equations and linear equations. Additional topics will include power series, Laplace transforms, linear systems, and numerical methods. Prerequisite: MAT 261.

MAT 1101 Math Fundamentals 3-0-3
Review and practice in the fundamental operations with whole numbers, fractions, decimals, and percentage. Formulas and practice problems are drawn from the skill areas of the vocational programs. (F)

MAT 1102 Measurements 3-0-3
A study of linear measurements, measuring devices, angles, perimeters, areas, volumes, and metric units. Prerequisite: Permission of advisor. (W)

MAT 1123 Machinist Mathematics 3-0-3
Introduces gear ratios, lead screw and indexing problems with emphasis on application to the machine shop. Practical applications and problems furnish the trainee with experience in geometric propositions and trigonometric relations to shop problems; concludes with an introduction to compound angle problems.

MECHANICAL

MEC 101 Manufacturing Processes I 3-9-6
An introduction to the machine shop as it relates to engineering operations. The student will study machine tool safety, basic hand tools, layout tools, semi-precision measuring instruments, and precision measuring instruments. Operations on engine lathes, drilling machines, grinders, and metal cutting saws will also be introduced.

MEC 102 Manufacturing Processes II 3-9-6
Continued instruction in the use of precision measuring tools, engine lathes, drilling machines and other machining tools. Also, an introduction to gauging, inspection, machine setup, surface grinders and milling machines. Secondary operations such as assembly of parts, fits, buffing and polishing will also be covered.

MEC 103 Manufacturing Processes III 3-9-6
Practice in the setup and operation of machine tools such as engine lathes, milling machines, drilling machines, and grinders will be continued. Also included will be the selection and use of work holding devices, jigs and fixtures, feeds and speeds, cutting tools and coolants.

MEC 104 Manufacturing Processes IV 3-9-6
Instruction and practice in the use of precision machining operations while maintaining required tolerances. Also, an introduction to computer numerical controlled machining and other advanced machining operations.

MEC 110 Machine Processes 3-3-4
A course to acquaint the student with basic machine tools of industry through lectures, demonstrations, and hands-on practice. It will include the study of safety practices; measuring instruments; characteristics of basic machine tools, materials, and cutting tools; and actual experience on lathe, drill press, milling machines, shaper and grinder.

MEC 112 Introduction to Manufacturing 3-3-4
A basic introduction to manufacturing, both the industry and the processes used. A good understanding of various industries, tools materials, processes and safety procedures is also necessary. Research and development, production planning and industrial processes will be covered.

MEC 113 Numerical Control Principles 3-3-4
An introductory course to acquaint the student with principles and application of numerical control. Relationships between machine tools, mathematics, and drafting practices are presented. New developments in numerical control are discussed.

MEC 117 Industrial Material and Processes 3-3-4
This course is designed to introduce the student to the important engineering materials of industry and how they are processed. The student will receive broad understandings and concepts of the nature, processing, application, and testing of industrial materials such as metals, woods, plastics, and ceramics. Much emphasis will be placed upon problem solving and fundamental engineering applications.

MEC 118 Introduction to Metals 3-3-4
This course is designed to familiarize the student with the different properties of ferrous and non-ferrous metals. It provides a background for understanding the physical changes and chemical metallurgy of producing metal. The course explains the material designation system, classifications of steels, trade names and cross-reference information for comparable materials. Common ship terms used in treatment of metals will be explained.

MEC 119 Applied Metallurgy 3-3-4
This course is designed to provide a working knowledge of the methods of treating ferrous and non-ferrous metals. The effects of hardening, tempering, and annealing upon the structure and physical properties of metals. Trainees will be given the opportunity to acquaint themselves with the equipment and processes of heat treating.

MEC 204 Applied Mechanics 5-0-5
Concepts and applications of statics and dynamics, force systems, moments and couples, equilibrium, trusses, friction, centroids, center of gravity, moments of inertia, motion, work, energy, momentum, and impulse are covered. Applications relating to the particular technology are introduced.

MEC 205 Strength of Materials 5-0-5
Study of stresses and deformation which occur within machine and structure elements subjected to various types of loads. Stress, strain, torsion, bending and factors affecting these area analyzed. Stresses in thin-walled cylinders and spheres, riveted and welded joints, beams, columns and machine components are also covered.

MEC 208 Machine Design 3-3-4
A study of factors affecting the design of machines. Applications of the principles of mechanics, properties of materials, manufacturing processes and economics of production fundamental to the design of machine components. Empirical and theoretical equations, practical considerations, and design procedures are included.

MEC 240 Computer Numerical Control Programming 3-3-4
Computer Numerical Control Programming is designed to teach students with numerical control skills how to develop part geometry and use computer software to write a CNC program. Using computers in programming CNC machines will greatly lessen programming time, eliminate many programming errors, enable programmers to simulate part machining on the computer to ensure accuracy and safety of machine moves, and provide fast and easy changes to the CNC program.

MEC 1101 Machine Shop Theory and Practice I 4-12-8
An introduction to the metalworking trade as it relates to machining operations. The student will be oriented to the machine shop, safety, basic hand tools, and shop measuring instruments. Operations on engine lathes, drilling machines, metal cutting saws, milling machines, and bench grinders will also be covered.

MEC 1102 Machine Shop Theory and Practice II 4-12-8
An introduction to the assembly of parts, fits, hand broaches, screw and tap extractors, setup equipment, inspection tools, gauges, buffing and polishing, and surface grinders. Continued instruction in the use of precision measuring tools, selection of speeds and feeds, reciprocating and continuous band cut-off saws, contour band saws, lathes, power drills, and milling machines.

MEC 1103 Machine Shop Theory and Practice III 4-12-8
An instruction and practice in the use of precision measuring tools, milling machines, and surface grinders. Practice is setting up and operating machine tools including the selection and use of work holding devices, feeds and speeds, special heads and table cutting tools, and coolants. Instruction and practice in the use of power feed drills and abrasive saws.

MEC 1104 Machine Shop Theory and Practice IV 4-12-8
The student will work to required tolerances setting up and operating machine tools. An introduction to turret lathes, advanced milling machine operations, special machining operations, and special machines. Also covered will be grinding specific surfaces using hand, surface and cylindrical grinders, and lapping and honing parts to specific tolerances.

MEC 1112 Machine Shop Processes 1-3-2
This course acquaints the student with the procedures of layout work and the correct use of hand and machine tools. Experiences in the fundamentals of drill press and lathe operations, hand grinding of drill bits and lathe tools, and set-up work applied to the trade are provided. Prerequisite: None.

MEC 1140 Metallurgy for Welders 3-0-3
Emphasis will be placed on the methods of treating ferrous and non-ferrous metals. The effects of hardening, tempering, and annealing upon the structure and physical properties of metals will be studied.

MARKETING

MKT 119 Small Business Marketing & Sales Strategies 2-0-2
This course is designed for a person already in a small business or those committed to starting one. The course will include developing practical marketing guidelines, conducting marketing research, learning basic elements of a sound sales approach and formulating sales campaigns.

MKT 120 Marketing 3-0-3
A general survey of the field of marketing, with a detailed study of the function, policies, and instructions involved in the marketing process. Emphasis on marketing management. (F)

MKT 131 Small Business Sales Technique 2-0-2
This course is designed for persons already in a small business or for those committed to starting one. The course covers contacting new prospects and expanding their sales network, learning techniques to identify the needs and wants of potential customers, and learning methods to ensure future sales and referrals.

MKT 132 Sales Development 3-0-3
A study of retail, wholesale and specialty selling with emphasis placed upon mastering and applying the fundamentals of selling. Preparation for an execution of sales demonstration required. (Sp)

MKT 210 Advertising, Sales & Promotion 3-2-4
A study of the various aspects of advertising including the different forms of advertising. The psychology of advertising and sales will be studied. An examination of rate cards and other sales tools, preparing and delivering sales presentations, obtaining and retaining accounts, and a look at agencies, administration and compensation will be made.

MKT 243 Advertising 3-0-3
The role of advertising in a free economy and its place in the media of mass communications. A study of advertising appeals, product and market research, selection of media, means of testing effectiveness of advertising. Theory and practice of writing advertising copy for various media. (W)

APPLIED MUSIC

APPLIED MUSIC is the term given to the study of an instrument. The student may choose to study as his principal instrument Voice, Piano, Brass, Woodwind, Percussion, or Organ, depending upon prior experience or musical aptitude as shown in his/her audition. Each music major is required to accumulate 12 credit hours of Applied Music for graduation. A student may choose a secondary instrument for which a total of 6 credit hours may be earned.
APPLIED MUSIC: For Music Majors and advanced students. Audition is required before registering. Classes are self-supporting; additional fees are required. One hour lesson per week (TBA); 2 credit hours.
MUA 110, 111, 112 - Applied Voice (Major-Principal) I, II, III
MUA 210, 211, 212 - Advanced Applied Voice (Major-Principal) IV, V, VI
MUA 120, 121, 122 - Applied Piano (Major-Principal), I, II, III
MUA 220, 221, 222 - Advanced Applied Piano (Major-Principal) IV, V, VI
MUA 130, 131, 132 - Applied Brass (Major-Principal) I, II, III
MUA 230, 231, 232 - Advanced Applied Brass (Major-Principal) IV, V, VI
MUA 140, 141, 142 - Applied Woodwind (Major-Principal) I, II, III
MUA 240, 241, 242 - Advanced Applied Woodwind (Major-Principal) IV, V, VI
MUA 150, 151, 152 - Applied Percussion (Major-Principal) I, II, III
MUA 250, 251, 152 - Advanced Applied Percussion (Major-Principal) IV, V, VI
MUA 160, 161, 162 - Applied Organ (Major-Principal) I, II, III
MUA 260, 261, 162 - Advanced Applied Organ (Major-Principal) IV, V, VI
APPLIED MUSIC: For non-majors or study in secondary instruments. Audition is required before registering. Classes are self-supporting; additional fees are required. One 1/2 hour lesson per week (TBA): 1 credit hour.
MUA 113, 114, 115 - Applied Voice (Secondary) I, II, III
MUA 213, 214, 215 - Advanced Applied Voice (Secondary) IV, V VI
MUA 123, 124, 125 - Applied Piano (Secondary) I, II, III
MUA 223, 224, 225 - Advanced Applied Piano (Secondary) IV, V, VI
MUA 133, 134, 135 - Applied Brass (Secondary) I, II, III
MUA 233, 234, 235 - Advanced Applied Brass (Secondary) IV, V, VI
MUA 143, 144, 145 - Applied Woodwind (Secondary) I, II, III
MUA 243, 244, 245 - Advanced Applied Woodwind (Secondary) IV, V, VI
MUA 153, 154, 155 - Applied Percussion (Secondary) I, II, III
MUA 253, 254, 255 - Advanced Applied Percussion (Secondary) IV, V, VI
MUA 163, 164, 165 - Applied Organ (Secondary) I, II, III
MUA 263, 264, 265 - Advanced Applied Organ (Secondary) IV, V, VI

MUSIC

MUS 151 Introduction to Music History I 3-0-3
A course which introduces the student to the materials of music, music terminology, the make-up of an orchestra, and forms and styles of music. It will focus on master works through the Baroque Period. Listening is emphasized.

MUS 152 Introduction to Music History II **3-0-3**
A continuation of MUS 151. This course will focus on forms and styles of master works from the Classical, Romantic, and Modern Periods. Listening is emphasized.

MUS 160 Music Theory I **3-2-4**
An introduction to the basic concepts of music theory and the materials of music: aural, analytical, vocal, and keyboard applications. Lecture 3, Lab (sight singing and ear training)2.

MUS 161 Music Theory II
Expansion of materials in MUS 160 with emphasis on part-writing. Prerequisite: MUS 160 or permission of instructor. Lecture 3, Lab 2.

MUS 162 Music Theory III **3-2-4**
Expansion of materials in MUS 161 with emphasis on dominant seventh chord, modulation, and secondary dominant chords. Prerequisite: MUS 161, or permission of instructor.

MUS 170 Chorus **0-3-1(each)**
This study-activity course is designed to give the student a deeper understanding, appreciation, and enjoyment of choral music, its practice and performance. This choral class is open to all students in all divisions of the college who wish to continue their interest in part singing (soprano, alto, tenor, bass). This course may be taken 6 quarters for credit. No auditions are required.

MUS 173 Class Piano I **0-3-1**
The student participating in Class Piano I will, at its conclusion, be able to demonstrate mastery of the repertoire and written assignments in Units I through IV of The Older Beginner Piano Course Level I. The student will also be responsible for supplementary repertoire chosen by the student with instructor approval. Mastery of these assignments must be demonstrated on tests which will be administered at regular intervals (including written work and piano performance), which must be passed before the student proceeds to the following levels. Each student will proceed at this own rate. Open to all students.

MUS 174 Class Piano II **0-3-1**
The student participating in Class Piano II will, at its conclusion, be able to demonstrate mastery of the repertoire and written assignments, Units VI through X in The Older Beginner Piano Course Level I. The student will also be responsible for supplementary repertoire chosen by the student with instructor approval. Mastery of these assignments must be demonstrated on tests which will be administered at regular intervals (including written work and piano performance), which must be passed before the student proceeds to the following levels. Each student will proceed at his own rate. Prerequisite: Successful completion of Class Piano I or the approval of the instructor based on written tests and performance skills.

MUS 175 Class Piano III **0-3-1**
The student participating in Class Piano III will, at its conclusion, be able to demonstrate mastery of the repertoire and written assignments in Units I through VII in The Older Beginner Piano Course Level II. The student will also be responsible for supplementary repertoire chosen by the student with instructor approval. Mastery of these assignments must be demonstrated on tests which will be administered at regular intervals (including written work and piano performance), which must be passed before the student proceeds to the following levels. Each student will proceed at his own rate. Prerequisite: Successful completion of Class Piano I and II, or the approval of the instructor based on written tests and performance skills.

MUS 176 Class Piano IV **0-3-1**
The student participating in Class Piano IV will, at its conclusion, be able to demonstrate mastery of the repertoire and written assignments in Units VIII through X in The Older Beginner Piano Course Level II, plus all the Major Scales and Supplementary Repertoire in the text. The student will also be responsible for other supplementary repertoire chosen by the student with instructor approval. Mastery of these assignments must be demonstrated on tests which will be administered at regular intervals (including written work and piano performance), which must be passed before the student proceeds to the following levels. Each student will proceed at his own rate. Prerequisite: Successful completion of Class Piano I, II, and II, or the approval of the instructor based on written tests and performance skills.

MUS 177, 178, 179 Class Voice I, II, III **0-3-1(each)**
Elementary courses in singing in which both group and individual techniques are employed. Emphasis is on the study of voice production and principles of singing.

MUS 181 Music Appreciation **3-0-3**
This course is designed to give the student an understanding of basic materials of music and to enable him to listen to the various forms of music with deeper understanding, appreciation, and pleasure. Representative works related to historical and cultural background of music from the Middle Ages to the Contemporary Period are studied and compared by lectures and aural analysis. Listening is emphasized. Open to all students.

MUS 182 Jazz Appreciation **3-0-3**
This course is designed to give the student new insights and general knowledge of the historical evolution of jazz in the United States and of all jazz styles. Listening will be emphasized. This course does not require previous musical training.

MUS 183 Intro to Conducting **3-0-3**
This course is an introduction to choral direction, focusing on basic techniques in conducting and training choral groups. It includes conducting in a variety of musical styles, improving vocal technique, and teaching sight reading and music theory to your choral group.

MUS 184 Opera Workshop **0-3-1**
Each fall, an opera is presented in the local area. This course is a study of the particular opera in terms of its history and content. The class also services as the chorus for the opera in actual performance. In the event that an opera is not produced in the fall, various opera scenes will be performed by the class. This course may be taken 2 quarters for credit.

MUS 185 Chamber Singers **0-3-1**
A vocal group specializing in the performance of chamber literature of all periods. Although designed primarily for music majors, the group is open to all students by permission of the instructor. This course may be taken 2 quarters for credit.

MUS 186 Stage Band **0-3-1**
This course is designed to provide basic experience in the performance of stage band literature. Instrumentation is flexible, but includes alto sax, tenor sax, baritone sax, trumpets, trombones, and rhythm. Jazz, swing, blues, and contemporary styles will also be introduced. Proficiency in playing an appropriate instrument is required. This course maybe taken 6 quarters for credit.

MUS 187 Show Choir **0-3-1**
Show choir is a performing group by audition and/or invitation only, as class size is limited. Singing, choreography, and costumes are involved. This course may be taken 6 quarters for credit.

MUS 188 Gospel Choir **0-3-1**
This course will survey the Afro-American cultural and musical heritage. Major emphasis will be placed on music of the gospel style.

MUS 190 Special Approaches to Music **0-3-1**
This ensemble course will deal with timely or special interests in music. Specific approaches will vary depending on the talents and interests of students and faculty.

MUS 273 Advanced Class Piano **0-3-1**
In an electronic piano laboratory setting, students will receive group and individual instruction. Repertoire will include solo, duet, and ensemble compositions. Prerequisite: Class Piano I-IV or equivalent.

NUR 100 Nursing Role Transition **3-2-0-4**
This course is designed to facilitate the entry of the practical nurse graduate seeking advanced placement into the second year (fourth quarter) of the Foothills Nursing Consortium Associate Degree program. The program's philosophy, Conceptual framework, objectives and the legal roles and responsibilities of registered nurses will be presented and practice skills will be reviewed and supplemented to equate the level of mastery of the generic student specifically in the areas of: nursing practice, nursing process, physical assessment, nursing diagnosis, nursing care planning, patient teaching, and documentation. Practice in calculating dosages and solutions of medications/fluids will also be included. A minimum grade of "C" is required for all advanced placement candidates prior to being accepted into the nursing program and must be updated every three years.
Prerequisites: LPNs or PNE graduate of an approved program requesting advanced placement. (on demand)

NUR 101 Basic Concepts of Nursing I **6-4-3-9**
Basic Concepts of Nursing is a foundational course which provides the opportunity for students to explore basic facts, principles and concepts related to nursing roles and functions, patient needs, nursing problems, the nursing process, and the nurse-patient relationship. Units are included in the nurse's role in assessing and meeting patients' needs for comfort, cleanliness, rest, activity, and safety, and the needs of individuals with altered body functions.
Prerequisite: Admission to Program
Corequisite: NUR 102, HEA 120, BIO 270

NUR 102 Pharmacological Concepts in Nursing **3-0-0-3**
A study of principles and skills utilized in the computation and administration of medications. Major classifications of drugs are introduced as a basis for continued study of pharmacology. The course emphasizes the nursing roles of provider of care, and client/patient teacher. Pharmacological agents are considered as a means of promoting health and treating illness in individuals throughout the life span. The nursing process is presented as a means of assessing and providing for optimum safety, and legal implications. (Lab time is shared with NUR 101)
Prerequisite: Admission to Program
Corequisite: NUR 101

NUR 103 Nursing Care of Adults I **4-2-12-9**
A study of health care needs of the adult with common problems related to cellular function, sensory, urological, mobility and oxygenation alterations, utilizing concepts of prevention, psychophysiotherapy, and nursing management.
Prerequisites: NUR 101, 102, HEA 120
Corequisite: BIO 271.

NUR 104 Nursing Care of Adults II **4-0-12-8**
Health care needs of individuals with common health problems related to hemotologic, ingestive, absorptive, eliminatory, metabolic regulatory, and reproductive disorders. The concepts of prevention, psycholphysiotherapy, and nursing management are utilized to guide the course of study.
Prerequisites: NUR 103
Corequisites: BIO 272

NUR 105 Mental Health Nursing **5-0-12-9**
A study of the person experiencing altered patterns of behavior. Major focus is upon coping mechanisms, appropriate nursing intervention, psychotherapeutic modalities, communication skills, and the formation of therapeutic relationships. The concepts of Maslow's Hierarchy of Needs and the nursing process are utilized.
Prerequisites: NUR 105, PSY 261
Corequisites: none

NUR 201 Nursing Care of the Older Adults **4-0-12-8**
The course provides the student an opportunity to utilize the nursing process in meeting the needs of the older adult in the acute care, long-term care, and the community settings. Special emphasis will be placed on the aging process as it applies to the body systems and development changes. Content will include pathological alterations commonly occurring in the older adult. Planned learning experiences will be designed to give the student contact with the older adult in a variety of situations. Methods of Management, Prevention, and rehabilitation will be studied.
Prerequisite: NUR 202
Corequisite: none

NUR 202 Nursing Care of the Childbearing Family **5-0-12-9**
A study of the roles of the associate degree nurse in the health care of the mother, infant, and family during the normal and high-risk childbearing cycle using the nursing process and a human needs theory as guides. (1/2 quarter)
Prerequisites: NUR 105, SOC 160
Corequisites: none

NUR 203 Nursing Care of Children **5-0-12-9**
A study of the health care of children utilizing a human needs theory, the nursing process, the nursing roles, and principles of growth and development. Both health maintenance and care of the ill child are emphasized. Consideration is given to the child within his/her family unit. (1/2 quarter)
Prerequisite: NUR 105, SOC 160
Corequisite: none

NUR 204 Nursing Care of the Adult III **5-0-15-10**
Health care needs of the adult experiencing health problems which accompany serious or critical illness. Provides the learner with the opportunity for implementation of the nursing process in complex nursing situations. In addition, emphasis is placed upon integration of concepts, skills, and responsibilities designed to aid in the transition from nursing student to registered nurse. Understanding of the ADN roles are enhanced through a comprehensive clinical practicum in a variety of structured settings.
Prerequisites: All NUR courses
Corequisite: NUR 205

NUR 205 Nursing Perspectives and Issues **3-0-0-3**
Major trends and issues impacting the profession of nursing. Selected events, organizations, legal and ethical aspects, opportunities, and responsibilities related to the practice of nursing are addressed. The role and functions of the associate degree nurse within the scope of nursing practice and the health care system are considered. Maslow's Hierarchy of Needs provides a framework for focusing on the student, client, and society.
Prerequisites: NUR 203
Corequisites: NUR 204

NUR 1101 Nursing Fundamentals **6-4-3-9**
This course is designed to assist the student in acquiring the attitudes, knowledge, and understanding necessary to give care to patients of all ages and backgrounds. Emphasis is on consideration of the total patient and mental, emotional, and physical needs. Prerequisites or corequisites: BIO 270, NUR 1105, NUT 1109. (F)

NUR 1102 Medical Surgery I **9-0-12-13**
Introduces the student to the fundamentals of medical-surgical patient care with the central objective of performing assistance to patients with medical-surgical conditions. The student should be able to recognize modern concepts of nursing as applied to medical and surgical nursing, to discuss causes of disease, to describe methods of diagnosis, to applying beginning skills in assisting with diagnostic procedures, to discuss therapeutic methods commonly prescribed, and a study of the systems of body and related nursing care. Clinical experience will reinforce classroom learning. The student is assigned to specific areas in the hospital for care of medical, surgical, obstetric and pediatric patients, as well as orthopedic, urological obstetric, and gynecological clinics.
Prerequisite: NUR 1101, NUR 1105, NUR 1109. Corequisites: BIO 271, NUR 1107. (W)

NUR 1103 Maternity Nursing **5-0-9-8**
Introduces to the student the basic concepts of maternity care so that the highest level of health possible for every childbearing family be achieved in the broader sense of physical, emotional and social well-being. Knowledge of the anatomy and the physiology of the reproductive organs and of the development of the unborn child from conception to birth is also stressed. The student will apply beginning skills in nursing care during pregnancy, labor and delivery, the post partum period, normal newborns, and infants with disorders or special needs.
Prerequisites: NUR 1104. (Su)
Corequisite: NUR 1108

NUR 1104 Medical Surgery II **8-0-18-14**
This course is designed to develop knowledge and skill in the area of care for the seriously ill patients. Emphasis is given to the principles and beginning skills of nursing as related to care of the seriously ill patients. A clinical component is included.
Prerequisite: NUR 1107. (Sp)

NUR 1105 Pharmacology I **3-0-0-3**
A study of methods applied to calculating drug dosages by the use of the apothecaries and metrics systems and the development of the skills in preparation and administration of medications.
Corequisite: NUR 1101. (F)

NUR 1107 Pharmacology II **1-0-0-1**
A continuation of Pharmacology I. This course is a study of the legal aspects of drug administration, the methods of drug administration and an introduction to drug classification.
Prerequisite: NUR 1105, NUR 1109. (W)

NUR 1108 Pediatrics **5-0-9-8**
Pediatrics is designed to assist the student to understand the difference between diseased children and adults. Basics of child growth and development and common disease of infants, children, and adolescents and special nursing care are included.
Prerequisites: NUR 1104.
Corequisite: NUR 1103. (Su)

NURSING ASSISTANT/GERIATRIC

NUR 1003 Basic Nursing Assistant Procedures II **4-0-3-5**
A continuation of procedures covered in NUR 1115. Additional topics include measures to promote the patient's comfort, special types of patient care, and methods of becoming a successful health care employee. Prerequisite: NUR 1115 or discretion of division chairman.
Corequisites: NUR 1004, NUR 1005, NUR 1006. (W,Su)

NUR 1004 Geriatric Care II **3-0-0-3**
Study of the placement of geriatric patients and agencies concerned with care of the elderly. Also covered are the aging process, behavior patterns among the aged, methods of providing for socio-psychological needs of the aged, and physical needs resulting from aging. Prerequisite: HEA 1101 or discretion of Division Chairman. Corequisites: NUR 1003, NUR 1005, NUR 1006. (W, Su)

NUR 1005 Geriatric Care Practicum I **0-0-21-7**
A continuation of HEA 1104 in which the student receives advanced skills for basic care of patients including CPR and first aid. Corequisite: NUR 1004. (W,Su)

NUR 1006 Recreation and Activities for the Elderly Patient **3-0-0-3**
Identification of special needs of the elderly as modified by the normal and abnormal processes of aging. Study of factors that are included in a definition of physical fitness and specific methods to stimulate, motivate, and maintain fitness in the elderly through activities. (W,Su)

NUR 3023 Nursing Assistant I **2-2-6-5**
Survey of basic health science. Introduction to the role of nursing assistant, understanding the effects of illness and of learning how to perform treatment and make observations on geriatric patients. Safety measures in the care of the sick will also be covered. Prerequisite: None. Corequisites: NUR 3024, NUR 3025. (F,Sp)

NUR 3024 Nursing Assistant II **3-4-9-8**
Practical application of classroom knowledge will be presented in extended care units, retirement centers, and rest and nursing homes. All training in these centers will be under the direct supervision of the clinical instructor. Corequisites: NUR 3023, NUR 3025. (F,Sp)

NUR 3025 Home Care **2-2-0-3**
Study of the physical aspects of the aging process and the aged. Topics covered include nutritional needs of the aged, observing the aged for changes in condition, protection of the aged, safe practices related to medications, continuity of care for the aged, and developing competency in working with senior citizens. Corequisites: NUR 3023, NUR 3024. (F,Sp)

NUTRITION

NUT 110 Nutrition **1-6-3**
This course is designed to assist the students in acquiring the knowledge to serve wholesome and attractive meals that meet children's nutritional needs. Also to make meal time a pleasant and sociable experience.

NUT 160 Basic Nutrition **3-0-3**
A study of the basic dietary needs of man including the study of nutrients, digestion, absorption, and metabolism, as well as contemporary issues on nutrition and food preservation. (W)

NUT 1109 Nutrition and Diet Therapy **3-0-0-3**
Nutrition is designed to provide knowledge of function and sources of nutrients; mechanics of digestion, absorption, metabolism; principles of meal planning and therapeutic use of special diets. (F)

ORIENTATION

ORI 100 Student Orientation Seminar **1-0-1**
This course is required of all full-time technical and college transfer students enrolling for the first time. It is designed to assist you in developing an attitude which will help you appreciate the value of higher education, point the way to college resources that will allow you to develop to your fullest potential, and thereby enable you to survive your college experience. (This course is not required for students with advanced academic standing.)

ORI 164 Study Skills **3-0-3**
A course designed to improve the student's ability to study more efficiently. The following topics will be included: practical methods in studying for and in taking tests; principles of notetaking, outlining, and other study skills designed to aid students during their college days. (F,W,Sp,Su)

OFFICE SCIENCE

OSC 101 Keyboarding/Document Formatting I **2-3-3**
Students who have had no previous typewriting experience or those students who cannot prove competency on a typewriting placement test should take this course. This course is an introduction to the touch typewriting system with emphasis on correct techniques, mastery of the keyboard, simple business correspondence and tabulation. The student should, at the end of the course, be able to type 30 words per minute for three minutes with no more than five errors. (F,W,Sp,Su)

OSC 102 Document Formatting II 3-2-4
Instruction emphasizes the development of speed and accuracy with further mastery of correct typewriting techniques. These skills and techniques are applied in tabulation, correspondence, manuscripts, and business forms. The student should, at the end of the course, be able to type 40 words per minute for five minutes with no more than five errors. Prerequisite: OSC 101 or proof of competency on a typewriting placement test. (F,W,Sp,Su)

OSC 103 Document Formating III 3-2-4
Instruction emphasizes production typing problems and speed building. Attention is given to the development of the student's ability to function as an expert typist, producing mailable copies. The production units are tabulation, manuscripts, business letters, memos, telegrams, and legal documents. The student should, at the end of this course, be able to type 50 words per minute for five minutes with no more than five errors. Prerequisite: OSC 102. (F,W,Sp,Su)

OSC 108 Records Management 3-0-3
A course designed to teach the principles of filing and records management. The five methods of organizing records—alphabetic, geographic, subject, numeric, and chronological will be covered. (F,W,Sp,Su)

OSC 109 Transcription Skills 3-2-4
A course designed to build transcription and vocabulary skills. Course offers study of language skills in the area of word choice, spelling, capitalization, and punctuation. Prerequisite: None. (Sp,Su)

OSC 165 Word Processing Applications 3-2-4
This course is designed to increase efficiency and productivity while using a word processing software package. Prerequisite: CAS 163-Word Perfect.

OSC 204 Stenoscript 3-2-4
A course offering the theory and practice of ABC Shorthand. Emphasis on speed in taking dictation as well as accuracy in transcription. Minimum dictation rate of 60 words a minute required. (F,W,Sp,Su)

OSC 205 Machine Transcription 3-2-4
Course offers the opportunity for students to acquire employable skills in transcribing various forms of dictated material. Emphasis is placed on proficiency in using the dictaphone, word usage, correct grammar, letter styles, and general neatness. Prerequisites: OSC 109 and OSC 103 or the ability to type 50 w.p.m. with no more than 5 errors. (F,W,Sp,Su)

OSC 206 Medical Terminology 3-0-3
This is designed to teach the student the meanings of 350 Latin and Greek elements, or word parts. The knowledge of the 350 elements will enable the student to interpret and understand more than ten thousand medical terms. (F,W,Sp,Su)

OSC 207 Medical Vocabulary/Anatomy 3-0-3
This course is designed to teach basic human anatomy for the medical secretary or the medical records clerk. The student will learn to pronounce, spell, identify, and locate parts of the human anatomy. (F,W,Sp,Su)

OSC 208 Medical Transcription 3-2-4
A course in which the student transcribes from cassette dictation medical reports, letters, etc., dealing with the various branches of medicine. Prerequisites: OSC 102, OSC 109, OSC 206. (F,W,Sp,Su)

OSC 213 Secretarial Administration 3-0-3
A course designed to acquaint students with practical applications of secretarial responsibilities. These duties include receptionist duties, mail handling, telephone technique, travel information, telegrams, office records, supplies purchasing, office organizations, and time management. Prerequisite: OSC 103. (Sp)

OSC 219 Legal Terminology 3-0-3
Student learns legal terminology and procedures related to transactions. General legal terminology and specialized terms and phrases are covered. Student also acquires a knowledge of the structure of the American Court System. Prerequisite: None. (F,W,Sp,Su)

OSC 220 Legal Transcription 3-2-4
Student acquires employable skills in transcribing dictation of legal instruments and documents. Prerequisites: OSC 102, OSC 109, OSC 219. (F,W,Sp,Su)

PHYSICAL EDUCATION

*Note: Non-Credit recreational activity classes are offered on a self-supporting basis. Consult current class schedules for non-credit activity class schedules.

PED 150 Concepts in Physical Education 1-2-2
A thorough investigation into the theoretical and practical applications of basic concepts in physical education, such as: exercise, diet, and weight control; and exercise and heart disease. A lecture-laboratory course of instruction providing the individual with a complete physical fitness profile, and the ability to make intelligent decisions relevant to the development, maintenance, and evaluation of physical fitness and related health-fitness areas.

PED 151 Physical Fitness 0-3-1
A course of instruction designed to develop and maintain the following components of physical fitness: cardiovascular endurance, muscular endurance, strength, body composition, and flexibility. Individuals begin and progress at a rate suited to their present fitness level and personal needs.

PED 152 Aerobic Dance 0-3-1
An exercise course designed to improve physical appearance, muscle tone, loss of body fat, graceful movement, and relaxation. Integrated into the course will be discussions of diet, weight loss, and posture.

PED 153 Low Impact Aerobics 0-3-1
An easy-on-the-joints approach to cardiovascular conditioning. Adaptable for beginning through advanced level students. This class also includes exercises to increase strength and flexibility.

PED 154 Weight Training 0-3-1
A course of instruction designed to develop and maintain an adequate level of physical fitness through resistive (weight) training. Each student works and progresses through the program of exercise at a rate reflecting their present level of capability and needs.

PED 155 Fitness Through Swimming 0-3-1
A course of instruction for the fair to excellent swimmer designed to improve general physical fitness through swimming activities. The fitness program will include warm-up and cardiovascular endurance exercise through swimming.

PED 156 Water Aerobics 0-3-1
A physical fitness course designed to improve muscular strength, endurance, flexibility and cardiovascular endurance through mild resistive exercise in the water. The course will contribute to improve appearance, release tension, and with proper diet can aid in weight reduction. Highly recommended for individuals who may not be able to participate in other types of fitness exercise due to muscle, bone, joint, and other conditions, as exercise in the water reduces the overall stress on the body during exercise.

PED 160 Beginning Swimming 0-3-1
This course is designed for the adult non-swimmer. It is recommended for those who have a fear of water, have had previous difficulty in learning to swim, have never tried, or have hesitated to take a course for other reasons. Individuals will work at their own level and progress at their own rate. The primary objectives of the course are to build confidence and dissipate fear through water adjustment, breath control, coordination in skills, and relaxation. Not recommended for advanced level swimmers.

PED 161 Intermediate Swimming 0-3-1
A course designed to increase the individual's adjustment to the aquatic environment by adding to skills learned at the beginner level. Primary emphasis in the course is placed on developing relaxation, stamina, and basic coordination in fundamental swimming skills. Not recommended for the non-swimmer. Prerequisite: PED 0130 and/or the ability to jump into deep water, swim the crawl stroke a distance of 20 yards; swim a minimum of 10 yards on the back, and float on the back a minimum of 15 seconds.

PED 162 Swimming Techniques 0-1-3
A course devoted to developing and strengthening of skills in the basic swimming strokes and related water safety and recreational skills. American Red Cross Certification in intermediate swimming may be achieved through this course. Prerequisite: PED 0131 and/or the ability to jump into deep water, swim 25 yards using the crawl stoke, turn, and swim on back 20 yards, stop and float motionless for 30 seconds in deep water.

PED 163 Emergency Water Safety 0-3-1
The objective of this course is to provide the individual with the knowledge and skills designed to save his own life or the life of another in the event of an emergency. American Red Cross certification is obtainable through this course of instruction. Prerequisites: Intermediate Swimming and Basic Water Safety Certification or pass equivalent swim and safety skills tests.

PED 164 Lifeguard Training 0-3-1
A course of instruction designed to provide the necessary minimum skills training for a person to serve as a non-surf lifeguard. Prerequisites: (1) swim 500 yards continuously, (2) surface dive to 9 ft. and retrieve a 10 lb weight and bring it to the surface, (3) surface dive to 5 ft. and swim 15 yds under water, (4) tread water for 1 minute, (5) have, or earn prior to course completion, American Red Cross Certification in the new Standard First Aid or show current documentation of equivalent training. American Red Cross Certification is available through this course of instruction.

PED 165 Water Safety Instruction Training 0-3-1
A course of instruction leading to certification as an American Red Cross Water Safety Instructor. Prerequisite: Current Advanced Lifesaving Certification. (Sp)

PED 168 SCUBA Diving 0-3-1
A course of instruction designed to teach safety, basic skills, and knowledge of SCUBA diving. A student completing the course will be prepared to participate in open water diving to qualify for certification. Prerequisites: Swim 200 yards; tread water for 5 minutes; surface dive to a depth of 9 feet. (F,Sp,Su)

PED 170 Archery 0-3-1
Introduces the student to a versatile and exciting lifetime sport. Because of its few restrictions, archery can be performed by both sexes and is adaptable to the individual's physical capabilities. Included in the course are history, nature of the sport, fundamental skills, safety, competitive shooting and scoring.

PED 171 Bowling 0-3-1
A course of instruction designed to introduce the student to the fundamental skills and knowledge of the game. Includes instruction in rules, scoring, equipment, etiquette, and game playing experience.

PED 172 Beginning Golf 0-3-1
A course designed to develop and strengthen skill in the basic fundamentals of the game. Includes discussion of rules, equipment, playing strategy and etiquette. Not recommended for players of advanced ability.

PED 174 Karate I (Japanese Shotokan) 0-3-1
An introduction to the martial arts utilizing Japanese form referred to as Shotokan. Emphasis will be placed on proper conditioning, exercise, and body control relating to the fundamentals of self-defense. Attention will be given to Japanese terminology, including a historical overview of its foundation, ranks, promotion, and proper etiquette.

PED 176 Badminton 0-3-1
A course designed to develop and strengthen skill in the basic fundamentals of the game. Includes discussions of rules, equipment, playing strategy and etiquette.

PED 178 Beginning Tennis 0-3-1
A course designed to develop and strengthen skill in the basic fundamentals of the game. Includes discussions of rules, equipment, playing strategy and etiquette. Not recommended for players of advanced ability.

PED 180 Backpacking 0-3-1
A unique and innovative course for those who enjoy the out-of-doors. The course is designed to acquaint you with the various aspects of backpacking, to investigate the many facets of the subject and to make you feel qualified to participate in, and discuss, backpacking. This course includes field experience in a wilderness area.

PED 182 Basic Rock Climbing 0-3-1
A beginning course designed to teach the fundamental skills, knowledge of equipment, and safety of rock climbing. Practical application of skills and knowledge is achieved through an actual climb at a suitable location.

PED 184 Basic Canoeing 0-3-1
A basic course of instruction in the safe and correct handing of the canoe, rescue, and self-rescue skills. American Red Cross certification in Basic Canoeing is available through this course of instruction. Prerequisite: Ability to swim and stay afloat in deep water, fully clothed, for a minimum of 5 minutes.

PED 185 Basic River Canoeing 0-3-1
An opportunity for the beginner to experience the best whitewater in western North Carolina. Instruction will include skills of river running, safety and care of equipment. Application of skills and knowledge will be made on the school lake and a suitable river location. Prerequisite: Ability to swim and stay afloat in deep water for five minutes fully clothed.

PED 188 Basic Sailing 0-3-1
A course of instruction in the safe and correct handling of small sailing craft. (Sp)

PED 186 Canoe Camping 0-3-1
A course designed to teach the elementary skills of canoeing and camping. Emphasis in the course is placed on safety and efficiency in handling a canoe in calm to moderate water and, basic camping skills as they apply to the unique circumstances of extended canoe cruising. The course includes a two-four day field experience. Prerequisite: Ability to swim and stay afloat in deep water for five minutes fully clothed.

PED 190 Volleyball 0-3-1
A course designed to develop and strengthen skills in individual and team play fundamentals. Includes discussions of rules, playing equipment, and etiquette. Emphasis is on individual basic skill performance and development of sound team playing strategy.

PED 191 Sports and Games 0-3-1
A course of instruction designed to provide a variety of sports and recreational games. The course includes racquet sports, team sports, individual sports, and recreational activities and games.

PED 192 Clogging 0-3-1
A course designed to teach various types of positions, formations, steps, and identifiable characteristics of clogging.

PED 242 Physical Activities for Children 3-3-4
The student will develop techniques in teaching games and all phases of physical education related to day care and primary school children. The students will develop skills working with children in classroom and day care situations. This course is designed for students completing the child care worker or teacher associate program.

PED 250/251 Restrictive Physical Education 0-3-1
A course of study designed specifically to meet the need of those individuals who cannot enroll in regular physical education courses due to temporary or permanent physical impairment. Prerequisite: Completion of the Physical Education Restriction Form and approval by the designated Physical Education faculty member, prior to enrollment.

PHILOSOPHY

PHI 260 Introduction to Philosophy 3-0-3
An introduction to philosophy. This course will introduce the student both to the subject of philosophy and to the art of philosophy. In so doing, the student will study the great issues and the great persons whose work is the corpus of philosophy. Readings in the great issues will supplement the textbook. (F)

PHI 261 Introduction to Logic 3-0-3
An introduction to critical thinking. This course will introduce the student to the principles of formal and informal reasoning, fallacies, extended reasoning, and the relationship between and among beliefs, information, language, and values, and their effects on reasoning. (W)

PHI 262 Problems in Philosophy 3-0-3
An advanced study of philosophy. The subject matter of this course will range from classical to current issues in philosophy. New subject matter will be added at the discretion the instructor if it is timely or of special interest. Prerequisite: PHI 0260 or PHI 0261. (Sp)

PHOTOGRAPHY

PHO 101 Introduction to Photography I 2-3-3
Introduces students to photography. Begins with history of photography, different types of photography and uses for photography. Study of basic camera operations, and films.

PHO 105 Photography II 3-3-4
Will study black and white photographic theory and techniques. Explore the zone system, develop film and produce prints. Use 35mm camera.

PHO 108 Photography III 3-3-4
The use of color transparencies (slides) will be emphasized. Process slide film and produce color prints from slides. Study color theory and trends in color photography. Prerequisite: PHO 105.

PHO 202 Studio Photography 3-3-4
Using color as well as black-and-white films, the students will experiment with photography under controlled conditions, using products and models both in the studio and on location. Prerequisites: PHO 105, 108.

PHO 206 Advertising Photography 3-3-4
An advanced course which emphasizes photography in advertising; will include special effects such as posterization, solarization, slide sandwiching, multiple exposures and infrared photography. Prerequisites: PHO 105, 108, 202.

PHYSICAL SCIENCE

PHS 151, 152, 153 Physical Science I, II, III 3-3-4(each)
An integrated perspective of the physical sciences, study of selected topics such as systems of measurement, the expanding universe, structure of the earth, kinetic molecular theory of matter, energy (types, transformation, utilization), properties of elements and compounds, structure and utilization of atoms. The role of science in the development of civilization is emphasized. Three laboratory hours per week.

PHS 160 Science for Elementary Teachers **2-0-2**
Discussion, demonstration, and practical experience of science principles for the elementary teacher. The theory and underlying principles of basic science will be discussed and demonstrated using materials which are often readily available from the normal source of the busy teacher. Such areas as air, water, magnetism, gravity, simple machines, sound, light, electricity, rocks-minerals, and plant and animal life will be considered.

PHS 170 Environmental Science **3-0-3**
This is a man-centered study of the health, economic, ecological and aesthetic effects of our use of our natural resources. The physical, biological, and chemical processes that occur in nature are studied as to how they relate to man's activity and his generation of the different forms of pollution. Methods of controlling our environment for better living conditions and for a longer future are considered.

PHYSICS

PHY 100 Principles of Technology **3-3-4**
An introduction to physical principles and their application in industry. Topics in this course include measurement, properties of solids, liquids, gases and basic electrical principles. Students in this course will be employed as technicians in their chosen field.

PHY 101, 102, 103 Technical Physics I, II **3-3-4(each)**
Technical Physics introduces physics in a practical sense, utilizing the Unified Technical Concepts approach as prescribed by the North Carolina Department of Community Colleges. Topics covered include force, work, rate, momentum, resistance, power, energy, force transformers, energy convertors, transducers, vibrations, waves, time constants, and radiation. Topics covered are from mechanical, electrical, fluidal, and thermal references, giving the student a broad background in basic physics.

PHY 151 General Physics I **3-3-4**
This course deals mainly with classical mechanics. Review is given to all systems of measurement with emphasis placed on the MKSA system. Major areas of study deal with velocity, acceleration, Newton's Laws of Motion, vectors, work, energy, power and circular motion. Three laboratory hours per week. Prerequisite: Completion of, or currently enrolled in MAT 151 or higher. (F)

PHY 152 General Physics II **3-3-4**
The major areas of study are thermodynamics, sounds, and optics; with concentration on temperature, heat transfer, vibrations, waves, light and lenses. Three laboratory hours per week. Prerequisite: PHY 151. (W)

PHY 153 General Physics III **3-3-4**
Electricity and magnetism and atomic structure are the major topics for study. Three laboratory hours per week. Prerequisite: PHY 152. (Sp)

PHY 160 Descriptive Astronomy **2-2-3**
This course will study the structure, mechanics, and observation of the solar system, stars and nebulae. (W)

PHY 251, 252, 253 are calculus level courses for engineering and science majors.

PHY 251 Analytical Physics I **3-3-4**
This is a quantitative treatment of Newtonian mechanics, covering different motions of bodies, vectors, work, energy and power. Prerequisites: MAT 161, 162. (F)

PHY 252 Analytical Physics II **3-3-4**
A Continuation of physics with emphasis upon the study of thermodynamics, sound and optics. Prerequisite: PHY 251. (W)

PHY 253 Analytical Physics III **3-3-4**
Electricity, magnetism and nuclear physics will be the major topics of study. Prerequisite: PHY 252. (Sp)

PLASTICS

PLA 220 Introduction to Plastics **3-0-3**
A basic introduction to industrial plastics concerning both thermosets and thermoplastics. The descriptions, classification, and properties of various plastics will be covered. Plastics testing and polymer chemistry will also be included in the first quarter.

PLA 221 Plastics Materials and Processes **3-3-4**
A study of the plastics industry to include various products and manufacturing processes. Processes include extension, blow molding, thermoforming, roll forming, casting and thermofusion.

PLA 222 Injection Molding **3-3-4**
A concentration of the injection molding process. Topics include industrial equipment, materials, mold design and troubleshooting. Lab activities will include setup and operation of a modern injection molding machine.

POLITICAL SCIENCE

POL 260 American Government **3-0-3**
A study of formation and development of the national government; the Constitution; and the national government's organization, functions, and powers. (F)

POL 261 Problems and Policies of American Government **3-0-3**
A study of the politics, functions, and progress of the national government. Specific policies in the area of labor, agriculture, welfare, business, civil rights, citizenship, and national security, using a background of history, politics, and government institutions. (W)

POL 262 American State and Local Government **3-0-3**
A study of the organization, function, and powers of state and local government throughout the United States. (Sp)

POL 263 Special Topics in Political Science **variable**
This course will be concerned with special timely topics that occur in the political science area of study.

PSYCHOLOGY

PSY 115 Human Growth and Development I **3-0-3**
Considers the development sequence of pregnancy, prenatal and infant periods. The conditions necessary for optimal development and individual differences, perceptual-cognitive and emotional responses will be stressed. (F)

PSY 116 Human Growth and Development II **3-0-3**
Considers the development sequence and characteristic behavior from the preschool child through adolescence. Special attention is given to the physical growth, attitudes, social, emotional, and cognitive development as they relate to behavior. (W)

PSY 117 Human Growth and Development III **3-0-3**
Considers the development sequence and characteristic behavior from infancy through the life span. Special attention will be given to developmental changes and conditions necessary for optimal development and individual differences. (Sp)

PSY 150 Human Potential Seminar 3-0-2
The Human Potential Seminar assists persons in becoming more self-determining, self-motivating, self-affirming and empathetic toward other persons. The seminar is a structured small group experience founded on the assumption that something is right and good about each person. (F,W,Sp,Su)

PSY 155 Stress Management 3-0-3
This course is offered to assist students in better understanding and coping with various types and degrees of stress as it relates to everyday living experiences.Emphasis is placed on environmental, physical and psychological factors, as well as techniques to deal with and reduce stress levels. Biofeedback, progressive relaxation, breathing, meditation, dream interpretation, coping skills, diet and nutrition and other topics will be discussed and practiced so the individual can better deal with personal conflicts, interaction with others, occupational and domestic crises, test anxiety, and disease control. (F,W,Sp,Su)

PSY 260 General Psychology 3-0-3
This course is designed to acquaint the student with the various aspects of psychology at the introductory level. It is a survey of psychology dealing predominantly with material that enhances a study of the bio-social nature of humankind. Topics range from a study of the bio/chemical structure of the brain and nervous system to the underlying causes of abnormal behavior.

PSY 261 Developmental Psychology 3-0-3
The course is designed to acquaint the student with the developmental sequence of human growth which will include the essential elements involved in the study of prenatal and infant time periods. A study of the characteristic behavioral growth patterns from the preschool child through adolescence and adulthood will also be emphasized. Considerations will be given to individual differences, perceptualizations, cognition and physical growth. The social, emotional, and attitudinal aspects from within these areas of development will be stressed as part of this study. (W)

PSY 262 Introduction to Applied Psychology 3-0-3
This course explores the field of psychology with reference to its application in human affairs. Applied Psychology focuses upon the transferral of theoretical concepts from a research emphasis in psychology to aspects of practical application. Topics cover such diverse areas as artificial intelligence and brain studies of whales and dolphins emphasizing the realistic usage of all data studied.

PSY 263 Abnormal Psychology 3-0-3
The course traces the development of recognized psychological abnormalities from early Greek references to personality disturbances through the era of "High Tech" disorder therapy. Models of abnormal behavior, syndromes of abnormal behavior and perspectives on schizophrenia will be examined along with the major sub-structures within each. The societal response to abnormal behavior, as well as modern psychotherapeutic techniques, form the basis for further in-depth study into the nature of pathological phenomena. (Sp)

PSY 1100 Human Relations 3-0-3
This course is designed to enable students to better understand the basic principles of human behavior. The human relations problems of the individuals are studied in relation to society, group membership, and relationships within the work situation. (Sp)

RECREATION

REC 102 Recreational Activities I 2-3-3
A study of the role of dance and social recreational activities in recreation programs. Students will develop skill in these areas through classroom experiences. Leadership skills in planning, programming, and conducting activities will be stressed.

REC 105 Art and Crafts **1-3-2**
This course demonstrates the methods and materials used in arts and crafts projects applicable to camps and related recreational facilities. Emphasis is on constructing, administering, promoting, and teaching crafts.

READING

RED 085 2-3-3* Basic Reading **2-3-3***
The Basic Reading course is designed for students who are not able to read (decode) longer words with the speed and accuracy needed for success in RED 0090. Students will develop a strong sound/sound relationship (phonics) using a structured multi-sensory approach. As such, this course will be beneficial to those students who have a spelling deficiency. Knowledge of syllable types further aids the student in decoding and spelling longer words. Vocabulary studies, comprehension skills, and discussion complete the curriculum.

RED 090 Reading Proficiency **2-3-3***
Reading Proficiency provides the opportunity for students to acquire the reading skills that will be necessary for successful completion of college transfer, business, technical, and vocational programs. The course includes vocabulary instruction, reading comprehension, and critical thinking studies, as well as study skills that relate particularly to reading (pre-reading activities, summary writing, annotation, preparation for testing, and activities intended to improve the memory for information). This is largely an interactive class in which the particular needs of individual students receive careful attention.

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

RED 260 Speed Reading **3-0-3**
This course is designed to help a student become a more efficient reader by using the techniques of skimming, scanning, and study-type reading. The measurement of an efficient reader is not how many words he can recognize per minute; it is his/her ability to comprehend rapidly and retain concepts.

RELIGION

REL 160 Introduction to the Old Testament **3-0-3**
A survey of the Old Testament. Emphasis will be placed on the content of the Old Testament, as well as on its background and development. (F)

REL 161 Introduction to the New Testament **3-0-3**
A survey of the New Testament. After an introduction to the Interbiblical Period, emphasis will be placed on the content of the New Testament, as well as on its background and development. (W)

REL 162 World Religions **3-0-3**
A survey and comparison of the origins, developments, beliefs, and practices of the major faiths. (Sp)

REL 170 History of Christianity **3-0-3**
This course is designed to acquaint the student with the leaders of Christian doctrine and practice. It is a biographical study of men and women who have guided Christianity. Special emphasis is given to the Reformation period and the formation of various denominations.

REL 180 Special Topics **variable**
This course is designed to deal with any heretofore uncatalogued topics which are of timely and/or special interest. Prerequisites and credit hours will vary with each of the numerous topics which may be offered under this description. (On demand)

REAL ESTATE

RLS 121 Real Estate Math **3-0-3**
A review of formulas for calculating the areas of squares, rectangles, circles, triangles, trapezoids, and volumes applied to house size or land area. Calculations of commissions, percentages, proration, capitalization, interest, depreciation, appreciation, and taxes. (F,Sp)

RLS 122 Real Estate Brokerage **3-0-3**
This course covers the organization and conduct of real estate brokerage, business and professional activities; social, economic, legal licensing and ethical responsibilities of the real estate broker. (W)

RLS 230 Real Estate Fundamentals **6-0-6**
A study of brokerage, fair housing, contracts, property ownership and interests, leases, and transfer of title, financing, closing transactions, property management, building construction, property valuation, land use controls, and taxation. Meets North Carolina requirement for Sales examination and partial requirement for Brokerage examination. (F,Sp)

RLS 231 Real Estate Finance **3-0-3**
A study of financing instruments and financial intermediaries, government insurance, guarantees, controls, appraisals, and the processing of loans. Borrowing for the purpose of investing in income properties and investment techniques are included. (W)

RLS 238 Real Estate Law **3-0-3**
A comprehensive study of real property law as it relates to land, types of estates, easements, appurtenances, leases, types of tenancies, wills and deeds. (W)

RADIO AND TELEVISION BROADCASTING

RTV 116 Broadcasting Announcing **3-3-4**
A study of the announcer's function, skills, characteristics and techniques with emphasis on the analysis, interpretation and communication of a variety of types of announcing-performance projects. The course is further designed to familiarize the student with basic broadcast studio equipment and broadcast procedures.

RTV 201 Introduction to Broadcasting **5-0-5**
A survey course of radio and television broadcasting including history and development; station organization and procedures; and a practical introduction to the fundamentals of announcing, copy writing, production, promotion, programming, sales and administration.

RTV 203 Expression in the Media **5-0-5**
Students learn to express themselves clearly, quickly, and to the point. A must for anyone in the communications field.

RTV 204 Audio Production I **3-8-7**
A two part course that deals with the "Ground Floor" basics of audio. Part I deals with the physical behavior and perceptual effects of sound. Part II focuses on Broadcast and Recording equipment and its innerworkings.

RTV 205 Broadcast **3-0-3**
Trends and requirements of broadcast programming. An analysis of community program needs and tastes, station image, and the effect of self-regulatory codes on broadcasting.

RTV 206 Writing for Broadcasting **3-2-4**
A course designed for radio and television students who must learn to initiate written copy. Exercises in developing typical reports using writing techniques and graphic devices are completed by the students.

RTV 207 Video Production I 3-8-7
An introduction to television or radio production. According to the student's focus, operation of television cameras, microphones, lighting, switcher, character generator for studio and field, or operation of radio control board, microphones turntables, tape recorders and reproducers will be stressed in actual student productions.

RTV 208 Audio Production II 2-8-6
This course in advanced audio production will serve as a jumping off point for exploration into other specialized areas of audio production. The application of audio in various media, form a wide-ranging field of career choices. Students will be encouraged to pursue and submit projects in their areas of interest, as well as projects given them by the instructor.

RTV 209 Video Production II 2-8-6
Advanced work in producing and directing television programs, or in producing and announcing radio programming. Students will be responsible for initiating and carrying through real-time productions in the areas of their focus, broadcast or cable radio or television.

RTV 211 Broadcast Journalism 3-6-6
An introduction to the field of broadcasting journalism with special emphasis on the gathering, writing, delivery, editing and processing of news.

RTV 212 Broadcast Operations 3-0-3
The technologies of computers and satellites, combined with the date, audio and video messages of radio and television, center the human and technical systems that drive the modern broadcast facility's daily operations. This course studies first hand the work involved in organizing, managing and maintaining the on-line systems of Isothermal Community College's 90Q radio, Educable, TV and Ed-Net teleconferencing and WNCW-FM public radio.

RTV 218 Broadcast Law 3-0-3
The laws and regulations governing broadcasting with a working knowledge of the relationship of governing agencies, such as Congress, committees, courts and the FCC. Historical and current developments in rules and regulations, law and self-regulation are examined.

RTV 220 Introduction to TV Systems 5-4-7
Students become familiar with TV telecasting and receiving equipment including cameras, VTR's (consumer and commercial), Eng, transmitters, film chains, switchers, receivers, character generators, computers, TBC's, video processors, proc amps, test signals, VIT's dropout compensators, projectors, tally lights, and more.

RTV 221 Troubleshooting Broadcasting Equipment 2-3-3
Troubleshooting and appreciation of broadcast equipment. Includes a basic understanding of studio equipment, schematics, and flow chart review. General repairs on common studio equipment found in radio and TV stations.

RTV 222 Industrial/Instructional Television 4-0-4
This course studies non-broadcast television produced within the principles of instructional design. Focusing on applications in schools, institutions, industry and corporations, the course looks at programming content and the process of planning, producing and evaluation. Students will learn to use small format video equipment for producing short programs of this type.

RTV 223 Broadcasting Management 3-0-3
RTV 223 is a lecture/seminar course designed for advanced students to examine the issues, problems and strategies of managing radio and TV stations and audio-video operations. The social economic and legal responsibilities of management are stressed and are analyzed in terms of the day-to-day realities of the radio-television business.

RTV 226 Supervised Work Experience I 1-10-2
Students are assigned to work in a radio or TV station for a minimum of 20 hours per week. The objective is to provide actual work experience for broadcasting students and the practical application of the skills and knowledge previously learned.

RTV 227 Supervised Work Experience II 1-10-2
Students are assigned continued work in a radio or TV station for minimum of 20 hours per week. The objective is to provide actual work experience for broadcasting students and the practical application of the skills and knowledge previously learned.

SAFETY AND FIRST AID

SAF 150 Adult CPR 1-0-1
A course of instruction designed to develop competency in Standard First Aid and CPR. American Red Cross certification in Standard First Aid and Adult CPR is available through this course of instruction.

SAF 151 First Aid/Community CPR 3-0-3
A course of instruction designed to develop competency in the recognition of common emergencies, and the performance of first aid skills and CPR. Certification in American Red Cross Standard First Aid and Community CPR is available through this course of instruction.

SOCIOLOGY

SOC 160 Introduction to Sociology 3-0-3
An analysis of the society and culture dealing with social organization, control, institution, stratification, and social change. (F,Sp)

SOC 161 Social Problems 3-0-3
A study of the major social problems of modern society, including family disorganization, minority groups, and problems associated with industrial and urban development. (W, Su)

SOC 162 Sociology of the Family 3-0-3
Study of the American family with attention given to courtship, marriage, family relationships and interdependencies, and social cultural stresses emerging from contemporary family life. (Sp,Su)

SOC 170 Special Topics variable
This course is designed to deal with any heretofore uncatalogued topics which are of timely and/or special interest. Prerequisites and credit hours will vary with each of the numerous topics which may be offered under this description. (On demand)

SOC 171 Human Sexuality 3-0-3
A study of the biological and physiological elements of sex and reproduction, and that which is involved in our identity as sexual beings. A course of instruction which includes the psychological and social aspects of human sexuality.

SOC 215 Human Relations 3-0-3
The student will study the importance of values, personality development, self-concept and basic human relation principles, such as communication, speaking and listening. (W)

SPANISH

SPA 160, 161, 162 Fundamentals of Spanish I, II, III 3-2-4
This is a program of study designed to teach understanding, speaking, reading, and writing of Spanish and to grant an awareness of Spain and its people. An audio-visual method is used. Prerequisite: Must be taken in sequence. (F, W, Sp)

SPA 260, 261, 262 Intermediate Spanish I, II, II **3-2-4**
In this course of study, the fundamentals of Spanish are used as the background for a basic study of the culture, civilization and literature of Spain with a further development of language skills. Prerequisites: Fundamentals of Spanish I, II, III or two years of high school Spanish. (F,W,Sp)

TEXTILES

TEX 101 Fundamentals of Textiles **3-0-3**
An introduction to textiles, including the history of the industry, description of textile materials and products and their utilization. Presentation of the basic manufacturing systems, materials flow, terminology and calculations. (F)

TEX 102 Fiber Sciences **3-2-4**
This course includes a study of the vegetable, animal, mineral, and man-made fibers. Their chemical and physical properties are examined. Prerequisite: TEX 101. (W)

TEX 211 Yarn Forming I **3-0-3**
A general description of yarn will introduce the study of yarn forming systems. Included in this course will be opening and picking processes, card, drawing, and combing process, and fiber blending. Basic fundamentals of textile processing will be emphasized as each aspect of yarn formation is studied. (W)

TEX 212 Yarn Forming II **3-0-3**
This course will deal with yarn formation starting with the roving processing and will include spinning, winding and twisting. Processing of filamentous synthetic yarns will also be studied. Basic fundamentals of textile processing will be emphasized. Prerequisite: TEX 211. (Sp)

TEX 213 Fabric Forming Systems **3-0-3**
The course deals with the basic forming systems including weaving, knitting and non-conventional. Fundamentals of conversion of fibers and yarns into fabrics. Fabric design, construction and raw materials are considered which relate to properties and performance of the end product. (Su)

WELDING

WLD 1101 Welding I **4-12-8**
Introduction to the history of oxyacetylene welding, the principles of welding and cutting, nomenclature of the equipment, and assembly of the units. Welding procedures such as practice of puddling and carrying the puddle, running flat beads, butt welding in the flat, vertical and overhead position, brazing, hard and soft soldering safety. Safety procedures are emphasized throughout the course in the use of tools and equipment. (F)

WLD 1102 Welding II **4-12-8**
The operation of AC transformers and DC motor generator arc welding sets. Studies are made of welding heats, polarities, and electrodes for use in joining various metal allows by the arc welding process. After the student is capable of running beads, butt and fillet welds in all positions are made and tested in order that the student may detect his weaknesses in welding. Safety procedures are emphasized throughout the course in the use of tools and equipment. (W)

WLD 1103 Welding III **4-12-8**
Introduction and practical operations in the use of inert gas-shield arc welding. A study will be made of the equipment, operation, safety, and practice in the various positions. A thorough study of such topics as principles of operation, shielding gases, filler rods, process variations and applications, and manual and automatic welding. Practice in welding pipe in fixed position using inert-gas-shield arc welding and metal arc welding. (Sp)

WLD 1104 Welding IV **4-12-8**
This course involves pipe welding and certification practices. Designed to provide practice in welding of pressure piping in horizontal, vertical, and horizontal fixed position using shielded metal art welding processes according to Sections VIII and IX of the ASME code. Certification practices involve students' practice in welding the various materials to meet certification standards. (Su)

WLD 1118 Welding Problems I **2-6-4**
Special emphasis will be given to oxyacetylene cutting. Various cutting techniques will be practiced.

WLD 1119 Welding Problems II **2-6-4**
Emphasis will be given to the different types of metals that may be joined by the arc welding process.

WLD 1120 Welding Problems III **2-6-4**
Special emphasis will be given to certification practices using inert-gas-shield arc welding. A student will have the opportunity to practice his welding techniques.

WLD 1123 Auto Body Welding I **2-6-4**
The basic principles in use of mig, plastic, spot and oxygen, acetylene welding will be taught as applied to auto body repair. Also a thorough study of how individual panels are held in place. Cutting equipment will be covered including gas and plasma arc.

WLD 1124 Auto Body Welding II **2-6-4**
Body panels and unitized body structural components will be removed and replaced using welding and cutting equipment applicable to industry standards.

WLD 1135 Basic Gas Welding and Cutting **2-3-3**
Welding demonstrations by the instructor and practice by students in the welding shop. Safe and correct methods of assembling the welding equipment. Practice will be given for surface welding, bronze welding, silver soldering, and flame-cutting methods applicable to mechanical repair work.

ADMINISTRATORS AND FACULTY

Joyce Abernethy ..... Learning Place Instructor
B.S., Gardner-Webb College

Don Alexander ..... Electronics
A.S., DeVry Institute of Technology; B.E.E.T.,University of North Carolina-Charlotte

Marvie Alexander ..... Individualized Instruction Center

Marisa Baron ..... Business
A.A., Hibbing Community College; B.A.S., University of Minnesota; M.B.A., St. Cloud State University

Edward L. Barrier ..... Mathematics
A.B., University of North Carolina; M.M., University of Tennessee

Martha L. Baskin ..... Director, Foothills Nursing Consortium
B.S.N., Winston-Salem State University; M.S.N., Medical College of Georgia

Fred Bayley ..... Continuing Education
B.S., M.ED., North Carolina State University

Burr Beard ..... Director, Public Radio
B.A., University of Pittsburgh; M.A.C., UNC-Chapel Hill

Timothy D. Beaver ..... Mathematics
B.S., M.A., Appalachian State University

Fay Bedell ..... Assessment/Retention Specialist
A.A.S., Isothermal Community College; B.T., M.A., Appalachian State University

Carole W. Bartol ..... Director, Polk County Campus
B.A., Salem College; M.Ed., Converse College

Mary Blackwood ..... Nursing
A.D.N., Gaston College; B.S.N. University of North Carolina-Charlotte; M.S.N., University of Tennessee

Leonard Byers ..... Machinist

Dean Byrd ..... R/TV Instructor/Coordinator Telecommunications
A.A.S., Isothermal Community College; B.S., Clemson University

Ruth Boehning ..... Student Support Services/Handicapped Services
B.A., Adelphi Suffolk College; M.A., Adelphi University; M.Ed., Converse College

Mary B. Burgin ..... Director of Development
B.S., East Carolina University; M.A., Appalachian State University

Thomas M. Callison ..... English
A.B., Wofford College; M.A., Appalachian State University

Aubrey Calton, Jr. ..... Business
B.E.E., North Carolina State University; M.S.E.E., USAF Institute of Technology

Steve L. Chrisman ..... Business
B.S., Carson-Newman College; M.A., Appalachian State University

Treva Clayton ..... Business
A.A.S., Isothermal Community College; B.T., M.A., Appalachian State University

Rebecca E. S. Cleland ..... Assistant Librarian
B.A., M.S.L.S., University of Tennessee

Eileen Colon ..... Nursing
B.S.N., California State University

Ronnie Connor ..... Director, Small Business Center
A.A., Isothermal Community College; B.S., Limestone College

Jay Coomes ..... R/TV Instructor
B.A., Central State University

Michael Croussore ..... Physical Education
B.P.E., Purdue; M.A., University of Kentucky

Celia Davenport ..... Student Support Services
B.A., N.C., Central; M.A., Appalachian State University

DeLane M. Davis ..... HRD
B.S., Appalachian State University; M.A., Winthrop College

Mike Davis ..... Coordinator, Adult Basic Education
A.A., Brevard College; B.A., University of Tennessee; M.S., University of Tennessee

Rhonda Davis ..... Business
A.A.S., Isothermal Community College; B.S., Limestone College; M.A., Appalachian State University

Betty G. Deviney ..... Music
B.A., Columbia College; M.A.T., Duke University; M.M., Winthrope College

Phillip Fischer ..... Auto Body Repair

Clara Fowler ..... Business
B.S., Barber-Scotia; M.A., Appalachian State University

Charles Francis ..... Counselor, Student Support Services
B.A., M.A.E.D., East Carolina University

Betty Gabriel ..... Director of Counseling
B.S., Appalachian State University; M.A.Ed., Western Carolina University

Shirley Lyon Garcia ..... Nursing
B.S.N., University of North Carolina-Charlotte

Jim Garren ..... Physical Education
B.S., M.A., Appalachian State University

Olan R. Gilbert ..... Criminal Justice/BLET
B.A., USC-Spartanburg

Peter Golden ..... Chemistry/Physics
A.A., Broward Community College; B.S., University of Florida; M.S., University of Houston

Gene Green ..... Director, Plant Operations & Maintenance

James L. Hall ..... Mathematics
B.S., M.A., Appalachian State University; M.A.Ed., Western Carolina University

Frances Haney ..... Business
B.S., M.A., Ed.S., Appalachian State University

Burton Harris ..... Electrical Installation and Maintenance Instructor
B.S., University of Tennessee

Donna Harrison ..... Director, Student Support Services
B.S., Mars Hill College; M.A., Appalachian State University

Robert E. Harrison ..... Vice President for Academic and Student Affairs
A.B., Washington University; M.A., Southern Illinois University; Ph.D., Michigan State University

Mary Ann Head ..... Coordinator, Adult High School
B.A., UNC-Charlotte; M.A., Appalachian State University

Evelyn Heflin ..... Child Care/Teacher Associate
B.S., Appalachian State University

Wesley Henderson ..... Social Science
A.A., Community College of Air Force; B.A., University of Mississippi; M.S., State University of New York at Plattsburgh; Ed.S., Converse College

Pamela Huntley ..... Supplemental Instruction Coordinator
A.S., Isothermal Community College; B.S., Gardner-Webb College

Wayne Hutchins ..... Science
A.B., Duke University; M.A.T., University of North Carolina

Augusta M. Hyde ..... Coordinator, Study/Travel and Visiting Artist
A.A., Isothermal Community College

Noel J. Isham ..... Coordinator, Literacy Instruction/Special Projects
B.A., University of Florida; M.A., University of South Florida; Ph.D., Texas A & M University

Cathy Jackson ..... Commercial Graphics
B.F.A., Western Carolina University

Myra Johnson ..... Business
B.S. B.A., M.B.A., Western Carolina University; Ed.S. Appalachian State University

Catherine Jolley ..... Controller

Carol Jones ..... Business
B.S., Appalachian State University; M.S.B.E., UNC-Greensboro; Ed.S., Appalachian State University

Chris Koone ..... Business
B.S., Western Carolina University; M.B.A., Golden Gate University; Ed.S., Appalachian State University

Dewalt Koone ..... Mechanical Engineering
M.A., Appalachian State University, B.S., Ed.S. Western Carolina University

Patricia D. Lawing ..... Nursing
B.S.N., Western Carolina University

Willard L. Lewis ..... President
B.A., State University of N.Y., Cortland; M.S., State University of N.Y., Oneonta; Ed.D., William and Mary

Carol Lieurance ..... Coordinator, Compensatory Education
B.A., Limsetone College

Helyn Lowery ..... Dean, Business Division
B.A., Limestone College; M.A., Ed.S., Appalachian State University

Lowery Luckadoo ..... Welding
Certificate, Isothermal Community College

Cindy Martin ..... Physical Education
A.B., M.A.T., UNC-Chapel Hill; M.Ed., UNC-Charlotte

Gordon Martin ..... Electronics
B.S., Ohio Inst. of Technology

William McDaniel ..... Engineering
A.A., Isothermal Community College; B.S., Western Carolina University; M.I.T.; Western Carolina University; EDS, Western Carolina University

Frankie McWhorter ..... Public Information Officer
B.A., Carson Newman College

Susan C. Monday ..... Admissions/Records
A.A.S., Catawba Valley Technical College; B.T., Appalachian State University; M.A.Ed., Western Carolina University

Dillard L. Morrow ..... Vice President for Administration
B.S., M.A., Western Carolina University; Ed.D., North Carolina State University

Karen Murphy ..... Coordinator, Lifelong Learning
B.S., California State Teacher's College

Virginia Neal ..... Cosmetology
Diploma, Bo Mar Beauty College

Karen A. Noel ..... Director of Institutional Effectiveness and Research
B.S., Pennsylvania State University; M.L.S., Rutgers University; Ed.D., Virginia Polytechnic Institute and State University

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Diploma, Alamance Beauty College; A.A.S., Isothermal Community College; B.S., Western Carolina University

Barbara P. Peterson ..... English
B.A., Wake Forest University; M.A.T., Converse College

Deborah Lynne Puett ..... Student Support Services
A.S., Western Piedmont Community College; B.A., University of North Carolina-Asheville; M.A.Ed., Western Carolina University

William R. Rogers ..... Social Science
B.S., M.A., University of Tennessee

Joseph E. Sauve ..... Automotive Mechanic Technology
Associate Degree, Isothermal Community College; ASE Certified Master Mechanic Technician

Priscilla Sheppard ..... Nursing
B.S.N., University of South Carolina; M.S.N., Medical College of Georgia

Gary Shipley ..... Science
B.S., M.A., East Tennessee State University

Edna Ann Silver ..... Financial Aid/Counselor
B.S., University of North Carolina-Chapel Hill; M.A., Appalachian State University

Vivian Sitton ..... Coordinator, Individualized Instruction Center
B.A., M.A., Appalachian State University

Iverson Smith ..... Director, Occupational Extension
B.S., North Carolina State University; M.S., Ed.D., Western Carolina University

Melanie P. Smith ..... Counselor/Recruiter
A.A.S., Isothermal Community College; B.A., M.A.Ed., Western Carolina University

Tommy Tucker ..... English
B.A., M.A. Washington University

Curtis Vance ..... Computer Systems Administrator
B.S., Appalachian State University

Susan Vaughan ..... Director of Library
A.A., Cayuga County Community College; A.B., M.L.S., Syracuse University; Certification in Gerontology

Bruce Waddingham ..... Dean, Vocational-Technical
A.A., Mason City Jr., College; B.A., University of Northern Iowa; M.S., Iowa State University

Paula Walker ..... Word Processing/Cooperative Education
B.S., Gardner-Webb College; M.A., Appalachian State University

Bob Waters ..... Cosmetology
Southeastern College of Beauty Culture; Dale Streble University of Cosmetology

Elizabeth Watson ..... Student Support Services
A.B., Temple University; M.Ed., Converse College

Nancy Womack ..... Dean, College Transfer
B.S., Western Carolina University; M.A., Florida Technological University; Ph.D., University of South Carolina

Wilbur M. Wright ..... Dean of Student Affairs
B.S., M.A., Appalachian State University

Donna L. Wylie ..... Coordinator, Fire/Health

Index

Campus Map

ISOTHERMAL
COMMUNITY COLLEGE

P.O. Box 804
Spindale, North Carolina
28160-0804