

1987-89  
CATALOG



# Isothermal Community College

GENERAL CATALOG 1987-89



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### MESSAGE FROM THE PRESIDENT

For nearly a quarter of a century, Isothermal Community College has served its citizenry within the framework defined by its founding president, Fred J. Eason. These guiding principles are:

WE BELIEVE that every citizen should have the opportunity to study and work in whatever field best suits his/her individual abilities and desires.

WE BELIEVE that no interested and capable student should be denied the privilege of attending a college or vocational school of the highest quality.

WE BELIEVE that knowledge and skill are essential to a happy productive life for our people and for the welfare of our nation.

WE BELIEVE that since no one's education is ever complete, continuing education can be beneficial to any community.

Because of our belief in these principles and in the philosophy of the community college, we are extending every effort to bring to the people of this area the best possible education and training at a price they can afford to pay.

These timeless tenets continue to determine the course of the college today and provide the foundation for its future. The faculty and staff of the college are committed to these concepts in the service of our students. We welcome you to the college and pledge to make every effort to provide you the opportunity for "expanding your world and enriching your future."

A handwritten signature in dark ink, appearing to read "Willard L. Lewis". The signature is fluid and cursive.

Willard L. Lewis



## TABLE OF CONTENTS

Message From The President .....	2
Academic Calendar .....	5
Administrative Organization .....	9
Introduction .....	11
Accreditation .....	13
Library .....	14
Nondiscrimination Statement .....	14
Visits To The Campus .....	14
Admissions .....	16
Testing .....	32
Academic Procedures .....	20
Registration .....	20
Graduation .....	30
Student Services .....	31
Student Activities .....	37
General College Regulations & Policies .....	38
Tuition & Fees .....	39
Financial Assistance Program .....	41
Continuing Education .....	47
Polk Campus .....	53
Curriculum Programs .....	57
General Education .....	59
College Transfer .....	60
Technical Programs .....	88
Vocational Programs .....	134
Independent Study .....	151
Cooperative Education .....	152
Course Descriptions .....	154
Learning Place .....	51
Administrators and Faculty .....	229
Index .....	233

*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 listings, 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 1987-88 Calendar

### FALL QUARTER 1987 (56 days)

Sept. 2	Wednesday	Faculty Workshop
Sept. 3	Thursday	Orientation and Registration
Sept. 4	Friday	First Day of Classes
Sept. 7	Monday	Labor Day Holiday
Sept. 14	Monday	Last Day to Register or Add Courses
Oct. 12-16	Monday-Friday	Mid Term Week
Oct. 23	Friday	Last Day to Drop with "WP"
Nov. 19, 20, 23	Thursday, Friday, Monday	Final Examinations
Nov. 24	Tuesday (12:00 Noon)	Faculty Checkout
Nov. 25, 26, 27	Wednesday, Thursday, Friday	Thanksgiving Holidays

### WINTER QUARTER 1987-88 (56 days)

Nov. 30	Monday	Orientation and Registration
Dec. 1	Tuesday	First Day of Classes
Dec. 8	Tuesday	Last Day to Register or Add Courses
Dec. 22	Tuesday (10:00 p.m.)	Winter Holidays Begin
Jan. 4	Monday (8:00 a.m.)	Classes Resume
Jan. 11-15	Monday-Friday	Mid Term Week
Jan. 22	Friday	Last Day to Drop with "WP"
Feb. 24, 25, 26	Wednesday, Thursday, Friday	Final Examinations
Feb. 29	Monday (12:00 Noon)	Faculty Checkout

### SPRING QUARTER 1988 (56 days)

Mar. 2	Wednesday	Orientation and Registration
Mar. 3	Thursday	First Day of Classes
Mar. 10	Thursday	Last Day to Register or Add Courses
Mar. 31	Thursday (10:00 p.m.)	Spring Holiday Begin
Apr. 11	Monday (8:00 a.m.)	Classes Resume
Apr. 11-15	Monday-Friday	Mid Term Week
Apr. 22	Friday	Last Day to Drop with "WP"
May 25, 26, 27	Wednesday, Thursday, Friday	Final Examinations
May 30	Monday (12:00 Noon)	Faculty Checkout
May 31	Tuesday (7:30 p.m.)	Graduation

**SUMMER QUARTER 1988 (50 days)**

June 2	Thursday
June 3	Friday
June 9	Thursday
July 4	Monday
July 8	Friday (4:30 p.m.)
July 18	Monday (8:00 a.m.)
July 22	Friday
Aug. 18, 19	Thursday, Friday
Aug. 22	Monday (12:00 Noon)

Orientation and Registration  
 First Day of Classes  
 Last Day to Register or Add Courses  
 Independence Day Holiday  
 Summer Holidays Begin  
 Classes Resume  
 Last Day to Drop with "WP"  
 Final Examinations  
 Faculty Checkout

**1ST SUMMER SESSION 1988 (25 days)**

June 2	Thursday
June 3	Friday
June 7	Tuesday
July 4	Monday
July 8	Friday
July 11-15	Monday-Friday

Orientation and Registration  
 First Day of Classes  
 Last Day to Register or Add Courses  
 Independence Day Holiday  
 Last Day of 1st Session  
 Summer Holidays

**2ND SUMMER SESSION 1988 (25 days)**

July 8	Friday
July 18	Monday
July 20	Wednesday
Aug. 19	Friday
Aug. 22	Monday (12:00 Noon)

Registration  
 First Day of Classes  
 Last Day to Register or Add Courses  
 Last Day of 2nd Session  
 Faculty Checkout

## 1988-89 Calendar

### FALL QUARTER 1988 (56 days)

Aug. 31	Wednesday	Faculty Workshop
Sept. 1	Thursday	Orientation and Registration
Sept. 2	Friday	First Day of Classes
Sept. 5	Monday	Labor Day Holiday
Sept. 12	Monday	Last Day to Register or Add Courses
Oct. 10-14	Monday-Friday	Mid Term Week
Oct. 21	Friday	Last Day to Drop with "WP"
Nov. 17, 18, 21	Thursday, Friday, Monday	Final Examinations
Nov. 22	Tuesday (12:00 Noon)	Faculty Checkout
Nov. 23, 24, 25	Wednesday, Thursday, Friday	Thanksgiving Holidays

### WINTER QUARTER 1988-89 (56 days)

Nov. 28	Monday	Orientation and Registration
Nov. 29	Tuesday	First Day of Classes
Dec. 6	Tuesday	Last Day to Register or Add Courses
Dec. 20	Tuesday (10:00 p.m.)	Winter Holidays Begin
Jan. 2	Monday (8:00 a.m.)	Classes Resume
Jan. 9-13	Monday-Friday	Mid Term Week
Jan. 20	Friday	Last Day to Drop with "WP"
Feb. 22, 23, 24	Wednesday, Thursday, Friday	Final Examinations
Feb. 27	Monday (12:00 Noon)	Faculty Checkout

### SPRING QUARTER 1989 (56 days)

Mar. 1	Wednesday	Orientation and Registration
Mar. 2	Thursday	First Day of Classes
Mar. 9	Thursday	Last Day to Register or Add Courses
Mar. 23	Thursday (10:00 p.m.)	Spring Holidays Begin
Apr. 3	Monday (8:00 a.m.)	Classes Resume
Apr. 10-14	Monday-Friday	Mid Term Week
Apr. 21	Friday	Last Day to Drop with "WP"
May 24, 25, 26	Wednesday, Thursday, Friday	Final Examinations
May 29	Monday (12:00 Noon)	Faculty Checkout
May 30	Tuesday (7:30 p.m.)	Graduation



**SUMMER QUARTER 1989 (50 days)**

June 1	Thursday
June 2	Friday
June 8	Thursday
July 4	Tuesday
July 7	Friday (4:30 p.m.)
July 17	Monday (8:00 a.m.)
July 21	Friday
Aug. 17, 18	Thursday, Friday
Aug. 21	Monday (12:00 Noon)

Orientation and Registration  
First Day of Classes  
Last Day to Register or Add Courses  
Independence Day Holiday  
Summer Holidays Begin  
Classes Resume  
Last Day to Drop with "WP"  
Final Examinations  
Faculty Checkout

**1ST SUMMER SESSION 1989 (25 days)**

June 1	Thursday
June 2	Friday
June 6	Tuesday
July 4	Tuesday
July 7	Friday
July 10-14	Monday-Friday

Orientation and Registration  
First Day of Classes  
Last Day to Register or Add Courses  
Independence Day Holiday  
Last Day of 1st Session  
Summer Holidays

**2ND SUMMER SESSION 1989 (25 days)**

July 7	Friday
July 17	Monday
July 19	Wednesday
Aug. 18	Friday
Aug. 21	Monday (12:00 Noon)

Registration  
First Day of Classes  
Last Day to Register or Add Courses  
Last Day of 2nd Session  
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  
Mrs. Robert Spratt—Caroleen, NC—Secretary  
Mr. Thomas A. Roberts, Forest City, NC

**APPOINTED BY RUTHERFORD COUNTY COMMISSIONERS**

Mr. A. Jervis Arledge—Rutherfordton, NC—Chairman  
Mr. Walter Dalton—Rutherfordton, NC  
Mr. Joe A. Miller—Cliffside, NC—2nd Vice Chairman  
Mrs. Vivian G. Watson, Rutherfordton, NC

**APPOINTED BY POLK COUNTY COMMISSIONERS**

Mr. Mike O'Neal—Columbus, NC

**APPOINTED BY THE GOVERNOR OF NORTH CAROLINA**

Mr. J. D. Cooley—Forest City, NC  
Mr. Al King, Rutherfordton, NC  
Rev. M. B. Robinson—Forest City, NC—1st Vice Chairman  
Mrs. Opal Sauve—Columbus, NC

**RUTHERFORD COUNTY BOARD OF COMMISSIONERS**

Mr. Fred Crowe, Chairman	Mr. Donald Holland
Mr. Russell Duncan, Vice Chairman	Mr. Edgar Spicer
Mrs. Marion Michalove	

**POLK COUNTY BOARD OF COMMISSIONERS**

Rachel Ramsey, Chairman	Carson Deck
Henry Huntsinger	Ted Owens
Warren Carson	

**ADMINISTRATIVE OFFICES**

**Office of the President**

Willard L. Lewis, III .....	President
Glenda Scruggs .....	Secretary to the President
Mary Burgin .....	Director of Development
Frankie McWhorter .....	Assistant for Public Information
Augusta M. Hyde .....	Assistant for Special Projects
Fred J. Eason .....	President Emeritus

### Office of the Vice President for Administration

Dillard L. Morrow .....Vice President for Administration  
Catherine Jolley .....Controller  
Bill Hardin .....Director, Plant Operations and Maintenance

### Office of Vice President for Faculty and Programs

..... Vice President for Academic & Student Affairs  
.....Dean, Vocational/Technical Division  
Royce Ellis .....Director of Library  
Donna Harrison ..... Director, Special Services Program  
..... Dean, College Transfer Division  
Helyn Lowery .....Dean, Business Division  
Carl Williams .....Director, Continuing Education  
Marion Michalove ..... Director, Human Resources  
Development Program  
Mary Ann Head .....Coordinator, Learning Place  
E. McKenzie Smith ..... Telecommunications  
John F. Paul ..... Dean of Student Affairs  
..... Counselor/Director of Career Development  
Betty Gabriel .....Counselor  
Wilbur Wright ..... Registrar/Director of Admissions  
Sarah Hicks .....Assistant for Admissions  
Myra Woody ..... Assistant to the Registrar  
Charles Holcombe .....Director, Financial Aid and Student Activities

### Office of Vice President for Polk County Campus

Geoffrey E. Balkam .....Vice President for Polk County Campus  
Carole Blackburn ..... Coordinator, Continuing Education  
Barbara Moffitt ..... Librarian/Counselor

## 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 parallel (begun in September 1966) and adult education divisions were scattered in a number of temporary locations in Avondale, Spindale, and Caroleen. College parallel 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 1968, 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 parallel 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 10½ acres near St. Luke's Hospital. This new site was dedicated on July 25, 1983. Construction on the new facility will begin as soon as our local matching fund of \$400,000.00 is met.

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.

Having recently celebrated its twentieth anniversary, 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.



## **Purposes and Objectives**

**Statement of Purpose of College.** Isothermal Community College is a comprehensive two-year institution whose purpose is to provide appropriate, economical and convenient learning opportunities for all citizens beyond the compulsory high school age and who have left the public schools. The various programs include two-year college parallel and technical programs, one-year vocational programs, certificate programs, a variety of continuing education programs for adults, and guidance services for in-school and out-of-school citizens. Isothermal Community College offers help for citizens in developing and improving the understandings, dispositions, skills, and habits required for living more effectively.

The major aims of this institution are to provide:

1. Two years of college parallel education which is transferable to four-year colleges and universities.
2. Two years of technical education appropriate to the needs of the individual and the community.
3. Vocational education for persons desiring to prepare for a trade or upgrade their skills.
4. Adult programs based on community needs such as basic education, high school equivalency certificate or diploma, self-enrichment, and cultural and community service programs.
5. A program of guidance and instruction which will help all citizens become more effective members of a democratic society.

## **Accreditation**

Isothermal Community College is accredited by the Commission of the Southern Association of Colleges and Schools.

## **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 residences 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.-4:30 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 Director of Admissions to provide general information and a tour of the campus.

You may arrange a tour of the campus by writing or calling the Director of Admissions. 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 VII (section 799A) and Title VIII (section 845) 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.

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 Students.

## ADMISSIONS

### 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 the vocational programs based on the age of the applicant (18 years of age or older). The following are specific requirements for each program.

#### College Parallel and Technical Applicants:

1. A completed application for admission.
2. Transcript(s)—high school and college (if applicable).
3. Comparative Guidance and Placement Program.
4. Orientation Program with review of test scores and other helpful pre-registration information.
5. North Carolina high school graduates must have passed the N.C. Competency Test.

#### Vocational Applicants:

1. A completed application for admission.
2. High School transcript (if applicable).
3. Orientation Program.

**Practical Nursing** applicants are required to have a high school diploma or its equivalent.

Admission procedures for the Practical Nursing Program require each student to:

1. Complete an application for admission.
2. Take the Comparative Guidance and Placement Program and complete the requirements, if necessary, prior to Fall quarter enrollment in the Nursing Curriculum.
3. Provide a completed physical examination given by a physician.
4. Obtain three (3) references (other than family) and have them complete Isothermal Community College Reference Forms.
5. Provide high school transcript or GED Equivalency Certificate and transcripts 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.

The admission procedures to the Child Care Worker Program require that all students submit the following:

1. A completed application for admission.
2. A transcript(s) of all previous education.



3. Completion of the Comparative Guidance and Placement Program.
4. Applicants will be permitted to register for classes after their test scores have been reviewed and course recommendations are made by the Student Personnel Counseling Staff.

**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 beyond the seventh grade level.

### **ADMISSION PROCEDURE FOR PROSPECTIVE 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.

### **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 or take the placement test if their courses do not have prerequisites determined by test scores. Students transferring a grade of C or better in college English or math are exempt from the placement test. Isothermal Community College will accept any transfer student who has maintained satisfactory conduct at his previous institution. 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). Any student on disciplinary suspension from another institution must appear before the Admission Committee for approval for admission.

### **TRANSIENT STUDENTS**

Transient Students who are enrolling at Isothermal Community College need only to submit an application to the Director of Admissions 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 Director of Admissions 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 Students.

### **SPECIAL CREDIT**

High school and college graduates who are not currently attending a college may enroll in courses as special credit students. If the courses do not have a prerequisite that is determined by test scores, these students will only be required to complete an application for admission. 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**

Isothermal Community College has an agreement with the Rutherford 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.

### **DEVELOPMENTAL COURSES**

Students entering Isothermal Community College in the College Parallel, Technical, Nursing, and Child Care Worker 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 score below the 50th percentile on the Comparative Guidance and Placement Program in one or more of the English, reading or mathematics sections. (Mathematics is not required for students in the Child Care Worker program.)

2. Late registration and not 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 determine hour load for payment, eligibility for financial aid, and/or whether a student is a full-time student, they cannot be counted toward graduation.

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 Special Services. Any exception to the overall policy or course policy must be approved by the Director of Special Services.



## ACADEMIC PROCEDURES AND POLICIES

### 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 catalogue currently in force when he first entered the College or in any one subsequent catalogue published while he is a student, but the College is not obligated to fulfill this expectation or to offer in any particular year a course listed in the catalogue.

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/her 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 procedure 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 during the first class meeting.



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

### **Student Permanent Record**

Access to student records is limited and controlled according to federal law (Family Educational Rights and Privacy Act of 1974). Students have the right to inspect their educational records, to ask for interpretations for any entries, and to present evidence to request that inaccuracies be corrected by contacting the Registrar. Students may appeal any decisions concerning their records through a fair hearing of the Student-Faculty Disciplinary Committee.

### **Program Changes**

A student desiring to change programs should make this request to a counselor and to his/her advisor.

### **Withdrawal From College**

#### **All Official Withdrawals Must:**

1. Be made through the Student Services Office or the Vice President of the Polk County Branch.
2. Be made in person if possible.
3. Be recorded by the Registrar's Office to be official.
4. Be checked by the Business Office.
5. Receive a grade of "WP" or "WF" after the 20% point of the class. Students who leave class without officially withdrawing will receive a grade of "F" on all courses. NOTE: "WP" = Withdrawn Passing—"WF" = Withdrawn failing which is counted as an "F" in the Grade Point Average.

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

**Refunds.** Refunds can be made during the first 10 days following the registration date. Refund requests must be made in writing to the Dean of Students and must include reason for withdrawing.

### **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 QPA falls below the minimum satisfactory level as outlined in the probation policy below will be suspended.

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

**Cumulative Qtr. Hrs.**

<b>Attempted</b>	<b>QPA</b>
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**

	<b>QPA</b>
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.

**Academic Probation and Suspension Policy for the Practical Nurse Education Program**

**Probation.** The program defines a 2.0 quality 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 quality 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, who's QPA falls below the minimum satisfactory level as outlined in the probation policy will be suspended or any Practical Nurse Education student 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 who fails to complete a maximum of two courses during fall quarter, other than Nursing Fundamentals, NUR 1101, may be considered for readmission after successful completion with a minimum of a grade "C" in at least three **college level** courses as approved by the faculty of the Practical Nurse Education program.



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

### **Grade Appeals**

A student, after conferring with the instructor concerned, may present in writing to the department 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 department dean will refer the appeal to the Vice President for Faculty and Programs. 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

<b>Academic Load</b>	<b>Maximum Hours</b>
College Parallel	19 credit hours
Vocational	21 credit hours
Technical	21 credit hours

Approval from the Vice President for Faculty and Programs 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 Faculty and Programs. When a course has been repeated the higher grade will be counted.

### **Class Attendance**

Regular class attendance is a student obligation. A student, furthermore, is responsible for all the 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.

All 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. Normally, one hour of credit is earned for each lecture hour per week. Where the 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 at least three contact hours.

The grading system is as follows:

Grade Significance		Quality Points		
A	Excellence	4	per	quarter hour
B	Above Average	3	"	" "
C	Average	2	"	" "
D	Below Average	1	"	" "
F	Failed	0	"	" "
WP	Withdrawn Passing	0	"	" "
WF	Withdrawn Failing	0	"	" "
I	Incomplete	0	"	" "
Y	No Credit—Audit	0	"	" "
S	Satisfactory	"	"	" "
U	Unsatisfactory	"	"	" "
P	*Progress	"	"	" "
NC	No Credit	"	"	" "
NS	No Show	"	"	" "

To obtain credit, a student must repeat all courses resulting in the award of "0" quality points.

### 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 reregister 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. The last grade received in that course will be the only and final grade for the course.

A grade of "P" may not be awarded to veterans nor to veterans' dependents receiving VA 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 Drop/Add form from the Registrar's Office.
2. Have a Drop/Add approved by faculty advisor and instructor.
3. Record the Drop/Add in the Registrar's Office.

**NOTE:** Students will not be allowed to add or change sections after the last day to register as listed in the Academic Calendar.

Students may officially drop a course during the first 20% of the class without academic penalty. Students who drop a course after this period will receive a grade of "WP" (withdrawal passing) or "WF" (withdrawal failing). A "WF" is averaged the same as an "F" in computing the grade point average. The grade of "WP" cannot be awarded after the published deadline, generally one week after mid-term, unless approved by the Vice President for Faculty and Programs.

### **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.

## 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 nonaccredited 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 parallel curriculums. Transferable technical curriculum courses are accepted into the college parallel curriculum and technical courses are accepted into the vocational curriculum. College Parallel curriculum courses are transferable into the technical and vocational curriculums. Cumulative grade point averages are continued when changing programs within a curriculum but not when changing from curriculum to curriculum. (Example: College Parallel 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 procedure for challenging is as follows:

1. The student must consult with his/her advisor, must be registered for the course and in good standing.
2. If the exam is failed, s/he 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 students' grade must be submitted to the Registrar's Office during the first two weeks of the quarter.

### 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 Services 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 for a given examination:



## CLEP CHART

Exam	Minimum Score for awarding Credit	ICC Course(s) Comparable	Quarter Hours Credit Award
Accounting, Intro.	47	BUS 0210, 0211, 212	12
Afro-American His.	49	HIS 0170	3
American Government	47	POL 0260	3
American History	46	HIS 0260, 0261, 0262	9
American Literature	46	ENG 0203	3
Biology, General	46	BIO 0101, 0102, 0103	12
Calculus, with Elementary Functions	47	MAT 0131, 0132, 0133	15
Chemistry, General	47	CHM 0101, 0102, 0103	12
College Algebra	45	MAT 0121	5
Trigonometry	50	MAT 0122	5
College Algebra & Trig.	45	MAT 0121, 0122	10
College Composition	47	ENG 0101, 0102, 0103	9
College French Level I	41	FRE 0160, 0161, 0162	9
*Level II	53	FRE 0260, 0261, 0262	9
College German Level I	40	GER 0160, 0161, 0162	9
*Level II	48	GER 0260, 0261, 0262	9
College Spanish Level I	41	SPA 0160, 0161, 0162	9
*Level II	50	SPA 0260, 0261, 0262	9
Computers & Data Processing	47	CPS 0101, or EDP 0101	3
English Literature	46	ENG 0201, 0202	6
Freshman English	47	ENG 0101, 0102, 103	9
Marketing	47	DMK 0120	4
Macroeconomics, Intro.	48	ECO 0201, 0202, 0203	9
Microeconomics, Intro.	47		
Psychology, General	47	PSY 0260	3
Sociology, Intro.	47	SOC 0160	3
Statistics	49	MAT 0140	5
Western Civilization	50	HIS 0101, 0102, 0103	9

\* If level II of a Foreign Language is taken without taking Level I then credit for both levels (i.e. 18 quarter hours) will be awarded if the necessary minimum score is attained.

### Advanced Placement (AP) Exam:

If a student has taken Advanced Placement courses in high school and the respective exam, with a grade of (3) three or higher on the exam, then s/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 0101, 0102, 0103.)

### 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 quality 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 quality point average for the quarter.

## HONORS SCHOLARS PROGRAM

I. The Honors Scholars program is for freshmen students who will enroll fall quarter. The selection of participants will be based strictly on academic merit.

### II. Criteria for acceptance into the program

Selection of participants will be an Honors Scholars Program Faculty Committee decision based on the following:

1. SAT scores
2. Top 10% high school class ranking
3. High School grades
4. Two letters of recommendation from high school teachers, one of whom must be an English teacher.

### III. The Honors Curriculum:

As part of his/her regular course load, each participant will select two honors courses each quarter, fall through spring. Freshmen may choose courses from biology, English, and history. In the sophomore year, courses will be offered in humanities, N.C. history, literature, and physics. Participants in the Honors Program must:

1. Register for a minimum of 12 hours each quarter
2. Take two honors courses each quarter
3. Maintain a minimum grade point average of 3.50. (Should a student drop below the 3.50 requirement, s/he will have one quarter to bring the average back up to 3.50.)

### IV. Benefits of the Honors Program:

1. Selected participants will receive a three hundred dollar scholarship for each of the two years they are members of the Honors Program.
2. Participants will be identified as **Honors Scholars** on their transcripts and at graduation.
3. Honors courses will be challenging and enriching.
4. Special cultural opportunities will be available to **Honors Scholars** through the program.

## 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 or at a member institution of the North Carolina System of Community Colleges.

### 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, in cases where courses have been discontinued then additional substitutions may be approved. All course substitutions must be approved by the Division Dean and the Vice President for Faculty and Programs 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 unless excused by the Vice President for Faculty and Programs. Students should submit their written excuses at least one month in advance of the commencement exercises.

### Graduation With Honors

Students who complete a degree or diploma program with a quality point average of 4.0 will be graduated with High Honors. The student who earns a quality 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 coordinated by the Registrar's Office. 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 while attending this College. The College does not release an official transcript unless tuition, fees, and other obligations due the College have been paid. One transcript is given free. Thereafter a \$1.00 fee is charged for each transcript.

A statement of honorable dismissal will not be granted to students whose conduct and character would not entitle them to remain in the College.

## **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, and they receive certificates suitable for framing, as well as being eligible for placement service when they seek employment.

## **STUDENT SERVICES**

Transition to the college environment creates many challenges for students. ICC provides a professional staff, varied services, and attractive

facilities to assist its students in meeting these challenges. Student Services is committed to the philosophy of offering opportunities to maximize the personal development of its students across the life span — the recent high school graduate, the mid-life adult, the person seeking retraining, and the older citizen. Services have been, and are being, developed in response to the expressed individual needs of the students. The staff endeavors to establish and maintain positive relationships with students, members of the faculty, the administration, and the community.

### **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 Services Building, the attractive Center embodies a brightly decorated lounge, a game room, television area, and dining area where food vending service is available. Offices for the Student Government Association, the Yearbook and the Student Newspaper are adjacent to the game room.

Adjoining the Student Center are Student Services offices and personnel.

### **Orientation Program**

All new students are required to participate in the Orientation Program designed to facilitate their adjustment to the College's philosophy, programs, and standards. Special emphasis is placed on the facilities, services and resources of the College and the encouragement of the students to make full use of these opportunities. Students, in addition, are assisted in becoming better able to solve problems commonly experienced by students beginning college life.

### **Testing Services**

Before the new student enrolls in College Parallel, Technical, Early Childhood and Practical Nursing (LPN) programs, s/he is required to take the Comparative Guidance and Placement Test (CGP) which measures skill levels in reading, grammar, and mathematics. During a pre-registration orientation led by a counselor, the student learns whether or not his/her scores indicate a need for special preparation before credit courses are taken. The student's success is enhanced by an appropriate initial placement in classes. Prior to each quarter, a schedule of test dates is available and prospective students may call Student Services for further information. No fee is charged for the CGP.

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,

Reading Skills and Mathematics. Individuals interested in applying for the G.E.D. Program should make application to be tested at the Office of Student Services. Tests are administered on weekdays or evenings for a fee of \$5.00.

Other tests related to achievement of personal, academic, and vocational goals are available. Students who wish to explore any of these tests should contact a counselor. The testing unit, in addition, maintains information about a variety of national testing programs.

### **Counseling Center**

The professional counseling staff provides a variety of services to students and faculty 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 educational process, building of self-concept, improvement of interpersonal relationships, and increasing skills in self-management.

Counselors are available in the Student Service Building from 8:00 a.m. to 4:30 p.m. weekdays. Students may call 286-3636, ext. 244, for an appointment or they may drop in to talk with a counselor. By calling the above number, the student can make an evening appointment.

### **Job Placement**

The College provides an employment referral service for its students. Information on employment is made available and interviews are arranged with prospective employers. Students are assisted, also, with part-time employment.

The staff maintains contact with state employment services, business, industry, professions, federal government, and four-year colleges and universities in order to secure the latest information about employment trends, jobs, and educational requirements. In addition, representatives of various industries, businesses, and four-year colleges are invited to the Campus to talk with students about post-graduation plans and opportunities.

### **Career Development Center**

Look where you're going! Your career affects your life more than anything else does. For that reason, you really should know what you're getting into rather than just drifting into a career. The majority of people who fall into a career find their lives are not as satisfying or complete as they could be. Don't be like most people! Check out where you're going and find a career that is right for you.



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

- A Career Development Center staffed by a career assistant and offering a wide variety of occupational information.
- A career planning course, Career Decision Making and Life Planning — EDU 0161, 3 credits.
- CHOICES, a computer-assisted career information and Exploration System.
- Materials for interest-testing and other activities related to career decision-making.
- A career development counselor to assist you in the process of career decision-making.
- Assistance with skills identification, personality and interest assessment, resume writing, and interviewing skills.

Invest time and effort now to choose and implement a career that is right for you. Seldom will another investment give you the same payoff in your life!

For more information, call ext. 266 or visit the Career Center which is located off the lounge of the Student Services Building, Room 15.





## 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. Each building has a designated person responsible for first aid. Secretaries have had a first aid course.

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. In all cases involving serious illnesses or accidents, the next of kin will be notified.

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 through ICC. The current cost is \$9.50 per year.

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 Administration should visit the Student Services Office as early as possible for the purpose of making application to the Veterans Administration. Veterans are required to provide the Veterans Administration 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 Services will assist in completing the Veterans Administration 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 the "New GI Bill" should contact this office for assistance in completing their application to the Veterans Administration.

Veterans Administration educational benefits are authorized in accordance with credit or contact hours established by the Veterans Administration and are listed below:

### Courses Leading To A Standard Degree

#### College Parallel and Technical

Full time .....	12 or more quarter hours of credit
$\frac{3}{4}$ time .....	9-11 quarter hours of credit
$\frac{1}{2}$ time .....	6-8 quarter hours of credit

## Courses Not Leading To A Standard Degree

### Vocational Programs

Full time .....	22 clock hours
¾ time.....	16-21 clock hours
½ time.....	11-15 clock hours

Veterans and other eligible persons certified for Veterans Administration Educational Benefits who fail to maintain satisfactory progress as defined in the Academic Probation and Suspension Section of this catalog, will have their VA educational assistance benefits terminated. Attendance and conduct for all students, including veterans, is addressed in other portions of this catalog.

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

## Mail

The Office of Student Services distributes mail to the students, student activities, and clubs.

## 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 is 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  
Athletics  
Circle K International  
College Singers  
Cosmetology - Day  
Cosmetology - Afternoon  
Cosmetology - Evening  
Future Secretaries Association  
Intercollegiate Athletics  
Intramural Athletics  
Patriot Toastmasters Club  
Phi Beta Lambda  
Phi Theta Kappa  
Publications — Sentinel (Yearbook)  
                    Patriot (Newspaper)  
                    Anuran (Poetry Magazine)  
Sir Isaac Newton Science Club  
Technology Club  
Video Ventures Club

**Intercollegiate Athletics.** The College offers athletics on the intercollegiate level for men/women in golf and tennis. Isothermal Community College is a member of the Western Tarheel Conference.

SCHOOL COLORS: Blue and White

SCHOOL MASCOT: Patriot



## GENERAL COLLEGE REGULATIONS & POLICIES

### 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.

### Students' Rights

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

### 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.

### Traffic Regulations

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



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

### **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**

First week 8:30 a.m. to 3 p.m.  
Monday through Friday  
Second week 8:30 a.m. to 3 p.m.  
Monday through Friday

#### **NIGHT**

6 p.m. to 8:30 p.m.  
Monday through Thursday  
6 p.m. to 7:30 p.m.  
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**

Permanent 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 permanent ID card by paying the activity fee.

This permanent 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 Services 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/her fees during registration, s/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.

Tuition charges for all programs are as follows:

	<b>In-State</b>	<b>Out-of-State</b>
12 qtr. hours or more*	\$75 per qtr.	\$702. per quarter
Less than 12 qtr. hours*	\$6.25 per qtr. hr.	\$58.50 per qtr. hr.
<b>Activity Fee</b>		
Fall & Winter quarters	\$10 per quarter	\$10 per quarter
Spring quarter	\$ 8 per quarter	\$ 8 per quarter

\* Tuition charges are subject to change by the North Carolina Board of Community Colleges.

### **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 faculty 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. Tuition refunds will not be considered for tuition of five dollars (\$5) or less, except when the course or curriculum fails to materialize. Under these circumstances, the student's tuition shall be refunded.

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 the withdrawal are found excusable by the institution's administration, the student may be allowed credit for unrefunded tuition and fees if s/he applies for readmission during any of the next four calendar quarters and petitions in writing to be allowed such credit.

All requests for refunds must be in writing.

### **AUDIO-VISUAL SERVICES**

The audio-visual staff offers aid to the instructor in providing flexible and varied learning experiences. Audio-visual services include equipment, maintenance, production of teaching media, and assorted supplies to support the curriculum. The audio-visual specialist also provides assistance and facilities for student projects and to student representatives of the college newspaper, yearbook, and Student Government Association (SGA).

### **FINANCIAL ASSISTANCE PROGRAM**

#### **Financial Aid**

Isothermal Community College is a participant in federal and state financial aid programs. Awards are based on financial need as projected through a national Needs Analysis System, the Family Financial Statement (FFS) of the American College Testing Program. This financial aid application is made available through the local high school guidance offices or the Office of Financial Aid at Isothermal Community College. The student's need is derived by analyzing the total financial picture of the student and his/her family. Recipients must maintain satisfactory progress in their course of study and must show average academic achievement.

Students may secure information and financial aid applications by contacting the Director of Financial Aid in the Student Services Office. Listed below are the programs of financial assistance that are available at the College.



### **Pell Grants (formerly the Basic Educational Opportunity Grant (BEOG))**

The Pell Grant is a federally sponsored aid program designed to provide financial assistance to those who need aid to attend a post-high school educational institution. The main factor used to determine the family contribution is the family income. As a general guideline, if a family of four has an annual income of \$18,000 or less, the grant will be awarded. The average grant for Isothermal students has been \$490 per academic year. Applications for the Pell Grant can be obtained at the local high schools, at any post-high school institution (university, junior or senior college, technical or vocational school), or at any public library.

### **North Carolina Student Incentive Grants (NCSIG)**

This new grant program, NCSIG, is funded jointly by annual appropriations from the North Carolina State Legislature and the Federal Government. All undergraduate students who are considered North Carolina resident students for tuition purposes may make application, even though only those applicants with the greatest financial need can expect to receive this grant. For 1987-1988 no separate NCSIG application is required. Instead, all applicants from North Carolina should state on the Family Financial Statement (FFS) item #6666 representing College Foundation, Inc., Raleigh, N.C. and in the same item #84, Code #3109 representing Isothermal Community College, Spindale, N.C. as the agency and institution to which the data should be sent.



### **Supplemental Education Opportunity Grant (SEOG)**

This program is available to students with exceptional need. Supplemental Educational Opportunity Grants vary in amounts in direct relationship to an individual's needs and the availability of funds. Grants can range from \$200 to \$2,000 a year and can be no more than one-half of the total assistance to the student.

### **College Work-Study Program**

Students, particularly those from low-income families, who need a job to help pay for college expenses are potentially eligible for employment by their colleges under federally supported work-study programs.

The number of hours a student can work each week will depend on the student's academic load. During the summer or other vacation periods when they do not have classes, students can work full-time (40 hours per week).

### **Scholarship Loan Fund for Prospective Teachers of North Carolina**

This loan program is administered through the State Department of Education. Maximum loan consideration is \$900 per year and is renewable for four years. A percentage of the loan will be cancelled for each year of teaching service in North Carolina. Applications can be obtained from the Financial Aid Director in the Student Services Office. Students are advised to submit their applications early in the year.

### **Guaranteed Loan Program**

Loans are available to both incoming freshmen and currently enrolled students through the Guaranteed Loan Program. Under this program, one may borrow from a bank or other private financial institutions. Additional information and applications can be obtained through the Director of Financial Aid.

### **Vocational Rehabilitation**

Vocational rehabilitation offers services necessary to enable a student who is disabled to become self-supporting. Eligible handicapped persons may receive financial assistance while enrolled at Isothermal Community College.

Prospective students having a disability, including those with a learning disability, who desire to apply for training under the provisions of this program should contact the Division of Vocational Rehabilitation Office in their respective county.

## **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. To be eligible, the student must be enrolled as a full time curriculum student in good standing with a grade point average that will enable him/her to graduate.

## **Scholarships**

Each year scholarships are awarded to deserving students by the following organizations. The college does not participate in the selection process for off campus scholarships. Students interested in applying for one of the off campus scholarships must contact the grantor.

### **On Campus Scholarships**

A.J. Fletcher Music Scholarships  
Department of Community Colleges Scholarships  
Dr. W.M. Elliott Scholarship  
Dillard L. Morrow Sentinel Scholarship  
Frank & Mabel West Scholarship  
G.K. McClure Educational Fund  
Isothermal Community College Honors Scholarships  
N.C. Sheriff's Association Scholarship  
Robert Spratt Memorial Scholarship  
Ruppe Bible Class - Forest City First Baptist Church  
Rutherford Hospital Auxillary  
Southern Bell Telephone and Telegraph Company Scholarship  
Ulysses G. Whitworth, Sr. Scholarship Fund  
Wachovia Bank and Trust Company Scholarship

### **Off Campus Scholarships**

Beta Conclave Kappa Kappa Iota, Rutherford County  
Chase Areas High School Scholarships  
Cone Mills Scholarships  
Dora Yarn Mill  
East Rutherford High School  
    Afro American Club  
    Student Council  
    East Area High School Scholarship  
Education Assistance Program  
Forest City American Legion  
Gamma Beta Chapter of the Delta Kappa Gamma Society International  
    Forest City, NC

Grand Chapter of the Eastern Star Smithfield, NC  
Hong Kong Textile Profession Scholarship (Know How Exchange Association)  
Kiwanis Club of Rutherfordton  
Kiwanis Club of Tryon  
Lutz Yelton Scholarships  
Morgan Cooper Scholarship  
Kiwanis Club of Forest City  
National Secretaries Association  
Isothermal Chapter, Forest City, NC  
North Carolina Association of Educators  
North Carolina Lung Association  
N.C. Restaurant Association Scholarship  
R.S. Jaycettes  
Robert W. Conley IV Memorial Scholarship  
Rutherford County Association of Educational Office Personnel  
Rutherford Lions Club (Gene Denning) Scholarship  
Rutherford Spindale Central H.S. Area Scholarship  
Spindale Mills, Inc., Educational Assistance Program  
Spindale Rotary Club

### **Satisfactory Progress Standards for Financial Aid**

**Introduction:** The Higher Education Act of 1965, as amended by Congress in 1980, mandates institutions of higher education to establish minimum standards of "satisfactory progress" for students receiving financial aid. For the purpose of maintaining a consistent policy for all students receiving financial aid administered by the College's Financial Aid Office, these standards are applicable to all financial aid programs including all Federally sponsored Title IV programs.

### **Single Parent/Displaced Homemakers**

Carl D. Perkins Vocational Education Act (Funds for Single Parent/Displaced Homemakers). Funding for this program is provided to qualified students in the forms of tuition, fees, books and supplies, transportation and professional childcare. Eligibility is determined by a selection committee using federal guidelines and institutional criteria. Recipients must be enrolled in either the Learning Place (ABE) to earn a high school diploma, the Vocational/Technical Division or Business Division. A limited number of positions are available each year. Applications can be obtained in the offices of Student Services or the Career Planning Center.

### **Individual Referral Program — JTPA**

Funding for this program is provided through the Job Training Partnership Act. Participants receive tuition, fees, required books, supplies and a travel allowance. Some are also entitled to a weekly needs-based payment.

Eligibility is determined by JTPA income guidelines and other criteria. Students must enroll or be enrolled in certain approved technical or vocational courses. A limited number of openings are available each quarter. Applications can be obtained in the HRD Office, Continuing Education Building and at the Polk County Campus.

**Satisfactory Progress Defined:** To initially receive or continue to receive financial aid, a student must demonstrate satisfactory progress as defined in the GENERAL COLLEGE ACADEMIC STATUS section of the catalog and meet the following condition: The maximum enrollment time frame for this purpose is defined as the equivalent of twice the number of academic quarters, as outlined in the College catalog, required of full-time students to complete a curriculum.

**Policies and Procedures:** The specific policies and procedures to be used in applying the satisfactory progress standards are outlined below:

1. Satisfactory progress will be evaluated prior to each payment period on a quarterly basis. (Exception: For the Guaranteed Student Loan and PLUS Loan Programs evaluation will be completed prior to certification of the loan application.)
2. Grades of "F", "I", "WP", "WF", "W", and "Y" will not qualify as successful completion of credit hours attempted.
3. Repeated courses for which the student initially received a grade of "I", "WP", "WF", or "W", and was paid will be permitted one additional quarter to complete the course. Also, courses repeated which were previously completed with an acceptable grade toward the College's graduation requirements will not qualify for repayment.
4. Transfer credits from other postsecondary institutions will not be used to determine satisfactory progress.
5. Courses taken, which are not required to meet the graduation requirements of the curriculum program for which a student is enrolled, do not qualify for payment.
6. A student who fails to demonstrate satisfactory progress as defined will forfeit all financial aid awarded and disbursements will be terminated.
7. The maximum enrollment time frame will be prorated for those students who enroll on a half time or three-quarter time basis.

**Appeal of Financial Aid Termination:** To appeal financial aid termination a student must be able to demonstrate mitigating circumstances. The procedure for appeal is:

1. A student will indicate *in writing* to the Director of Financial Aid the reasons why he/she did not make satisfactory progress and why financial aid should not be terminated. Documentation to support the appeal is permitted.



2. The Director of Financial Aid will review the appeal to determine whether or not termination of aid is justified. The student will be advised of the decision in writing.
3. A student wishing to appeal the decision of the Director of Financial Aid may do so in writing to the Student Financial Aid Committee, c/o the Financial Aid Office. Additional appeals may be made to the Academic Affairs Committee and finally through the Student Due Process Procedure, if deemed necessary by the student.

**Reinstatement of Financial Aid Eligibility:** Should a student have his/her financial aid eligibility terminated due to not meeting the satisfactory progress definition, termination will continue until the student enrolls for a subsequent academic term at his/her own expense and completes the term satisfying the satisfactory progress definition. Once the satisfactory progress definition is met eligibility is reinstated for the subsequent academic term. In addition, financial aid eligibility will immediately be reinstated for all appeals upheld.

## CONTINUING EDUCATION

Continuing Education's flexibility provides the opportunity to meet a wide variety of individual and group educational needs. Subjects available range from learning the alphabet to the study of a high tech skill. Many can be offered on a basic, intermediate or advanced level of study. Some courses are offered on a continuing basis while others are given in response to requests of individuals or groups. Study groups meet in schools, churches, community clubs, fire stations, industry, and rest homes throughout Rutherford and Polk Counties. Class hours, the length of the course, and the number of meetings per week can be arranged for the convenience of the participants.

Individuals or organizations (a neighborhood group, an industry, or a church group, for example) are urged to call the Continuing Education office, 286-3636 in Spindale, and 859-5868 in Tryon, regarding classes scheduled, the possibility of locating a class in their community, or organizing a class around a new idea.

### 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 ABE or adult high school program.) It is important for a person planning to participate in a class to call the Continuing Education office and place their name on the class list. All people listed will be notified of schedule changes. Registration and payment of fees are made at the first class meeting.

### **Registration Fees**

Student fees depend on the type of course. There are no registration fees for certain programs. Adult Basic Education, GED, and the High School Diploma programs are free. This includes in-service training for law enforcement, firemen and EMT personnel. North Carolina residents 65 and over, as well as prisoners and mentally handicapped adults taking academic or occupational oriented courses are also exempt.

The fee for adults registering for Academic or Occupational courses is \$15.00. It is \$20.00 for Practical Skill classes and \$25.00 for Avocational courses.

### **New and Expanding Industry**

New training service 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**

Occupational oriented classes appeal to those seeking to retain or upgrade their knowledge or skills for job qualification or improvement. The College also provides business, industry and public service organizations classes that concentrate on employee development. The following is a brief list of occupational oriented courses:

Advanced Spinning	Industrial Sewing
Advanced Winding	Intro to Metals
Blueprints and Measurements	Law Enforcement
Building Contractor's Code	Loom Fixing
Child Care	Mechanist Fundamentals
Emergency Medical Service	Management Development
Fire Fighting	Metallurgy
Geriatric Care	Nursing Service
Industrial Fire Brigade	Secretarial Skills
	Sewing Machine Repair

## Academic Extension Program

Traditional college courses are modified for the adult seeking self-improvement and enrichment study. Classes may be developed from the following categories:

Humanities  
Religion  
Languages  
Math  
Anthropology  
Economics  
Geography

History  
Journalism  
Philosophy  
Politics  
Sociology  
Psychology  
Science related



## Avocational and Practical Skill Programs

These courses are designed for self-satisfaction. Classes may help participants broaden talents, stimulate creativity or to develop skills that are not work related. The list below provides ideas for the type of classes that can be offered.

Craft  
Power Puff Mechanics  
Cake Decorating  
Calligraphy  
CPR  
Painting  
Stitchery  
Photography  
Draperly Making

Ceramics  
Wood-working  
Bricklaying  
Genealogy  
Cooking  
Sign Language  
Quilting  
Guitar  
Gunsmithing

## Adult Basic Education

Adult Basic Education is a program designed to improve a person's skills in reading, writing, and arithmetic. These skills are not developed as isolated bits of knowledge, but are related to practical situations adults deal with in everyday life. The materials used are designed for adults and range from materials to teach reading through those preparing students to enter the high school program.

Classes usually meet for a three-hour session twice a week. In order to accommodate a variety of student needs, both daytime and evening classes are scheduled. ABE classes are often held in neighborhoods where students live or at their places of work. 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

The HRD (Human Resources Development) Program is presently operating in 45 Community Colleges and Technical Institutes in the state. It is a program dealing with motivation, attitudinal changes and pre-job orientation for the unemployed or underemployed. The class meets three hours a day, Monday-Friday. The length varies from five to six weeks.

During the program, the student is involved in group interaction activities, discussions and counseling which help to improve self-concept, overcome obstacles to effective communication and develop job-getting and job-holding skills. Participants complete job applications, write a resume and prepare for job interviews. The HRD student is also encouraged to set personal goals and list the steps to be taken to achieve them.





## **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 the vocational workshop. There is no registration fee for these classes.

### **The Learning Place (Adult High School Diploma and GED Programs)**

In cooperation with the Polk, Tryon, and Rutherford County School Boards of Education and the North Carolina State Board of Education, Isothermal Community College offers adult high school completion programs to area residents who are 18 years old or older. These programs include the Adult High School Diploma (AHSD) program and the General Educational Development (GED) program.

A variety of adult-oriented reading, writing, grammar, arithmetic, science, and social studies material is provided for self-paced instruction. Self-paced study allows students to work independently of others and to progress at his or her own pace. Individualized instruction is provided to a student during each class meeting.

To enter either the adult high school diploma program or the GED program, a person must be at least eighteen years old or have special written permission from the proper authorities. Eligible students may choose to enroll in any of the scheduled classes that are located on campus or off campus. 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 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.

GED practice tests and GED study material are available through the high school completion program. A student's score on the practice GED test indicates whether or not the student should study as well as which subject(s) to study.

### **Telecourses**

A student can prepare for the GED test by watching weekly courses on Public TV. These courses usually begin in September. A student who is enrolled in the course is required to watch a variety of 30 minute lessons. At the end of the series, the student can make an appointment to take the GED test.

### **Learning Place Hours:**

#### **Office Hours**

8:00 a.m. — 4:30 p.m. and 6:00 p.m. — 9:00 p.m. Monday-Thursday

8:00 a.m. — 3:00 p.m. Friday

#### **Class Hours**

In order to make the classes as convenient for students as possible, morning, afternoon, and evening classes are offered. Classes are normally scheduled from 9:00 a.m. to 12:00 noon, from 1:00 p.m. to 4:00 p.m. and from 6:00 p.m. to 9:00 p.m. (A class is often scheduled from 4:00 p.m. to 6:00 p.m., two days a week.)

**Polk  
County  
Campus**



## POLK COUNTY CAMPUS

The Polk County Campus offers a wide selection of both credit and noncredit courses. Credit classes include college parallel and occupational study programs. A diversified program with qualified faculty members teaching both day and evening classes is available. Students may choose to complete specialized coursework at the Spindale campus or transfer to another college. Noncredit (continuing education) courses range from self-enrichment classes such as painting and foreign languages to courses which offer training to volunteer firemen, emergency medical technicians, and rescue personnel. Courses to improve occupational skills are also offered through Polk County Campus' continuing education program.

Services offered at Polk County Campus include academic and career counseling, individual referral for the JTPA program, library facilities and an individualized instruction center.

A bulletin listing course offerings is mailed out quarterly and news releases of the curriculum are placed in all three local papers and 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. and the Campus Council, which meets the 3rd Saturday of each month and is open to the public. Both of these groups provide the Vice President of Polk Campus with information and suggestions for improvement in both programs and services.

Regular hours at the Polk County Campus are Monday through Thursday, 8:00 a.m. — 9:30 p.m. Friday from 8:00 a.m. to 4:30 p.m., and other prearranged times including weekends. Additional information concerning this campus may be obtained by visiting the campus or by calling 859-5868.

Polk County Campus  
Isothermal Community College  
P.O. Box 520  
Tryon, NC 28782



## **Continuing Education**

The Continuing Education Division is designed to provide educational noncredit opportunities for adults who desire to learn occupational skills as well as to upgrade their capabilities for success on the job; or to enrich their lives through arts and crafts. In order to accommodate a variety of student needs, a list of the Continuing Education classes include industrial and business management courses, bookkeeping, sewing, woodworking, guitar, first aid, adult growth and personal effectiveness, Emergency Medical Technician Training (EMT), Fire Service, teacher renewal courses, and many others.

## **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.

To enter the program a person must be eighteen years old or older, or have special permission from the Polk County Superintendent of Education or the Superintendent, Tryon School System as appropriate. Students may choose to study at the Individualized Instruction Center at Tryon, or at an extension high school class. Each student in the program independently of others, arranges a personal program, arranges their own study schedule, and proceeds at an individualized pace. Diplomas earned are valid for those who wish to continue their studies in institutions of high learning.

## **Adult Basic Education**

Adult Basic Education is a program designed to improve a person's 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 in providing tutors for students desiring one-on-one instruction.

Classes meet four days a week in three-hour sessions on the Polk Campus. Also, there are night classes offered on campus and throughout the county. There is no charge for these classes.

Upon completion, the Adult Basic Education program enables a student to enroll in an Adult High School Diploma program. This program is held at the same times and places as the Adult Basic Education Classes.



## CURRICULUM PROGRAMS

General Education  
College Transfer Programs  
Technical Programs  
Vocational Programs  
Certificate Programs  
Individualized Instruction  
Cooperative Education  
Special Services

## CURRICULUM PROGRAMS

Curriculum programs at Isothermal Community College fall into three major categories — general education, college transfer and occupational. The general education program is designed for someone with no intentions of transferring to a senior institution or someone that does not have any specific educational goals. 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 (indicated in course outlines); some subjects in these programs may be taken on a self-instructional basis through the Individualized Instruction Center.

### General Education

G-020 Associate of General Education

### 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-109 Associate Degree for Vocational Instructors
- 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-030 Executive Secretarial Science
- T-074 Foodservice Management
- T-033 General Office Technology
- T-049 Industrial Management
- T-128 Insurance
- T-020 Marketing and Retailing
- T-051 Mechanical Engineering Technology
- T-179 Radio and TV Broadcasting Technology
- T-127 Real Estate
- T-088 Teacher Associate
- T-187 Telecommunications Equipment Technology

### **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-042 Electronic Servicing — Radio/T.V. Repair
- V-111 Geriatric Care Specialist
- V-033 Industrial Mechanics
- V-032 Machinist
- V-072 Nurse Assistant
- V-038 Practical Nurse Education
- V-050 Welding



## GENERAL EDUCATION

The General Education program is designed for the person who does not have a specific educational goal in mind, but wishes to take courses to broaden their personal knowledge in fields of interest or in new areas. If the courses outlined below are taken during the student's time at Isothermal Community College, then the Associate of General Education (AGE) degree can be awarded. This program is not designed for transfer to a senior institution. If, however, one decides to transfer after starting this program, then it will be the student's responsibility to take those courses required for admission to the senior institution. This program has a curriculum code of G020.

## GRADUATION REQUIREMENTS

### Associate of General Education (AGE)

Subject	Course	Credit Hours
History	History 0101, 0102, 0103	9
Communications	English 0101, 0102, 0103*	9
Literature	English 0201, 0202, 0203	9
Mathematics Math	Math 0101 or 0121	4 or 5
Natural Science	Any three-quarter sequence of the same lab science.	12
Computer Science	Any CPS or EDP course of 3 or more credits	3
Physical Education	PED 0101	2
Humanities	See the humanities section of the course descriptions for the list of courses that can be used to meet this requirement (page 199).	3
Electives	May be chosen from among any first digit "O" courses.	44 or 45

\*ENG 0111, 0112, 0113 will also satisfy this requirement.

## COLLEGE TRANSFER PROGRAMS

### Objectives

To provide opportunities for students to complete the general education requirements leading to an Associate of Arts Degree (A.A.), an Associate of Fine Arts Degree (A.F.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., A.F.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.

### Course Numbering System

College transfer courses are indicated by a four (4) digit number beginning with "0". Any such numbered course may be taken for graduation requirements. No course with a four digit number beginning with "1" may be taken for college transfer graduation requirements. Any Physical Education course — regardless of number — may be taken either during the first or second year.

## GRADUATION COURSE REQUIREMENTS

### ASSOCIATE OF ARTS

Subject	Course	Credit Hours
History	History 0101, 0102, 0103	9
Communications	*English 0101, 0102, 0103 (Must be taken in sequence)	9
Literature	English 0201, 0202, 0203, 0204 (Any three of the four)	9
Mathematics	**Math 0101, 0102 or Math 0121, 0122 or Math 0131, 0132	8
Computer Science	Any CPS or EDP course of 3 or more credits	3
Natural Science	Any three-quarter sequence of the same lab science.	12
Physical Education	PED 0101 and two physical educa- tion activity courses from the following: PED 0102-0160, 0201-0244	4
Humanities	See the humanities section of the course descriptions for the list of courses that can be used to meet this requirement (page 199)	6
Social Science	May be taken from among any Psychology, Religion, Philosophy, Soci- ology, Anthropology, Economics, History, Geography, or Political Science courses.	3
Electives	May be chosen from among any first digit "0" courses.	33

\*ENG 0111, 0112, 0113 will also satisfy this requirement.

\*\*Math 0121, 0122, 0131, and 0132 are 5-hour courses.

## 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 0121, 0122, 0131, 0132)

24 hours Natural Science

4-6 additional hours math, science, and/or Computer Science

Additional science hours can be substituted for MATH 0132 in Pre-Medical.

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

MAT 0131, 0132, 0133, 0231 and

PHY 0220, 0221, 0222 and

CHM 0101, 0102, 0103 -or-

BIO 0101, 0102, 0103

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

CHM 0101, 0102, 0103

PHY 0220, 0221, 0222

MAT 0121, 0122, 0131, 0132, 0133, and 0231 -or-

any 30 hours of advanced math beyond 0121

These requirements are reflected in the program outlines which follow.

### ASSOCIATE IN FINE ARTS (AFA) DEGREE

The Fine Arts program as outlined below will fulfill the requirements for the Associate of Fine Arts Degree (A.F.A.). It requires prescribed amounts of general education courses as well as courses in the desired professional program. At this time the professional area in which the A.F.A. degree will be awarded is Music.



## GRADUATION COURSE REQUIREMENTS

### ASSOCIATE OF FINE ARTS (AFA)

Subject	Course	Credit Hours
Communications	*ENG 0101, 0102, 0103	9
Humanities	Literature — ENG 0203 or 0204 — required See the humanities section of the course description for the list of courses that can be used to meet this requirement (page 199) — one course from four different areas, not to include professional program area.	12
Sciences and/or Mathematics		8
Computer Science	Any CPS or EDP course of 3 or more credits	3
Social Sciences	Anthropology, Economics, Geography, History, Political Science, Psychology, Sociology, Religion, or Philosophy.	9
Physical Education		4
Music Courses		51

\*ENG 0111, 0112, 0113 will also satisfy this requirement.

#### Major Area of Concentration in MUSIC (C015)

- Music Theory I, II, III (12 credit hours)
- Advanced Music Theory IV, V, VI (12 credit hours)
- Music History (15 credit hours)
- Applied Music (6 credit hours)
- Advanced Applied Music (6 credit hours)
- Ensemble (6 credit hours)
- Piano Skills (1 credit hour)

**PRE-BUSINESS ADMINISTRATION C-004 (DAY)**

		Course Title	Class Hours	Lab Hours	Credit Hours
<b>FIRST QUARTER</b>					
ENG	0101	Freshman Composition I	3	0	3
MAT	0121	College Algebra & Trigonometry I	5	0	5
		Natural Science	3	3	4
HIS	0101	Western Civilization	3	0	3
PED	0101	Concepts in Physical Education	<u>1</u>	<u>2</u>	<u>2</u>
			15	5	17
<b>SECOND QUARTER</b>					
ENG	0102	Freshman Composition II	3	0	3
MAT	0122	College Algebra & Trigonometry II	5	0	5
		Natural Science	3	3	4
HIS	0102	Western Civilization	3	0	3
PED		Selection	<u>0</u>	<u>3</u>	<u>1</u>
			14	6	16
<b>THIRD QUARTER</b>					
ENG	0103	Freshman Composition III	3	0	3
		Natural Science	3	3	4
HIS	0103	Western Civilization	3	0	3
PED		Selection	0	3	1
		Humanities Requirement	3	0	3
		Humanities Requirement	<u>3</u>	<u>0</u>	<u>3</u>
			15	6	17
<b>FOURTH QUARTER</b>					
		Literature Selection	3	0	3
BUS	0210	Principles of Accounting	3	2	4
		Computer Requirement	3	0	3
ECO	0201	Principles of Economics	<u>3</u>	<u>2</u>	<u>4</u>
			12	4	14
<b>FIFTH QUARTER</b>					
		Literature Selection	3	0	3
BUS	0211	Principles of Accounting	3	2	4
ECO	0211	Principles of Economics	3	2	4
		Electives	<u>6</u>	<u>0</u>	<u>6</u>
			15	4	17
<b>SIXTH QUARTER</b>					
		Literature Selection	3	0	3
BUS	0212	Principles of Accounting	3	2	4
ECO	0203	Principles of Economics	3	2	4
		Electives	<u>6</u>	<u>0</u>	<u>6</u>
			15	4	17

\*May demonstrate competency.

**PRE-BUSINESS ADMINISTRATION C-004 (EVENING)**

		<b>Course Title</b>	<b>Class Hours</b>	<b>Lab Hours</b>	<b>Credit Hours</b>
<b>FIRST QUARTER</b>					
ENG	0101	Freshman Composition I	3	0	3
		Natural Science	3	3	4
HIS	0101	Western Civilization	<u>3</u>	<u>0</u>	<u>3</u>
			9	3	10
<b>SECOND QUARTER</b>					
ENG	0102	Freshman Composition II	3	0	3
		Natural Science	3	3	4
HIS	0102	Western Civilization	<u>3</u>	<u>0</u>	<u>3</u>
			9	3	10
<b>THIRD QUARTER</b>					
ENG	0103	Freshman Composition III	3	0	3
		Natural Science	3	3	4
HIS	0103	Western Civilization	<u>3</u>	<u>0</u>	<u>3</u>
			9	3	10
<b>FOURTH QUARTER</b>					
		Literature Selection	3	0	3
MAT	0121	College Algebra & Trigonometry I	5	0	5
PED	0101	Concepts in Physical Education	1	2	2
BUS	0101	Beginning Typewriting*	2	3	3
BUS	0210	Principles of Accounting	<u>3</u>	<u>2</u>	<u>4</u>
			12	5	14
<b>FIFTH QUARTER</b>					
MAT	0122	College Algebra & Trigonometry II	5	0	5
ECO	0201	Principles of Economics	3	2	4
BUS	0211	Principles of Accounting	<u>3</u>	<u>2</u>	<u>4</u>
			11	4	13
<b>SIXTH QUARTER</b>					
		Literature Selection	3	0	3
ECO	0202	Principles of Economics	3	2	4
BUS	0212	Principles of Accounting	3	2	4
		Humanities Requirement	3	0	3
PED		Selection	<u>0</u>	<u>3</u>	<u>1</u>
			12	7	15
<b>SEVENTH QUARTER</b>					
		Literature Selection	3	0	3
ECO	0203	Principles of Economics	3	2	4
		Electives	<u>6</u>	<u>0</u>	<u>6</u>
			12	2	13
<b>EIGHTH QUARTER</b>					
		Computer Requirement	3	0	3
PED		Selection	0	3	1
		Humanities Requirement	3	0	3
		Electives	<u>6</u>	<u>0</u>	<u>6</u>
			12	3	13

\*May demonstrate competency.

**PRE-BUSINESS EDUCATION C-026 (DAY)**

			<b>Class</b>	<b>Lab</b>	<b>Credit</b>
			<b>Hours</b>	<b>Hours</b>	<b>Hours</b>
<b>FIRST QUARTER</b>					
ENG	0101	Freshman Composition I	3	0	3
MAT	0101	Finite Mathematics I	4	0	4
or					
MAT	0121	College Algebra & Trigonometry I			
BUS	0101	Beginning Typewriting*	2	3	3
BIO	0101	Principles of Biology	3	3	4
HIS	0101	Western Civilization	<u>3</u>	<u>0</u>	<u>3</u>
			15	6	17
<b>SECOND QUARTER</b>					
ENG	0102	Freshman Composition II	3	0	3
MAT	0102	Finite Mathematics II	4	0	4
or					
MAT	0122	College Algebra & Trigonometry II			
BIO	0102	Principles of Biology	3	3	4
HIS	0102	Western Civilization	3	0	3
PED		Selection	<u>0</u>	<u>3</u>	<u>1</u>
			13	6	15
ENG	0103	Freshman Composition III	3	0	3
			3	0	3
BIO	0103	Principles of Biology	3	3	4
HIS	0103	Western Civilization	3	0	3
ENG	0160	Public Speaking	3	0	3
PED		Selection	<u>0</u>	<u>3</u>	<u>1</u>
			15	9	17
<b>FOURTH QUARTER</b>					
			3	0	3
BUS	0104	Shorthand	5	0	5
BUS	0210	Principles of Accounting	3	2	4
ECO	0201	Principles of Economics	<u>3</u>	<u>2</u>	<u>4</u>
			14	6	16
<b>FIFTH QUARTER</b>					
			3	0	3
BUS	0105	Shorthand	5	0	5
BUS	0211	Principles of Accounting	3	2	4
ECO	0202	Principles of Economics	<u>3</u>	<u>2</u>	<u>4</u>
			14	6	16
<b>SIXTH QUARTER</b>					
			3	0	3
BUS	0106	Shorthand	5	0	5
BUS	0212	Principles of Accounting	3	2	4
ECO	0203	Principles of Economics	3	2	4
PED	0101	Concepts in Physical Education	<u>1</u>	<u>2</u>	<u>2</u>
			15	8	18

\*May demonstrate competency.



**PRE-BUSINESS EDUCATION C-026 (EVENING)**

		<b>Course Title</b>	<b>Class Hours</b>	<b>Lab Hours</b>	<b>Credit Hours</b>
<b>FIRST QUARTER</b>					
ENG	0101	Freshman Composition I	3	0	3
BIO	0101	Principles of Biology	3	3	4
HIS	0101	Western Civilization	<u>3</u>	<u>0</u>	<u>3</u>
			9	3	10
<b>SECOND QUARTER</b>					
ENG	0102	Freshman Composition II	3	0	3
BIO	0102	Principles of Biology	3	3	4
HIS	0102	Western Civilization	<u>3</u>	<u>0</u>	<u>3</u>
			9	3	10
<b>THIRD QUARTER</b>					
ENG	0103	Freshman Composition III	3	0	3
BIO	0103	Principles of Biology	3	3	4
HIS	0103	Western Civilization	<u>3</u>	<u>0</u>	<u>3</u>
			9	3	10
<b>FOURTH QUARTER</b>					
			3	0	3
ENG	0160	Computer Requirement	3	0	3
BUS	0210	Principles of Accounting	3	2	4
PED		Selection	<u>0</u>	<u>3</u>	<u>1</u>
			9	5	11
<b>FIFTH QUARTER</b>					
			3	0	3
ECO	0201	Literature Selection	3	2	4
BUS	0104	Principles of Economics	5	0	5
BUS	0211	Shorthand	<u>3</u>	<u>2</u>	<u>4</u>
			14	4	16
<b>SIXTH QUARTER</b>					
			3	0	3
BUS	0105	Literature Selection	5	0	5
ECO	0202	Shorthand	3	2	4
BUS	0212	Principles of Economics	<u>3</u>	<u>2</u>	<u>4</u>
			14	4	16
<b>SEVENTH QUARTER</b>					
			3	0	3
BUS	0106	Literature Selection	5	0	5
ECO	0203	Shorthand	3	2	4
MAT	0101	Principles of Economics	4	0	4
MAT	0121	Finite Mathematics I or College Algebra & Trigonometry I	—	—	—
			15	2	16
<b>EIGHTH QUARTER</b>					
BUS	0101	Beginning Typewriting*	2	3	3
PED	0101	Concepts in Physical Education	1	2	2
MAT	0102	Finite Mathematics II	4	0	4
MAT	0122	Finite Mathematics II or College Algebra & Trigonometry II	—	—	—
PED		Selection	<u>0</u>	<u>3</u>	<u>1</u>
			7	8	10

\*May demonstrate competency.

## PRE-COMPUTER SCIENCE C-040 (DAY)

			Class	Lab	Credit
<b>FIRST QUARTER</b>			Hours	Hours	Hours
ENG	0101	Freshman Composition I	3	0	3
EDP	0160	Microcomputer Operations	2	2	3
MAT	0131	Calculus & Analytic Geometry I	5	0	5
HIS	0101	Western Civilization	3	0	3
EDP	0101	Computer Concepts	<u>3</u>	<u>0</u>	<u>3</u>
			16	2	17
<b>SECOND QUARTER</b>					
ENG	0102	Freshman Composition II	3	0	3
MAT	0132	Calculus & Analytic Geometry II	5	0	5
HIS	0102	Western Civilization	3	0	3
CPS	0102	Introduction to Computer Programming	<u>3</u>	<u>2</u>	<u>4</u>
			14	2	15
<b>THIRD QUARTER</b>					
ENG	0103	Freshman Composition III	3	0	3
MAT	0133	Calculus & Analytic Geometry III	5	0	5
CPS	0105	Pascal Programming	3	2	4
HIS	0103	Western Civilization	3	0	3
PED	0101	Concepts in Physical Education	<u>1</u>	<u>2</u>	<u>2</u>
			15	4	17
<b>FOURTH QUARTER</b>					
Literature Selection			3	0	3
MAT	0231	Calculus & Analytic Geometry IV	5	0	5
CHM	0101	General Chemistry I	3	3	4
or					
PHY	0220	Analytical Physics I			
PED		Elective	0	3	1
CPS	0201	Algorithms and Programming	<u>3</u>	<u>2</u>	<u>4</u>
			14	8	17
<b>FIFTH QUARTER</b>					
Literature Selection			3	0	3
CPS	0202	Assembly Language and Machine Operation	3	2	4
CHM	0102	General Chemistry II	3	3	4
or					
PHY	0221	Analytical Physics II			
		Social Science Elective	3	0	3
PED		Elective	<u>0</u>	<u>3</u>	<u>1</u>
			12	8	15
<b>SIXTH QUARTER</b>					
Literature Selection			3	0	3
CPS	0204	Data Structures	3	2	4
CHM	0103	General Chemistry III	3	3	4
or					
PHY	0222	Analytical Physics III			
		Humanities Electives	<u>6</u>	<u>0</u>	<u>6</u>
			15	5	17

PRE-ENGINEERING AND PRE-MATH C007/C-012

		Course Title	Class Hours	Lab Hours	Credit Hours
<b>FIRST QUARTER</b>					
CHM	0101	General Chemistry	3	3	4
ENG	0101	Freshman Composition I	3	0	3
HIS	0101	Western Civilization	3	0	3
MAT	0131	Calculus & Analytic Geometry I	<u>5</u>	<u>0</u>	<u>5</u>
			14	3	15
<b>SECOND QUARTER</b>					
CHM	0102	General Chemistry	3	3	4
ENG	0102	Freshman Composition II	3	0	3
HIS	0102	Western Civilization	3	0	3
MAT	0132	Calculus & Analytic Geometry II	<u>5</u>	<u>0</u>	<u>5</u>
			14	3	15
<b>THIRD QUARTER</b>					
CHM	0103	General Chemistry	3	3	4
ENG	0103	Freshman Composition III	3	0	3
HIS	0103	Western Civilization	3	0	3
MAT	0133	Calculus & Analytic Geometry III	<u>5</u>	<u>0</u>	<u>5</u>
PED	0101	Concepts in Physical Education	<u>1</u>	<u>2</u>	<u>2</u>
			15	5	17
<b>FOURTH QUARTER</b>					
			3	0	3
MAT	0231	Calculus & Analytic Geometry IV	5	0	5
PED		Selection	0	3	1
PHY	0220	Analytical Physics I	3	3	4
ECO	0201	Principles of Economics	<u>3</u>	<u>2</u>	<u>4</u>
			14	8	17
<b>FIFTH QUARTER</b>					
			3	0	3
CPS	0102	Introduction to Computer Programming	3	2	4
EGR	0101	Engineering Drawing I	0	6	3
PHY	0221	Analytical Physics II	3	3	4
ECO	0202	Principles of Economics	<u>3</u>	<u>2</u>	<u>4</u>
			12	13	18
<b>SIXTH QUARTER</b>					
			3	0	3
CPS	0235	FORTTRAN Programming	3	2	4
PHY	0222	Analytical Physics III	3	3	4
			3	0	3
			3	0	3
PED		Selection	<u>0</u>	<u>3</u>	<u>1</u>
			15	8	18

## PRE-HEALTH AND PHYSICAL EDUCATION C-031

		Course Title	Class Hours	Lab Hours	Credit Hours
<b>FIRST QUARTER</b>					
ENG	0101	Freshman Composition I	3	0	3
HIS	0101	Western Civilization	3	0	3
MAT	0101	Finite Mathematics I	4	0	4
		or			
MAT	0121	College Algebra & Trigonometry I			
PED	0101	Concepts in Physical Education	1	2	1
		Natural Science (Biology)	<u>3</u>	<u>3</u>	<u>4</u>
			14	5	15
<b>SECOND QUARTER</b>					
ENG	0102	Freshman Composition II	3	0	3
HIS	0102	Western Civilization	3	0	3
MAT	0101	Finite Mathematics II	4	0	4
		or			
MAT	0122	College Algebra & Trigonometry II			
HEA	0103	First Aid	3	0	3
		Natural Science (Biology)	<u>3</u>	<u>3</u>	<u>4</u>
			16	3	17
<b>THIRD QUARTER</b>					
ENG	0103	Freshman Composition III	3	0	3
HIS	0103	Western Civilization	3	0	3
HEA	0112	Personal & Community Health	5	0	5
PED		Selection	0	3	1
		Natural Science (Biology)	<u>3</u>	<u>3</u>	<u>4</u>
			14	6	16
<b>FOURTH QUARTER</b>					
		Literature Selection	3	0	3
HUM	0160	Introduction to Humanities	3	0	3
PSY	0260	General Psychology	3	0	3
BIO	0270	Anatomy & Physiology I	3	3	4
PED		Selection	0	3	1
PED		Selection	<u>0</u>	<u>3</u>	<u>1</u>
			12	9	15
<b>FIFTH QUARTER</b>					
		Literature Selection	3	0	3
ENG	0160	Public Speaking	3	0	3
BIO	0271	Anatomy & Physiology II	3	3	4
		Computer Requirement	3	0	3
PHS	0170	Environmental Science	<u>3</u>	<u>0</u>	<u>3</u>
			15	3	16
<b>SIXTH QUARTER</b>					
		Literature Selection	3	0	3
BIO	0272	Anatomy & Physiology III	3	3	4
CHM	0162	Introduction to Chemistry	3	3	4
PSY	0261	Developmental Psychology	3	0	3
		Elective	<u>3</u>	<u>0</u>	<u>3</u>
			15	6	17



**PRE-JOURNALISM C-009**

		<b>Course Title</b>	<b>Class Hours</b>	<b>Lab Hours</b>	<b>Credit Hours</b>
<b>FIRST QUARTER</b>					
ENG	0101	Freshman Composition I	3	0	3
HIS	0101	Western Civilization	3	0	3
MAT	0101	Finite Mathematics I	4	0	4
		or			
MAT	0121	College Algebra & Trigonometry I			
ENG	0161	Journalism	3	0	3
		Natural Science (Biology, Chemistry, or Geology)	<u>3</u>	<u>3</u>	<u>4</u>
			16	3	17
<b>SECOND QUARTER</b>					
ENG	0102	Freshman Composition II	3	0	3
HIS	0102	Western Civilization	3	0	3
MAT	0102	Finite Math II	4	0	4
		or			
MAT	0122	College Algebra & Trigonometry II			
ENG	0162	Journalism Practice	0	2	1
PED		Selection	0	3	1
		Natural Science	<u>3</u>	<u>3</u>	<u>4</u>
			13	8	16
<b>THIRD QUARTER</b>					
ENG	0103	Freshman Composition III	3	0	3
HIS	0103	Western Civilization	3	0	3
		Computer Requirement	3	0	3
ENG	0162	Journalism Practice	0	2	1
		Natural Science	3	3	4
		Social Science Requirement (Economics)	<u>3</u>	<u>0</u>	<u>3</u>
			15	5	17
<b>FOURTH QUARTER</b>					
		Literature Selection	3	0	3
ENG	0260	Creative Writing I	3	0	3
ENG	0162	Journalism Practice	0	2	1
HUM	0160	Introduction to the Humanities	3	0	3
PED	0101	Concepts in Physical Education	1	2	2
SOC	0160	Introduction to Sociology	<u>3</u>	<u>0</u>	<u>3</u>
			13	4	15
<b>FIFTH QUARTER</b>					
		Literature Selection	3	0	3
ENG	0262	Creative Writing II	3	0	3
ENG	0162	Journalism Practice	0	2	1
PED		Selection	0	3	1
SOC	0161	Social Problems	3	0	3
PSY	0261	Developmental Psychology	3	0	3
ENG	0100	Writing with the Apple	<u>0</u>	<u>2</u>	<u>1</u>
			12	7	15
<b>SIXTH QUARTER</b>					
		Literature Selection	3	0	3
ENG	0162	Journalism Practice	0	2	1
ENG	0104	Business Communications	3	0	3
REL	0162	World Religions	3	0	3
PSY	0260	General Psychology	3	0	3
ENG	0160	Public Speaking	<u>3</u>	<u>0</u>	<u>3</u>
			15	2	16

## PRE-LAW C-010 (DAY)

			Class Hours	Lab Hours	Credit Hours
<b>FIRST QUARTER</b>					
ENG	0101	Freshman Composition I	3	0	3
HIS	0101	Western Civilization	3	0	3
		Natural Science (Biology, Chemistry, or Geology)	3	3	4
MAT	0101	Finite Mathematics I	4	0	4
		or			
MAT	0121	College Algebra & Trigonometry I			
PED	0101	Concepts in Physical Education	<u>1</u>	<u>2</u>	<u>2</u>
			14	5	16
<b>SECOND QUARTER</b>					
ENG	0102	Freshman Composition II	3	0	3
HIS	0102	Western Civilization	3	0	3
		Natural Science	3	3	4
MAT	0102	Finite Mathematics II	4	0	4
		or			
MAT	0122	College Algebra & Trigonometry II			
PED		Selection	<u>0</u>	<u>3</u>	<u>1</u>
			13	6	15
<b>THIRD QUARTER</b>					
ENG	0103	Freshman Composition III	3	0	3
HIS	0103	Western Civilization	3	0	3
		Natural Science	3	3	4
		Humanities Requirement	3	0	3
PED		Selection	0	3	1
		Elective	<u>3</u>	<u>0</u>	<u>3</u>
			15	6	17
<b>FOURTH QUARTER</b>					
		Literature Selection	3	0	3
HIS	0260	History of U.S.	3	0	3
POL	0260	American Government	3	0	3
		Humanities Requirement	3	0	3
		Computer Requirement	<u>3</u>	<u>0</u>	<u>3</u>
			15	0	15
<b>FIFTH QUARTER</b>					
		Literature Selection	3	0	3
HIS	0261	History of U.S.	3	0	3
POL	0261	Problems & Policies of American Government	3	0	3
		Electives	<u>9</u>	<u>0</u>	<u>9</u>
			18	0	18
<b>SIXTH QUARTER</b>					
		Literature Selection	3	0	3
HIS	0262	History of U.S.	3	0	3
POL	0262	State & Local Government	3	0	3
		Electives	<u>6</u>	<u>0</u>	<u>6</u>
			15	0	15

Electives should be taken from the social science area.

## PRE-LAW C-010 (EVENING)

		Course Title	Class Hours	Lab Hours	Credit Hours
<b>FIRST QUARTER</b>					
ENG	0101	Freshman Composition I	3	0	3
HIS	0101	Western Civilization	3	0	3
		Natural Science (Biology, Chemistry, or Geology)	<u>3</u>	<u>3</u>	<u>4</u>
			9	3	10
<b>SECOND QUARTER</b>					
ENG	0102	Freshman Composition II	3	0	3
HIS	0102	Western Civilization	3	0	3
		Natural Science	<u>3</u>	<u>3</u>	<u>4</u>
			9	3	10
<b>THIRD QUARTER</b>					
ENG	0103	Freshman Composition III	3	0	3
HIS	0103	Western Civilization	3	0	3
		Natural Science	<u>3</u>	<u>3</u>	<u>4</u>
			9	3	10
<b>FOURTH QUARTER</b>					
PED	0101	Concepts in Physical Education	1	2	2
		Humanities Requirement	3	0	3
		Electives	<u>9</u>	<u>0</u>	<u>9</u>
			13	2	14
<b>FIFTH QUARTER</b>					
		Literature Selection	3	0	3
HIS	0260	History of U.S.	3	0	3
POL	0260	American Government	3	0	3
		Computer Requirement	<u>3</u>	<u>0</u>	<u>3</u>
			12	0	12
<b>SIXTH QUARTER</b>					
		Literature Selection	3	0	3
HIS	0261	History of U.S.	3	0	3
HIS	0261	Problems & Policies of American Government	3	0	3
MAT	0101	Finite Mathematics	4	0	4
		or			
MAT	0121	College Algebra & Trigonometry I	—	—	—
			13	0	13
<b>SEVENTH QUARTER</b>					
		Literature Selection	3	0	3
HIS	0262	History of U.S.	3	0	3
POL	0262	State & Local Government	3	0	3
MAT	0102	Finite Mathematics II	4	0	4
		or			
MAT	0122	College Algebra & Trigonometry II	—	—	—
			13	0	13

### EIGHTH QUARTER

PED	Selection	0	3	1
PED	Selection	0	3	1
	Humanities Requirement	3	0	3
	Electives	<u>9</u>	<u>0</u>	<u>9</u>
		12	6	14

Electives should be taken from the social science area.





**PRE-LIBERAL ARTS C-011 (DAY)**

		Course Title	Class Hours	Lab Hours	Credit Hours
<b>FIRST QUARTER</b>					
ENG	0101	Freshman Composition I	3	0	3
HIS	0101	Western Civilization	3	0	3
		Natural Science (Biology, Chemistry, or Geology)	3	3	4
MAT	0101	Finite Mathematics I	4	0	4
		or			
MAT	0121	College Algebra & Trigonometry I			
PED	0101	Concepts in Physical Education	<u>1</u>	<u>2</u>	<u>2</u>
			14	5	16
<b>SECOND QUARTER</b>					
ENG	0102	Freshman Composition II	3	0	3
HIS	0102	Western Civilization	3	0	3
		Natural Science	3	3	4
MAT	0102	Finite Mathematics II	4	0	4
		or			
MAT	0122	College Algebra & Trigonometry II			
PED		Selection	<u>0</u>	<u>3</u>	<u>1</u>
			13	6	15
<b>THIRD QUARTER</b>					
ENG	0103	Freshman Composition III	3	0	3
HIS	0103	Western Civilization	3	0	3
		Natural Science	3	3	4
		Social Science Requirement	3	0	3
PED		Selection	0	3	1
		Computer Requirement	<u>3</u>	<u>0</u>	<u>3</u>
			15	6	17
<b>FOURTH QUARTER</b>					
		Literature Selection	3	0	3
		Humanities Requirement	3	0	3
		Electives	<u>9</u>	<u>0</u>	<u>9</u>
			15	0	15
<b>FIFTH QUARTER</b>					
		Literature Selection	3	0	3
		Humanities Requirement	3	0	3
		Electives	<u>12</u>	<u>0</u>	<u>12</u>
			18	0	18
<b>SIXTH QUARTER</b>					
		Literature Selection	3	0	3
		Electives	<u>12</u>	<u>0</u>	<u>12</u>
			15	0	15

## PRE-LIBERAL ARTS C-011 (EVENING)

		Course Title	Class Hours	Lab Hours	Credit Hours
<b>FIRST QUARTER</b>					
ENG	0101	Freshman Composition I	3	0	3
HIS	0101	Western Civilization	3	0	3
		Natural Science (Biology, Chemistry, or Geology)	<u>3</u>	<u>3</u>	<u>4</u>
			9	3	10
<b>SECOND QUARTER</b>					
ENG	0102	Freshman Composition II	3	0	3
HIS	0102	Western Civilization	3	0	3
		Natural Science	<u>3</u>	<u>3</u>	<u>4</u>
			9	3	10
<b>THIRD QUARTER</b>					
ENG	0103	Freshman Composition III	1	0	3
HIS	0103	Western Civilization	3	3	4
		Natural Science	<u>3</u>	<u>3</u>	<u>4</u>
			9	3	10
<b>FOURTH QUARTER</b>					
PED	0101	Concepts in Physical Education	1	2	2
		Electives	<u>12</u>	<u>0</u>	<u>12</u>
			13	2	14
<b>FIFTH QUARTER</b>					
		Literature Selection	3	0	3
MAT	0101	Finite Mathematics I	4	0	4
		or			
MAT	0121	College Algebra & Trigonometry I			
PED		Selection	0	3	1
		Electives	<u>6</u>	<u>0</u>	<u>6</u>
			13	3	14
<b>SIXTH QUARTER</b>					
		Literature Selection	3	0	3
MAT	0102	Finite Mathematics II	4	0	4
		or			
MAT	0122	College Algebra & Trigonometry II			
PED		Selection	0	3	1
		Elective	<u>3</u>	<u>0</u>	<u>3</u>
			10	3	11
<b>SEVENTH QUARTER</b>					
		Literature Selection	3	0	3
		Humanities Requirement	3	0	3
		Computer Requirement	3	0	3
		Social Science Requirement	<u>3</u>	<u>0</u>	<u>3</u>
			12	0	12
<b>EIGHTH QUARTER</b>					
		Humanities Requirement	3	0	3
		Electives	<u>12</u>	<u>0</u>	<u>12</u>
			15	0	15

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

		<b>Course Title</b>	<b>Class Hours</b>	<b>Lab Hours</b>	<b>Credit Hours</b>
<b>FIRST QUARTER</b>					
ENG	0101	Freshman Composition I	3	0	3
HIS	0101	Western Civilization	3	0	3
MAT	0121	College Algebra & Trigonometry I	5	0	5
		Natural Science (Biology, Chemistry, or Geology)	3	3	4
PED	0101	Concepts in Physical Education	<u>1</u>	<u>2</u>	<u>2</u>
			15	5	17
<b>SECOND QUARTER</b>					
ENG	0102	Freshman Composition II	3	0	3
HIS	0102	Western Civilization	3	0	3
MAT	0122	College Algebra & Trigonometry II	5	0	5
		Natural Science	3	3	4
PED		Selection	<u>0</u>	<u>3</u>	<u>1</u>
			14	6	16
<b>THIRD QUARTER</b>					
ENG	0103	Freshman Composition III	3	0	3
HIS	0103	Western Civilization	3	0	3
		Natural Science	3	3	4
		Social Science Requirement	3	0	3
		Humanities Requirement	<u>3</u>	<u>0</u>	<u>3</u>
			15	3	16
<b>FOURTH QUARTER</b>					
		Literature Selection	3	0	3
MAT	0131	Calculus & Analytic Geometry I	5	0	5
		Natural Science	3	3	4
		Natural Science	<u>3</u>	<u>3</u>	<u>4</u>
			14	6	16
<b>FIFTH QUARTER</b>					
		Literature Selection	3	0	3
MAT	0132	Calculus & Analytic Geometry II	5	0	5
		Natural Science	3	3	4
		Natural Science	<u>3</u>	<u>3</u>	<u>4</u>
			14	6	16
<b>SIXTH QUARTER</b>					
		Literature Selection	3	0	3
		Natural Science	3	3	4
		Computer Science	3	0	3
		Humanities Requirement	3	0	3
PED		Selection	<u>0</u>	<u>3</u>	<u>1</u>
			12	6	14

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
<b>FIRST QUARTER</b>					
ENG	0101	Freshman Composition I	3	0	3
HIS	0101	Western Civilization	3	0	3
MAT	0101	Finite Mathematics I	4	0	4
		or			
MAT	0121	College Algebra & Trigonometry I			
REL	0160	Old Testament	3	0	3
		Natural Science	<u>3</u>	<u>3</u>	<u>4</u>
			16	3	17
<b>SECOND QUARTER</b>					
ENG	0102	Freshman Composition II	3	0	3
HIS	0102	Western Civilization	3	0	3
MAT	0102	Finite Mathematics II	4	0	4
		or			
MAT	0122	College Algebra & Trigonometry II			
REL	0161	New Testament	3	3	4
		Natural Science	<u>3</u>	<u>0</u>	<u>3</u>
			16	3	17
<b>THIRD QUARTER</b>					
ENG	0103	Freshman Composition III	3	0	3
HIS	0103	Western Civilization	3	0	3
REL	0162	World Religions	3	0	3
		Computer Requirement	3	0	3
		Natural Science	<u>3</u>	<u>3</u>	<u>4</u>
			15	3	16
<b>FOURTH QUARTER</b>					
		Literature Selection	3	0	3
SOC	0160	Introduction to Sociology	3	0	3
PHI	0260	Introduction to Philosophy	3	0	3
PSY	0260	General Psychology	3	0	3
HUM	0160	Introduction to Humanities	<u>3</u>	<u>0</u>	<u>3</u>
			15	0	15
<b>FIFTH QUARTER</b>					
		Literature Selection	3	0	3
SOC	0161	Social Problems	3	0	3
PHI	0261	Problems in Philosophy	3	0	3
PSY	0261	Developmental Psychology	3	0	3
ENG	0160	Public Speaking	3	0	3
PED		Selection	<u>0</u>	<u>3</u>	<u>1</u>
			15	3	16
<b>SIXTH QUARTER</b>					
		Literature Selection	3	0	3
SOC	0162	Family Sociology	3	0	3
PHI	0262	Deductive Logic	3	0	3
PSY	0263	Abnormal Psychology	3	0	3
PED	0101	Concepts in Physical Education	1	2	2
PED		Selection	<u>0</u>	<u>3</u>	<u>1</u>
			13	5	15



## PRE-MUSIC C-015

		Course Title	Class Hours	Lab Hours	Credit Hours
<b>FIRST QUARTER</b>					
ENG	0101	Freshman Composition I	3	0	3
		Science or Math Requirement	—	—	4
MUS	0101	Medieval and Renaissance Music History	3	0	3
MUS	0104	Music Theory I	3	2	4
MUA	0110	Applied Music	—	—	2
		or			
		(0120, 0130, 0140, 0150, 0160)			
MUS	0170	Chorus or other ensemble	0	3	1
MUS	0180	Piano Skills	<u>0</u>	<u>3</u>	<u>1</u>
			9	8	18
<b>SECOND QUARTER</b>					
ENG	0102	Freshman Composition I	3	0	3
		Science or Math Requirement	—	—	4
MUS	0102	Baroque Music History	3	0	3
MUS	0105	Music Theory II	3	2	4
MUA	0111	Applied Music	—	—	2
		or			
		(0121, 0131, 0141, 0151, 0161)			
MUS	0170	Chorus or other ensemble	<u>0</u>	<u>3</u>	<u>1</u>
			8	6	17
<b>THIRD QUARTER</b>					
ENG	0103	Freshman Composition III	3	0	3
PED		Selection	0	3	1
		Social Science Requirement	3	0	3
MUS	0103	Eighteenth Century Music History	3	0	3
MUS	0106	Music Theory III	3	2	4
MUA	0112	Applied Music	—	—	2
		or			
		(0122, 0132, 0142, 0152, 0162)			
MUS	0170	Chorus or other ensemble	<u>0</u>	<u>3</u>	<u>1</u>
			12	8	17
<b>FOURTH QUARTER</b>					
MUS	0201	Nineteenth Century Music History	3	0	3
MUS	0204	Advanced Music Theory IV	3	2	4
MUA	0210	Advanced Applied Music	—	—	2
		or			
		(0220, 0230, 0240, 0250, 0260)			
MUS	0170	Chorus or other ensemble	0	3	1
		Humanities Requirement	3	0	3
		Computer Requirement	<u>3</u>	<u>0</u>	<u>3</u>
			12	5	16

**FIFTH QUARTER**

MUS	0202	Twentieth Century Music History	3	0	3
MUA	0205	Advanced Music Theory V	3	2	4
MUS	0211	Advanced Applied Music or (0221, 0231, 0241, 0251, 0261)	—	—	2
MUS	0170	Chorus or other ensemble	0	3	1
PED	0101	Concepts in Physical Education	1	2	2
		Social Science Requirement	3	0	3
		Humanities Requirement	<u>3</u>	<u>0</u>	<u>3</u>
			13	7	18

**SIXTH QUARTER**

MUS	0206	Advanced Music Theory VI	3	2	4
MUA	0212	Advanced Applied Music or (0222, 0232, 0242, 0252, 0262)	—	—	2
MUS	0170	Chorus or other ensemble	0	3	1
ENG	0203	American Literature I	3	0	3
PED		Selection	0	3	1
		Humanities Requirement	3	0	3
		Social Science Requirement	<u>3</u>	<u>0</u>	<u>3</u>
			12	8	17



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

		<b>Course Title</b>	<b>Class Hours</b>	<b>Lab Hours</b>	<b>Credit Hours</b>
<b>FIRST QUARTER</b>					
ENG	0101	Freshman Composition I	3	0	3
HIS	0101	Western Civilization	3	0	3
BIO	0101	Principles of Biology I	3	3	4
MAT	0121	College Algebra & Trigonometry I	5	0	5
PED	0101	Concepts in Physical Education	<u>1</u>	<u>2</u>	<u>2</u>
			15	5	17
<b>SECOND QUARTER</b>					
ENG	0102	Freshman Composition II	3	0	3
HIS	0102	Western Civilization	3	0	3
BIO	0102	Principles of Biology II	3	3	4
MAT	0122	College Algebra & Trigonometry II	5	0	5
PED		Selection	<u>0</u>	<u>3</u>	<u>1</u>
			14	6	16
<b>THIRD QUARTER</b>					
ENG	0103	Freshman Composition III	3	0	3
HIS	0103	Western Civilization	3	0	3
BIO	0103	Principles of Biology III	3	3	4
MAT	0131	Calculus & Analytical Geometry I	5	0	5
PED		Selection	<u>0</u>	<u>3</u>	<u>1</u>
			14	6	16
<b>FOURTH QUARTER</b>					
		Literature Selection	3	0	3
CHM	0101	General Chemistry I	3	3	4
PHY	0201				
or	0220	Physics I	3	3	4
		Humanities Requirement	3	0	3
		Social Science (Economics)	<u>3</u>	<u>0</u>	<u>3</u>
			15	6	17
<b>FIFTH QUARTER</b>					
		Literature Selection	3	0	3
CHM	0102	General Chemistry II	3	3	4
PHY	0202				
or	0221	Physics II	3	3	4
MAT	0232	Calculus & Analytical Geometry II	<u>5</u>	<u>0</u>	<u>5</u>
			14	6	16
<b>SIXTH QUARTER</b>					
		Literature Selection	3	0	3
CHM	0103	General Chemistry III	3	3	4
		Computer Requirement	3	0	3
		Humanities Requirement	3	0	3
		Elective	<u>3</u>	<u>0</u>	<u>3</u>
			15	3	16

## PRE-SOCIAL WORK C-019 (DAY)

		Course Title	Class Hours	Lab Hours	Credit Hours
<b>FIRST QUARTER</b>					
ENG	0101	Freshman Composition I	3	0	3
HIS	0101	Western Civilization	3	0	3
		Natural Science (Biology, Chemistry, or Geology)	3	3	4
MAT	0101	Finite Mathematics I	4	0	4
SOC	0160	Introduction to Sociology	<u>3</u>	<u>0</u>	<u>3</u>
			16	3	17
<b>SECOND QUARTER</b>					
ENG	0102	Freshman Composition II	3	0	3
HIS	0102	Western Civilization	3	0	3
		Natural Science	3	3	4
MAT	0102	Finite Mathematics II	4	0	4
SOC	0161	Social Problems	<u>3</u>	<u>0</u>	<u>3</u>
			16	3	17
<b>THIRD QUARTER</b>					
ENG	0103	Freshman Composition III	3	0	3
HIS	0103	Western Civilization	3	0	3
		Natural Science	3	3	4
SOC	0162	Sociology of the Family	3	0	3
		Humanities Requirement	3	0	3
PED		Selection	<u>0</u>	<u>3</u>	<u>1</u>
			15	6	17
<b>FOURTH QUARTER</b>					
		Literature Selection	3	0	3
PSY	0260	General Psychology	3	0	3
PED	0101	Concepts in Physical Education	1	2	2
		Humanities Requirement	3	0	3
		Computer Requirement	3	0	3
		Electives	<u>3</u>	<u>0</u>	<u>3</u>
			16	2	17
<b>FIFTH QUARTER</b>					
		Literature Selection	3	0	3
PSY	0261	Developmental Psychology	3	0	3
PED		Selection	0	3	1
		Electives	<u>2</u>	<u>0</u>	<u>2</u>
			15	3	16
<b>SIXTH QUARTER</b>					
		Literature Selection	3	0	3
PSY	0262	Applied Psychology	3	0	3
		Electives	<u>6</u>	<u>0</u>	<u>6</u>
			12	0	12

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



**PRE-SOCIAL WORK C-019 (EVENING)**

		<b>Course Title</b>	<b>Class Hours</b>	<b>Lab Hours</b>	<b>Credit Hours</b>
<b>FIRST QUARTER</b>					
ENG	0101	Freshman Composition I	3	0	3
HIS	0101	Western Civilization	3	0	3
		Natural Science (Biology, Chemistry, or Geology)	<u>3</u>	<u>3</u>	<u>4</u>
			9	3	10
<b>SECOND QUARTER</b>					
ENG	0102	Freshman Composition II	3	0	3
HIS	0102	Western Civilization	3	0	3
		Natural Science	<u>3</u>	<u>3</u>	<u>4</u>
			9	3	10
<b>THIRD QUARTER</b>					
ENG	0103	Freshman Composition III	3	0	3
HIS	0103	Western Civilization	3	0	3
		Natural Science	<u>3</u>	<u>3</u>	<u>4</u>
			9	3	10
<b>FOURTH QUARTER</b>					
PED	0101	Concepts in Physical Education	1	2	2
		Computer Requirement	3	0	3
		Electives	<u>6</u>	<u>0</u>	<u>6</u>
			10	2	11
<b>FIFTH QUARTER</b>					
		Literature Selection	3	0	3
PSY	0260	General Psychology	3	0	3
MAT	0101	Finite Mathematics I	4	0	4
SOC	0160	Introduction to Sociology	<u>3</u>	<u>0</u>	<u>3</u>
			13	0	13
<b>SIXTH QUARTER</b>					
		Literature Selection	3	0	3
PSY	0261	Developmental Psychology	3	0	3
MAT	0102	Finite Mathematics II	4	0	4
SOC	0161	Social Problems	<u>3</u>	<u>0</u>	<u>3</u>
			13	0	13
<b>SEVENTH QUARTER</b>					
		Literature Selection	3	0	3
PSY	0262	Applied Psychology	3	0	3
SOC	0162	Sociology of the Family	3	0	3
		Humanities Requirement	<u>3</u>	<u>0</u>	<u>3</u>
			12	0	12
<b>EIGHTH QUARTER</b>					
PED		Selection	0	3	1
PED		Selection	0	3	1
		Humanities Requirement	3	0	3
		Electives	<u>12</u>	<u>0</u>	<u>12</u>
			15	6	17

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

		Course Title	Class Hours	Lab Hours	Credit Hours
<b>FIRST QUARTER</b>					
ENG	0101	Freshman Composition I	3	0	3
HIS	0101	Western Civilization	3	0	3
BIO	0101	Principles of Biology	3	3	4
MAT	0101	Finite Mathematics I	4	0	4
		or			
MAT	0121	College Algebra & Trigonometry (5-0-5)			
PED	0101	Concepts in Physical Education	<u>1</u>	<u>2</u>	<u>2</u>
			14	5	16
<b>SECOND QUARTER</b>					
ENG	0102	Freshman Composition II	3	0	3
HIS	0102	Western Civilization	3	0	3
BIO	0102	Principles of Biology	3	3	4
MAT	0102	Finite Mathematics II	4	0	4
		or			
MAT	0122	College Algebra & Trigonometry II (5-0-5)			
PED		Selection	<u>0</u>	<u>3</u>	<u>1</u>
			13	6	15
<b>THIRD QUARTER</b>					
ENG	0103	Freshman Composition III	3	0	3
HIS	0103	Western Civilization	3	0	3
BIO	0103	Principles of Biology	3	3	4
PED		Selection	0	3	1
		Electives	<u>5</u>	<u>0</u>	<u>5</u>
			14	6	16
<b>FOURTH QUARTER</b>					
		Literature Selection	3	0	3
GEG	0160	Physical Geography	3	2	4
		A Physical Science (Chemistry, Physics, Geology, or Physical Science)	3	3	4
		Humanities Requirement	3	0	3
		Computer Requirement	<u>3</u>	<u>0</u>	<u>3</u>
			15	5	17
<b>FIFTH QUARTER</b>					
		Literature Selection	3	0	3
GEG	0161	Economic Geography	3	0	3
		A Physical Science	3	3	4
		Humanities Requirement	3	0	3
		Elective	<u>3</u>	<u>0</u>	<u>3</u>
			15	3	16
<b>SIXTH QUARTER</b>					
		Literature Selection	3	0	3
GEG	0162	World Regions	3	0	3
		A Physical Science	3	3	4
		Electives	<u>6</u>	<u>0</u>	<u>6</u>
			15	3	16

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

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

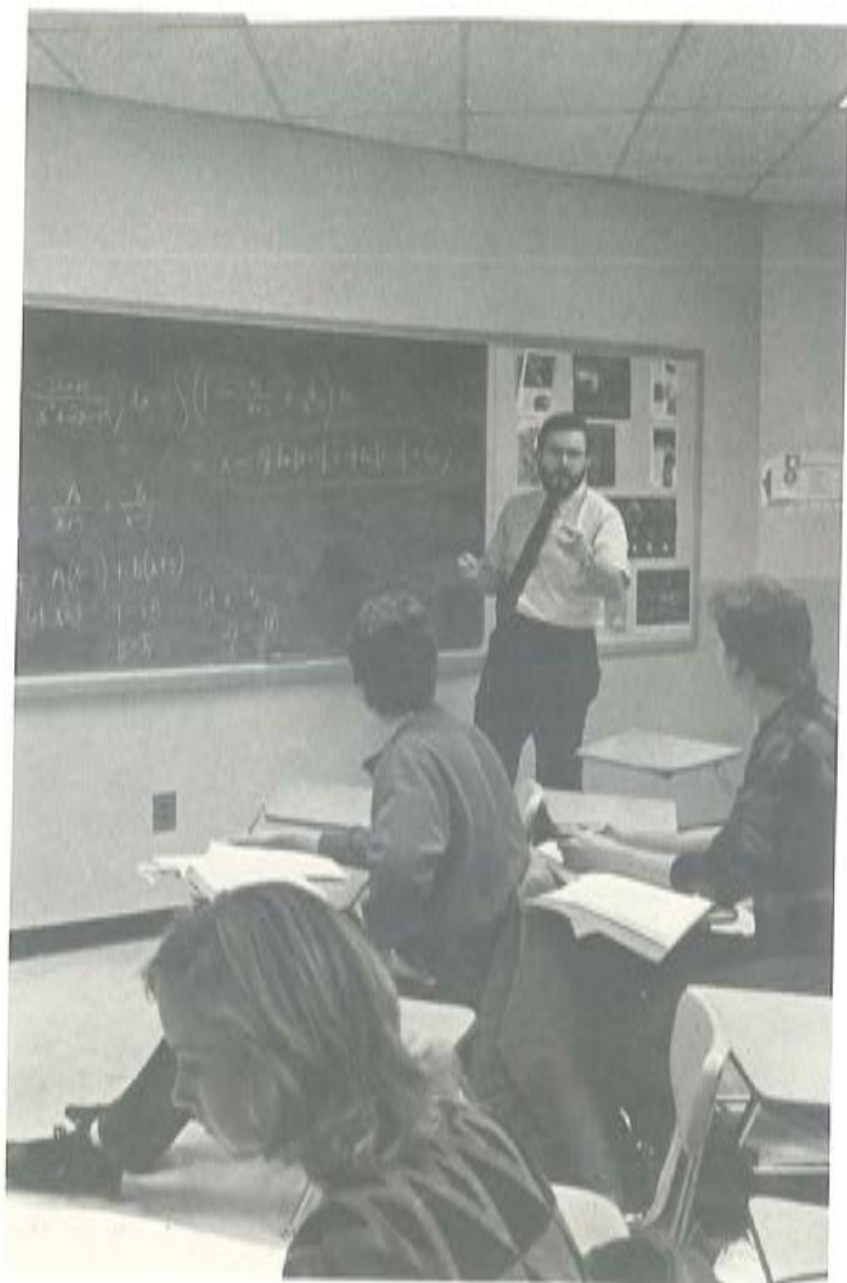
		Course Title	Class Hours	Lab Hours	Credit Hours
<b>FIRST QUARTER</b>					
ENG	0101	Freshman Composition I	3	0	3
HIS	0101	Western Civilization	3	0	3
BIO	0101	Principles of Biology	<u>3</u>	<u>3</u>	<u>4</u>
			9	3	10
<b>SECOND QUARTER</b>					
ENG	0102	Freshman Composition II	3	0	3
HIS	0102	Western Civilization	3	0	3
BIO	0102	Principles of Biology	<u>3</u>	<u>3</u>	<u>4</u>
			9	3	10
<b>THIRD QUARTER</b>					
ENG	0103	Freshman Composition III	3	0	3
HIS	0103	Western Civilization	3	0	3
BIO	0103	Principles of Biology	<u>3</u>	<u>3</u>	<u>4</u>
			9	3	10
<b>FOURTH QUARTER</b>					
			3	0	3
			3	0	3
PED	0101	Concepts in Physical Education	<u>1</u>	<u>2</u>	<u>2</u>
			7	2	8
<b>FIFTH QUARTER</b>					
			3	0	3
GEG	0160	Physical Geography	3	2	4
			3	3	4
MAT	0101	A Physical Science (Chemistry, Physics, Geology, or Physical Science)	4	0	4
			4	0	4
MAT	0121	Finite Mathematics I or College Algebra & Trigonometry I (5-0-5)	—	—	—
			13	5	15
<b>SIXTH QUARTER</b>					
			3	0	3
GEG	0161	Literature Selection	3	0	3
			3	3	4
MAT	0102	Economic Geography	3	3	4
			4	0	4
MAT	0122	A Physical Science	4	0	4
			4	0	4
MAT	0122	Finite Mathematics II or College Algebra & Trigonometry II (5-0-5)	—	—	—
			13	3	14
<b>SEVENTH QUARTER</b>					
			3	0	3
GEG	0162	Literature Selection	3	0	3
			3	0	3
			3	3	4
PED		World Regions	<u>0</u>	<u>3</u>	<u>1</u>
			9	6	11
			3	0	3
			3	0	3
			3	3	4
			0	3	1
			9	6	11

**EIGHTH QUARTER**

PED

Selection  
Humanities Requirement  
Electives

0	3	1
3	0	3
<u>14</u>	<u>0</u>	<u>14</u>
17	3	18





## PRE-TEXTILE TECHNOLOGY C-033

		Course Title	Class Hours	Lab Hours	Credit Hours
<b>FIRST QUARTER</b>					
ENG	0101	Freshman Composition I	3	0	3
MAT	0102	College Algebra & Trigonometry I or	5	0	5
MAT	0131	Calculus & Analytic Geometry I			
CHM	0101	General Chemistry I	3	3	4
HIS	0101	Western Civilization	3	0	3
		Humanities Elective	<u>3</u>	<u>0</u>	<u>3</u>
			17	3	18
<b>SECOND QUARTER</b>					
ENG	0102	Freshman Composition II	3	0	3
MAT	0122	College Algebra & Trigonometry II or	5	0	5
MAT	0132	Calculus & Analytic Geometry II			
CHM	0102	General Chemistry II	3	3	4
HIS	0102	Western Civilization	3	0	3
		Humanities Elective	<u>3</u>	<u>0</u>	<u>3</u>
			17	3	18
<b>THIRD QUARTER</b>					
ENG	0103	Freshman Composition III	3	0	3
MAT	0131	Calculus & Analytic Geometry I or	5	0	5
MAT	0133	Calculus & Analytic Geometry III			
PED	0101	Concepts in Physical Education	1	2	2
CHM	0103	General Chemistry III	3	3	4
HIS	0103	Western Civilization	<u>3</u>	<u>0</u>	<u>3</u>
			15	5	17
<b>FOURTH QUARTER</b>					
		Literature Selection	3	0	3
MAT	0132	Calculus & Analytic Geometry II or	5	0	5
MAT	0231	Calculus & Analytic Geometry IV			
PHY	0220	Analytical Physics I	3	3	4
PED		Elective	0	3	1
		Social Science Elective	<u>3</u>	<u>0</u>	<u>3</u>
			14	6	16
<b>FIFTH QUARTER</b>					
		Literature Selection	3	0	3
MAT	0133	Calculus & Analytic Geometry III	5	0	5
		Computer Requirement	3	0	3
PHY	0221	Analytical Physics II	3	3	4
PED		Elective	<u>0</u>	<u>3</u>	<u>1</u>
			14	6	16
<b>SIXTH QUARTER</b>					
		Literature Selection	3	0	3
MAT	0231	Calculus & Analytic Geometry IV or	5	0	5
MAT	0140	Introductory Statistics			
PHY	0222	Analytical Physics III	<u>3</u>	<u>3</u>	<u>4</u>
			11	3	12

## TECHNICAL PROGRAMS

Courses in technical programs are designed to meet the increasing demand in the community for high level skills. The technical curriculum requires two years for completion. All students, regardless of the program, must complete the following requirements for graduation with the Associate of Applied Science Degree (A.A.S.):

1. A minimum of 96-127 quarter hours of earned credit according to the program.
2. A minimum of a 2.0 grade point average.
3. A minimum of 18 quarter hours in the areas of English, Social Science, and Humanities, and not less than 3 quarter hours in each field. A student may be exempt from any area upon the approval of the appropriate Division Dean.
4. All specifically designated courses in each program must be taken. These may be found in the program outlines in the following section.

The Technical Programs offered are:

Associate Degree for Vocational Instructors	Industrial Management
Business Administration	Insurance
Business Computer Programming	Marketing and Retailing
Commercial Graphics	Mechanical Engineering Technology
Criminal Justice	Radio/TV Broadcasting Technology
Drafting and Design Technology	Real Estate
Executive Secretarial Science	Teacher Associate
Electronics Engineering Technology	Telecommunications
Foodservice Management	Equipment Technology
General Office Technology	

## TECHNICAL CERTIFICATE PROGRAMS

Upon the recommendation of the Division Dean to the Vice President, a Certificate of Achievement may be awarded to a student who meets the prescribed requirements in Business Administration, Industrial Management, and Secretarial Science, as shown in the following outlines. *The student must apply to the Registrar's Office for this certificate.*

**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 speciality 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 by 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 0110, 0111, 0112, 0113, 0114, 0117, 0118, 0234 .....	
D. Elective .....	3

**ASSOCIATE DEGREE PROGRAM  
FOR VOCATIONAL INSTRUCTORS  
T-109**

		<b>Course Title</b>	<b>Class Hours</b>	<b>Lab Hours</b>	<b>Credit Hours</b>
<b>ENGLISH</b>					
ENG	0101	Freshman Composition I	3	0	3
ENG	0102	Freshman Composition II	3	0	3
ENG	0103	Freshman Composition III	3	0	3
ENG	0160	Public Speaking	<u>3</u>	<u>0</u>	<u>3</u>
			12	0	12

**SOCIAL SCIENCE:**

Any advisor approved six credit hours of social science.

**MATHEMATICS:**

May select at least 7 hours of Mathematics.

MAT	0111	Technical Math	3	0	3
MAT	0101	Finite Math I	4	0	4
MAT	0102	Finite Math II	4	0	4
MAT	0120	Intermediate Algebra	5	0	5
MAT	0121	College Algebra/Trig. I	5	0	5
MAT	0122	College Algebra/Trig. II	5	0	5

**SCIENCE:**

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

**EDUCATION:**

EDU	0110	Introduction to Trade/Industrial Education	3	0	3
EDU	0111	Occupational Analysis & Course Dev.	3	0	3
EDU	0112	Instructional Methods	3	0	3
EDU	0113	Shop Organization & Planning	3	0	3
EDU	0114	Shop Safety	3	0	3
EDU	0117	Instructional Television	1	0	1
EDU	0118	Computer Applications	2	3	3
EDU	0234	AV Materials/Equipment	<u>3</u>	<u>0</u>	<u>3</u>
			21	3	22

**ELECTIVES:**

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



**BUSINESS ADMINISTRATION T-018  
DAY**

<b>Course Title</b>			<b>Class</b>	<b>Lab</b>	<b>Credit</b>
<b>FIRST QUARTER</b>	<b>(Fall)</b>		<b>Hours</b>	<b>Hours</b>	<b>Hours</b>
ENG	0101	Freshman Composition I	3	0	3
BUS	0100	Introduction to Business	3	2	4
BUS	0101	Beginning Typewriting	2	3	3
BUS	0210	Principles of Accounting	3	2	4
BUS	0107	Business Machines	<u>3</u>	<u>2</u>	<u>4</u>
			14	9	18
<b>SECOND QUARTER (Winter)</b>					
ENG	0102	Freshman Composition II	3	0	3
BUS	0239	Business Math	3	2	4
BUS	0112	Business Finance	3	0	3
BUS	0211	Principles of Accounting	3	2	4
PSY	0201	Industrial Psychology	3	0	3
Elective - English, Social Science, or Humanities			3	0	3
			<u>18</u>	<u>4</u>	<u>20</u>
<b>THIRD QUARTER (Spring)</b>					
ENG	0103	Freshman Composition III	3	0	3
BUS	0212	Principles of Accounting	3	2	4
BUS	0214	Principles of Management	3	0	3
EDP	0101	Computer Concepts	3	0	3
EDP	0160	Micro Operations	<u>2</u>	<u>2</u>	<u>3</u>
			14	4	16
<b>FOURTH QUARTER (Fall)</b>					
MOP	0193	Applied Business Communications	3	0	3
DMK	0120	Marketing	3	2	4
BUS	0225	Business Law	3	0	3
ECO	0201	Principles of Economics	3	2	4
EDP		Elective	3	2	4
EDP	0205	Software Applications	<u>2</u>	<u>4</u>	<u>4</u>
			17	10	22
<b>FIFTH QUARTER (Winter)</b>					
BUS	0217	Taxes	3	2	4
BMK	0243	Advertising	3	2	4
BUS	0226	Business Law	3	0	3
ECO	0202	Principles of Economics	3	2	4
Electives		Related	<u>3</u>	<u>0</u>	<u>3</u>
			15	6	18
<b>SIXTH QUARTER (Spring)</b>					
ENG	0160	Public Speaking	3	0	3
BUS	j0216	Principles of Supervision	3	0	3
BUS	0227	Business Law	3	0	3
BUS	0224	Personnel Management	3	0	3
ECO	0203	Principles of Economics	3	2	4
Elective - English, Social Science, or Humanities			3	0	3
			<u>18</u>	<u>2</u>	<u>19</u>
<b>TOTAL CREDIT HOURS</b>					113

**BUSINESS ADMINISTRATION T-018  
NIGHT**

	<b>Course Title</b>	<b>Class Hours</b>	<b>Lab Hours</b>	<b>Credit Hours</b>
<b>FIRST QUARTER (Fall)</b>				
ENG 0101	Freshman Composition I	3	0	3
BUS 0100	Introduction to Business	3	2	4
BUS 0101	Beginning Typewriting	2	3	3
BUS 0210	Principles of Accounting	<u>3</u>	<u>2</u>	<u>4</u>
		11	7	14
<b>SECOND QUARTER (Winter)</b>				
ENG 0102	Freshman Composition II	3	0	3
BUS 0107	Business Machines	3	2	4
BUS 0211	Principles of Accounting	3	2	4
DMK 0243	Advertising	<u>3</u>	<u>2</u>	<u>4</u>
		12	6	15
<b>THIRD QUARTER (Spring)</b>				
ENG 0103	Freshman Composition III	3	0	3
BUS 0212	Principles of Accounting	3	2	4
BUS 0214	Principles of Management	3	0	3
EDP 0101	Computer Concepts	<u>3</u>	<u>0</u>	<u>3</u>
		12	2	13
<b>FOURTH QUARTER (Summer)</b>				
MDP 0193	Applied Business Communications	3	0	3
BUS 0239	Business Math	3	2	4
EDP 0160	Micro Operations	2	2	3
Elective - English, Social Science, or Humanities		3	0	3
		<u>11</u>	<u>4</u>	<u>13</u>
<b>FIFTH QUARTER (Fall)</b>				
DMK 0120	Marketing	3	2	4
BUS 0225	Business Law	3	0	3
ECO 0201	Principles of Economics	3	2	4
EDP	Elective	<u>3</u>	<u>2</u>	<u>4</u>
		12	6	15
<b>SIXTH QUARTER</b>				
BUS 0217	Taxes	3	2	4
BUS 0224	Personnel Management	3	0	3
BUS 0226	Business Law	3	0	3
ECO 0202	Principles of Economics	<u>3</u>	<u>2</u>	<u>4</u>
		12	4	14
<b>SEVENTH QUARTER</b>				
BUS 0216	Principles of Supervision	3	0	3
BUS 0227	Business Law	3	0	3
ECO 0203	Principles of Economics	3	2	4
EDP 0205	Software Applications	<u>2</u>	<u>4</u>	<u>4</u>
		11	6	14

**EIGHTH QUARTER**

ENG 0160	Public Speaking	3	0	3
BUS 0112	Business Finance	3	0	3
PSY 0201	Industrial Psychology	3	0	3
Elective - English, Social Science or Humanities		3	0	3
Elective - Related		3	0	3
		<hr/>	<hr/>	<hr/>
TOTAL CREDIT HOURS		15	0	15
				113

**BUSINESS ADMINISTRATION CERTIFICATE T-018**

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

Required		Credit Hours
ENG 0101, 0102, 0160 (any two courses)		6 hrs.
BUS 0239	Business Math	4 hrs.
BUS 0210	Principles of Accounting	4 hrs.
BUS 0214	Business Management	3 hrs.
BUS 0225	Business Law	3 hrs.
ECO 0201	Principles of Economics	4 hrs.
*Electives		12 hrs.

\*Elect 12 hours from course 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 TO22  
(DAY)**

			<b>CLASS</b>	<b>LAB</b>	<b>CREDIT</b>
<b>FIRST QUARTER</b>					
<b>(FALL)</b>					
ENG	0101	Freshman Composition I	3	0	3
EDP	0101	Computer Concepts	3	0	3
EDP	0106	Principles of Problem Solving	3	1	3
EDP	0160	Microcomputer Operations	2	2	3
BUS	0100	Introduction to Business	3	2	4
BUS	0101	Beginning Typewriting	<u>2</u>	<u>3</u>	<u>3</u>
			16	8	19
<b>SECOND QUARTER (WINTER)</b>					
ENG	0102	Freshman Composition II	3	0	3
EDP	0200	Computer Operations	3	2	4
EDP	0210	BASIC Programming	4	2	5
BUS	0239	Business Math	3	2	4
EDP	Elective or BUS 0200		3	0	3
			<u>16</u>	<u>6</u>	<u>19</u>
<b>THIRD QUARTER (SPRING)</b>					
ENG	0103	Freshman Composition III	3	0	3
EDP	0201	Advanced Computer Operations	3	2	4
EDP	0220	RPG II Programming	3	2	4
BUS	0214	Principles of Management	3	0	3
BUS	0210	Principles of Accounting	<u>3</u>	<u>2</u>	<u>4</u>
			15	6	18
<b>FOURTH QUARTER (FALL)</b>					
MDP	0193	Applied Business Communications	3	0	3
BUS	0211	Principles of Accounting	3	2	4
EDP	0240	Systems Analysis	3	2	4
ECO	0260	Consumer Economics	3	0	3
EDP	0221	Advanced RPG II Programming	<u>3</u>	<u>2</u>	<u>4</u>
			15	6	18
<b>FIFTH QUARTER (WINTER)</b>					
EDP	0230	COBOL Programming	3	4	5
EDP	0252	Database Processing	3	2	4
PSY	0201	Industrial Psychology	3	0	3
BUS	0212	Principles of Accounting	3	2	4
Elective	- Eng, Social Science or Human.		3	0	3
			<u>15</u>	<u>8</u>	<u>19</u>
<b>SIXTH QUARTER (SPRING)</b>					
ENG	0160	Public Speaking	3	0	3
EDP	0231	Advanced COBOL Programming	3	4	5
EDP	0255	File Process. & Data Communications	3	2	4
EDP	0242	or Related Elective	3	0	3
Elective	- Eng, Social Science or Human.		3	0	3
			<u>15</u>	<u>6</u>	<u>18</u>
<b>TOTAL CREDIT HOURS</b>					<b>111</b>

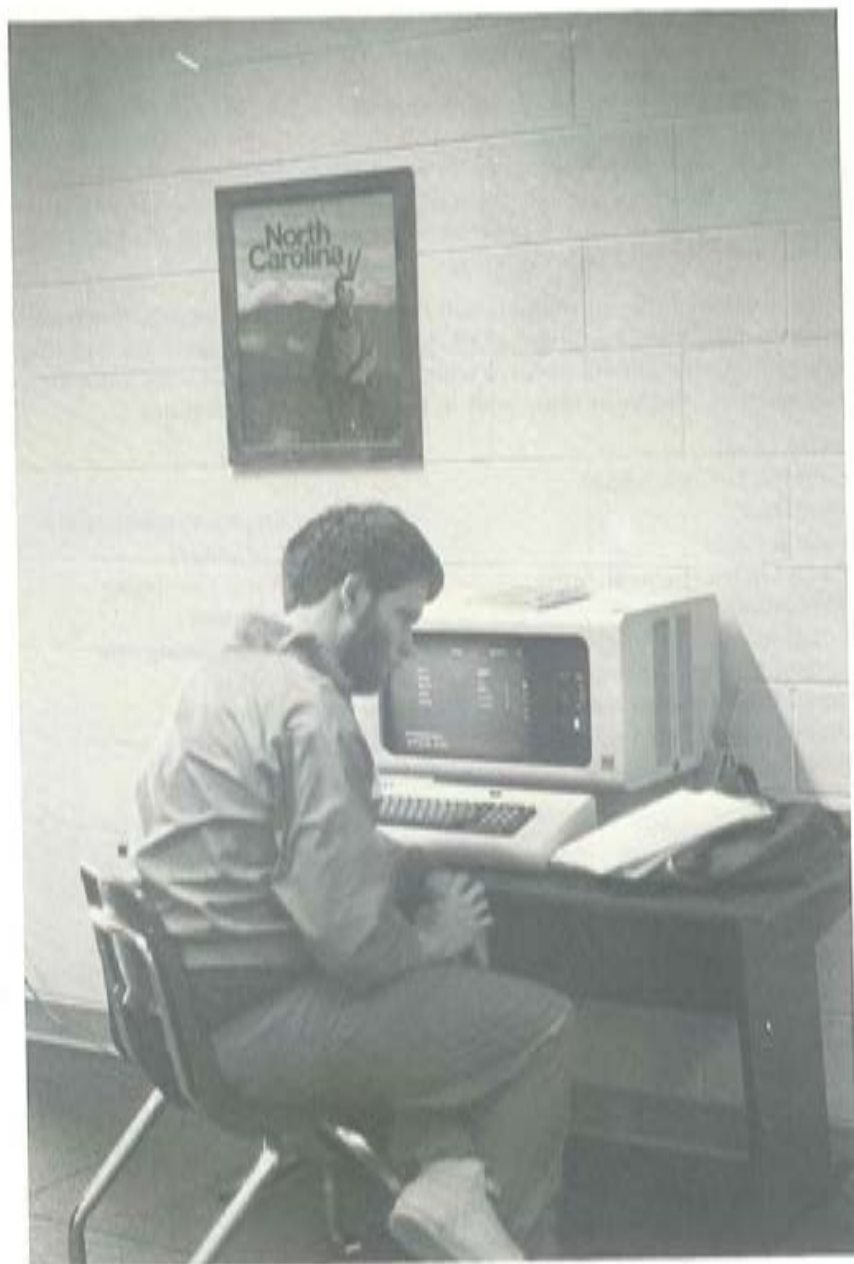
**BUSINESS COMPUTER PROGRAMMING TO22  
(EVENING)**

<b>FIRST QUARTER (FALL)</b>			<b>CLASS</b>	<b>LAB</b>	<b>CREDIT</b>
BUS	0101	Beginning Typewriting	2	3	3
EDP	0101	Computer Concepts	3	0	3
EDP	0160	Microcomputer Operations	2	2	3
EDP	0106	Principles of Problem Solving	<u>3</u>	<u>1</u>	<u>3</u>
			10	6	12
<b>SECOND QUARTER (WINTER)</b>					
ENG	0101	Freshman Composition I	3	0	3
BUS	0100	Introduction to Business	3	2	4
EDP	0210	BASIC Programming	4	2	5
EDP		Elective or BUS 0200	<u>3</u>	<u>0</u>	<u>3</u>
			13	4	15
<b>THIRD QUARTER (SPRING)</b>					
ENG	0102	Freshman Composition II	3	0	3
BUS	0239	Business Math	3	2	4
EDP	0200	Computer Operations	3	2	4
EDP	0220	RPG II Programming	<u>3</u>	<u>2</u>	<u>4</u>
			12	6	15
<b>FOURTH QUARTER (SUMMER)</b>					
ENG	0103	Freshman Composition III	3	0	3
PSY	0201	Industrial Psychology	3	0	3
EDP	0221	Advanced RPG II Programming	3	2	4
EDP	0201	Advanced Computer Operations	<u>3</u>	<u>2</u>	<u>4</u>
			12	4	14
<b>FIFTH QUARTER (FALL)</b>					
BUS	0210	Principles of Accounting	3	2	4
EDP	0240	Systems Analysis	3	2	4
ECO	0260	Consumer Economics	3	0	3
		Elective - English, Social Science or Humanities	<u>3</u>	<u>0</u>	<u>3</u>
			12	4	14
<b>SIXTH QUARTER (WINTER)</b>					
BUS	0211	Principles of Accounting	3	2	4
EDP	0230	COBOL Programming	3	4	5
EDP	0252	Database Processing	3	2	4
		Elective - English, Social Science or Humanities	<u>3</u>	<u>0</u>	<u>3</u>
			12	8	16
<b>SEVENTH QUARTER (SPRING)</b>					
ENG	0160	Public Speaking	3	0	3
BUS	0212	Principles of Accounting	3	2	4
BUS	0214	Principles of Management	3	0	3
EDP	0231	Advanced COBOL Programming	<u>3</u>	<u>4</u>	<u>5</u>
			12	6	15



**EIGHTH QUARTER (SUMMER)**

EDP 0255	File Process. & Data Communications	3	2	4
EDP 0242	or Related Elective	3	0	3
MDP 0193	Applied Business Communications	<u>3</u>	<u>0</u>	<u>3</u>
	<b>TOTAL CREDIT HOURS</b>	9	2	11



## 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
<b>FIRST QUARTER</b>					
ART	0101	Fundamentals of Two Dimensional Design (Des 1)	2	4	4
ENG	0101	Freshman Composition I	3	0	3
BUS	0101	Beginning Typewriting	2	3	3
CMG	0101	Introduction to Photography I	2	3	3
CMG	0110	Introduction to Commercial Graphics	2	3	3
EDU	0118	Computer Applications	<u>2</u>	<u>3</u>	<u>3</u>
			13	16	19
<b>SECOND QUARTER</b>					
CMG	0102	Graphic Layout & Design (Des 2)	3	3	4
ENG	0102	Freshman Composition II	3	0	3
ENG	0101	Engineering Drawing	0	6	3
CMG	0103	Typesetting & Typography	2	3	3
RTV	0202	Advertising, Sales & Promotion	<u>3</u>	<u>2</u>	<u>4</u>
			11	14	17
<b>THIRD QUARTER</b>					
CMG	0104	Creative Visual Design (Des 3)	3	3	4
ENG	0103	Freshman Composition III	3	0	3
ART	0103	Drawing & Composition I	2	4	4
CMG	0105	Photography II	3	3	4
		Social Science Elective	<u>3</u>	<u>0</u>	<u>3</u>
			14	10	18
<b>FOURTH QUARTER</b>					
CMG	0106	Commercial Art I	5	3	6
MAT	0111	Technical Mathematics	3	0	3
CMG	0107	Graphic Arts	1	6	3
CMG	0108	Photography III	<u>3</u>	<u>3</u>	<u>4</u>
			12	12	16
<b>FIFTH QUARTER</b>					
CMG	0201	Commercial Art II	5	3	6
		Humanities Elective	3	0	3
CMG	0212	Illustration I	3	3	4
CMG	0209	Silkscreen Printing	<u>1</u>	<u>6</u>	<u>3</u>
			12	12	16
<b>SIXTH QUARTER</b>					
CMG	0204	Commercial Art III	5	3	6
CMG	0205	Offset Printing I	2	3	3
PSY	0260	General Psychology	3	0	3
CMG	0214	Illustration II	<u>3</u>	<u>3</u>	<u>4</u>
			13	9	16
<b>SEVENTH QUARTER</b>					
CMG	0207	Commercial Art IV	5	3	6
CMG	0208	Offset Printing II	2	3	3
CMG	0203	Portfolio Preparation	1	6	3
**		Elective	<u>3</u>	<u>0</u>	<u>3</u>
			11	12	15
<b>TOTAL CREDIT HOURS</b>					<b>117</b>

\*\*Cooperative education internship (COE 100, 106, 201, 202) may be used for credit toward degree requirements.

## CRIMINAL JUSTICE

The Criminal Justice Technology curriculum is designed so that it may be a multifaceted program of study. It may consist of study options in corrections, 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 qualified one for job opportunities with private enterprise in such areas as industrial, retail and private security.

### CRIMINAL JUSTICE T-129

		Course Title	Class	Lab	Shop/ Clin	Credit
FIRST QUARTER			Hours	Hours	Hours	Hours
CJC	0101	Nature and History of Law	5	0	0	5
CJC	0102	Introduction to Criminal Justice System	5	0	0	5
ENG	0101	Freshman Composition I	3	0	0	3
SOC	0160	Introduction to Sociology	3	0	0	3
			<u>16</u>	<u>0</u>	<u>0</u>	<u>16</u>

**SECOND QUARTER**

CJC	0103	The Law Enforcement Officer's Function in Criminal Justice	5	0	0	5
CJC	0104	The Court's Function in Criminal Justice	3	0	0	3
MAT	0111	Technical Mathematics	3	0	0	3
ENG	0102	Freshman Composition II	3	0	0	3
CJC	0105	Corrections in Criminal Justice	<u>3</u>	<u>0</u>	<u>0</u>	<u>3</u>
			17	0	0	17

**THIRD QUARTER**

CJC	0106	Juvenile Justice	5	0	0	5
CJC	0107	Introduction to Criminology	5	0	0	5
HEA	0103	First Aid	3	0	0	3
CJC	0108	N.C. Juvenile Code	<u>3</u>	<u>0</u>	<u>0</u>	<u>3</u>
			16	0	0	16

**FOURTH QUARTER**

SOC	0161	Social Problems	3	0	0	3
ENG	0160	Public Speaking	3	0	0	3
HIS	0260	History of United States	3	0	0	3
CHM	0162	Introduction to Chemistry	3	2	0	4
BUS	0101	Beginning Typewriting*	<u>2</u>	<u>0</u>	<u>3</u>	<u>3</u>
			14	2	3	16

**FIFTH QUARTER**

CJC	0201	Criminal Law I	3	0	0	3
CJC	0203	Motor Vehicle Laws of N.C.	5	0	0	5
POL	0260	American Government	3	0	0	3
PSY	0261	General Psychology	3	0	0	3
CJC	0210	Officer Survival I	<u>2</u>	<u>0</u>	<u>3</u>	<u>3</u>
			16	0	3	17

**SIXTH QUARTER**

CJC	0202	Criminal Law II	3	0	0	3
CJC	0204	Criminal Evidence	3	0	0	3
CJC	0207	Law of Arrest, Search and Seizure	3	0	0	3
HIS	0261	History of United States	3	0	0	3
CJC	0205	Criminal Investigation	<u>5</u>	<u>0</u>	<u>0</u>	<u>5</u>
			17	0	0	17

**SEVENTH QUARTER**

POL	0262	American State & Local Government	3	0	0	3
PSY	0262	Introduction to Applied Psychology	3	0	0	3
CJC	0206	Introduction to Criminalistics	4	0	3	5
CJC	0208	Use of Deadly Force	3	0	0	3
CJC	0209	Law Enforcement Organization and Administration	3	0	0	3
CJC	0211	Officer Survival II	<u>2</u>	<u>0</u>	<u>3</u>	<u>3</u>
			18	6	6	20

\* May demonstrate competency.

\*\* Cooperative Education Internship (0100-0106) (0201-0202) may be used for credit toward degree requirements.



## BASIC LAW ENFORCEMENT TRAINING

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

Student who satisfactorily complete the Basic Law Enforcement Training Course may be given credit for CJC 0210, CJC 0211, CJC 0207 in the Criminal Justice Curriculum, T-129.



## DRAFTING AND DESIGN TECHNOLOGY T-043

The Mechanical Drafting and Design curriculum is designed to prepare 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 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	
<b>FIRST QUARTER</b>					
EGR	0101	Engineering Drawing I	0	6	3
MEC	0111	Industrial Safety	3	0	3
MAT	0120	Intermediate Algebra	5	0	5
MEC	0110	Machine Processes	<u>3</u>	<u>3</u>	<u>4</u>
		11	9	15	
<b>SECOND QUARTER</b>					
EGR	0102	Engineering Drawing II	0	6	3
MAT	0121	College Algebra & Trigonometry	5	0	5
MEC	0118	Introduction to Metals	3	3	4
MEC	0112	Introduction to Manufacturing	<u>3</u>	<u>3</u>	<u>4</u>
		11	12	16	
<b>THIRD QUARTER</b>					
EGR	0103	Engineering Drawing III	0	6	3
MEC	0119	Applied Metallurgy	3	3	4
DFT	0107	Surveying and Mapping	2	3	3
MAT	0122	College Algebra & Trigonometry	<u>5</u>	<u>0</u>	<u>5</u>
		10	12	15	

**FOURTH QUARTER**

DFT	0203	Architectural Drafting	1	6	3
PSY	0260	General Psychology	3	0	3
DFT	0205	Design Drafting I	2	6	4
WLD	0135	Basic Gas Welding & Cutting	<u>2</u>	<u>3</u>	<u>3</u>
			8	15	13

**FIFTH QUARTER**

ELC	0205	Applied Electricity	3	3	4
ENG	0101	Freshman Composition I	3	0	3
DFT	0211	Mechanisms	3	3	4
EDU	0118	Computer Applications	<u>2</u>	<u>3</u>	<u>3</u>
			11	9	14

**SIXTH QUARTER**

ENG	0102	Freshman Composition II	3	0	3
DFT	0212	Jig and Fixture Design	3	3	4
MEC	0235	Hydraulics and Pneumatics	3	0	3
**		Elective	3	0	3
		Social Science Elective	<u>3</u>	<u>0</u>	<u>3</u>
			15	3	16

**SEVENTH QUARTER**

ENG	0103	Freshman Composition III	3	0	3
MEC	0204	Applied Mechanics	5	0	5
DFT	0206	Design Drafting II	2	6	4
DFT	0220	Computer Aided Drafting & Design I	2	3	3
**		Elective	<u>3</u>	<u>0</u>	<u>3</u>
			15	9	18

**EIGHTH QUARTER**

ENG	0160	Public Speaking	3	0	3
MEC	0205	Strength of Materials	5	0	5
DFT	0221	Computer Aided Drafting & Design II	2	3	3
DFT	0209	Industrial Systems Schematics	<u>2</u>	<u>3</u>	<u>3</u>
			12	6	14

\*\* Cooperative Education Internship (0100-0106) (0201-0202) 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.

In addition to the Associate of Applied Science Degree, the Electronics Engineering Technology curriculum offers two certificate programs for technicians in need of specialized training.

The Basic Electronics Certificate curriculum provides instruction in circuit theory and circuit analysis techniques that are required to design, construct, and maintain all types of electronic equipment.

The Digital Electronics Certificate curriculum provides advanced instruction in Digital Control Circuits and Microprocessor applications, for technicians who need to update their training in this rapidly expanding field.

<b>Basic Electronics Certificate</b>			<b>Credit Hours</b>
ELC	0101	Electrical Fundamentals I	6
ELC	0102	Electrical Fundamentals II	6
ELN	0101	Electronics I	4
ELN	0102	Electronics II	6
ELN	0103	Electronics III	<u>6</u>
Total			28
<b>Digital Electronics Certificate</b>			
ELN	0202	Digital Fundamentals I	6
ELN	0213	Digital Fundamentals II	6
ELN	0204	Microprocessor Applications	<u>6</u>
Total			18

## ELECTRONICS ENGINEERING TECHNOLOGY T-045

			Class	Lab	Credit
			Hours	Hours	Hours
<b>FIRST QUARTER</b>					
ELC	0101	Electrical Fundamentals I	5	3	6
EGR	0101	Engineering Drawing or	0	6	3
EGR	0104	Electronics Drafting			
ENG	0101	Freshman Composition I	3	0	3
MAT	0120	Intermediate Algebra	<u>5</u>	<u>0</u>	<u>3</u>
			13	9	17
<b>SECOND QUARTER</b>					
ELC	0102	Electrical Fundamentals II	5	3	6
ELN	0101	Electronics I	3	3	4
MAT	0121	College Algebra & Trigonometry	5	0	5
ENG	0102	Freshman Composition II	<u>3</u>	<u>0</u>	<u>3</u>
			16	6	18
<b>THIRD QUARTER</b>					
ELN	0102	Electronics II	5	3	6
MAT	0122	College Algebra & Trigonometry	5	0	5
ENG	0103	Freshman Composition III	3	0	3
ELN	0202	Digital Fundamentals	<u>5</u>	<u>3</u>	<u>6</u>
			18	6	20
<b>FOURTH QUARTER</b>					
ELN	0103	Electronics III	5	3	6
ELN	0217	Linear Integrated Circuits	5	3	6
ELN	0213	Digital Fundamentals II	5	3	6
EDP	0160	Microcomputer Operations	<u>2</u>	<u>2</u>	<u>2</u>
			17	11	20
<b>FIFTH QUARTER</b>					
ELN	0206	Electrical Machines	5	3	6
ELN	0204	Micro Processor Applications	5	3	6
EDP	0210	BASIC Programming I	3	2	4
PHY	0201	General Physics I	<u>3</u>	<u>3</u>	<u>4</u>
			16	11	20
<b>SIXTH QUARTER</b>					
ELN	0215	Industrial Electronics	5	3	6
PHY	0202	General Physics II	3	3	4
EDP	0211	Basic Programming II	3	2	4
		Humanities Elective	<u>3</u>	<u>0</u>	<u>3</u>
			14	8	17
<b>SEVENTH QUARTER</b>					
ELN	0205	Electronics Systems Project	2	6	4
ENG	0160	Public Speaking	3	0	3
		Social Science Elective	3	0	3
		Elective	<u>3</u>	<u>0</u>	<u>3</u>
			11	6	13



## ELECTRONICS ENGINEERING TECHNOLOGY (NIGHT)

		Course Title	Class Hours	Lab Hours	Credit Hours
<b>FIRST QUARTER</b>					
ELC	0101	Electrical Fundamentals I	5	3	6
MAT	0120	Intermediate Algebra	5	0	5
ENG	0101	Freshman Composition I	<u>3</u>	<u>0</u>	<u>3</u>
			13	3	14
<b>SECOND QUARTER</b>					
ELC	0102	Electrical Fundamentals II	5	3	6
MAT	0121	College Algebra and Trigonometry	5	0	5
ENG	0102	Freshman Composition II	<u>3</u>	<u>0</u>	<u>3</u>
			13	3	14
<b>THIRD QUARTER</b>					
ELN	0101	Electronics I	3	3	4
MAT	0122	College Algebra and Trigonometry	5	0	5
ENG	0103	Freshman Composition III	<u>3</u>	<u>0</u>	<u>3</u>
			11	3	12
<b>FOURTH QUARTER</b>					
ELN	0102	Electronics II	5	3	6
ENG	0160	Public Speaking Humanities Elective	3 <u>3</u>	0 <u>0</u>	3 <u>3</u>
			11	3	12
<b>FIFTH QUARTER</b>					
ELN	0103	Electronics III	5	3	6
EGR	0101	Engineering Drawing	<u>0</u>	<u>6</u>	<u>3</u>
			5	9	9
<b>SIXTH QUARTER</b>					
ELN	0202	Digital Fundamentals I	5	3	6
PHY	0101	Technical Physics I	<u>3</u>	<u>3</u>	<u>4</u>
			8	6	10
<b>SEVENTH QUARTER</b>					
ELN	0213	Digital Fundamentals II	5	3	6
PHY	0102	Technical Physics II	<u>3</u>	<u>3</u>	<u>4</u>
			8	6	10
<b>EIGHTH QUARTER</b>					
ELN	0204	Microprocessor Applications	5	3	6
ELN	0217	Linear Integrated Circuits	<u>5</u>	<u>3</u>	<u>6</u>
			10	6	12
<b>NINTH QUARTER</b>					
ELN	0215	Industrial Electronics	5	3	6
EDP	0160	Microcomputer Operations Social Science Elective	2 <u>3</u>	2 <u>0</u>	2 <u>3</u>
			10	5	11

**TENTH QUARTER**

ELN	0206	Electrical Machines	5	3	6
EDP	0210	BASIC Programming I	3	2	4
		Elective	<u>3</u>	<u>0</u>	<u>3</u>
			11	5	13

**ELEVENTH QUARTER**

ELN	0205	Electronics Systems Project	2	6	4
EDP	0211	BASIC Programming II	<u>3</u>	<u>2</u>	<u>4</u>
			5	8	8



**EXECUTIVE SECRETARIAL SCIENCE T-030  
(DAY)**

		<b>Course Title</b>	<b>Class Hours</b>	<b>Lab Hours</b>	<b>Credit Hours</b>
<b>FIRST QUARTER (Fall)</b>					
ENG	0101	Freshman Composition I	3	0	3
BUS	0100	Introduction to Business	3	2	4
BUS	0101	Beginning Typewriting	2	3	3
BUS	0104	Shorthand	5	0	5
BUS	0190	Word Processing Concepts	<u>3</u>	<u>0</u>	<u>3</u>
			16	5	18
<b>SECOND QUARTER (Winter)</b>					
ENG	0102	Freshman Composition II	3	0	3
BUS	0102	Typewriting II	3	2	4
BUS	0105	Shorthand	5	0	5
BUS	0107	Business Machines	3	2	4
PSY	0101	Personality Development	<u>3</u>	<u>0</u>	<u>3</u>
			17	4	19
<b>THIRD QUARTER (Spring)</b>					
ENG	0103	Freshman Composition III	3	0	3
BUS	0106	Shorthand	5	0	5
BUS	0109	Terminology and Transcription	3	2	4
BUS	0200	Word Processing Applications	3	2	4
BUS	0239	Business Math	<u>3</u>	<u>2</u>	<u>4</u>
			17	6	20
<b>FOURTH QUARTER (Fall)</b>					
MDP	0193	Applied Business Communications	3	0	3
BUS	0210	Principles of Accounting	3	2	4
BUS	0225	Business Law	3	0	3
BUS	0103	Typewriting III	3	2	4
ECO	0260	Consumer Economics	3	0	3
		Elective - English, Social Science or Humanities	3	0	3
			<u>18</u>	<u>4</u>	<u>20</u>
<b>FIFTH QUARTER (Winter)</b>					
BUS	0205	Machine Transcription	3	2	4
BUS	0201	Word Processing Files	3	2	4
BUS	0211	Principles of Accounting	3	2	4
PSY	0201	Industrial Psychology	3	0	3
EDP	0101	Computer Concepts	<u>3</u>	<u>0</u>	<u>3</u>
			15	6	18
<b>SIXTH QUARTER (Spring)</b>					
ENG	0160	Public Speaking	3	0	3
BUS	0108	Records Management	3	0	3
BUS	0213	Secretarial Procedures	3	2	4
BUS	0165	Office Applications/IBM PC	3	2	4
		Elective - Related	3	0	3
			<u>15</u>	<u>4</u>	<u>17</u>
<b>TOTAL CREDIT HOURS</b>					<b>112</b>

**EXECUTIVE SECRETARIAL SCIENCE T-030  
(NIGHT)**

<b>FIRST QUARTER</b>		<b>Course Title</b>	<b>Class Hours</b>	<b>Lab Hours</b>	<b>Credit Hours</b>
ENG	0101	Freshman Composition I	3	0	3
BUS	0100	Introduction to Business	3	2	4
BUS	0101	Beginning Typewriting	2	3	3
BUS	0104	Shorthand	<u>5</u>	<u>0</u>	<u>5</u>
			13	5	15
<b>SECOND QUARTER (Winter)</b>					
ENG	0102	Freshman Composition II	3	0	3
BUS	0102	Typewriting II	3	2	4
BUS	0105	Shorthand	5	0	5
PSY	0101	Personality Development	<u>3</u>	<u>0</u>	<u>3</u>
			14	2	15
<b>THIRD QUARTER (Spring)</b>					
ENG	0103	Freshman Composition III	3	0	3
BUS	0106	Shorthand	5	0	5
BUS	0109	Terminology and Transcription	3	2	4
BUS	0200	Word Processing Applications	<u>3</u>	<u>2</u>	<u>4</u>
			14	4	16
<b>FOURTH QUARTER (Summer)</b>					
BUS	0210	Principles of Accounting	3	2	4
PSY	0201	Industrial Psychology	3	0	3
BUS	0103	Typewriting III	3	2	4
MDP	0193	Applied Business Communications	<u>3</u>	<u>0</u>	<u>3</u>
			12	4	14
<b>FIFTH QUARTER (Fall)</b>					
BUS	0205	Machine Transcription	3	2	4
BUS	0211	Principles of Accounting	3	2	4
BUS	0225	Business Law	3	0	3
ECO	0260	Consumer Economics	<u>3</u>	<u>0</u>	<u>3</u>
			12	4	14
<b>SIXTH QUARTER (Winter)</b>					
ENG	0160	Public Speaking	3	0	3
BUS	0108	Records Management	3	0	3
BUS	0213	Secretarial Procedures	3	2	4
EDP	0101	Computer Concepts	<u>3</u>	<u>0</u>	<u>3</u>
			12	2	13
<b>SEVENTH QUARTER (Spring)</b>					
BUS	0190	Word Processing Concepts	3	0	3
BUS	0107	Business Machines	3	2	4
BUS	0165	Office Applications/IBM PC	3	2	4
Elective - English, Social Science, or Humanities			3	0	3
			<u>12</u>	<u>4</u>	<u>14</u>

**EIGHTH QUARTER (Summer)**

BUS 0239	Business Math	3	2	4
BUS 0201	Word Processing Files	3	2	4
Elective - Related		3	0	3

<u>3</u>	<u>2</u>	<u>4</u>
9	4	11

**TOTAL CREDIT HOURS****112**



## FOOD SERVICE MANAGEMENT T-074

### CURRICULUM DESCRIPTION

The first year of the Foodservice Management curriculum trains students in the art and science of quantity food preparation with particular emphasis on restaurant and institutional foodservice. The second year of the Foodservice Management curriculum trains students at the supervisory or "middle management" level in foodservice.

Students completing the first year of this curriculum and desiring additional study in supervision and management may continue for the second year or exit after the fourth quarter with a diploma in Foodservice Management.

In addition to having a sound foundation in the science of food preparation and service, students will develop an understanding of the basic science and principles of quantity food preparation, an appreciation of accuracy, the use of standards in production, and an increased knowledge of the space and equipment requirements for quantity food production. Service operations of various types, and some ability to evaluate the effectiveness of the operation of a foodservice department will also be taught. Students will understand pricing and cost controls, principles of nutrition as applied to institutional menu planning, safe methods of work performance, and an appreciation of sanitation and hygiene in a food-service operation.

### JOB OPPORTUNITIES

#### Entry Level

Cook, Pastry  
Cook  
Baker  
Baker Assistant  
Short Order Cook  
Waitress/Waiter

#### Advanced Level

Cook, Head  
Baker, Head  
Director, Food Services  
Chef  
Supervisor, Food Service  
Manager, Food Service  
Unit Manager  
Dietetic Assistant  
Quality Control Technicians  
Food Buyer

**FOOD SERVICE MANAGEMENT T-074  
TWO-YEAR DEGREE PROGRAM**

<b>Course Title</b>			<b>Class</b>	<b>Lab</b>	<b>Credit</b>
			<b>Hours</b>	<b>Hours</b>	<b>Hours</b>
<b>FIRST QUARTER</b>					
ENG	0101	Freshman Composition I	3	0	3
FSO	0101	Introduction to Food Services	3	0	3
FSO	0102	Food Preparation I	2	9	5
FSO	0103	Equipment—Use and Care	3	0	3
FSO	0104	Sanitation and Safety	<u>3</u>	<u>0</u>	<u>3</u>
			14	9	17
<b>SECOND QUARTER</b>					
ENG	0102	Freshman Composition II	3	0	3
FSO	0105	Food Preparation II	2	9	5
FSO	0106	Baking I	2	6	4
FSO	0107	Dining Room Service I	<u>3</u>	<u>0</u>	<u>3</u>
			10	15	15
<b>THIRD QUARTER</b>					
ENG	0103	Freshman Composition III	3	0	3
MAT	0111	Technical Math	3	0	3
FSO	0108	Food Preparation III	2	9	5
FSO	0109	Baking II	2	6	4
FSO	0110	Nutrition	<u>1</u>	<u>6</u>	<u>3</u>
			11	21	18
<b>FOURTH QUARTER</b>					
			3	0	3
			1	20	3
FSO	0220	Social Science Elective	1	20	3
FSO	0220	Supervised Work Experience	<u>1</u>	<u>0</u>	<u>1</u>
EDU	0117	Instructional Television	5	20	7
<b>FIFTH QUARTER</b>					
FSO	0201	Food Preparation IV	2	9	5
FSO	0202	Food & Labor Cost Control	3	0	3
			3	0	3
PSY	0260	Humanities Elective	3	0	3
PSY	0260	General Psychology	3	0	3
DFT	0120	Basic House Plans & Equipment Layout	<u>1</u>	<u>3</u>	<u>2</u>
			12	12	16
<b>SIXTH QUARTER</b>					
FSO	0208	Production Management	3	0	3
FSO	0203	Food Preparation V	2	9	5
BUS	0197	Small Business Operations	3	0	3
FSO	0205	Food Service Management	3	0	3
FSO	0204	Baking III	<u>2</u>	<u>6</u>	<u>4</u>
			13	15	18
<b>SEVENTH QUARTER</b>					
MDP	0190	Leadership Development	3	0	3
FSO	0206	Food Merchandising	2	3	3
FSO	0207	Specialty Cooking	2	3	3
BUS	0216	Principles of Supervision	3	0	3
EDU	0118	Computer Applications	<u>2</u>	<u>3</u>	<u>3</u>
			12	9	15

**FOOD SERVICE MANAGEMENT (T-074)  
ONE-YEAR DIPLOMA PROGRAM**

<b>Course Title</b>			<b>Class Hours</b>	<b>Lab Hours</b>	<b>Credits Hours</b>
<b>FIRST QUARTER</b>					
ENG	0101	Freshman Composition I	3	0	3
FSO	0101	Introduction to Food Services	3	0	3
FSO	0102	Food Preparation I	2	9	5
FSO	0103	Equipment—Use and Care	3	0	3
FSO	0104	Sanitation and Safety	<u>3</u>	<u>0</u>	<u>3</u>
			14	9	17
<b>SECOND QUARTER</b>					
ENG	0102	Freshman Composition II	3	0	3
FSO	0105	Food Preparation II	2	9	5
FSO	0106	Baking I	2	6	4
FSO	0107	Dining Room Service I	<u>3</u>	<u>0</u>	<u>3</u>
			10	15	15
<b>THIRD QUARTER</b>					
ENG	0103	Freshman Composition III	3	0	3
MAT	0111	Technical Math	3	0	3
FSO	0108	Food Preparation III	2	9	5
FSO	0109	Baking II	2	6	4
FSO	0110	Nutrition	<u>1</u>	<u>6</u>	<u>3</u>
			11	21	18
<b>FOURTH QUARTER</b>					
		Social Science Elective	3	0	3
FSO	0220	Supervised Work Experience	1	20	3
EDU	0117	Instructional Television	<u>1</u>	<u>0</u>	<u>1</u>
			5	20	7



**GENERAL OFFICE TECHNOLOGY T-033  
(DAY)**

		<b>Course Title</b>	<b>Class Hours</b>	<b>Lab Hours</b>	<b>Credit Hours</b>
<b>FIRST QUARTER (Fall)</b>					
ENG	0101	Freshman Composition I	3	0	3
BUS	0100	Introduction to Business	3	2	4
BUS	0101	Beginning Typewriting	2	3	3
BUS	0190	Word Processing Concepts	3	0	3
EDP	0101	Computer Concepts	<u>3</u>	<u>0</u>	<u>3</u>
			14	5	16
<b>SECOND QUARTER (Winter)</b>					
ENG	0102	Freshman Composition II	3	0	3
BUS	0102	Typewriting II	3	2	4
BUS	0107	Business Machines	3	2	4
PSY	0101	Personality Development	3	0	3
Elective - Related			<u>3</u>	<u>0</u>	<u>3</u>
			15	4	17
<b>THIRD QUARTER (Spring)</b>					
ENG	0103	Freshman Composition III	3	0	3
BUS	0109	Terminology and Transcription	3	2	4
BUS	0200	Word Processing Applications	3	2	4
BUS	0239	Business Math	3	2	4
Elective - Related			<u>4</u>	<u>0</u>	<u>4</u>
			16	6	19
<b>FOURTH QUARTER (Fall)</b>					
BUS	0103	Typewriting III	3	2	4
BUS	0210	Principles of Accounting	3	2	4
BUS	0225	Business Law	3	0	3
ECO	0260	Consumer Economics	3	0	3
MDP	0193	Applied Business Communications	<u>3</u>	<u>0</u>	<u>3</u>
			15	4	17
<b>FIFTH QUARTER (Winter)</b>					
BUS	0205	Machine Transcription	3	2	4
BUS	0208	Stenoscrypt	3	2	4
BUS	0211	Principles of Accounting	3	2	4
PSY	0201	Industrial Psychology	<u>3</u>	<u>0</u>	<u>3</u>
			12	6	15
<b>SIXTH QUARTER (Spring)</b>					
ENG	0160	Public Speaking	3	0	3
BUS	0108	Records Management	3	0	3
BUS	0213	Secretarial Procedures	3	2	4
BUS	0165	Office Applications/IBM PC	3	2	4
Elective - English, Social Science, or Humanities			<u>3</u>	<u>0</u>	<u>3</u>
			15	4	17
<b>TOTAL CREDIT HOURS</b>					<b>101</b>

**GENERAL OFFICE TECHNOLOGY T-033  
(NIGHT)**

<b>FIRST QUARTER</b>		<b>Course Title (Fall)</b>	<b>Class Hours</b>	<b>Lab Hours</b>	<b>Credit Hours</b>
ENG	0101	Freshman Composition I	3	0	3
BUS	0100	Introduction to Business	3	2	4
BUS	0101	Beginning Typewriting	2	3	3
EDP	0101	Computer Concepts	<u>3</u>	<u>0</u>	<u>3</u>
			11	5	13
<b>SECOND QUARTER (Winter)</b>					
ENG	0102	Freshman Composition II	3	0	3
BUS	0102	Typewriting II	3	2	4
PSY	0101	Personality Development	3	0	3
BUS	0107	Business Machines	<u>3</u>	<u>2</u>	<u>4</u>
			12	4	14
<b>THIRD QUARTER (Spring)</b>					
ENG	0103	Freshman Composition III	3	0	3
BUS	0109	Terminology and Transcription	3	2	4
BUS	0200	Word Processing Applications	3	2	4
BUS	0239	Business Math	<u>3</u>	<u>2</u>	<u>4</u>
			12	6	15
<b>FOURTH QUARTER (Summer)</b>					
BUS	0103	Typewriting III	3	2	4
BUS	0210	Principles of Accounting	3	2	4
PSY	0201	Industrial Psychology	3	0	3
MDP	0193	Applied Business Communications	<u>3</u>	<u>0</u>	<u>3</u>
			12	4	14
<b>FIFTH QUARTER (Fall)</b>					
BUS	0205	Machine Transcription	3	2	4
BUS	0211	Principles of Accounting	3	2	4
BUS	0225	Business Law	3	0	3
ECO	0260	Consumer Economics	<u>3</u>	<u>0</u>	<u>3</u>
			12	4	14
<b>SIXTH QUARTER (Winter)</b>					
ENG	0160	Public Speaking	3	0	3
BUS	0108	Records Management	3	0	3
BUS	0213	Secretarial Procedures	3	2	4
BUS	0208	Stenograph	<u>3</u>	<u>2</u>	<u>4</u>
			12	4	14
<b>SEVENTH QUARTER (Spring)</b>					
BUS	0190	Word Processing Concepts	3	0	3
BUS	0165	Office Applications/IBM PC	3	2	4
Elective - English, Social Science, or Humanities			3	0	3
Elective - Related			3	0	3
			<u>12</u>	<u>2</u>	<u>13</u>
<b>EIGHTH QUARTER (Summer)</b>					
Elective Related			4	0	4
			4	0	4
			<b>TOTAL CREDIT HOURS</b>		
					101



## GENERAL OFFICE CERTIFICATE (T-033)

A certificate of achievement will be awarded upon successful completion (average of "C" - 2.00 GPA) of a minimum of 45 credit hours from the requirements listed below.

Required			Credit Hours
ENG	0101	Freshman Composition I	3 hrs.
ENG	0160	Public Speaking	3 hrs.
MDP	0193	Applied Business Communications	3 hrs.
BUS	0101	Beginning Typewriting	3 hrs.
BUS	0102	Typewriting II	4 hrs.
BUS	0107	Business Machines	4 hrs.
BUS	0239	Business Mathematics	4 hrs.
EDP	0101	Computer Concepts or	3 hrs.
BUS	0190	Word Processing Concepts	
PSY	0101	Personality Development	3 hrs.
BUS	0210	Principles of Accounting	4 hrs.
BUS	0200	Word Processing Applications	4 hrs.
		*Electives	7 hrs.
			<hr/>
			45 hrs.

\* Electives may be any course within the General Office Technology curriculum. Any course with a grade of below "C" cannot be applied toward the certificate.



**INDUSTRIAL MANAGEMENT T-049  
(DAY)**

		<b>Course Title</b>	<b>Class Hours</b>	<b>Lab Hours</b>	<b>Credit Hours</b>
<b>FIRST QUARTER (Fall)</b>					
ENG	0101	Freshman Composition I	3	0	3
BUS	0210	Principles of Accounting	3	2	4
BUS	0239	Business Math	3	2	4
BUS	0100	Introduction to Business	3	2	4
		Elective - Related	3	0	3
			15	6	18
<b>SECOND QUARTER (Winter)</b>					
ENG	0102	Freshman Composition II	3	0	3
BUS	0211	Principles of Accounting	3	2	4
EDP	0101	Computer Concepts	3	0	3
PSY	0201	Industrial Psychology	3	0	3
ISC	0100	Principles of Industrial Management	3	0	3
			15	2	16
<b>THIRD QUARTER (Spring)</b>					
ENG	0103	Freshman Composition III	3	0	3
MDP	0194	Employee Problem Solving	3	0	3
ISC	0121	Industrial Engineering Applications	3	0	3
MDP	0190	Leadership Development	3	0	3
BUS	0216	Principles of Supervision	3	0	3
		Elective	3	0	3
			18	0	18
<b>FOURTH QUARTER (Fall)</b>					
DMK	0120	Marketing	3	2	4
BUS	0225	Business Law	3	0	3
MDP	0193	Applied Business Communications	3	0	3
EDP	0160	Microcomputer Operations	2	2	3
		Elective - English, Social Science or Humanities	3	0	3
			14	4	16
<b>FIFTH QUARTER (Winter)</b>					
BUS	0112	Business Finance	3	0	3
ISC	0111	Industrial Safety	3	0	3
PSY	0101	Personality Development	3	0	3
ISC	0113	Statistical Quality Control	3	2	4
ECO	0202	Economic Principles	3	2	4
ISC	0217	Work Compensation	3	0	3
			18	4	20
<b>SIXTH QUARTER (Spring)</b>					
ENG	0160	Public Speaking	3	0	3
BUS	0224	Personnel Management	3	0	3
ISC	0221	Production Planning/Value Analysis	3	2	4
ECO	0261	Labor Economics	3	0	3
ISC	0225	Selected Topics	3	0	3
		Elective	3	0	3
			18	2	19
<b>TOTAL CREDIT HOURS</b>					<b>107</b>

## INDUSTRIAL MANAGEMENT T-049 (NIGHT)

	Course Title	Class Hours	Lab Hours	Credit Hours
<b>FIRST QUARTER (Fall)</b>				
ENG 0101	Freshman Composition I	3	0	3
BUS 0100	Introduction to Business	3	2	4
BUS 0210	Principles of Accounting	3	2	4
Elective - Related		3	0	3
		<u>12</u>	<u>4</u>	<u>14</u>
<b>SECOND QUARTER (Winter)</b>				
ENG 0102	Freshman Composition II	3	0	3
BUS 0211	Principles of Accounting	3	2	4
ISC 0100	Principles of Industrial Management	3	0	3
BUS 0239	Business Math	<u>3</u>	<u>2</u>	<u>4</u>
		12	4	14
<b>THIRD QUARTER (Spring)</b>				
ENG 0103	Freshman Composition III	3	0	3
ISC 0121	Industrial Engineering Applications	3	0	3
MDP 0194	Employee Problem Solving	3	0	3
MDP 0190	Leadership Development	<u>3</u>	<u>0</u>	<u>3</u>
		12	0	12
<b>FOURTH QUARTER (Summer)</b>				
PSY 0201	Industrial Psychology	3	0	3
EDP 0101	Computer Concepts	3	0	3
EDP 0160	Microcomputer Operations	2	2	3
MDP 0193	Applied Business Communications	<u>3</u>	<u>0</u>	<u>3</u>
		11	2	12
<b>FIFTH QUARTER (Fall)</b>				
BUS 0225	Business Law	3	0	3
DMK 0120	Marketing	3	2	4
Elective		3	0	3
Elective- English, Social Science, or Humanities		3	0	3
		<u>12</u>	<u>2</u>	<u>13</u>
<b>SIXTH QUARTER (Winter)</b>				
ISC 0111	Industrial Safety	3	0	3
ISC 0113	Statistical Quality Control	3	2	4
ECO 0202	Economic Principles	3	2	4
BUS 0224	Personnel Management	<u>3</u>	<u>0</u>	<u>3</u>
		12	4	14
<b>SEVENTH QUARTER (Spring)</b>				
ENG 0160	Public Speaking	3	0	3
ECO 0261	Labor Economics	3	0	3
BUS 0216	Principles of Supervision	3	0	3
ISC 0221	Production Planning/Value Analysis	<u>3</u>	<u>2</u>	<u>4</u>
		12	2	13

**EIGHTH QUARTER (Summer)**

ISC 0217	Work Compensation	3	0	3
PSY 0101	Personality Development	3	0	3
BUS 0112	Business Finance	3	0	3
Elective		<u>3</u>	<u>0</u>	<u>3</u>
		12	0	12

**NINTH QUARTER (Fall)**

ISC 0225	Selected Topics	3	0	3
	<b>TOTAL CREDIT HOURS</b>			<b>107</b>

**INDUSTRIAL MANAGEMENT CERTIFICATE T-049****Required**

		<b>Credit Hours</b>
ENG 0101, 0102, 0160	(any two courses)	6 hrs.
BUS 0239	Business Math	4 hrs.
ISC 0113	Statistical Quality Control	4 hrs.
ISC 0221	Production Planning/Value Analysis	4 hrs.
ISC 0100	Principles of Industrial Management	3 hrs.
BUS 0216	Principles of Supervision	3 hrs.

**Electives**

Elect 9 hours from courses within the Industrial Management Curriculum.

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

**TOTAL CREDIT HOURS 33**



## INSURANCE T-12B (DAY)

	Course Title	Class Hours	Lab Hours	Credit Hours
<b>FIRST QUARTER (Fall)</b>				
ENG	0101 Freshman Composition I	3	0	3
BUS	0239 Business Math	3	2	4
BUS	0101 Beginning Typewriting	2	3	3
BUS	0210 Principles of Accounting	3	2	4
Elective - Related		4	0	4
		<hr/>	<hr/>	<hr/>
		15	7	18
<b>SECOND QUARTER (Winter)</b>				
ENG	0102 Freshman Composition II	3	0	3
BUS	0263 Business Insurance	3	0	3
BUS	0112 Business Finance	3	0	3
BUS	0211 Principles of Accounting	3	2	4
PSY	0201 Industrial Psychology	3	0	3
Elective- Related		3	0	3
		<hr/>	<hr/>	<hr/>
		18	2	19
<b>THIRD QUARTER (Spring)</b>				
ENG	0103 Freshman Composition III	3	0	3
BUS	0214 Business Management	3	0	3
EDP	0101 Computer Concepts	3	0	3
BUS	0277 Personal Risk Mgt. & Ins. I (CLU)	4	0	4
BUS	0282 Economics (CLU)	4	0	4
		<hr/>	<hr/>	<hr/>
		17	0	17
<b>FOURTH QUARTER</b>				
ENG	0160 Public Speaking	3	0	3
BUS	0210 BASIC Programming	3	2	4
BUS	0278 Personal Risk Mgt. & Ins. II (CLU)	4	0	4
BUS	0279 Multiline Ins. Law & Oper. (CLU)	4	0	4
Elective - Related		3	0	3
Elective - English, Social Science, or Humanities		3	0	3
		<hr/>	<hr/>	<hr/>
		20	2	21
<b>FIFTH QUARTER</b>				
BUS	0280 Income Taxation (CLU)	4	0	4
BUS	0281 Financial Services (CLU)	4	0	4
BUS	0283 Financial Statement Analysis (CLU)	4	0	4
BUS	0292 Claims Adjusting	2	0	2
Elective - Related		3	0	3
		<hr/>	<hr/>	<hr/>
		17	0	17
<b>SIXTH QUARTER</b>				
BUS	0284 Ins. Environment & Operations (CLU)	4	0	4
BUS	0285 Group Benefits & Social Ins. (CLU)	4	0	4
BUS	0286 Pensions & Other Retire. Plans (CLU)	4	0	4
DMK	0132 Sales Development	3	0	3
Elective - English, Social Science, or Humanities		3	0	3
		<hr/>	<hr/>	<hr/>
		18	0	18
<b>TOTAL CREDIT HOURS</b>				<hr/>
				110



**MARKETING AND RETAILING T-020  
(DAY)**

<b>FIRST QUARTER</b>		<b>Course Title (Fall)</b>	<b>Class Hours</b>	<b>Lab Hours</b>	<b>Credit Hours</b>
ENG	0101	Freshman Composition I	3	0	3
BUS	0100	Introduction to Business	3	2	4
BUS	0101	Beginning Typewriting	2	3	3
BUS	0210	Principles of Accounting	3	2	4
BUS	0239	Business Math	<u>3</u>	<u>2</u>	<u>4</u>
			14	9	18
<b>SECOND QUARTER (Winter)</b>					
ENG	0102	Freshman Composition II	3	0	3
BUS	0211	Principles of Accounting	3	2	4
DMK	0101	Retailing	3	2	4
PSY	0201	Industrial Psychology	3	0	3
BUS	0112	Business Finance	3	0	3
COE	0100	Co-op Seminar	<u>1</u>	<u>0</u>	<u>1</u>
			16	4	18
<b>THIRD QUARTER (Spring)</b>					
ENG	0103	Freshman Composition III	3	0	3
BUS	0212	Principles of Accounting	3	2	4
BUS	0214	Principles of Management	3	0	3
DMK	0132	Sales Development	3	0	3
EDP	0101	Computer Concepts	3	0	3
Elective - English, Social Science, or Humanities			<u>3</u>	<u>0</u>	<u>3</u>
			18	2	19
<b>FOURTH QUARTER (Fall)</b>					
DML	0120	Marketing	3	2	4
BUS	0225	Business Law	3	0	3
ECO	0201	Principles of Economics	3	2	4
EDP	0160	Microcomputer Operations	2	2	3
MDP	0193	Applied Business Communications	<u>3</u>	<u>0</u>	<u>3</u>
			14	6	17
<b>FIFTH QUARTER (Winter)</b>					
DMK	0243	Advertising	3	2	4
DMK	0249	Buying and Merchandising	3	2	4
BUS	0226	Business Law	3	0	3
ECO	0202	Principles of Economics	3	2	4
PSY	0101	Personality Development	<u>3</u>	<u>0</u>	<u>3</u>
			15	6	18
<b>SIXTH QUARTER (Spring)</b>					
ENG	0160	Public Speaking	3	0	3
BUS	0223	Credit Procedures and Problems	3	0	3
DMK	0260	Commercial Display and Design	3	2	4
BUS	0216	Principles of Supervision	3	0	3
MDP	0190	Leadership Development	3	0	3
Elective - English, Social Science, or Humanities			<u>3</u>	<u>0</u>	<u>3</u>
			18	2	19
<b>TOTAL CREDIT HOURS</b>					<b>109</b>

## MARKETING AND RETAILING T-020 (NIGHT)

		Course Title	Class	Lab	Credit
FIRST QUARTER		(Fall)	Hours	Hours	Hours
ENG	0101	Freshman Composition I	3	0	3
BUS	0100	Introduction to Business	3	2	4
BUS	0210	Principles of Accounting	3	2	4
DMK	0120	Marketing	<u>3</u>	<u>2</u>	<u>4</u>
			12	6	15
<b>SECOND QUARTER (Winter)</b>					
ENG	0102	Freshman Composition II	3	0	3
BUS	0211	Principles of Accounting	3	2	4
PSY	0101	Personality Development	3	0	3
DMK	0101	Retailing	<u>3</u>	<u>2</u>	<u>4</u>
			12	4	14
<b>THIRD QUARTER (Spring)</b>					
ENG	0103	Freshman Composition III	3	0	3
BUS	0212	Principles of Accounting	3	2	4
BUS	0214	Principles of Management	3	0	3
DMK	0132	Sales Development	<u>3</u>	<u>0</u>	<u>3</u>
			12	2	13
<b>FOURTH QUARTER (Summer)</b>					
BUS	0101	Beginning Typewriting	2	3	3
BUS	0239	Business Math	3	2	4
COE	0100	Co-op Seminar	1	0	1
PSY	0201	Industrial Psychology	3	0	3
MDP	0193	Applied Business Communications	<u>3</u>	<u>0</u>	<u>3</u>
			12	5	14
<b>FIFTH QUARTER (Fall)</b>					
EDP	0101	Computer Concepts	3	0	3
BUS	0225	Business Law	3	0	3
EDP	0160	Microcomputer Operations	2	2	3
ECO	0201	Principles of Economics	<u>3</u>	<u>2</u>	<u>4</u>
			11	4	13
<b>SIXTH QUARTER (Winter)</b>					
BUS	0226	Business Law	3	0	3
DMK	0249	Buying and Merchandising	3	2	4
DMK	0243	Advertising	3	2	4
ECO	0202	Principles of Economics	<u>3</u>	<u>2</u>	<u>4</u>
			12	6	15
<b>SEVENTH QUARTER (Spring)</b>					
DMK	0260	Commercial Display and Design	3	2	4
BUS	0223	Credit Procedures and Problems	3	0	3
BUS	0216	Principles of Supervision	3	0	3
MDP	0190	Leadership Development	<u>3</u>	<u>0</u>	<u>3</u>
			12	2	13
<b>EIGHTH QUARTER (Summer)</b>					
ENG	0160	Public Speaking	3	0	3
BUS	0112	Business Finance	3	0	3
Elective - English, Social Science, or Humanities			3	0	3
Elective - English, Social Science, or Humanities			<u>3</u>	<u>0</u>	<u>3</u>
			12	0	12
TOTAL CREDIT HOURS					109

## 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 the 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	
<b>FIRST QUARTER</b>					
MEC	0101	Manufacturing Processes I	3	9	6
MAT	0120	Intermediate Algebra	5	0	5
DFT	0101	Blueprint Reading	0	3	1
MEC	0111	Industrial Safety	<u>3</u>	<u>0</u>	<u>3</u>
		11	12	15	
<b>SECOND QUARTER</b>					
MEC	0102	Manufacturing Processes II	3	9	6
EGR	0101	Engineering Drawing I	0	6	3
MAT	0121	College Algebra & Trigonometry	5	0	5
MEC	0118	Introduction to Metals	<u>3</u>	<u>3</u>	<u>4</u>
		11	18	18	
<b>THIRD QUARTER</b>					
MEC	0103	Manufacturing Processes III	3	9	6
EGR	0102	Engineering Drawing II	0	6	3
MEC	0119	Applied Metallurgy	3	3	4
MAT	0122	College Algebra & Trigonometry	<u>5</u>	<u>0</u>	<u>5</u>
		11	18	18	
<b>FOURTH QUARTER</b>					
MEC	0104	Manufacturing Processes IV	3	9	6
MEC	0260	Introduction to Plastics	3	0	3
PSY	0260	General Psychology	3	0	3
WLD	0135	Basic Gas Welding & Cutting	<u>2</u>	<u>3</u>	<u>3</u>
		11	12	15	

**FIFTH QUARTER**

ELC	0205	Applied Electricity	3	3	4
PHY	0101	Technical Physics I	3	3	4
ENG	0101	Freshman Composition I	3	0	3
DFT	0211	Mechanisms	3	3	4
EDU	0118	Computer Applications	<u>2</u>	<u>3</u>	<u>3</u>
			14	12	18

**SIXTH QUARTER**

MEC	0113	Numerical Control Principles	3	3	4
PHY	0102	Technical Physics II	3	3	4
ENG	0102	Freshman Composition II	3	0	3
MEC	0235	Hydraulics and Pneumatics	<u>3</u>	<u>0</u>	<u>3</u>
			12	6	14

**SEVENTH QUARTER**

ENG	0103	Freshman Composition III	3	0	3
MEC	0204	Applied Mechanics	5	0	5
		Humanities Elective	3	0	3
		**Elective	<u>3</u>	<u>0</u>	<u>3</u>
			14	0	14

**EIGHTH QUARTER**

MEC	0208	Machine Design	3	3	4
MEC	0205	Strength of Materials	5	0	5
ENG	0160	Public Speaking	3	0	3
MEC	0236	Manufacturing Quality Control	<u>3</u>	<u>0</u>	<u>3</u>
			14	3	15

\*\* Cooperative Education Internship (0100-0106) (0201-0202) may be used for credit toward degree requirements.



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

A diploma in Radio Broadcasting may be obtained by taking a total of 66 hours consisting of:

RTV0116, 0120, 0201, 0202, 0203, 0204, 0205, 0206, 0211, 0212, 0218, 0221, 0226.

ENG 0101, 0102.



## RADIO AND TELEVISION BROADCASTING TECHNOLOGY T-179

		Course Title	Class Hours	Lab Hours	Credit Hours
<b>FIRST QUARTER</b>					
BUS	0101	Beginning Typewriting	2	3	3
RTV	0201	Introduction to Broadcasting	5	2	6
RTV	0203	Expression in the Media	5	0	5
ENG	0101	Freshman Composition I	3	0	3
ENG	0160	Public Speaking	<u>3</u>	<u>0</u>	<u>3</u>
			18	5	20
<b>SECOND QUARTER</b>					
RTV	0204	Radio Production	3	8	7
RTV	0206	Writing for Broadcasting	3	2	4
RTV	0220	Intro to TV Systems	5	4	7
ENG	0102	Freshman Composition II	<u>3</u>	<u>0</u>	<u>3</u>
			14	14	21
<b>THIRD QUARTER</b>					
RTV	0116	Broadcasting Announcing	3	6	6
RTV	0207	R/TV Production I	3	8	7
MAT	0101	Finite Mathematics I	4	0	4
RTV	0221	Troubleshooting Broadcasting Equipment	<u>3</u>	<u>3</u>	<u>4</u>
			16	17	21
<b>FOURTH QUARTER</b>					
RTV	0120	Radio Control Room Procedures	3	0	3
RTV	0209	R/TV Production II	2	8	6
RTV	0205	Broadcasting Programming	3	0	3
		Elective/Humanities	3	0	3
MAT	0102	Finite Mathematics II	<u>4</u>	<u>0</u>	<u>4</u>
			15	8	19
<b>FIFTH QUARTER</b>					
RTV	022	Industrial/Instructional Television	4	0	4
RTV	0211	Broadcast Journalism	5	6	8
ELC	0205	Applied Electricity	3	3	4
CMG	0210	Advertising, Sales and Promotion	<u>3</u>	<u>2</u>	<u>4</u>
			15	11	20
<b>SIXTH QUARTER</b>					
		Elective/Social Science	3	0	3
RTV	0226	Supervised Work Experience I	2	20	4
PSY	0260	General Psychology	3	0	3
EDU	0118	Computer Applications	<u>2</u>	<u>3</u>	<u>3</u>
			10	23	13
<b>SEVENTH QUARTER</b>					
RTV	0212	Broadcasting Management	3	0	3
RTV	0218	Broadcast Law	3	0	3
RTV	0227	Supervised Work Experience II	<u>2</u>	<u>20</u>	<u>4</u>
			8	20	10

## RADIO DIPLOMA PROGRAM T-179

The radio diploma program is an offshoot of the Radio TV curriculum. It focus is directed at radio broadcasting as well as audio operation in the fields of television, motion pictures, or a recording company facility. Students will learn the operations of the various types of electronic equipment that are necessary in the studios and the control rooms associated with those studios.

Course Title			Class	Lab	Credit
			Hours	Hours	Hours
RTV	0116	Broadcasting Announcing	3	6	6
RTV	0120	Radio Control Room Procedures	3	0	3
RTV	0201	Introduction to Broadcasting	5	2	6
CMG	0210	Advertising, Sales & Promotion	3	2	4
RTV	0203	Expression in the Media	5	0	5
RTV	0204	Radio Production	3	8	7
RTV	0205	Broadcasting Programming	3	0	3
RTV	0206	Writing for Broadcasting	3	2	4
RTV	0211	Broadcast Journalism	5	6	8
RTV	0212	Broadcasting Management	3	0	3
RTV	0218	Broadcast Law	3	0	3
RTV	0221	Troubleshooting Broadcasting Equipment	3	3	4
RTV	0207	R/TV Production I	3	8	7
RTV	0209	R/TV Production II	2	8	6
RTV	0226	Supervised Work Experience I	2	20	4
RTV	0227	Supervised Work Experience II	2	20	4
ENG	0101	Freshman Composition I	3	0	3
ENG	0102	Freshman Composition II	3	0	3
TOTAL CREDIT HOURS					83



## REAL ESTATE T-127 (NIGHT)

	Course Title	Class Hours	Lab Hours	Credit Hours
<b>FIRST QUARTER (Fall)</b>				
ENG 0101	Freshman Composition I	3	0	3
BUS 0230	Real Estate Fundamentals I & II	<u>6</u>	<u>0</u>	<u>6</u>
		9	0	9
<b>SECOND QUARTER (Winter)</b>				
ENG 0102	Freshman Composition II	3	0	3
BUS 0238	Real Estate Law	3	0	3
BUS 0231	Real Estate Finance and Investment	<u>3</u>	<u>0</u>	<u>3</u>
		9	0	9
<b>THIRD QUARTER (Spring)</b>				
ENG 0103	Freshman Composition III	3	0	3
EDP 0101	Computer Concepts	3	0	3
BUS 0120	Real Estate Construction	3	0	3
BUS 0121	Real Estate Math	<u>2</u>	<u>0</u>	<u>2</u>
		11	0	11
<b>FOURTH QUARTER (Summer)</b>				
ENG 0160	Public Speaking	3	0	3
BUS 0233	Real Estate Appraisal	6	0	6
MDP 0193	Applied Business Communications	<u>3</u>	<u>0</u>	<u>3</u>
		12	0	12
<b>FIFTH QUARTER (Fall)</b>				
BUS 0123	Real Estate Merchandising	3	0	3
BUS 0235	Real Estate Property Management	3	0	3
BUS 0225	Business Law	3	0	3
DMK 0120	Marketing	<u>3</u>	<u>2</u>	<u>4</u>
		12	2	13
<b>SIXTH QUARTER (Winter)</b>				
BUS 0122	Real Estate Brokerage	3	0	3
BUS 0242	Real Estate Investments and Taxation	3	0	3
BUS 0226	Business Law	3	0	3
DMK 0243	Advertising	<u>3</u>	<u>2</u>	<u>4</u>
		12	2	13
<b>SEVENTH QUARTER (Spring)</b>				
BUS 0210	Principles of Accounting	3	2	4
BUS 0227	Business Law	3	0	3
BUS 0107	Business Machines	3	2	4
DMK 0132	Sales Development	<u>3</u>	<u>0</u>	<u>3</u>
		12	4	14
<b>EIGHTH QUARTER (Summer)</b>				
BUS 0211	Principles of Accounting	3	2	4
BUS 0101	Beginning Typewriting	2	3	3
BUS 0239	Business Math	3	2	4
PSY 0201	Industrial Psychology	<u>3</u>	<u>0</u>	<u>3</u>
		11	7	14
<b>NINTH QUARTER (Fall)</b>				
	Electives - Related	4	0	4
	Electives - English, Social Science, or Humanities	6	0	6
		<u>10</u>	<u>0</u>	<u>10</u>
<b>TOTAL CREDIT HOURS</b>				105

## 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	Lab	Credit
FIRST QUARTER			Hours	Hours	Hours
EDU	0107	Administration, Supervision & Standards	3	0	3
EDU	0101	Introduction to Education	3	0	3
EDU	0208	Art and Music	1	3	2
EDU	0240	Practicum	0	15	5
EDU	0241	Seminar	1	0	1
FSO	0110	Nutrition	1	6	3
			<u>9</u>	<u>24</u>	<u>17</u>
SECOND QUARTER					
PSY	0115	Human Growth & Development I	3	0	3
EDU	0109	Learning Activities	2	3	3
EDU	0203	Exceptional Child	3	0	3
		**Elective	4	0	4
EDU	0242	Practicum	0	15	5
EDU	0243	Seminar	1	0	1
			<u>13</u>	<u>18</u>	<u>19</u>
THIRD QUARTER					
PSY	0116	Human Growth & Development II	3	0	3
HEA	0104	First Aid	3	0	3
PED	0242	Physical Activities for Children	3	3	4
EDU	0108	Math & Science for Children	3	0	3
EDU	0244	Practicum	0	15	5
EDU	0245	Seminar	1	0	1
			<u>13</u>	<u>18</u>	<u>19</u>

**FOURTH QUARTER**

ENG 0101	Freshman Composition I	3	0	3
EDU 0115	Language Arts	2	3	3
EDU 0213	Children's Literature	4	0	4
EDU 0246	Practicum	0	9	3
EDU 0247	Seminar	<u>1</u>	<u>0</u>	<u>1</u>
		10	12	14

**FIFTH QUARTER**

RED 0102	Methods, Materials, and Techniques of Reading I	3	0	3
ENG 0102	Freshman Composition II	3	0	3
EDU 0118	Computer Applications	2	3	3
MAT 0101	Finite Mathematics I	4	0	4
EDU 0248	Practicum and Supervision	<u>1</u>	<u>6</u>	<u>3</u>
		13	9	16

**SIXTH QUARTER**

RED 0103	Methods, Materials, and Techniques of Reading II	3	0	3
BUS 0197	Small Business Management	3	0	3
ENG 0103	Freshman Comp. II	3	0	3
EDU 0204	Parent Education	3	0	3
REC 0102	Recreational Activities I	<u>2</u>	<u>3</u>	<u>3</u>
		14	3	15

**SEVENTH QUARTER**

REC 0105	Arts & Crafts	1	3	2
EDU 0234	A/V Materials and Equipment	3	0	3
ENG 0160	Public Speaking	3	0	3
EDU 0206	Discipline	3	0	3
EDU 0250	Supervision Seminar	2	0	2
EDU 0214	Instructional Resources	<u>3</u>	<u>0</u>	<u>3</u>
		15	3	16

\*\* Cooperative Education Internship (0100-0106) (0201-0202) may be used for credit toward degree requirements.



## TELECOMMUNICATIONS EQUIPMENT TECHNOLOGY T-187

The Telecommunications Equipment Technology program is designed to train students to operate and maintain electronic equipment used to send, receive and process information by electric means. Courses in basic electronics, digital electronics and microprocessor fundamentals will provide the student with the necessary background to advance to digital communication systems, broadband communication systems and radar systems.

The student will get hands-on experience in the operation, troubleshooting and repair of electronic equipment used in various communication systems.

### JOB COMPETENCIES

#### Entry Level

Telecommunications Technician  
Transmitter Operator  
Audio Control Engineer  
Video Control Engineer  
Maintenance Technician

#### Advanced Level

Chief Engineer  
Transmission Engineer

## TELECOMMUNICATIONS EQUIPMENT TECHNOLOGY T-187

Course Title		Class	Lab	Credit
FIRST QUARTER		Hours	Hours	Hours
ELC 0101	Electrical Fundamentals I	5	3	6
EGR 0101	Engineering Drawing or EGR 0104	0	6	3
MAT 0120	Intermediate Algebra	5	0	5
ENG 0101	Freshman Composition I	<u>3</u>	<u>0</u>	<u>3</u>
		13	9	17
SECOND QUARTER				
ELC 0102	Electrical Fundamentals II	5	3	6
ELN 0101	Electronics I	3	3	4
MAT 0121	College Algebra & Trigonometry I	5	0	5
ENG 0102	Freshman Composition II	<u>3</u>	<u>0</u>	<u>3</u>
		16	6	18
THIRD QUARTER				
ELN 0102	Electronics II	5	3	6
MAT 0122	College Algebra & Trigonometry II	5	0	5
ENG 0103	Freshman Composition III	3	0	3
TEL 0200	Introduction to Telecommunications	<u>3</u>	<u>0</u>	<u>3</u>
		16	3	17

**FOURTH QUARTER**

ELN	0103	Electronics III	5	3	6
		Social Science Elective	3	0	3
ENG	0160	Public Speaking	3	0	3
		Humanities Elective	3	0	3
ELN	0202	Digital Fundamentals	<u>5</u>	<u>3</u>	<u>6</u>
			19	6	21

**FIFTH QUARTER**

TEL	0205	Modulation and Transmission	5	3	6
TEL	0208	Data Transmission	3	3	4
PHY	0201	General Physics I	3	3	4
ELN	0204	Microprocessor Applications	<u>5</u>	<u>3</u>	<u>6</u>
			16	12	20

**SIXTH QUARTER**

TEL	0206	Communications Receivers	5	3	6
TEL	0210	Audio & Video Recording Systems	5	3	6
PHY	0202	General Physics II	3	3	4
EDP	0210	BASIC Programming I	<u>3</u>	<u>2</u>	<u>4</u>
			16	11	20

**SEVENTH QUARTER**

TEL	0215	Broadcast Standards	5	3	6
TEL	0220	Supervised Work Experience	0	20	2
EDP	0211	Basic Programming II	<u>3</u>	<u>2</u>	<u>4</u>
			8	25	12



## VOCATIONAL PROGRAMS

### 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:

Automotive Body Repair	Geriatric Care Specialist
Automotive Mechanics	Industrial Mechanics
Child Care Worker	Machinist
Cosmetology	Nurse Assistant
Electrical Installation and Maintenance	Practical Nursing
Electronic Servicing	Welding

### AUTOMOTIVE BODY REPAIR

The Automotive Body Repair curriculum provides training in the use of the equipment and materials of the auto body mechanic trade. The student studies the construction of the automobile body and techniques of auto body repairing, rebuilding, and refinishing.

Repairing, straightening, aligning, metal finishing, and painting of automobile bodies and frames are typical jobs performed. Job titles include automobile body repairman, automotive painter, and frame and chassis repairman. Students may enter this program any quarter.

### AUTO BODY REPAIR V-001

	Course Title	Class Hours	Lab Hours	Credit Hours
<b>FIRST QUARTER</b>				
AUB 1101	Auto Body Repair I	2	15	7
AUB 1118	Auto Body Problems I	2	3	3
WLD 1111	Basic Gas Welding	1	3	2
MAT 1101	Math Fundamentals	3	0	3
WLD 1113	MIG/Plastic/Spot Welding I	<u>1</u>	<u>3</u>	<u>2</u>
		9	24	17

**SECOND QUARTER**

AUB	1102	Auto Body Repair II	2	15	7
AUB	1119	Auto Body Problems II	2	3	3
WLD	1112	Basic Arc Welding	0	3	1
PSY	1100	Human Relations	3	0	3
WLD	1114	MIG/Plastic/Spot Welding II	<u>1</u>	<u>3</u>	<u>2</u>
			8	24	16

**THIRD QUARTER**

AUB	1103	Auto Body Repair III	2	15	7
AUB	1120	Auto Body Problems III	2	3	3
		**Elective	1	0	1
AUM	1119	Radiator/Heat Exchanger Servicing	<u>5</u>	<u>3</u>	<u>6</u>
			10	21	17

**FOURTH QUARTER**

AUB	1104	Auto Body Repair IV	2	15	7
AUB	1121	Auto Body Problems IV	1	3	2
ENG	1101	Communications	3	0	3
PHY	0100	Principles of Technology	<u>3</u>	<u>3</u>	<u>4</u>
			9	21	16
		<b>TOTAL CREDIT HOURS</b>			66

\*Cooperative Education Internship (0100-0106) (0201-0202) may be used for credit toward degree requirements.

**AUTO BODY REPAIR  
CERTIFICATE  
V-001**

	Course Title	Class Hours	Lab Hours	Credit Hours
<b>FIRST QUARTER</b>				
AUB	1101 Auto Body Repair I	2	15	7
<b>SECOND QUARTER</b>				
AUB	1102 Auto Body Repair II	2	15	7
<b>THIRD QUARTER</b>				
AUT	1103 Auto Body Repair III	2	15	7
<b>FOURTH QUARTER</b>				
AUB	1104 Auto Body Repair IV	2	15	7

**AUTOMOTIVE MECHANICS V003**

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.

### AUTOMOTIVE MECHANICS V003

		Course Title	Class Hours	Lab Hours	Credit Hours
<b>FIRST QUARTER</b>					
AUM	1101	Automotive Engine Electrical Fuel Systems	2	15	7
AUM	1111	Automotive Schematics and Diagrams	2	3	3
AUM	1118	Automotive Problems	3	3	4
MAT	1101	Math Fundamentals	<u>3</u>	<u>0</u>	<u>3</u>
			10	21	17
<b>SECOND QUARTER</b>					
AUM	1102	Automotive Brakes, Chassis & Suspension	2	15	7
AUM	1112	Automotive Schematics & Diagrams	2	3	3
AUM	1125	Automotive Air Conditioning	3	3	4
MAT	1102	Measurements	<u>3</u>	<u>0</u>	<u>3</u>
			10	21	17
<b>THIRD QUARTER</b>					
AUM	1103	Automotive Internal Combustion Engines	2	15	7
AUM	1113	Automotive Schematics & Diagrams	1	3	2
BUS	1100	Small Business Operations	2	0	2
AUT	1105	Automotive Inspection	3	3	4
		**Elective	<u>1</u>	<u>0</u>	<u>1</u>
			9	21	16
<b>FOURTH QUARTER</b>					
AUM	1104	Automotive Power Train Systems	2	15	7
AUM	1126	Auto Servicing I	1	3	2
ENG	1101	Communications	3	0	3
PSY	1100	Human Relations	<u>3</u>	<u>0</u>	<u>3</u>
			9	18	15
<b>TOTAL CREDIT HOURS</b>					65

\*\*Cooperative Education Internship (0100-0106) (0201-0202) may be used for credit toward degree requirements.

### AUTOMOTIVE MECHANICS CERTIFICATE V-003

		Course Title	Class Hours	Lab Hours	Credit Hours
<b>FIRST QUARTER</b>					
AUM	1101	Automotive Engine Electrical Fuel Systems	2	15	7
<b>SECOND QUARTER</b>					
AUM	1102	Automotive Brakes Chassis & Suspension	2	15	7
<b>THIRD QUARTER</b>					
AUM	1103	Automotive Internal Combustion Engines	2	15	7
<b>FOURTH QUARTER</b>					
AUM	1104	Automotive Power Train Systems	2	15	7



## CHILD CARE WORKER V067

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 re-training 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
<b>FIRST QUARTER</b>					
EDU	0107	Administration, Supervision & Standards	3	0	3
DU	0101	Introduction to Education	3	0	3
EDU	0208	Art and Music	1	3	2
		**Elective	1	0	1
EDU	0240	Practicum	2	15	5
EDU	0241	Seminar	1	0	1
FOS	0110	Nutrition	1	6	3
			10	24	18
<b>SECOND QUARTER</b>					
PSY	0115	Human Growth & Development I	3	0	3
EDU	0109	Learning Activities	2	3	3
EDU	0203	Exceptional Child	3	0	3
MAT	1101	Fundamentals of Math	3	0	3
EDU	0242	Practicum	0	15	5
EDU	0243	Seminar	1	0	1
			12	18	18
<b>THIRD QUARTER</b>					
PSY	0116	Human Growth & Development II	3	0	3
HEA	0104	First Aid	3	0	3
Ped	0242	Physical Activities for Children	3	3	4
EDU	0108	Math & Science for Children	3	0	3
EDU	0244	Practicum	0	15	5
EDU	0245	Seminar	1	0	1
			13	18	19
<b>FOURTH QUARTER</b>					
ENG	0101	Freshman Composition I -or-	3	0	3
ENG	1101	Communications	3	0	3
EDU	0115	Language Arts	3	0	3
EDU	0213	Children's Literature	4	0	4
EDU	0246	Practicum	0	9	3
EDU	0247	Seminar	1	0	1
			11	9	14

\*\*Cooperative Education Internship (0109-0106) (0201-0202) 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, PSY, 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.

ICC Cosmetology is an approved Pivot Point member school, 1985, and a Redken SES school, (Scientific Educational System) 1986. ICC 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. ICC is the second community college and one of 250 private colleges in the nation offering the Pivot Point Educational System.

## COSMETOLOGY V-009 (DAY AND AFTERNOON)

		Course Title	Class	Clinical	Hours Credit
<b>FIRST QUARTER</b>					
COS	1101	Theory I	6	0	6
COS	1011	Lab I	0	24	8
COS	1110	Professional Esthetics	2	0	2
ART	1100	Art Awareness	2	0	2
CHM	1130	Trichology & Chemistry I	<u>2</u>	<u>0</u>	<u>2</u>
			12	24	20
<b>SECOND QUARTER</b>					
COS	1102	Theory II	6	0	6
COS	1022	Lab II	0	24	8
COS	1120	Professional Haircoloring	2	0	2
COS	1150	Pivot Point Sculpting & Design	2	0	2
CHM	1140	Trichology & Chemistry II	<u>2</u>	<u>0</u>	<u>2</u>
			12	24	20
<b>THIRD QUARTER</b>					
COS	1103	Theory III	6	0	6
COS	1033	Lab III	0	24	8
BUS	1100	Small Business Management	2	0	2
COS	1160	Pivot Point Design Forum I & II	<u>4</u>	<u>0</u>	<u>4</u>
			12	24	20
<b>FOURTH QUARTER</b>					
COS	1104	Theory IV	6	0	6
COS	1044	Lab IV	0	27	9
ENG	1100	Skills for Communicating	2	0	2
PSY	1102	Self Awareness	<u>2</u>	<u>0</u>	<u>2</u>
			10	27	19
TOTAL CREDIT HOURS REQUIRED FOR ADVANCED DIPLOMA					79
TOTAL COSMETOLOGY CLOCK HOURS REQUIRED FOR ADVANCED DIPLOMA					1500

### DAY, AFTERNOON, AND EVENING

DIPLOMA REQUIREMENTS — 1200 Cosmetology clock hours and all of the above except for these changes:

		Class	Lab	Credit
Delete:	COS 1150	2	0	2
	COS 1160	2	0	2
Change Fourth Quarter, Day or Afternoon				
	COS 1044	0	21	7
Sixth Quarter, Evening				
	COS 2066	0	12	4
Tentative Class Schedule: Day Program 8am - 3pm MTWTF				
Afternoon 10am - 5pm MTWTF				
Evening 4pm - 10pm MTWT				

## COSMETOLOGY - EVENING CURRICULUM

		Course Title	Class	Clinical	Hours Credit
<b>FIRST QUARTER</b>					
COS	2101	Theory I A&B	4	0	4
COS	2011	Lab I A&B	0	15	5
BUS	1100	Small Business Management	2	0	2
CHM	1130	Trichology & Chemistry for Cosmetologists I	<u>2</u>	<u>0</u>	<u>2</u>
			8	15	13
<b>SECOND QUARTER</b>					
COS	2102	Theory I C and Theory IIA	4	0	4
COS	2022	Lab I C and Theory IIA	0	15	5
CHM	1140	Trichology and Chemistry for Cosmetologists II	2	0	2
COS	1150	Pivot Point Sculpting and Design	<u>2</u>	<u>0</u>	<u>2</u>
			8	15	13
<b>THIRD QUARTER</b>					
COS	2103	Theory II BC	4	0	4
COS	2033	Lab II BC	0	18	6
COS	1160A	Pivot Point Design Forum I	<u>2</u>	<u>0</u>	<u>2</u>
			6	18	12
<b>FOURTH QUARTER</b>					
COS	2104	Theory III A&B	4	0	4
COS	2044	Lab III A&B	0	15	5
ENG	1100	Skills For Communicating	2	0	2
PSY	1102	Self Awareness	<u>2</u>	<u>0</u>	<u>2</u>
			8	15	13
<b>FIFTH QUARTER</b>					
COS	2105	Theory III C and IV A	4	0	4
COS	2055	Lab III C and IV A	0	18	6
COS	1110	Professional Esthetics	2	0	2
COS	1160B	Pivot Point Design Forum II	<u>2</u>	<u>0</u>	<u>2</u>
			8	18	14
<b>SIXTH QUARTER</b>					
COS	2106	Theory IV B&C	4	0	4
COS	2066	Lab IV B&C	0	18	6
COS	1120	Professional Haircoloring	2	0	2
ART	1100	Art Awareness	<u>2</u>	<u>0</u>	<u>2</u>
			8	18	14
TOTAL REQUIRED CREDIT HOURS FOR ADVANCED DIPLOMA					79
TOTAL REQUIRED COSMETOLOGY CONTACT HOURS					1500

## ELECTRICAL INSTALLATION AND MAINTENANCE V-01B

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, check out, and maintenance of systems in residential, commercial, or industrial plants. Students may enter this program any quarter.

## ELECTRICAL INSTALLATION AND MAINTENANCE V01B

		Course Title	Class Hours	Lab Hours	Credit Hours
<b>FIRST QUARTER</b>					
ELC	1101	Fundamentals of Electricity	4	12	8
ELC	1118	Basic Electronics	3	3	4
DFT	1111	Blueprints—Electrical	0	3	1
MAT	1103	Electrical Math I	<u>5</u>	<u>0</u>	<u>5</u>
			12	18	18
<b>SECOND QUARTER</b>					
ELC	1102	Residential Wiring	4	12	8
ELC	1119	National Electrical Codes-Residential	6	0	6
DFT	1112	Blueprint-Electrical	0	3	1
MAT	1104	Electrical Math II	<u>5</u>	<u>0</u>	<u>5</u>
			15	15	20
<b>THIRD QUARTER</b>					
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	2	0	2
**		Elective	<u>1</u>	<u>0</u>	<u>1</u>
			15	15	20
<b>FOURTH QUARTER</b>					
ELC	1104	Controls of AC-DC Machines	4	12	8
ELC	1121	Industrial Wiring	3	3	4
ENG	1101	Communications	3	0	3
EDU	0118	Computer Applications	<u>2</u>	<u>3</u>	<u>3</u>
			18	18	18
<b>TOTAL CREDIT HOURS</b>					<b>76</b>

\*\*Cooperative Education Internship (0100-0106) (0201-0202) may be used for credit toward degree requirements.



**ELECTRICAL INSTALLATION AND MAINTENANCE  
CERTIFICATE  
V-01B**

		Hours	Per Week Class Hours	Qtr. Hours Lab Hours	Credit Hours
<b>FIRST QUARTER</b>					
ELC	1101	Fundamentals of Electricity	4	12	8
<b>SECOND QUARTER</b>					
ELC	1103	AC-DC Machines	4	12	8
<b>THIRD QUARTER</b>					
ELC	1102	Residential Wiring	4	12	8
<b>FOURTH QUARTER</b>					
ELC	1104	Controls of AC-DC Machines	4	12	8

**ELECTRONIC SERVICING**

The curriculum in Electronic Servicing is designed to provide the basic knowledge and skills required in the installation, maintenance and servicing of electronic components and systems. Laboratory time will be spent verifying electronic theory and principles, learning installation, maintenance and service techniques.

An electronic service technician will be able to install, maintain, and service electronic equipment including; radios, television, audio/video recording and playback equipment, home entertainment systems digital electronic systems. Master Antenna Television and Cable Television components and systems.

**ELECTRONIC SERVICING V-042**

		Course Title	Class Hours	Lab Hours	Credit Hours
<b>FIRST QUARTER</b>					
ELN	1101	Fundamentals of Electronics	4	12	8
MAT	1103	Electrical Math I	5	0	5
ELN	1118	Troubleshooting Concepts	<u>3</u>	<u>6</u>	<u>5</u>
			12	18	18
<b>SECOND QUARTER</b>					
ELN	1102	Semiconductor Theory and Circuits	4	12	8
MAT	1104	Electrical Math II	5	0	5
**		Elective	1	0	1
ELN	1119	Modular Components Repair	<u>3</u>	<u>6</u>	<u>5</u>
			13	18	19
<b>THIRD QUARTER</b>					
ELN	1103	Audio Equipment Servicing	4	12	8
BUS	1100	Small Business Operations	2	0	2
PSY	1100	Human Relations	3	0	3
ELN	1120	Amplifier Systems	<u>3</u>	<u>6</u>	<u>5</u>
			12	18	18

**FOURTH QUARTER**

ELN	1104	TV and Video Equipment Servicing	2	12	6
PHY	0100	Principles of Technology	3	3	4
ENG	1101	Communications	3	0	3
ELN	1121	Communication Equipment Servicing	<u>1</u>	<u>6</u>	<u>3</u>
		<b>TOTAL CREDIT HOURS</b>	9	21	16
					71

\*\*Cooperative Education Internship (0100-0100) (0201-0202) may be used for credit toward degree requirement.

**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
<b>FIRST QUARTER</b>						
NUR	1115	Basic Nursing Assistant Procedures I	6	9	0	9
HEA	1104	Nurse Assistant Practicum	0	0	15	5
HEA	1101	Geriatric Care I	<u>3</u>	<u>0</u>	<u>0</u>	<u>3</u>
			9	9	15	17
<b>SECOND QUARTER**</b>						
NUR	1116	Basic Nursing Assistant Procedures II	4	3	0	5
HEA	1105	Geriatric Care II	3	0	0	3
HEA	1103	Recreation & Activities for the Elderly Patient	3	0	0	3
HEA	1106	Geriatric Care Practicum I	<u>0</u>	<u>0</u>	<u>21</u>	<u>7</u>
			10	3	21	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.

## INDUSTRIAL MECHANICS

The curriculum in Industrial Mechanics prepares students with a broad background in industrial skills required by industry for its mechanics. The individual develops skills in the repair and maintenance of industrial equipment, basic welding and cutting, refrigeration and air conditioning, direct and alternating current, machines, and their control and related courses.

The Certificate Program courses are identical to the respective courses in the diploma program, therefore, they may be interchanged.

### INDUSTRIAL MECHANICS V-033

		Course Title	Class Hours	Lab Hours	Credit Hours
<b>FIRST QUARTER</b>					
MEC	0101	Manufacturing Process I	3	9	6
MAT	1101	Math Fundamentals	3	0	3
MEC	0111	Industrial Safety	3	0	3
DFT	1101	Blueprint Reading	0	3	1
PLU	1110	Plumbing Pipework	<u>2</u>	<u>6</u>	<u>4</u>
			11	18	17
<b>SECOND QUARTER</b>					
ELC	1131	Basic Electricity Controls	2	3	3
MEC	1136	Industrial Water	3	0	3
DFT	1111	Blueprint Reading—Electrical	0	3	1
MEC	1137	Sheet Metal Layout	2	3	3
MEC	1124	Fundamentals of Hydraulics	3	0	3
MEC	1126	Metallurgy	3	0	3
		Elective	<u>1</u>	<u>0</u>	<u>1</u>
			14	9	17
<b>THIRD QUARTER</b>					
MEC	1133	Machine Maintenance I	3	6	5
ELC	1120	Troubleshooting Methods	4	3	5
PSY	1100	Human Relations	3	0	3
WLD	1112	Arc Welding	0	3	1
ELC	1122	Industrial Electricity	<u>3</u>	<u>3</u>	<u>4</u>
			13	15	18
<b>FOURTH QUARTER</b>					
MEC	1134	Machine Maintenance II	3	6	5
DFT	0209	Industrial Systems Schematics	2	3	3
WLD	1135	Basic Gas Welding and Cutting	2	3	3
ENG	1101	Communications	3	0	3
PHY	0100	Principles of Technology	<u>3</u>	<u>3</u>	<u>4</u>
			13	15	18

## 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 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. His 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. Students can enter this program fall quarter only.

## MACHINIST V-032

Course Title	Qtr.		Hours
	Hours Per Class	Hours Per Week	
<b>FIRST QUARTER</b>			
MEC 1101 Machine Shop Theory & Practice	4	12	8
MAT 1101 Fundamentals of Math	3	0	3
DFT 1101 Blueprint Reading	0	3	1
MEC 0111 Industrial Safety	<u>3</u>	<u>0</u>	<u>3</u>
	10	15	15

**SECOND QUARTER**

MEC	1102	Machine Shop Theory & Practice II	4	12	8
DFT	1105	Blueprint Reading; Mechanical	0	3	1
MAT	0111	Technical Math	3	0	3
**		Elective	1	0	1
MEC	011B	Introduction to Metals	<u>3</u>	<u>3</u>	<u>4</u>
			11	18	17

**THIRD QUARTER**

MEC	1103	Machine Shop Theory & Practice III	4	12	8
MAT	1123	Machinist Math	3	0	3
MEC	0119	Applied Metallurgy	3	3	4
DFT	1106	Advanced Mechanical Blueprint Reading/Sketching	1	3	2
PSY	1100	Human Relations	<u>3</u>	<u>0</u>	<u>3</u>
			14	18	20

**FOURTH QUARTER**

MEC	1104	Machine Shop Theory & Practice IV	4	12	8
PHY	0100	Principles of Technology	3	3	4
ENG	1101	Communications	3	0	3
WLD	1135	Basic Gas Welding & Cutting	<u>2</u>	<u>3</u>	<u>3</u>
			12	18	18

**MACHINIST CERTIFICATE V-032**

Course Title			Class Hours	Lab Hours	Credit Hours
<b>FIRST QUARTER</b>					
MEC	1101	Machine Shop Theory and Practice	4	12	8
<b>SECOND QUARTER</b>					
MEC	1102	Machine Shop Theory and practice	4	12	8
<b>THIRD QUARTER</b>					
MEC	1103	Machine Shop Theory and Practice	4	12	8
<b>FOURTH QUARTER</b>					
MEC	1104	Machine Shop Theory and Practice	4	12	8





## NURSE ASSISTANT V-072 (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
<b>FIRST QUARTER</b>						
NUR	1115	Basic Nursing Assistant Procedures I	6	9	0	9
HEA	1104	Nurse Assistant Practicum	0	0	15	5
HEA	1101	Geriatric Care I	3	0	0	3
			9	0	15	17

### 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	Qtr.			Hours Credit
			Hours Per Week		Clinical	
FIRST QUARTER			Class	Lab		
BIO	1102	Anatomy/Physiology	3	3	0	4
NUT	0101	Nutrition & Diet Therapy	3	0	0	3
NUR	1101	Nursing Fundamentals	6	6	3	9
NUR	1105	Pharmacology I	3	0	0	3
ENG	0101	Freshman Composition I	<u>3</u>	<u>0</u>	<u>0</u>	<u>3</u>
			18	9	3	22
<b>SECOND QUARTER (Winter)</b>						
BIO	1103	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	0260	General Psychology	<u>3</u>	<u>0</u>	<u>0</u>	<u>3</u>
			16	3	12	21
<b>THIRD QUARTER</b>						
NUR	1103	Maternity Nursing	5	0	9	8
NUR	1108	Pediatrics	5	0	9	8
PSY	0117	Human Growth & Development	<u>3</u>	<u>0</u>	<u>0</u>	<u>3</u>
			13	0	18	19
<b>FOURTH QUARTER (Summer)</b>						
NUR	1104	Med-Surg II	8	0	18	14
NUR	1106	Voc-Adjustment I	<u>3</u>	<u>0</u>	<u>0</u>	<u>3</u>
			11	0	18	17
		<b>TOTAL CREDIT HOURS</b>				<b>70</b>



## 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
<b>FIRST QUARTER</b>					
WLD	1101	Welding I	4	12	8
WLD	1118	Welding Problems I	2	6	4
DFT	1101	Blueprint Reading	0	3	1
MAT	1101	Math Fundamentals	<u>3</u>	<u>0</u>	<u>3</u>
			9	21	16
<b>SECOND QUARTER</b>					
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
**		Elective	<u>1</u>	<u>0</u>	<u>1</u>
			13	18	19
<b>THIRD QUARTER</b>					
WLD	1103	Welding III	4	12	8
WLD	1120	Welding Problems III	2	6	4
DFT	1103	Blueprint Reading & Pattern Sketching	1	3	2
PSY	1100	Human Relations	<u>3</u>	<u>0</u>	<u>3</u>
			10	21	17
<b>FOURTH QUARTER</b>					
WLD	1104	Welding IV	4	12	8
WLD	1121	Welding Problems IV	2	6	4
ENG	1101	Communications	3	0	3
PHY	0100	Principles of Technology	<u>3</u>	<u>3</u>	<u>4</u>
			12	21	19
<b>TOTAL CREDIT HOURS</b>					<b>71</b>

\*\*Cooperative Education Internship (0100-0106) (0201-0202) may be used for credit toward degree requirement.

## WELDING CERTIFICATE

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





## INDIVIDUALIZED INSTRUCTION CENTER

The Individualized Instruction Center provides the opportunity for you 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, flexible hours, and personalized instruction.

The Individualized Instruction Center is located in the Business Education Building and is open from 8 a.m. until 3 p.m. Monday through Friday and from 5:30 p.m. until 9:30 p.m. Monday through Thursday evenings. Weekend classes may also be available when there is sufficient enrollment.

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.

### ICC CAMPUS OFFERINGS

- BUS 0101 Beginning Typewriting
- BUS 0102 Typewriting II
- BUS 0103 Typewriting III
- BUS 0107 Business Machines
- BUS 0108 Records Management
- BUS 0109 Terminology & Vocabulary
- BUS 0165 Office Applications/IBM PC
- BUS 0200 Word Processing Applications
- BUS 0201 Word Processing Files
- BUS 0205 Machine Transcription
- BUS 0207 Medical Terminology
- BUS 0208 Stenoscrypt
- BUS 0210 Principles of Accounting
- BUS 0211 Principles of Accounting
- BUS 0212 Principles of Accounting
- BUS 0213 Secretarial Procedures
- BUS 0219 Legal Terminology
- BUS 0239 Business Math
- BUS 0290 Medical Transcription
- BUS 0291 Legal Transcription



- COE 0100 Cooperative Education
- \*HIS 0101 Western Civilization
- \*HIS 0102 Western Civilization
- \*HIS 0103 Western Civilization
- \*HIS 0260 History of United States
- \*HIS 0261 History of United States
- \*HIS 0262 History of United States
- \*PSY 0260 General Psychology
- \*RED 0260 Speed Reading
- \*SOC 0160 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 off-campus work as an integral part of their academic program. This employment is related as closely as possible to each student's course of study and individual interest. The blend of classroom theory and practical on-the-job training adds a vital dimension to learning experiences. Numerous advantages accrue from the Cooperative Education approach to learning, such as career direction and financial assistance for participating students, a source of manpower for employers, and an avenue to better relate the college to the community.

A student may earn a maximum of 12 elective hours credit depending on his/her major. There is a one hour Cooperative Education Seminar required of all students desiring to participate in the Cooperative Education program. Students enrolled in the following curricula may participate in Cooperative Education.

#### College Parallel

- C004 - Pre-Business Administration
- C026 - Pre-Business Education
- C035 - Pre-Teaching Early Childhood
- C020 - Pre-Teaching Elementary
- C028 - Pre-Teaching Secondary

#### Technical

- T109 - Associate Degree for Vocational Instructors
- T018 - Business Administration
- T022 - Business Computer Programming
- T073 - Early Childhood Specialist
- T045 - Electronics Engineering Technology
- T030 - Executive Secretarial Science
- T074 - Foodservice Management

T033 - General Office Technology  
T068 - Graphics Arts  
T049 - Industrial Supervision and Management  
T128 - Insurance  
T020 - Marketing and Retailing  
T043 - Mechanical Drafting and Design  
T051 - Mechanical Engineering Technology  
T179 - Radio and TV Broadcasting Technology  
T127 - Real Estate  
T088 - Teacher Associate

### **Vocational**

V024—Air Conditioning, Heating & Refrigeration  
V001—Automotive Body Repair  
V003—Automotive Mechanics  
V067—Child Care Worker  
V018—Electrical Installation & Maintenance  
V042—Electronic Servicing  
V111—Geriatric Care Specialist  
V033—Industrial Mechanics  
V029—Light Construction  
V032—Machinist  
V050—Welding

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

1. Be enrolled in one of the preceding programs, 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.

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.

### **DEFINITION AND EXPLANATION OF SPECIAL SERVICES**

Special 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 including physically or learning disabled.

Students will participate in exciting self-paced, teacher assisted instruction. Each student's strengths and weaknesses are diagnosed in the areas of English, Reading, and Mathematics. 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.

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

### **Academic Services Available:**

DSE	0090	Enrichment English
DSE	0091	Spelling Improvement
DSE	0092	Vocabulary Improvement
DSE	0108	Advanced College Vocabulary
ENG	0100	Writing with the Apple
ENG	0163	Study Skills
DSM	0090	Basic Math I
DSM	0095	Basic Math II
DSR	0090	Reading Proficiency
DSR	0101	Computer Rapid Reading

### **Special Support Services Available:**

Computer Assisted Instruction  
Personal, Career, and Financial Counseling  
Free Tutorial Assistance  
Biofeedback  
Stress Management  
Math Anxiety Workshops  
Human Potential Seminar  
Standardized Test Preparation

## **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 3-letter prefix (example—AHR for Air Conditioning, Heating and Refrigeration; ANT for Anthropology).
2. The courses are numbered as follows: (example—PSY 0201).
  - A. All are 4 digit
  - B. Those beginning with "0" are college transfer and technical courses
  - C. Those beginning with "1" are vocational courses
3. Any course number less than 0100 will not give credit hours for graduation.
4. The course title follows the number (example—PSY 0201 Industrial Psychology).

5. The number of contact and credit hours follow the title (example—PSY 0201 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:

**PSY 0201 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**

**AIR CONDITIONING, HEATING AND REFRIGERATION**

**AHR 1121 Fundamentals of Refrigeration: Domestic** **5-12-9**  
 Terminology, laws of refrigeration, absolute pressure, and absolute temperature, energy conversion units; specific heat, latent heat, and sensible heat; measurement of heat in quantity and intensity; ton of refrigeration, pressure temperature relationships; transfer of heat by conduction, convection, and radiation; elementary refrigeration, refrigeration cycle and domestic refrigeration circuits and controls. Tools, materials, and methods applicable to refrigeration; bending, and joining tubing. Safety practices will be stressed. Emphasis will be placed on domestic equipment because of its basic nature.

**AHR 1122 Fundamentals of Refrigeration: Commercial** **5-12-9**  
 Commercial refrigeration installation and servicing of display cabinets, walk in coolers and freezer units and mobile refrigeration systems are studied. The use of catalogues are used to calculate heat loads, sizing, and matching system components and a study of circuits and controls, refrigerants, oils, and methods are made. The American Standard Safety Code for refrigeration is studied and its principles practiced.

**AHR 1123 Principles of Air Conditioning** **4-3-5**  
 An introduction to the principles of air conditioning, the use and care of tools and equipment and the identification and function of the component parts of a system. Practical work includes leak detecting with various leak detecting devices. Making electrical checks on Hermetic Compressors. Disassembling and reassembling air conditioning equipment. Standard procedures and safety measures are stressed in the use of air conditioning equipment and the handling of refrigerants.

**AHR 1124 Principles of Heating: Fuels and Burners** **5-9-8**  
 Fuel and burners used in supplying heat for various types of heating systems—coal, oil, natural gas, manufactured gas, liquified petroleum gas, and electricity. Experiments in equipment selection, installation, adjustments, and servicing will be conducted. Warm air



systems, heat emitter, electric heating, forced hot water and steam heating systems, including selection and sizing of equipment—registers, grills, furnaces, boilers, radiators, baseboards, piping, and ducts. Heating layout and specifications for an existing structure or one in blueprint stage will be prepared.

**AHR 1126 All-Year Comfort Systems and AC Servicing** 4-9-7

Auxiliary equipment used in conjunction with refrigeration system to provide both heating and cooling for "all year" comfort will be studied and set up in the laboratory. Included will be oil fired systems, gas fired systems, water circulating systems and electric-resistance systems. Installation of heat pumps will be studied along with servicing techniques. Reversing valves, special types of thermostatic expansion valves, systems of de-icing coils, and electric wiring and controls are included in the study.

**AHR 1127 Duct Construction & Maintenance** 3-3-4

Study of various duct materials including sheet steel, aluminum, fiberglass, and plastic. Safety, sheet metal hand tools, cutting and shaping machines, fasteners, and fabrication practices, layout methods, and development of duct systems. The student will study and service various duct systems and perform repairs including ducts made of fiberglass. A study is made of duct fittings, dampers and regulators, diffusers, heater and air washers, fans, insulation and ventilating hoods.

## **ANTHROPOLOGY**

**ANT 0160 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. (Su)

**ANT 0260 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, Su)

**ANT 0261 Introduction to Cultural Anthropology** 3-0-3

The evolution of culture is emphasized in the areas of cultural innovations, language, mores, customs, and anthroarchaeological techniques. (W, Su)

**ANT 0262 Comparative Cultures and World Development** 3-0-3

Comparison of selected primitive, pre-literate or nonindustrial cultures from different regions of the world. (Sp)

**ANT 0263 Archaeological Methodology** 1-3-2

This course focuses on those aspects of Archaeology that promotes 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 excavating 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. (Su, F, Sp)

## **ART**

**ART 0101 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. (F)



<b>ART 0102 Fundamentals of Three-Dimensional Design</b>	<b>2-4-4</b>
Study and application of the elements and principles of art as they relate to three-dimensional space. (W)	
<b>ART 0103 Drawing and Composition I</b>	<b>2-4-4</b>
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. (Sp)	
<b>ART 0104 Ancient and Medieval Art History</b>	<b>3-0-3</b>
A study of prehistoric art, Egyptian art, Middle Eastern art, Greek, Etruscan, Roman, early Christian and Byzantine, and Medieval art, with emphasis on styles, media, methods, purposes and accomplishments. (F)	
<b>ART 0105 Renaissance Art History</b>	<b>3-0-3</b>
Survey of Western art from the Romanesque through the Baroque periods with emphasis on the art of the Renaissance in Italy and northern Europe. (W)	
<b>ART 0106 History of Modern Art</b>	<b>3-0-3</b>
Study of nineteenth and twentieth-century art. (Sp)	
<b>ART 0160 Survey of Art</b>	<b>3-0-3</b>
Introduction to principles of art, including media, style, technique. Emphasis on Egyptian, Greek, Roman, Byzantine, Medieval, Renaissance, Baroque, Neo-Classical, Romantic, Impressionistic and Modern art. (May not be taken as an AFA degree professional art course.) (F, Sp)	
<b>ART 0201 Drawing and Composition II</b>	<b>2-4-4</b>
Confrontation of the figure, landscape, and still life through a variety of drawing concepts and media. Prerequisite: ART 0101 or ART 0103. (F)	
<b>ART 0202 Painting I</b>	<b>1-4-3</b>
Introduction to the painting experience through exploration of various painting media. (W)	
<b>ART 0203 Printmaking</b>	<b>1-4-3</b>
Introduction to the printmaking process through exploration of various printmaking techniques. Prerequisite: ART 0101 or ART 0103. (Sp)	
<b>ART 0204 Introduction to Sculpture</b>	<b>1-4-3</b>
Exploration of three-dimensional form through the application of diverse sculpture media. Prerequisite: ART 0102. (F)	
<b>ART 0205 Constructive Design: Clay</b>	<b>1-4-3</b>
Exploration of clay as a sculptural medium. Prerequisite: ART 0102. (W)	
<b>ART 0206 Life Drawing</b>	<b>1-4-3</b>
Study of the human form by drawing the model in various media. (Sp)	
<b>ART 0207 Painting II</b>	<b>1-4-3</b>
Development of original work in various painting media through an individual problem-solving approach. Prerequisites: ART 0101, 0103 or 0202. (Sp)	
<b>ART 0208 Presentation Techniques for the Visual Artist</b>	<b>0-2-1</b>
Development of basic skills related to visual art presentation: framing, matting, portfolio presentation, etc. (F, Su)	
<b>ART 0209 Painting III</b>	<b>1-4-3</b>
Further involvement with the painting process. Emphasis on individual exploration, technical understanding, and compositional resolutions. Prerequisite: ART 0207 (W, Sp)	

**ART 0250 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. (On demand)

**ART 1100 Art Awareness**

2-0-2

Designed for cosmetology students, this course emphasizes art fundamentals including line, color, and form.

**AUTO BODY REPAIR****AUB 1101 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)

**AUB 1102 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)

**AUB 1103 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)

**AUB 1104 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)

**AUB 1118 Auto Body Problems I**

2-3-3

This course is designed to give the student more practical applications in reforming automotive body styling lines. Shaping and forming techniques are stressed.

**AUB 1119 Auto Body Problems II**

2-3-3

Frame straightening will be emphasized. The student will be introduced to various techniques and equipment used to straighten auto frames including the Damage Dozer.

**AUB 1120 Auto Body Problems III**

2-3-3

Techniques of metal shrinking will be studied. The student will be given ample opportunity to develop these techniques.

**AUB 1121 Auto Body Problems IV**

1-3-2

Special emphasis will be given to the procedures of estimating damage. Also studied will be the operation of a body shop; ordering parts and materials, making repair orders, etc.

**AUTOMOTIVE MECHANICS****AUM 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.

**AUM 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.

**AUM 1103 Automotive Internal Combustion Engine** 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.

**AUM 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.

**AUM 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.

**AUM 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.

**AUM 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.

**AUM 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.

**AUM 1119 Radiator/Heat Exchanger Servicing** 5-3-6

The primary function of a radiator and heat exchanger is discussed.

**AUM 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.



**AUM 1126 Auto Servicing** 1-3-2  
Emphasis is on the shop procedures necessary in "trouble-shooting" the various component systems of the automobile. "Trouble-shooting" of automotive systems, provides a full range of experiences in testing, adjusting, repairing and replacing components. A close simulation to an actual automotive shop situation will be maintained.

**AUM 1226 Automobile Servicing II** 2-6-4  
Emphasis is placed on "trouble-shooting" and repairing the various component systems on vehicles provided for general repairs. The student is given in depth experiences in diagnosis, testing, adjusting, repairing, and replacing component parts.

**AUM 1230 Small Engine Repair** 2-6-4  
This course will study the various specifications and parts of the four-cycle engine. Overhaul and maintenance will be emphasized.

**AUM 1231 Motorcycle Engine Repair** 2-6-4  
This course will study the various specifications and parts of the basic motorcycle engine. Various makes of motorcycle engines will be studied on an individual basis. Overhaul and maintenance will be emphasized.

**AUM 1232 Marine Engine Repair** 2-6-4  
This course will study the various specifications and parts of the basic outboard marine engine. Various makes of outboard marine engines will be studied on an individual basis. Maintenance will be emphasized.

**AUM 1233 Chain Saw Engine Repair** 2-6-4  
This course will study the various specifications and parts of the basic two-cycle engine (chain saw engines). Various makes of the two-cycle engine will be studied on an individual basis. Maintenance will be emphasized.

## **AUTOMOTIVE**

**AUT 1101 Trim and Glass** 4-0-4  
Basic principles of installing and restoring trim and glass.

**AUT 1105 Automotive Inspection** 3-3-4  
This course is designed to teach the student how the North Carolina Inspection is performed. Through lecture and slides the student will learn all areas that are to be covered in the inspection process.

## **BIOLOGY**

**BIO 0101 Principles of Biology** 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. (F, W, Su)

**BIO 0102 Principles of Biology** 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. (W, Sp, Su)

**BIO 0103 Principles of Biology** 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. Three laboratory hours per week. (Sp, Su)

**BIO 0165 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 0260 and 0261 General Zoology**

3-3-4 each

These courses survey the many topics concerned with the biology of invertebrates and vertebrates. The classification and outstanding characteristics of the major phyla as well as the anatomy and physiology are considered. Prerequisites: BIO 0101, 0102, 0103. (F, W)

**BIO 0262 General Botany**

4-6-6

The principles of cytology, physiology, phylogeny, anatomy and ecology of plants will be covered. Special emphasis will be given to the seed plants. (Sp)

**BIO 0270 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. The nervous system is introduced by covering nerve cell structure. (F)

**BIO 0271 Anatomy and Physiology II**

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 is also covered. Emphasis is given to the nervous system's organization and the cardiovascular system. (W)

**BIO 0272 Anatomy and Physiology III**

3-3-4

The final quarter deals with the respiratory, digestive and urogenital systems. Emphasis is placed on metabolism, excretion, fluid and electrolyte balance. (Sp)

**BIO 0280, 0281 Microbiology**

2-3-3 each

A general introduction to the 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 0101 or 0270; Prerequisite for BIO 0281 is BIO 0280. (Su)

**BIO 1102 Anatomy/Physiology**

3-3-4

Anatomy/Physiology provides the student with a thorough understanding of the general plan of the body and six of its systems. A knowledge of how the body moves, provides immunity, provides transportation for the nutrients it absorbs and removes waste are necessary to understand disease processes and the nursing care of patients. (F)

**BIO 1103 Anatomy/Physiology II**

3-3-4

A continuation of BIO 1102 with a thorough study of the systems that provide communication and control, provide immunity, provide nutrients, provide the reproductive ability, and maintain hydration and homeostasis for the body. Prerequisite: BIO 1102. (W)

**BUSINESS****BUS 0100 Introduction to Business**

3-2-4

An introductory course in the organization, functions, operations, controls, and problems of business enterprises. (F, W)

**BUS 0101 Beginning Typewriting**

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)

**BUS 0102 Typewriting**

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: BUS 0101 or proof of competency on a typewriting placement test. (F, W, Sp, Su)

**BUS 0103 Typewriting**

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: BUS 0102. (F, W, Sp, Su)

**BUS 0104 Shorthand**

5-0-5

Instruction is based on Gregg shorthand with emphasis on phonetics, penmanship, word families, brief forms, and phrases. It is designed for students who have had no previous shorthand or those who cannot prove competency on a shorthand placement test. (F)

**BUS 0105 Shorthand**

5-0-5

This course is a review of fundamental principles, followed by assignments which stress speed, accuracy, fluency, and vocabulary and introduces transcription. Prerequisite: BUS 0104 or proof of competency on a shorthand placement test. (W)

**BUS 0106 Shorthand**

5-0-5

This course is a further study of shorthand theory, acquisition of ability to take rapid dictation, ability to transcribe accurately and an introduction to office style dictation. Prerequisite: BUS 0105. (Sp)

**BUS 0107 Business Machines**

3-2-4

A course designed to provide students with entry-level business math and calculator skills by expanding basic math concepts while developing proficiency on a 10-key electronic calculator. Prerequisite: Satisfactory placement test score in arithmetic or DSM 0100. (F, W, Sp, Su)

**BUS 0108 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)

**BUS 0109 Terminology & Transcription**

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. (F, W, Sp, Su)

**BUS 0112 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, Su)

**BUS 0120 Real Estate Construction**

3-0-3

One of the courses designed for the student enrolled in the Real Estate Curriculum. Fundamentals are given consideration in the classroom and also at construction sites. An understanding of the materials, design, site location and the use of terminology must be demonstrated by the student. (Sp)

- BUS 0121 Real Estate Math** 2-0-2  
A review of formulas for calculating the area 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)
- BUS 0122 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)
- BUS 0123 Real Estate Merchandising** 3-0-3  
A study of the current sales techniques in the real estate industry, including problems in selling as well as emphasis on consumer motivation and reactions. Particular emphasis is placed on morals and ethics related to the sale of real property. Other topics include the methods of securing property listings and prospective customers, bringing the prospect and property together, the use of advertising in the selling function, the basic development of a sales plan and sales presentation. (F)
- BUS 0165 Office Applications/IBM PC** 3-2-4  
This course is designed to provide specific instruction in how to use word processing software packages on the IBM PC. Each student will be required to become proficient with the operation of three software packages. (F, W, Sp, Su)
- BUS 0190 Word Processing Concepts** 3-0-3  
This course is an overview of all aspects of word and information processing, including concepts, equipment and procedures. It integrates management techniques and procedures with operative and administrative procedures necessary to function in a word processing environment. (F, Sp)
- BUS 0197 Small Business Management** 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 0200 Word Processing Applications** 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: BUS 0102. (F, W, Sp, Su)
- BUS 0201 Word Processing Files** 3-2-4  
This course is intended to teach the Files Processing function of a word processing system starting with basic concepts and going to the full capabilities of the system. Prerequisite: BUS 0200. (F, W, Sp, Su)
- BUS 0205 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: BUS 0109 and BUS 0103 or the ability to type 50 w.p.m. with no more than 5 errors. (F, W, Sp, Su)
- BUS 0206 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)
- BUS 0207 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)

- BUS 0208 Stenoscrypt I** 3-2-4  
A course offering the theory and practice for 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)
- BUS 0210 Principles of Accounting** 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)
- BUS 0211 Principles of Accounting** 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: BUS 0210 (F, W, Sp, Su)
- BUS 0212 Principles of Accounting** 3-2-4  
A continuation of basic accounting principles and procedures including partnerships, corporations, and manufacturing concerns. Prerequisite: BUS 0211. (F, W, Sp, Su)
- BUS 0213 Secretarial Procedures** 3-2-4  
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 organization, and time management. Prerequisite: BUS 0103. (F, W, Sp, Su)
- BUS 0214 Principles of Management** 3-0-3  
A course in the principles of business management includes an overview of the functions of management, planning, organizing, directing and controlling. Clarification is sought between the decision making function and operations. (Sp)
- BUS 0215 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 0216 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 0217 Taxes - Federal** 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)
- BUS 0219 Legal Terminology** 3-0-3  
Student learns legal terminology and procedures related 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, S, Su)
- BUS 0223 Credit Procedures and Problems** 3-0-3  
Principles and practices in the extension of credit, collection procedures, and laws pertaining to credit extension and collection. (Sp)
- BUS 0224 Personnel 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. (W, Sp)
- BUS 0225 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 0226 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 0227 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 0230 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)
- BUS 0231 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)
- BUS 0233 Real Estate Appraisal** 6-0-6  
 An introduction to the field of appraisal, including the nature of real property and value, economic trends, residential, commercial and industrial property values, along with valuation methods. (Su)
- BUS 0235 Real Estate Property Management** 3-0-3  
 A study of the nature of property management, the types of property, lease preparation, protection of property and property maintenance. Additional topics include fair housing, tenant selection, advertising, ethics, and budgeting.
- BUS 0238 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)
- BUS 0239 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: BUS 0107 or satisfactory placement test score. (F, W, Sp, Su)
- BUS 0242 Real Estate Investments and Taxation** 3-0-3  
 A study of fundamental investment concepts including location, timing and methods of financing, designed to provide the prospective investor with a guide to successful real estate investment. Other topics to be discussed are how to invest in real estate corporations and trusts, tax consequences and investment, and the influence of federal and state laws on real estate investment. (W)
- BUS 0243 Real Estate Survey** 3-0-3  
 A survey of real estate with emphasis placed on types of ownership, property rights, agreements of sale, agency, wills, deeds, mortgages, leases, appraisal and financing. (Sp)
- BUS 0249 Intermediate Accounting** 3-0-3  
 Emphasis is placed on accounting theory and concepts and on analysis of the problems that arise in applying these underlying concepts to financial accounting. Prerequisite: BUS 0212.
- BUS 0250 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: BUS 0212.

- BUS 0251 Estate Planning** 1-0-1  
The emphasis is upon the importance of estate planning and the need for a will. Real and personal property, estate planning, wills, and trusts are considered.
- BUS 0252 Bookkeeping** 3-0-3  
Emphasis is placed upon the art of record keeping in the business world. The student will learn the proper techniques and application of bookkeeping in the business world.
- BUS 0253 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.
- BUS 0263 Business Insurance** 3-2-4  
A presentation of the basic principles of risk insurance and their application including a survey of the various types of insurance.
- BUS 0270 Commercial Property Insurance** 3-0-3  
This course is designed to aid in the development of analyzing and evaluating exposures and selecting coverages for those exposures for commercial property.
- BUS 0272 Introduction to Insurance** 2-0-2  
Topics covered in this course include the history of insurance, introduction to risk, the field of insurance, and insurance law. Approved by the N.C. Dept. of Insurance for licensing.
- BUS 0273 Life, Accident, and Health Insurance** 2-0-2  
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. Prerequisite: BUS 0272. Approved by the N.C. Dept. of Insurance for licensing.
- BUS 0274 Property and Liability Insurance** 2-0-2  
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. Prerequisite: BUS 0272. Approved by the N.C. Dept. of Insurance for licensing.
- BUS 0277 Personal Risk Management and Insurance I—CLU** 4-0-4  
A study of risk management as it applies to automobile insurance, homeowners insurance, social insurance, individual health and group health. (Sp)
- BUS 0278 Personal Risk Management and Insurance II—CLU** 4-0-4  
A stud of risk management as it applies to life insurance, retirement income, investments, business health insurance, estate planning and personal insurance cases.
- BUS 0279 Multiline Insurance Law and Operations—CLU** 4-0-4  
This course is an introduction to insurance law as it applies to the law of contracts, creation of agency, law of torts, and underwriting of personal property and liability insurance, pricing of life and health insurance and pricing of property and liability insurance. (F)
- BUS 0280 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)



- BUS 0281 Financial Services: Environment and Professions—CLU** 4-0-4  
This introductory course sets the stage for the CLU and Chartered Financial Consultant programs by providing an overview of the environment in which financial services professionals assist clients in meeting their financial counseling and planning needs. (W)
- BUS 0282 Economics/CLU** 4-0-4  
Basic economics concepts with emphasis on such macroeconomic and microeconomic topics as the price system and the market economy, the circular flow of national income and product, the determinants of national income, multiplier theory and fiscal policy, money and monetary policy, unemployment and inflation, and stabilization policy. (Sp)
- BUS 0283 Financial Statement Analysis/Individual Insurance Benefits—CLU** 4-0-4  
This is the first course in the CLU and Chartered Financial Consultant programs providing coverage of products, tools, and techniques. Topics covered are personal and business financial statements, including the basic concepts of accounting, the format and contents of key financial statements, the techniques of financial statement analysis, and personal budgeting. (W)
- BUS 0284 Insurance Environment and Operations—CLU** 4-0-4  
Legal aspects of contract formation, policy provisions, assignments, ownership rights, creditor rights, beneficiary designations, disposition of life insurance proceeds, and life insurance agency. Also covered are insurance company types, organization, operations, and regulation. (Sp)
- BUS 0285 Group Benefits and Social Insurance—CLU** 4-0-4  
Analysis of group insurance benefits, including the regulatory environment, contract provisions, marketing, underwriting, ratemaking, plan design, and alternative funding methods. Also, various governmental programs related to the economic problems of death, old age, unemployment and disability. (Sp)
- BUS 0286 Pensions and Other Retirement Plans/CLU** 4-0-4  
Introduction to qualified and nonqualified deferred compensation, design of qualified pension, profit-sharing and other qualified plans; cost factors and funding instruments for qualified plans, income and estate tax aspects. Also, individual retirement plans, income and estate tax aspects. Also, individual retirement plans, tax-deferred annuities and non-qualified deferred-compensation plans. The course emphasizes planning for retirement income and for maximum tax benefits for employees and business owners. (Sp)
- BUS 0287 Investments—CLU** 4-0-4  
Various aspects of investment principles and their application to personal finance. Yields, limited income securities, investment markets, valuation of common stock, real estate, debt and credit, mutual funds, variable annuities, tax-sheltered investments, and principles of personal portfolio management. The significance of this course is high-lighted by the growing importance of money management to individuals.
- BUS 0288 Estate and Gift Tax Planning—CLU** 4-0-4  
Estate and gift tax planning including the nature, valuation, transfer, administration and taxation of property. Particular emphasis will be given to a basic understanding of the unified estate and gift tax system. The course covers gratuitous transfers of property outright or in trust, wills, powers of appointment, federal estate and gift taxation, the marital deduction, uses of life insurance in estate planning, and other estate planning devices. Also, covered is the estate planning process including the client interview, fact finding, and development of appropriate personal estate plans using various estate planning devices.
- BUS 0289 Planning for Business Owners and Professionals—CLU** 4-0-4  
Tax and legal aspects of organizing a business; problems in continuing a business after an owner's death and the insured buy-sell agreement; retirement of a business owner, including estate planning and "estate freezing" techniques; stock dividends, corporate recapitaliza-

tions, stock redemptions, and other techniques; lifetime disposition of a business interest—taxable and tax-free dispositions and the use of the installment sale and other methods, business uses of life and health insurance for the benefit of business owners; disability buy-sell agreements, key employee life and health insurance plans, and split-dollar life insurance plans; and business uses of property and liability insurance. The course also covers special problems of professional corporations.

**BUS 0290 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. Prerequisite: BUS 0207. (F, W, Sp, Su)

**BUS 0291 legal Transcription** 3-2-4

Student acquires employable skills in transcribing dictation of legal instruments and documents. Prerequisites: BUS 0102, BUS 0109. (F, W, Sp, Su)

**BUS 0292 Claims Adjusting** 2-0-2

This course describes the legal basis of contracts and claims, discusses the elements and purpose of negligence, lists and discusses the principles of Torts, describes and discusses the art of investigation and interviews, and list and discusses medical terminology and diagnostic procedures. (W)

**BUS 0295-0297 Selected Topics (1-3)** 3-0-3

A study of current business topics. Emphasis will be placed upon subjects which have particular applications for participants. Prerequisite: Permission of instructor. (On demand)

**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 EDP course descriptions.

**CAREER PLANNING** .....see EDU 0161, 0162.

**CARPENTRY**

**CAR 1011, 1012 Carpentry I and II** 2-6-4

A brief history of carpentry and present trends of the construction industry. The course will involve operation, care, and safe use of carpenter's handtools and powertools in cutting, shaping and joining construction materials used by the carpenter. Major topics of study will include theoretical and practical applications involving: materials and methods of construction, building layout, preparation of site, footings and foundation wall construction including form construction and erection.

**CAR 1114 Building Codes** 3-0-3

A study is made of building codes and the minimum requirements for local, county, and state construction regulations. Also, a review will be made of the minimum property requirements of the Federal Housing Administration and the N.C. State Code.

**CHEMISTRY**

**CHM 0101 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. Prerequisite: Completion of MAT 0101 and 0102 or currently taking MAT 0121 or higher. (F)

- CHM 0102 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 0101. (W)
- CHM 0103 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 0102. (Sp)
- CHM 0160 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, stoichiometry, reactions, solutions, chemical equilibrium, and basic organic chemistry. (Su)
- CHM 0162 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 0220 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 0221 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 0220. (Su, Upon request)
- CHM 1130 Trichology and Chemistry for Cosmetologists I** 2-0-2  
A classroom study of hair composition and how it is affected by various products used in the salon. This course provides the cosmetology student with an understanding of not only "why" certain techniques are performed but also which chemical actions and reactions may be expected from the cosmetic products employed.
- CHM 1140 Trichology and Chemistry for Cosmetologists II** 2-0-2  
A continued classroom study of hair composition and how its chemistry is affected by various products used in the salon.

## CRIMINAL JUSTICE

- CJC 0100 Basic Law Enforcement Training** 15-27-24  
The North Carolina Criminal Justice Education and Training Standards Commission requires all law enforcement officers to complete a Commission approved training course. CJC 100 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 0101 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 man of social control in politically organized society.



- CJC 0102 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 0103 The Law Enforcement Officer's Function in Criminal Justice** 5-0-5  
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 0104 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 0105 Corrections Function 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 0106 Juvenile Justice** 5-0-5  
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, and duties responsibilities, and functions of the agencies in the Juvenile Justice System that deal with the juvenile delinquents.
- CJC 0107 Introduction to Criminology** 5-0-5  
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 0108 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 0110 Basic Firearms** 1-3-2  
This course introduces the student to the Weaver Stance and modern techniques of firearms usage designed to insure survival in life threatening situations. Emphasis is placed on training the student utilizing various methods in firearms proficiency development. The student will be required to successfully complete a certified qualification course on the firing range.
- CJC 0111 Advanced Firearms** 1-3-2  
This course is a continuation of the basic fundamentals taught in Basic Firearms. Utilizing multiple targets, timed firing sequence, and pressure situations; the student is taught to respond to life-threatening firearm conflicts utilizing the methods and principles taught in class. The student will be required to successfully complete a certified qualification course on the firing range.
- CJC 0112 High Risk and Stress Management for Law Enforcement** 1-3-2  
This course is designed to train the law enforcement officer in how to effectively respond and handle high risk and stressful situations. Utilizing classroom lecture and realistic created conditions the student is taught the most up-to-date procedures in surviving the value difficult

situations that may confront the officer on the street. This course is limited to sworn law enforcement personnel.

**CJC 0201 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 0202 Criminal Law II** 3-0-3

A study of elements of crimes with particular emphasis on N.C. crimes.

**CJC 0203 Motor Vehicle Laws of North Carolina** 5-0-5

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

**CJC 0204 Criminal Evidence** 3-0-3

Instruction covers the kinds and degrees of evidence and the rules governing the admissibility of evidence in court.

**CJC 0205 Criminal Investigation** 5-0-5

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 0206 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 and the student will participate in actual use of the scientific equipment.

**CJC 0207 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 0208 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 0209 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 0210 Officer Survival I** 2-3-3

This course is a practical introduction to the essence of survival as it applies to crises situations in law enforcement. The student will be introduced to the survival state of mind, survival tactics and maneuvers, etc. Areas covered will be felony vehicle stops, pr-27 baton certification, robbery-in-progress responses, etc.

**CJC 0211 Officer Survival II** 2-3-3

This course will be a continuation of Officer Survival I with expanded and increased emphasis on survival tactics and dealing with the pressure of handling crisis situations.

**COMMERCIAL GRAPHICS**

**CMG 0101 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 basic camera operations, and films.



- CMG 0102 Graphic Layout & Design (Des 2)** 3-3-4  
Application of the elements and principles of two-dimensional design problems. 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.
- CMG 0103 Typesetting & Typography** 2-3-3  
This course will provide instruction in the use of an electronic phototypesetter. 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.
- CMG 0104 Creative Visual Design (Des 3)** 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: CMG 0102.
- CMG 0105 Photography II** 3-3-4  
Will study black and white photography theory and techniques. Explore the zone-system, develop film and produce prints. Use 35mm camera.
- CMG 0106 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: CMG 0102, 0104.
- CMG 0107 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.
- CMG 0108 Photography III** 3-3-4  
The use of color transparencies (slides) will be emphasized. Process slide film and produce color prints from the slides. Study color theory and trends in color photography. Prerequisite: CMG 0105.
- CMG 0110 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.
- CMG 0111 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 the student will be encouraged to go into which ever area of airbrushing interests them most, rather it be freehand or controlled.
- CMG 0112 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. Prereq CMG 0111.
- CMG 0201 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: CMG 0106.

- CMG 0202 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: CMG 0105, 0108.
- CMG 0203 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: CMG 0102, 0104, 0105, 0106, 0108, 0201, 0202.
- CMG 0204 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: CMG 0106, 0201.
- CMG 0205 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.
- CMG 0206 Advertising Photography** 3-3-4  
An advanced course in photography which emphasizes the photography in advertising, will include special effects such as posterization, solarization, slide sandwiching, multiple exposures and infrared photography. Prerequisites: CMG 0105, 0108, 0202.
- CMG 0207 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 and printing of design work. Prerequisites: CMG 0102, 0104, 0106, 0201, 0204.
- CMG 0208 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: CMG 0205.
- CMG 0209 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.
- CMG 0210 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.
- CMG 0212 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.
- CMG 0214 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 will be a continuation of CMG 212.
- CMG 0220 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.

## COOPERATIVE EDUCATION

### COE 0100 Cooperative Education Seminar

A career planning and development course designed to help the student make the transition from school to 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 as interview techniques and develops a resume.

Credit	1 Quarter Hour
Contact	1 Quarter Hour

### COE 0101-0106 Co-Op Part-time Work Experience (Parallel Plan)

Through the Cooperative Education Program, the student works on a part-time basis in a position related to his or her program of study and for an employer selected and/or approved by the College. Grades will be determined by the evaluations by employers, students, and the Co-op office.

Credit	1-3 Hours/Quarter
Contact	10-30 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 0101 - 1st quarter student has parallel work assignment
- COE 0102 - 2nd quarter of parallel work assignment, etc.

### COE 0201-0202 Co-Op Full-Time Work Experience I

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. 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

Courses in the 1000 and 1100 series are designed for day and afternoon students, whereas, course in the 2000 and 2100 series are designed for evening students. Courses in all series are also offered in modular form.

### Beginners' 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 this department shall be devoted to scientific study and mannequin practice. Manicuring practice in this department shall be done on the students enrolled in the school during the first 300 hours.

#### COS 1011 Lab I

0-24-B

A study of Finger Waving, Pin Curling, Rollers, Marcelling, Hair Relaxing, Shampooing and Rinses, Scalp Treatment, Hair Cutting, Permanent Waving, Hairdressing and Combing, Hair Tinting, Bleaching, Frosting, Streaking, Wig Care and Styling.

#### COS 1101 Theory I

6-0-6

This is a course for beginners in Cosmetology. It includes a study of Professional Ethics, Grooming and Personality Development, Sterilization, Sanitation, First Aid and Bacteriology, Cosmetology Law, Anatomy, Chemistry, Nails, Nail Disorders, Manicuring, Hair, Scalp, Skin, and disorders pertaining to the hair, scalp and skin.



- COS 2011 Lab I A&B** **0-15-5**  
 A study of Finger Waving, Pin Curling, Rollers, Marcelling, Hair Relaxing, Shampooing and Rinses, Scalp Treatment, Hair Cutting, Permanent Waving, Hairdressing and Combing, Hair Tinting, Bleaching, Frosting, Streaking, Wig Care and Styling.
- COS 2101 Theory I A&B** **4-0-4**  
 This is a course for beginners in Cosmetology. It includes a study of Professional Ethics, Grooming and Personality Development, Sterilization, Sanitation, First Aid and Bacteriology, Cosmetic Law, Anatomy, Chemistry, Nails, Nail Disorders, Manicuring, Hair, Scalp, Skin, and Disorders pertaining to the hair, scalp and skin.
- Advanced Department**
- The hours earned in the Advanced Department shall be devoted to the following study and live model performance completions. Work in this department may be done on the public. Students with less than 300 hours shall not work in this department.
- COS 1000 Advanced Lab** **0-6-2**  
 This course is designed for students with 300 hours or one quarter of Cosmetology. The purpose of the course is to give students more experience in the lab and allows them to build contact hours to complete the program earlier.
- COS 1022 Lab II** **0-24-8**  
 A study of live model performance. This course is designed to develop skills and understanding of techniques and application in the areas of Bacteriology, Pin Curling, Finger Waving, Rollers, Permanent Waving, Marcelling, Chemical Relaxing, Hairdressing and Wigs, Manicuring and Pedicuring, Skin and Scalp Disorders, Hair Coloring, and Hair Cutting.
- COS 1033 Lab III** **0-24-8**  
 A continued study of laboratory practices in Chemistry, Sanitation, Sterilization, Hair Coloring and Lash and Brow Tinting, Artistry in Hair Styling, Cold Waving, and Hair Shaping.
- COS 1044 Lab IV** **0-27-9**  
 A continued study of laboratory practices in Chemistry, Sterilization, Sanitation, Safety Measures, the proper use of a Curling Iron, Marcelling, and Speed in all areas of Beauty Salon Service.
- COS 1102 Theory II** **6-0-6**  
 A classroom study of Skin, Scalp, Hair, Nails, and their Disorders, Salesmanship, Permanent Waving, Marcelling, Relaxing, Hairdressing, Wigs, and Hair Coloring.
- COS 1103 Theory III** **6-0-6**  
 A classroom study of Anatomy, Manicuring, Chemistry, Cosmetic Facials, Hair Styling, Theory of Massage, Scalp Treatments, Superfluous Hair Removal, Grooming and Hygiene.
- COS 1104 Theory IV** **6-0-6**  
 A classroom study of Chemistry, Sanitation, Sterilization, Hair Coloring and Lash and Brow Tinting, Artistry in Hair Styling, Beauty Salon Salesmanship Management, Electricity, Cold Waving and Hair Shaping.
- COS 1110 Professional Esthetics** **2-0-2**  
 A classroom study of skin disorders, procedures for correcting disorders, skin analysis, corrective and maintenance facial treatments, color analysis, and professional make-up application.
- COS 1120 Professional Haircoloring** **2-0-2**  
 A classroom study of the theory of haircoloring, the pH scale, the structure of the hair in relation to haircoloring, the three classifications of haircoloring, the use of haircoloring to create special effects, and common problems encountered in haircoloring.

- COS 1150 Pivot Point Sculpting & Design** 2-0-2  
 This course is designed for the advanced student. The seven elements of design; form, line, movement, texture, size, value, and color, will be introduced to the student with emphasis on form. This system of haircutting will enable the student to convert their creative ideas into actual designs by applying the techniques presented.
- COS 1160 A & B Pivot Point Design Forum I & II** 2-0-2 each  
 This course is designed to give the experienced students an overview of the newest trends in hair sculpting and design, and to develop advanced skills in sculpting and design.
- COS 2022 Lab I C & II A** 0-15-5  
 A study of live model performance. This course is designed to develop skills and understanding of techniques and application in the areas of Bacteriology, Pin Curling, Finger Waving, Rollers, Permanent Waving, Chemical Relaxing, Safety Measures, and Wigs, Manicuring, Skin and Scalp Disorders, Hair Coloring, and Hair Cutting.
- COS 2033 Lab II B & C** 0-1B-6  
 This course gives continued laboratory practice and application of techniques in Hair Shaping, Professional Ethics, Cosmetics-Facials, Hair Styling, Color Rinses, Hair Tinting, and Scalp Treatments.
- COS 2044 Lab III A & B** 0-15-5  
 A continued study of laboratory practices in Chemistry, Sanitation, Hair Coloring and Lash and Brow Tinting, Artistry in Hair Styling, Cold Waving, and Hair Shaping.
- COS 2055 Lab III C & Lab IV A** 0-1B-6  
 A continued study of laboratory practice in relation to Hair Styling, Tinting, Bleaching, Special Effects with Color and Lightness, Safety measures with Electrical Equipment, and Hair Shaping.
- COS 2066 Lab IV B & C** 0-1B-6  
 A continued laboratory practice in relation to Chemistry, safety measures, and speed and efficiency in Hair Styling.
- COS 2102 Theory I C & II A** 4-0-4  
 A classroom study of Skin, Scalp, Hair, Nails, and their Disorders, Salesmanship, Permanent Waving, Marcelling, Relaxing, Hairdressing, Wigs and Hair Coloring.
- COS 2103 Theory II B & C** 4-0-4  
 A classroom study of Anatomy, Manicuring, Chemistry, Cosmetic Facials, Hair Styling, Theory of Massage, Salesmanship, Cold Waving, and Superfluous Hair Removal.
- COS 2104 Theory III A & B** 4-0-4  
 A classroom study of Chemistry, Sanitation, Sterilization, Hair Coloring and Lash and Brow Tinting, Artistry in Hair Styling, Beauty Salon Salesmanship Management, Electricity, Cold Waving and Hair Shaping.
- COS 2105 Theory III C & IV A** 4-0-4  
 A study of Hair Styling, Hair Tinting, and Bleaching, Special effects in Hair Coloring, Beauty Salon Management, Safety measures, the proper use of Curling and Marcell Irons, and Hair Shaping.
- COS 2106 Theory IV B & C** 4-0-4  
 A continued study of Chemistry, Safety Measures, Beauty Salon Management, and Advanced Hair Styling techniques.

#### **COSMETOLOGY INSTRUCTOR TRAINING PROGRAM**

- COS 1201 Cosmetology Instructor Training I** 0-36-12  
 This course will be an overall view of and practice in lesson planning and theory of teaching and supervised clinic management as each relate to cosmetic art.



**COS 1202 Cosmetology Instructor Training II** 0-36-12

This course will include a more in-depth study of the rules and regulations of the North Carolina State Board of Cosmetic Art and actual teaching experiences to both the individual and to groups.

**COS 1203 Cosmetology Instructor Training III** 0-36-12

This course will stress methods and techniques in cosmetic art and advanced clinic management.

**COS 1204 Cosmetology Instructor Training IV** 0-36-12

This course is designed to give the trainee a chance to perform as a teacher under the close supervision of an experienced cosmetology instructor.

**COMPUTER SCIENCE**

**CPS 0102 Introduction to Computer Programming** 3-2-4

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.

**CPS 0105 Pascal Programming** 3-2-4

This course provides a more detailed study of structured programming techniques, data types, procedures, functions, recursion, arrays, files and data structures. Related computer lab required. (Prerequisite: CPS 0102)

**CPS 0201 Algorithms & Programming** 3-2-4

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: CPS 0105)

**CPS 0202/EDP 0225 Assembly Language and Machine Operation** 3-2-4

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: CPS 0201)

**CPS 0204 Data Structures** 3-2-4

The use and implementation of various information structures, including arrays, records, stacks, queues, linked lists and trees. Related computer lab required. (Prerequisite: CPS 0201)

**CPS 0211/EDP 0235 FORTRAN Programming** 3-2-4

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: CPS 0102. (Sp)

**DATA PROCESSING** .....see EDP courses.

**DRAFTING**

**DFT 0101 Blueprint Reading** 0-3-1

Interpretation and reading of blueprints. Information on the basic principles of the blueprints; Lines; Dimensions, Tolerances, Views, Symbols and Notes.

- DFT 0107 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 0120 Basic House Plans & Equipment Layout** 1-3-2  
A study is made of architectural drawing. Included is basic layout, types of drawings, dimensions, and schedules. A student will be able to draw a complete set of simple plans.
- DFT 0203 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: EGR 0103.
- DFT 0205 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: EGR 0103.
- DFT 0206 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: DFT 0205.
- DFT 0209 Industrial Systems 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 0211 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 0212 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 and fixtures and their design. Prerequisites: DFT 0205 and DFT 0206.
- DFT 0220 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 drafter is used? Types of cad equipment; why CAD is used, techniques used in the operations of CAD equipment.
- DFT 0221 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 computer, such as electronics, mechanical, architectural, and schematic. Prerequisite: DFT 0220
- DFT 0222 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. Preq. Permission of instructor.

- DFT 0240 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.
- DFT 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)
- DFT 1102 Blueprints: Welding** 0-3-1  
Understanding drawings on which welding is directed. Exercise in reading welding symbols, abbreviations, notes and specifications. Estimating job cost including materials, labor, and overhead expense. (W)
- DFT 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)
- DFT 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.
- DFT 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.
- DFT 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)
- DFT 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)
- DFT 1115 Structural Drawing** 2-3-3  
This course will dwell on the structure of buildings. Roof design, wall sections (both masonry and wood), kitchen details, bath details, and any special type of construction will be studied. (Su)
- DFT 1116 Blueprint Reading: Air Conditioning** 0-3-1  
Reading of working prints, exploded drawings, wiring schematics, equipment layouts, shop sketches, building codes, heat systems, standards and symbols.

## **DIESEL MECHANICS**

- DIE 1101 Diesel Engines I** 2-6-4  
The trainees will be taught the design and operating principles of the diesel engines; how to disassemble the engine; how to clean, check, and test the components for serviceability; and how to store engine components properly. They should also learn the purpose, design, and servicing of the engine's supporting systems (fuel-injection systems intake, exhaust, cooling and lubrication). Training in why specific tests, checks, and adjustments are required



will be provided, and trainees will be given the opportunity to perform them during and after assembly. Trainees will be taught the design and operating principles of the major fuel systems.

**DIE 1102 Diesel Engines II**

2-6-4

A study and practice in the servicing and repair of diesel engines and components. A study of fuels and special handling precautions, diesel engine principles, design, construction, re boring and installing of cylinder sleeves, and the operation of auxiliary engine controls.

**MARKETING**

**DMK 0101 Retailing**

3-2-4

A study of the role of retailing in the economy including development of present retail structure, functions performed, principles governing effective operation and managerial problems resulting from current economic and social trends. (W)

**DMK 0120 Marketing**

3-2-4

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)

**DMK 0132 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)

**DMK 0243 Advertising**

3-2-4

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)

**DMK 0249 Buying and Merchandising**

3-2-4

A course dealing with the changes of opportunities apparent in retailing today. Many aspects of the business recession of the early 70's including inflation, curtailed buying by consumers, and uncertainty in fashion are discussed. Also emphasized are the new techniques and managerial measures required for successful retail operation in today's business environment. (W)

**DMK 0260 Commercial Display and Design**

3-2-4

Internal—An introduction to basic layout and design and commercial displays, retail store, and service institutions. (Sp)

**DMK 0275-0277 Selected Topics in Marketing (1-3)**

3-0-3

A study of current topics related to marketing and retailing. Emphasis will be placed upon subjects which have particular applications for participants. Prerequisite: Permission of instructor. (On demand)

**DEVELOPMENTAL STUDIES**

**DSE 0090 Enrichment English**

2-3-3\*

This course provides basic English skills identified as necessary to succeed in the freshman composition sequence. It includes a study of major structural errors, grammar, mechanics, punctuation, spelling, diction, freewriting, journal-keeping, and paragraph writing are components of the course. This course is oriented toward student success. Everyone with a score below the 50th percentile on the English portion of the entrance test will be required to complete this course before s/he can graduate. (F, W, Sp, Su)

**DSE 0100 Advanced College Vocabulary**

1-2-2

Advanced College Vocabulary is designed to be a practical course, which will allow the student to think about a wide range of ideas and words and to communicate them with exactness. Classroom, tape/workbooks, and computerized instruction will be used to teach essential words that appear frequently in college textbooks. Use of context clues, word memory techniques, dictionary skills, word parts, and thesaurus usage will teach students how to improve their vocabularies on their own. (F, W, Sp, Su)

**DSM 0090 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)

**DSM 0095 Basic Algebra**

2-3-3\*

This course is designed to provide background in the fundamentals of algebra required of students planning to take MAT 0120 or MAT 0111. Topics include integers and rational numbers, operations on polynomials, the solution and graphing of linear equations and inequalities, factoring. Prerequisite: DSM 0090 or satisfactorily placement test score. (F, W, Sp, Su)

**DSR 0090 Reading Proficiency**

2-3-3\*

Reading Proficiency is designed to help students acquire reading comprehension, inference, and vocabulary skills that will be necessary for successful competition in most college parallel and technical programs. Those persons with unsatisfactory scores on the reading portion of the college entrance test will be required to complete this course. (F, W, Sp, Su)

**DSR 0091 Standardized Test Preparation**

1-0-1\*

The course is designed to better prepare individuals to take standardized tests and teacher made tests through computer assisted learning and classroom exposure. Emphasis will be placed on test taking strategies and overcoming of test anxiety so as to improve test scores and provide higher individual confidence in test-taking situations.

**DSR 0101 Rapid Reading**

2-0-3

Computer Rapid Reading is a six part reading program designed to help you become a faster, more efficient reader through computerized instruction. This course will sharpen your perception, increase your eye span, and improve your eye movements. The exercises will incorporate these new techniques into your everyday reading.

\*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 basically whether a student is a full-time student.

**ECONOMICS****ECO 0201 Principles of Economics**

3-2-4

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 0202 Principles of Economics**

3-2-4

A continuation of Economics 0201 with emphasis on the market and price system, the allocation of resources, business cycles, monetary and fiscal policy. (W)

**ECO 0203 Principles of Economics**

3-2-4

A continuation of Economics 0202 with emphasis on a study of the international economy and perspectives on economic change and comparative systems. (Sp)



**ECO 0204 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. (F)

**ECO 0260 Consumer Economics** 3-0-3  
A study of personal financial problems in such areas as housing, budgeting, loans, banking, taxes, credit and insurance. (F)

**ECO 0261 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. (Sp)

## **DATA PROCESSING**

**EDP 0101 Computer 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)

**EDP 0106 Principles of Problem Solving** 3-1-3  
A prerequisite to all programming courses, this course is designed to introduce the student to scientific problem-solving with computer programming applications. Flowcharting and pseudocode will be introduced, along with file layouts and print charts. (F)

**EDP 0160 Microcomputer Operations** 2-2-3  
This course is designed to provide the student with operational skills needed to use the keyboard, cassette recorder, printer, disk drives, and software packages. In addition, Disk Operating Systems (DOS) and Job Control Language (JCL) will be introduced. Practical applications will provide hands-on experience. Prerequisite: BUS 0101 or equivalent. (F, W, Sp)

**EDP 0161-0164 Selected Computer Applications (1-4)** Variable  
Topics for special interest groups with practical applications and hands-on experience.

**EDP 0200 Computer Operations** 3-2-4  
This course is designed to introduce the student to the operation and control of a computer system. Laboratory exercises and computer assisted training software will be used in practical situations to demonstrate file creation, on line data entry, updating, and processing. Prerequisite: EDP 0106 or equivalent. (Sp)

**EDP 0201 Advanced Computer Operations** 3-2-4  
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: EDP 0200. (F, Su)

**EDP 0205 Software Applications** 2-4-4  
This course is designed to introduce the student to a variety of software packages for microcomputers. The student will learn to install and use word processing, spread sheet, file manipulation, integrated, communications, accounts receivable, and graphics software packages. Practical applications will be provided on the IBM PC and the TRS-80. Prerequisite: EDP 0160 or permission of instructor. (F, Sp)

**EDP 0210 BASIC Programming** 4-2-5  
The student will study the BASIC programming language with applications containing calculations, print editing, arrays and loops, defined functions, sorting, and file manipulation. Prerequisite: EDP 0106 or equivalent. (W)

- EDP 0218 Pascal Programming** 4-2-5  
 This course is designed as an introduction to structured programming techniques using the high-level programming language Pascal. Topics covered will include financial reports and analysis, input/output techniques and report formatting. Work will be done on the IBM Personal Computer. Prerequisite: EDP 0106 or equivalent.
- EDP 0220 RPG II 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: EDP 0106 or permission of the instructor. (5p)
- EDP 0221 Advanced RPG II 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: EDP 0220. (F, 5u)
- EDP 0225 Assembly Language Programming** 4-2-5  
 This course serves as an introduction to programming of the Intel 8088 microprocessor and CPUs in general through assembler and machine languages. Concepts presented include binary and hexadecimal numbering systems, chip architecture and function, operation codes and programming. The IBM PC and the IBM macro-assembler software will be used. Prerequisite: EDP 0210 or EDP 0218.
- EDP 0227 C Programming** 4-2-5  
 The student will study the C programming language with applications containing calculations, arrays and loops, pointers, file manipulation, sorting and recursion. Prerequisite: EDP 0106 or equivalent.
- EDP 0230 COBOL Programming** 3-4-5  
 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 S/26. Prerequisites: EDP 0101 and EDP 0220. (W)
- EDP 0231 Advanced COBOL Programming** 3-4-5  
 As continuation of EDP 0230, 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: EDP 0230. (5p)
- EDP 0235 FORTRAN Programming** 4-2-5  
 The student will learn the fundamental rules of the FORTRAN (FORMula TRANslation) language and apply these rules to the solution of typical statistical problems, including formula development and solutions. A variety of laboratory exercises will be performed and are designed to acquaint the student with capabilities and typical usages of the FORTRAN language. Prerequisite: EDP 0106 or equivalent.
- EDP 0237-0239 Selected Programming Projects (1-3)** 3-0-3  
 These courses are designed to permit the student to complete major independent programming assignments in a selected language. The student will meet the instructor for consultations and progress checks throughout the quarter but will have the responsibility of writing, testing, and debugging the program(s) for a typical applications system. Languages may include BASIC, COBOL, FORTRAN, RPG II, Assembly, Pascal, or additional languages as they are offered. Prerequisites: Completion of all available quarters of instruction in the selected language and permission of instructor.

**EDP 0240 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. Prerequisite: EDP 0210 or EDP 0220. (F)

**EDP 0241 Lotus 123****3-0-3**

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 123 commands. Also selected advanced topics will be covered such as keystroke macros. Persons who have previously taken ICC Lotus 123 workshops will gain additional experience because all class exercises will be new and different. Prerequisite: EDP 0160

**EDP 0242 Computerized Accounting****3-2-4**

This course is designed to provide the student with the operational skills needed to implement and use account software packages to provide accounts receivable, accounts payable, payroll, and general ledger services in a business. Prerequisites: EDP 0160 and BUS 0211. (BUS 0211 may be taken simultaneously with this course.) (Sp)

**EDP 0243 IBM PC Applications****3-0-3**

This class will be ideal for persons with some IBM PC experience who wish to gain additional expertise on the machine using a variety of software applications. As in the Introduction to IBM PC class, the student will see examples of the main types of PC programs including DOS, spreadsheet (Lotus 123), database (dBase 3+), word processing (Display Write 4) and shorter demonstrations of other PC techniques such as graphics, networking and utilities. Before taking this class you should have taken the Intro to IBM PC class or have equivalent business computer experience. This course requires the purchase of a book.

**EDP 0244 Displaywrite 3 & 4****3-0-3**

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

**EDP 0245-0249 Selected Topics (1-4)****4-0-4**

Selected Topics provides for study of current Data Processing topics, including operation and programming of currently marketed software and related DP topics. Prerequisite: Permission of instructor. (On demand) (W)

**EDP 0252 Database Processing****3-2-4**

This course will present the concepts and applications of database design, maintenance, and processing. Students will utilize Database software on the IBM PC. Prerequisites: EDP 0240 and (EDP 0220 or EDP 0210) (W)

**EDP 0254 dBase 3+****3-0-3**

This class will cover all the major functions of the program including interactive commands and programming. Included will be exercises in creating, editing and maintaining a database as well as deletion of records, math functions, date arithmetic, sorting and searching of records and printing reports. The new features of dBase 3+ (over dBase 3) will be emphasized. Persons who have taken ICC dBase 3 workshops will gain additional experience because all class exercises will be new and different. Prerequisite: EDP 0160.

**EDP 0255 File Processing and Data Communications****3-2-4**

This course is designed to enhance file processing techniques using a variety of programming languages and system utilities. Data communications will be introduced. Applications will be developed on the IBM S/36 and the IBM PC. Prerequisites: EDP 0210, 0201, 0221, and 0230. (Sp)



**EDP 0270 Robotics Concepts**

2-2-3

Introduction to Robotic Systems includes important information on the role and use of robots in industry. An educational robot is used as an example in various phases of manufacturing applications. (Su)

**EDUCATION****EDU 0101 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 0107 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 0108 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 0109 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 0110 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 0111 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 0112 Instructional Methods**

3-0-3

This course includes the various instructional methods in vocational education with emphasis on behavioral objectives and individualized instruction.

**EDU 0113 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 0114 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 0115 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 0117 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 0118 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, spread sheets and data base. "Hands-on" laboratory experiences are emphasized.

**EDU 0119 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.

**EDU 0161 Career Decision Making and Life Planning****3-0-3**

This course will provide a structure for students to assess their work related interests, values, and aptitudes and teach them useful decision-making skills for the purpose of developing realistic career plans. Students must progress through four phases: self-assessment, occupational exploration, career decision making, and goal planning. The course encourages students to take charge of their lives by learning the skills of self-assessment, alternative development/appraisal and decision-making, all of which will assist them throughout their life. (F, W, Sp, Su)

**EDU 0162 Job Seeking Skills****1-0-1**

Students first will identify their best and most enjoyed skills, aptitude-related natural talents, and discover the kinds of careers for which they are best suited. Then, they will learn how to develop a job qualifications brief (resume), an effective job search strategy, and effective interviewing skills. (F, W, Sp, Su)

**EDU 0203 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 0204 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 0206 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 0208 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 0209 Social Studies for Children****3-0-3**

A study of content, method, and materials of social studies for use in the Early Childhood Curriculum. Students will write a social studies unit and teach a lesson from the resource unit. (W)



- EDU 0213 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 0214 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 0215 Individualized Instruction** 3-0-3  
The student will study how to assess pupils needs and plan materials, games, and activities for individual needs. (F)
- EDU 0221 Administration, Supervision and Standards** 3-0-3  
The student will study record keeping, school policies organization of classroom, supervision of children and professional ethics. (Sp)
- EDU 0231 Creative Activities** 3-0-3  
The student will create games, materials, and training activities appropriate for the young child. Cooking, woodworking, serving, art, puppetry, drama, etc., will be included. (Sp)
- EDU 0234 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 0240/0242/0244 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 0246 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 0241/0243/0245/0247 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 an practicum situations. This course is designed for students completing the Child Care Worker or Early Childhood Specialist Program. (Sp, Su)
- EDU 0248 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 0250 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.
- EDU 0260 Professional Grooming for the Total Look** 1-0-1  
This course is designed to help the career bound male or female coordinate clothing, hairstyle, and make-up (for the female) for a total, professional look. The student will study the colors which are best suited for his/her skin, eye, and hair color. The male and female will be introduced to the latest styles in hair and clothes and will be advised on how to select and style the hair according to facial type, profile, lifestyle, height, weight, and the

profession that he/she has chosen. The student will also learn how to coordinate clothing with emphasis on color, style, and individual characteristics.

**EDU 0261 Professional Grooming—Make-up Application** **1-0-1**

This course is designed to introduce the techniques used by professional make-up artists to the professional or career bound individual. The student will learn how to select colors that coordinate with skin, eyes, and hair color and proper application to compliment the bone structure of the face, to diminish imperfections, and emphasize the most attractive features.

**EDU 0262 Professional Grooming: Color Coordination** **1-0-1**

This course is designed to help the professional or career bound individual select colors in clothing and make-up that coordinate with the individual's skin, eyes, and hair color. Wearing the right color does make a difference!

**EDU 0263 Professional Grooming: Clothing** **1-0-1**

This course is designed to help the professional or career bound individual select clothing that suit the individual's personal physique and get him/her up-to-date with the latest fashions. The student will learn how to make the most of a wardrobe by selecting colors that coordinate with the individual's season and how to combine garments to create an ensemble.

**EDU 0264 Professional Grooming: Hair** **1-0-1**

This course is designed to help the student learn how to select the proper hairstyle according to his/her lifestyle, facial features, height, weight, and personal tastes. He/she will also learn techniques used by professional hairstylists to style their hair at home. The student will be introduced to the latest in hair fashions and styling techniques.

## **ENGINEERING DRAWING**

**EGR 0101 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 as an independent study.

**EGR 0102 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: EGR 0101.

**EGR 0103 Engineering Drawing III** **0-6-3**

This course is a continuation of EGR 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: EGR 0101 and EGR 0102.

**EGR 0104 Electronics Drafting** **0-6-3**

An introduction to Basic Drafting Techniques used in Electronics topics include lettering, dimensioning, use of instruments, and construction of drawings with instruments, and freehand. Special emphasis will be placed on Electronic Symbols, Schematic Diagrams, and Printed Circuit Board Layout.

## **ELECTRICITY**

### **ELC 0101 Electrical Fundamentals I**

**3-3-6**

An introduction to the theory of circuit analysis. Equilibrium equations for direct-current circuits with resistance and methods for their solution. Special emphasis on inductance, capacitance, and electrical measuring instruments.

### **ELC 0102 Electrical Fundamentals II**

**5-3-6**

Elementary A-C circuits; effective and average values of current and emf, instantaneous and average power. Complex algebra, analysis of R-L, R-C, R-L-C series and parallel circuits; complex power; A-C instruments. Prerequisite: ELC 0101

### **ELC 0205 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 1011, 1012 Basic Electricity I and II**

**2-6-4**

Provides instruction and application in the fundamentals of electricity. A study of the National Electrical Code in actual building mock-ups will be emphasized. Residential and commercial wiring will be studied.

### **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, DFT 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 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.

### **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** 4-3-5  
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.

**ELC 1122 Industrial Electricity** 3-3-4  
A study of basic theory, operating characteristics, and application principles of vacuum tubes, gaseous tubes, and semiconductor devices commonly used in industrial applications. The study will include an introduction of these devices as used in basic amplifier, rectifier regulator and control circuits.

**ELC 1125 National Electrical Code Part I** 3-0-3  
A study of the National Electrical Code for systems up to 600 volts. This course will include bonding and grounding, calculations, wiring methods and terminations, overcurrent protection, boxes and fittings, service entrance and equipment, motors and controllers, laws and regulations. This course is recommended for Electrical Installation and Maintenance students as well as practicing electricians in the field.

**ELC 1126 National Electrical Code Part II** 3-0-3  
An advanced study of the National Electrical Code to include electrical systems greater than 600 volts, special occupancies such as health care facilities, places of assembly and theaters, hazardous locations and transformers. This course is recommended for Electrical Installation and Maintenance students as well as practicing electricians in the field.

**ELC 1131 Basic Electricity Controls** 2-3-3  
This course covers the elementary principles of electricity, including units and terms, Ohm's Law, power, and types of electricity with specific application to the operation of electrical controls.

## **ELECTRONICS**

**ELN 0101 Electronics I** 3-3-4  
This course is designed to provide instruction in the basics of semiconductor physics, junction and special diodes and diode applications. An introduction to bipolar junction transistors, characteristic curves, and biasing will be included. Prerequisite: ELC 0101.

**ELN 0102 Electronics II** 5-3-6  
An introduction to common emitter, common collector and common base small signal amplifiers. Additional topics include H parameters, Class A, B, and C power amplifiers and field effect transistors and biasing. Prerequisite: ELN 0101.

**ELN 0103 Electronics III** 5-3-6  
Provides instruction in the areas of amplifier gain, frequency response, and feedback. Additional topics include oscillators, frequency mixing circuits, and breakdown devices. Prerequisite: ELN 0102.

**ELN 0202 Digital Fundamentals I** 5-3-6  
Provides instruction in the fundamental concepts of digital circuits and applications. Topics include the binary number system, boolean algebra, truth tables, logic symbols, digital integrated circuits. Prerequisite: ELN 0101 or permission from the instructor.



- ELN 0204 Microprocessor Applications** 5-3-6  
Provides instruction in microprocessor terminology, architecture, programming, and interfacing. Topics include terminology definitions, hardware familiarization, assembly language programming, branching, and programming loops, and interfacing. Prerequisite: ELN 0202.
- ELN 0205 Electronics Systems Project** 2-6-4  
This course emphasizes the practical application of electronic theories. The student will select an electronic design and construction project subject to approval by the instructor. The student will perform independent research and create an original design. The student will complete the project by building and testing a working model of the circuit.
- ELN 0206 Electrical Machines** 3-3-6  
A study of the construction, principles, regulation, characteristics, efficiency and application of direct-current motors and generators, and an introduction to the transformers, alternators, and induction motors. Prerequisite: ELC 0102.
- ELN 0213 Digital Fundamentals II** 5-3-6  
Provides instruction in the application of the basic logic gates to construct practical combinational and sequential circuits. Topics include MSI digital integrated circuits, design of digital circuits emphasizing the use of Karnaugh Maps and an introduction to digital computers. Prerequisite: ELN 0202.
- ELN 0215 Industrial Electronics** 5-3-6  
Provides instruction in the selection and application of electronic devices and circuits to control industrial equipment. Topics include Transducers, power control circuits, control devices, interfacing and industrial schematics. Prerequisite: ELN 0102.
- ELN 0217 Linear Integrated Circuits** 5-3-6  
A study of linear integrated circuits using the basic operational amplifier as a building block. Emphasis will be placed on the use of linear integrated circuits in regulators, timers, oscillators, filters and signal processing circuits. Prerequisite: ELN 0102.
- ELN 1101 Fundamentals of Electronics** 4-12-8  
Elementary principles of electricity including basic electrical units, Ohm's law, Kirchoff's Law, network theorems, magnetics, basic electrical measuring instruments, inductance, capacitance, and sine wave analysis.
- ELN 1102 Semiconductor Theory and Circuits** 4-12-8  
An introduction to semiconductors and their development; the theory, characteristics and operation of vacuum diodes, semi-conductor diodes, rectifier circuit. Transistor theory, operation, characteristics, and their application to audio and radio frequency amplifier and oscillator circuits. Troubleshooting and repair of solid state devices. Prerequisite: ELN 1101 or permission from the instructor.
- ELN 1103 Audio Equipment Servicing** 4-12-8  
An introduction of commonly used servicing techniques as applied to monophonic and stereophonic high fidelity amplifier systems and auxiliary equipment. The operation and servicing of inter-communication amplifiers and switching circuits will also be taught. Principles of radio reception and practices of servicing, including block diagrams of radio receivers, servicing techniques of AM and FM receivers by resistance measurements, signal injection, voltage analysis, oscilloscope methods of locating faulty stages and components and the alignment of AM and FM receivers. Prerequisites: ELN 1102, ELN 1101, or permission from the instructor.
- ELN 1104 TV and Video Equipment Servicing** 2-12-6  
A study of principles of television receivers, alignment of radio and intermediate frequency amplifiers, adjustment of horizontal and vertical sweep circuits. Techniques of troubleshooting and repair of TV receivers with the proper use of associated test equipment will

be stressed. Additional study of more specialized servicing techniques and oscilloscope waveform analysis will be used in the adjustment, troubleshooting and repair of the color television circuits. Prerequisites: ELN 1101, ELN 1102, or permission from the instructor.

**ELN 1111 Basic Electronics** 3-3-4

A study of the structure of matter and the electron theory, the relationship between voltage, current and resistance in series, parallel and series-parallel circuits. Analysis of direct current circuits by Ohm's Law and Kirchoff's Law; sources of direct current potentials. Fundamental concepts of alternating current flow; a study of reactance, impedance, phase angle, power and resonance and alternating current circuit analysis.

**ELN 1118 Troubleshooting Concepts** 3-6-5

Special emphasis will be given to troubleshooting and problem solving of electronic circuits consisting of resistors, inductors.

**ELN 1119 Modular Components Repair** 3-6-5

Introduction to integrated circuits and modular components. A study of their applications to audio frequency, radio frequency, and electronic switching will be stressed.

**ELN 1120 Amplifier Systems** 3-6-5

An introduction to the types of amplifier circuits used in monophonic and stereophonic high fidelity amplifier systems and auxiliary equipment. Servicing techniques will also be studied. Prerequisites: ELN 1101, ELN 1102, or permission from the instructor.

**ELN 1121 Communication Equipment Servicing** 1-6-3

The study of techniques involved in diagnosing special malfunctions in communication equipment such as radio transmitters and receivers. Prerequisites: 1101, 1102, 1103.

**ELN 1160 Novice Amateur Radio License Preparation** 2-3-3

This is the first course to obtain a Radio Amateur Operator's License, novice class. It will cover instruction in International Morse Code, radio theory, and laws that regulate the operation of an amateur radio station. There are no prerequisites for this course.

**ELN 1161 Technician/General Amateur Radio License Preparation** 2-3-3

A continuation in preparing the student to pass the FCC administered exam for a Technician/General Class Radio Operator's License. It covers instruction, International Morse Code, radio theory, laws and rules of the FCC. Prerequisite: Novice License Classification.

**ELN 1162 Advanced Amateur Radio License Preparation** 2-3-3

This course prepares the student to pass the FCC administered exam for an Advanced Class Radio Operator's License. It covers instruction in advanced radio theory as well as the laws and rules of the FCC. Prerequisite: General/Technician License Classification.

## ENGLISH

**ENG 0100 Writing With The Apple** 0-2-1

This course is designed to teach students how to use the Apple Computer and the Bank Street Writer 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 0101 Freshman Composition I** 3-0-3

This course emphasizes narrative and descriptive writing, language study, vocabulary development, critical reading, and library use. Prerequisite: DSE 0090 and/or DSR 0090 or satisfactory scores on placement tests. (F, W, Sp, Su)

*Oliver Estes*

- ENG 0102 Freshman Composition II** **3-0-3**  
 This course emphasizes a variety of expository compositions utilizing various writing strategies, as well as language study, vocabulary development, and critical reading. Prerequisite: ENG 0101 (W, Sp, Su)
- ENG 0103 Freshman Composition III** **3-0-3**  
 This course consists of an introduction to the research paper and an introduction to literature. Following a study of correct research procedures, each student writes a research paper on a selected topic. The second part of the course is a study of three genres of literature: the short story, drama, and poetry, with selected samples from each genre. Prerequisite: ENG 0102 (F, Sp, Su)
- ENG 0104 Business Communications** **3-0-3**  
 This course, designed to develop competency in business communication, involves the students in various hypothetical situations in which they utilize the communication skills of listening, speaking, reading, letter writing, and report writing. Prerequisite: ENG 0102 (Sp, Su)
- ENG 0111 Honors English I** **3-0-3**  
 For freshman college parallel honors students. The course requires advanced reading and writing skills in a diversity of subject areas. Specific objectives include improving skills in library research, critical reading of sources, critical thinking, and writing. Writing assignments include the personal narrative, the descriptive essay, and summaries and syntheses of source materials. Prerequisite: Acceptance into the Honors Program or above satisfactory scores on the placement test. (F)
- ENG 0112 Honors English II** **3-0-3**  
 For freshman college parallel honor students. This course continues its emphasis on reading and writing in a diversity of subject areas. Specific objectives include improving skills in library research, critical reading and thinking, and writing. Writing assignments include the synthesis, the critique, and the research paper. Prerequisite: ENG 0111 or recommendation of an English instructor. (W)
- ENG 0113 Honors English III** **3-0-3**  
 For freshman college parallel honor students. The course 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 through writing to 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. Prerequisite: English 0111 & 0112, or English 0101 and 0112. (Sp)
- ENG 0160 Public Speaking** **3-0-3**  
 A course in oral communication. The course includes instruction in effective public speaking, the opportunity to listen to and evaluate other's speeches and the preparation and presentation by each student of speeches to inform, to persuade, and to entertain. Prerequisite: None (F, W, Sp, Su)
- ENG 0161 Journalism** **3-0-3**  
 This course is to study the techniques of identifying news, gathering information, writing effective accurate news and feature stories. (F, W, Sp)
- ENG 0162 Journalism Practice** **0-2-1**  
 This course is for learning how to prepare news copy for the press and is primarily for the preparation of the school newspaper. This course can be taken a many as six times. (F, W, Sp)



- ENG 0163 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. (W, Sp)
- ENG 0164 Photo Journalism** **0-2-1**  
 This course is for learning layout design, documentation, graphics and how to prepare copy. It is primarily for the preparation of the school yearbook and can be taken as many as six times. (F, W, Sp)
- ENG 0201 English Literature I** **3-0-3**  
 A survey of English literature from Beowulf through Boswell with emphasis on representative writers and their works, the English language, and historical events which influenced the writers. Term papers, projects, and reports may be assigned at the discretion of the instructor. Prerequisites: Successful completion of freshman English courses. (F, Sp, Su)
- ENG 0202 English Literature II** **3-0-3**  
 A survey of English literature from the pre-Romantics to the Modern Age with emphasis on representative writers and their works, the English language, and historical events and philosophical movements which influenced the writers. Term papers, book reviews, projects and reports may be assigned at the discretion of the instructor. Prerequisites: Successful completion of freshman English courses. (W, Su)
- ENG 0203 American Literature I** **3-0-3**  
 Survey of American literature through the 19th Century. Presents representative works and types selected by the instructor. Term papers and projects, optional. Prerequisite: Successful completion of freshman English courses. (F, Sp, Su)
- ENG 0204 American Literature II** **3-0-3**  
 Survey of American literature of the 20th Century. Presents representative works and genres by a wide variety of modern American authors. Term papers and projects, optional. Prerequisite: Successful completion of freshman English courses. (W, Su)
- ENG 0260 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. (W)
- ENG 0262 Creative Writing II** **3-0-3**  
 Continued guidance and experiment to producing various forms of literary expression—poetry, short fiction, the essay—including the procedures involved in getting published. Prerequisite: Eng 0260.
- ENG 0265 Special Topics in Literature** **variable**  
 The course will deal with 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 0270 Classical Literature** **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: ENG 0101, 0102, 0103.
- ENG 1100 Skills for Communicating** **2-0-2**  
 Designed for cosmetology students to promote the practical application of effective communication in speaking, listening and writing. (F, W, Sp)



**ENG 1101 Communication Skills****3-0-3**

Designed to promote the practical application of effective communication in speaking, listening and writing. (W, 5)

**ESTIMATING****EST 1101 Estimating I****2-3-3**

This is a practical course in quantity "Take-off" from prints of jobs done by carpenters and electricians. Figuring quantities of materials needed and costs of building various components and structures will be included.

**EST 1102 Estimating II****3-3-4**

This is a continuation of Estimating I. Emphasis will be given to masonry estimating and plumbing estimating. A special emphasis will be placed on total cost estimating.

**EST 1111 Estimating****3-0-3**

In this course a study will be made of the various techniques of estimating air conditioning and refrigeration work. Also a study will be made of the various codes pertaining to heating, air conditioning and refrigeration.

**FRENCH****FRE 0120 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. (Su)

**FRE 0160, 0161, 0162 Fundamentals of French I, II, III****2-3-3 (each)**

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, 5p)

**FRE 0260, 0261, 0262 Intermediate French I, II, III****2-3-3 (each)**

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. Prerequisite: Fundamentals of French I, II, III or two years of high school French. (F, W, 5p)

**FOOD SERVICE MANAGEMENT****FSO 0101 Introduction to Food Services****3-0-3**

Introduction to and history of food service and the job opportunities available within the industry.

**FSO 0102 Food Preparation I****2-9-5**

Basic food preparation fundamentals (equipment, skills, cooking techniques, and products necessary to all areas of food preparation) are covered in this course. Standard weights and measures and learned and manual skills are developed. Soup, salads, stocks, sauces, and gravies will be prepared in lab classes.

**FSO 0103 Equipment—Use and Care****3-0-3**

Designed to teach the student to operate and care for most standard kitchen equipment. Particular emphasis will be placed on proper operating and cleaning procedures.

**FSO 0104 Sanitation and Safety****3-0-3**

A study of sanitation standards and safety precautions as related to food storage, preparation, and service.

- FSO 0105 Food Preparation II** 2-9-5  
 Emphasis in this course is placed on meal preparation, specifically beef preparations. The use of standardized recipes and portions control is stressed because meals prepared in the lab are served in the dining room. Prerequisite: FSO 0102.
- FSO 0106 Baking I** 2-6-4  
 A study of the basic tools, appliances, and equipment necessary for baking as well as typical baking measurements and terms. Students will actually prepare quick breads and yeast-raised products.
- FSO 0107 Dining Room Service I** 3-0-3  
 This course focuses on various forms of dining room service. American, French, Russian and buffet service techniques and procedures will be applied. Practical skill is developed through actual table service in the "Tar Heel Room" of the College. The student will be given an opportunity to perform, on a rotating basis, the role *maitre d'hotel*, waiter/waitress. This program will also cover, when applicable, *gueridon* service. French menu terminology, dining equipment utilization and merchandising of dining room will be stressed.
- FSO 0108 Food Preparation III** 2-9-5  
 Meal preparation is continued in this course, particularly pork and poultry preparation. Meals are served in the dining room. Prerequisite: FSO 0102, 0105.
- FSO 0109 Baking II** 2-6-4  
 Emphasis in this baking course is placed on dessert preparations. Students prepare assorted pies and cakes. Prerequisite: FSO 0106.
- FSO 0110 Nutrition** 1-6-3  
 Designed to teach students to write different types of menus, depending on seasons, clientele, employee skills, and food costs.
- FSO 0201 Food Preparation IV** 2-9-5  
 Students plan their menus and serve meals based on the preparations learned in Food Preparation II and III. Students work more independently than in the first three quarters. Prerequisite: FSO 0102, 0105, 0108.
- FSO 0202 Food & Labor Cost Control** 3-0-3  
 Designed to give the student practical experience in costing, ordering, receiving, storage, inventory-taking, and record keeping.
- FSO 0203 Food Preparation V** 2-9-5  
 Institutional cooking is introduced during this course. Field experience is gained in a university and hospital cafeteria. Prerequisite: FSO 0102, 0105, 0108, 0201.
- FSO 0204 Baking III** 2-6-4  
 Upon successful completion of the course the student should be able to decorate cakes; identify ingredients used in French and Danish pastries and various icings; and create flaming desserts. Prerequisite: FSO 0106, 0109.
- FSO 0205 Food Service Management** 3-0-3  
 Designed to teach a student how to operate a commercial operation.
- FSO 0206 Food Merchandising** 2-3-3  
 A basic look at the principles involved in retail food merchandising. All principles including buying, pricing, display, computerized ordering, and inventory control will be covered.
- FSO 0207 Specialty Cooking** 2-3-3  
 Designed to expose the student to different international cuisines/Italian, German, Chinese, Mexican.

**FSO 0208 Production Management** 3-0-3  
Designed to teach the student how to prepare production schedules from preparation to service.

**FSO 0220 Supervised Work Experience** 1-20-3  
Students are expected to work in a minimum food service establishment for a minimum of 20 hours per week. The objective is to provide actual work experience in the field of Food Service Management. The student may work off-campus in a restaurant or on-campus in the cafeteria.

**FOREIGN LANGUAGES**.....see **FRE, GER, SPA** for course descriptions.

## **GEOGRAPHY**

**GEG 0160 Physical Geography** 3-2-4  
The earth's astronomical relations, factors of weather and climate, and physiographic features. Two lab hours per week. (F)

**GEG 0161 Economic Geography** 3-0-3  
Geographic factors involved in production, distribution, consumption, and conservation of the major crops, minerals, and industries of the world. (W)

**GEG 0162 World Regions** 3-0-3  
Relation of human activities to the larger geographic regions of the world. (Sp)

## **GEOLOGY**

**GEL 0101 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 0102 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 0103 Historical Geology** 3-3-4  
Emphasis in this course is on the stratigraphic 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 0160 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 0120 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 0160, 0161, 0162 Fundamentals of German I, II, III** 2-3-3 (each)  
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)

## HEALTH

### **HEA 0103 First Aid** **3-0-3**

A study of accident and emergency situations; causes, prevention, and appropriate first aid treatment. A course of instruction, designed to develop competency in recognition of the symptoms of common injuries and illnesses, and the performance of first aid skills. Certification in American Red Cross Standard First Aid and Personal Safety is available through this course of instruction. (W, Sp)

### **HEA 0105 Fundamental First Aid** **1-0-1**

A course of instruction designed to develop first aid knowledge and skills in the common injuries and sudden illnesses. American Red Cross certification in Fundamental First Aid is available through this course of instruction.

### **HEA 0112 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. (Sp)

### **HEA 0120 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 in nutrition and food preservation. (W)

### **HEA 0201 Health, Safety and Nutrition** **3-0-3**

A study of personal health in relation to the emotional, physical, and mental self of the child. Special attention is given to nutrition, accidents, anatomy, physiology, disease, and effects of the community upon health. (Sp)

### **HEA 0203 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.

### **HEA 1101 Geriatric Care I** **3-0-0-3**

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. Corequisite: HEA 1104, NUR 1115. (F, Sp)

### **HEA 1104 Nurse Assistant Practicum I** **0-0-15-5**

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: HEA 1101, NUR 1115. (F Sp)

### **HEA 1105 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. Corequisite: HEA 1103, HEA 1106, NUR 1116. (W, Su)

### **HEA 1106 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: HEA 1105. (W, Su)



**HEA 1103 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)

## **HISTORY**

**HIS 0101, 0102, 0103 Western Civilization** 3-0-3 (each)  
A survey of world history with special emphasis on European background and development in three time periods: ancient and early medieval, later medieval Western and early modern, and the modern period. (F-Su, W-Su, Sp-Su)

**HIS 0260, 0261, 0262 History of the United States** 3-0-3 (each)  
A survey of the history of the United States: 1492-1840; 1840-1896; 1896-current date. (F-Su, W-Su, Sp-Su)

**HIS 0160 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 0170 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 0265 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. (Sp, Su)

## **HUMANITIES**

The following courses in addition to specify humanities courses can be taken to fulfill the humanities requirements for the A.A., A.F.A., A.G.E., A.S. and A.A.S. degrees. If a specific course is required for a college parallel degree, then it cannot be used to satisfy the humanities requirement.

ENG 0160, 0201, 0203, 0260, 0262, 0265, 0270  
ART 0104, 0105, 0106, 0160  
MUS 0101, 0102, 0103, 0161, 0162, 0201, 0202, 0203, 0209  
PHI 0260, 0261, 0262  
REL 0160, 0161, 0162, 1070

**HUM 0160 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, W, Sp, Su)

**HUM 0161 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.

**INDUSTRIAL SCIENCE****ISC 0100 Principles of Industrial Management****3-0-3**

The basic managerial decision; organizational structure including plant location, building requirements and internal factory organization; problems of factory operation and control, planning, scheduling, routing factory production, stores control, labor control, purchasing, cost control. Plant problems are utilized as lab experiments. (W)

**ISC 0111 Industrial Safety****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 0113 Statistical Quality Control****3-2-4**

An introduction to probability, statistics, and quality control techniques. Include graphs, measures of central tendency, grouped and ungrouped data, and problem solving. Prerequisite: MAT 0100 or permission of instructor. (W)

**ISC 0114 Advanced Statistical Quality Control****3-0-3**

This course is designed for those who have taken Statistical Quality Control (ISC 0113), I.E. and 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. (Sp)

**ISC 0121 Industrial Engineering Application****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. (Sp)

**ISC 0122 Basic Electricity and Electronics****3-0-3**

Study of relationship between voltage, current and resistance in series parallel and series parallel circuits. A study will be made of semi-conductor diodes and transistors. This course will give the student a basic understanding of the electricity and electronics. (S)

**ISC 0216 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 0217 Work Compensation****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. (W, Su)

**ISC 0221 Production Planning/Value Analysis****3-2-4**

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 di-

rection, 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 0225/0232 Selected Topics in Industrial Management (1-8) 8-0-8**

A study of current topics. Emphasis will be placed upon subjects which have particular applications for participants. Prerequisite: Permission of instructor. (On demand)

**MARKETING ..... see DMK courses.**

**MASONRY**

**MAS 1011, 1012 Basic Bricklaying I and II 2-6-4**

The history of the bricklaying and the masonry industry, raw materials, basic manufacturing processes and terminology. Clay and shell brick, mortar, laying foundations, cutting masonry materials, bonding, and the use, care, and maintenance of tools. Practice is given in selecting the proper mortars, layout and construction of various building elements.

**MATHEMATICS**

**MAT 0101 Finite Mathematics I 4-0-4**

A non-rigorous approach to the study of sets and set algebra, introductory logic and proofs, topics from the real number systems and some consumer mathematics. This course is primarily intended for the student in liberal arts and other non-technical fields. Prerequisite: DSM 0090 or satisfactory placement score. (F, W, Sp, Su)

**MAT 0102 Finite Mathematics II 4-0-4**

A continuation of MAT 0101. Topics include mathematical systems, introductory algebra, elementary combinatorics, probability, and introductory statistics. Prerequisite: MAT 0101. (W, Sp, Su)

**MAT 0111 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 plan figures, solid figures, areas, volumes, trigonometric ratios, triangle solving, and vectors. Prerequisite: DSM 0095 or satisfactory placement test score in algebra. (W, Sp)

**MAT 0115 Elementary Statistics 3-0-3**

This course introduces the student to basic descriptive statistics including group frequency distributions, percentiles, measures of central tendency and dispersion, and elementary probability. The normal curve and introductory sampling theory are covered along with linear regression and correlation.

**MAT 0120 Intermediate Algebra 5-0-5**

A course designed for students who plan to take College Algebra and Trigonometry (MAT 0121) but who do not have an adequate background in algebra. The course includes a detailed study of: factoring; rational expressions; graphing; linear, quadrates, and linear absolute value equations; linear and quadratic inequalities; rational exponents and radicals. MAT 0120 is developmental in nature and carries elective credit only. A student who has received credit (with at least a "C") for MAT 0121 or MAT 0122 may not take MAT 0120 for credit. Prerequisite: Satisfactory placement test scores in arithmetic (or DSM 0090) and algebra (or DSM 0095). (F, W, Sp, Su)

**MAT 0121 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 0131 (Calculus) may not take MAT 0121 for credit except by special permission. Prerequisite: Satisfactory placement test scores or MAT 0120. (F, Sp, Su)

**MAT 0122 College Algebra and Trigonometry II** 5-0-5

A continuation of MAT 0121. 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 0121 or permission of instructor. (W, Sp, Su)

**MAT 0130 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 8 hour math requirement. Prerequisite: MAT 0122.

**MAT 0131 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 0122 or satisfactory placement test scores. (F, Sp)

**MAT 0132 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 0131. (F, W)

**MAT 0133 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 0132. (Sp)

**MAT 0140 Introductory Statistics** 5-0-5

A course dealing with collecting, representing, analyzing, and interpreting data. Topics include: measures of central tendency and dispersion; and introduction to probability, permutations, and combinations; the 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 0102 or MAT 0121. (Sp, Su)

**MAT 0231 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, quadric surfaces, multiple integrals, line integrals, and differential equations. Prerequisite: MAT 0133 (Su)

**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 1103 Electrical Math I** 5-0-5  
Review and practice in the fundamental operations with whole numbers, fractions, decimals, and percentage. Introduction to powers and roots as they apply to the electrical trades. Practice problems are drawn from the electrical trades. (F)

**MAT 1104 Electrical Math II** 5-0-5  
This is the second course in mathematics for electricians. Topics include: equations, ratio and proportion, formulae, and basic applied trigonometry. Prerequisite: Permission of the advisor. (W)

**MAT 1123 Machinist Mathematics** 3-0-3  
Introduces gear ratio, 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.

## MANAGEMENT

**MDP 0103 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.

**MDP 0105 Inventory Management** 3-0-3  
Major course objectives will cover the proper balance to maintain to achieve the desired level of customer service, investment in inventories, and proper timing in the management and purchasing requirements.

**MDP 0190 Leadership Development** 3-0-3  
Leadership Development 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)

**MDP 0193 Applied Business Communications** 3-0-3  
This course is designed to encourage participants to be aware of the basic elements of perception and how these affect their communication and relation with other people. (F, Su)

**MDP 0194 Employee Problem Solving** 3-0-3  
This course presents special knowledge, techniques, and skills for coaching your employees on the job. It is based on the learn-by-doing principle. Exercises in problem solving will be conducted and also role playing. (Sp)

**MDP 0201 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.

**MDP 0203 Master Planning** 3-0-3  
This course is divided into two major sections: forecasting and master production scheduling. The techniques and terminology used in and 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.

**MDP 0207 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.

**MARKETING** .....see DMK courses descriptions.

## **MECHANICAL**

### **MEC 0101 Manufacturing Processes I** **3-9-6**

An introduction to the machine shop as it related 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 0102 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 0103 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 0104 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 0110 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 0111 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.

### **MEC 0112 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 industrial processes will be covered.

### **MEC 0113 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. Number system, part programming, and manuscript preparation are covered. New developments in numerical control discussed.

### **MEC 0118 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 shop terms used in treatment of metals will be explained.

**MEC 0119 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. Training will be given the opportunity to acquaint themselves with the equipment and processes of heat treating.

**MEC 0204 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 0205 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, shear, torsion, bending and factors affecting these are analyzed. Stresses in thin-walled cylinders and spheres, riveted and welded joints, beams, columns and machine components are also covered.

**MEC 0208 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 0235 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.

**MEC 0236 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.

**MEC 0238 Heating, Refrigeration and Air Conditioning Systems**

3-0-3

An introduction to heating, air conditioning and refrigeration systems. Study of systems to include the characteristics and selections of equipment and their controls. Thermodynamic principles; psychometrics of air; heat gain/loss calculations; cooling loads; and steam, hot water, warm air, air conditioning, and refrigeration systems are discussed.

**MEC 0260 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.

**MEC 0261 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.

**MEC 0262 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.



- 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  
Additional 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 1124 Fundamentals of Hydraulics** 3-0-3  
This course is arranged to give the students a general knowledge of the basic components of hydraulic systems, as well as a general understanding of the basic laws and formulas used in simple hydraulic calculations. Course covers such topics as the use of standard hydraulic symbols, pumps, control valves, control assemblies, actuators and basic maintenance procedures.
- MEC 1126 Metallurgy — Heat Treating Practice** 3-0-3  
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 1133 Machine Maintenance I** 3-6-5  
Basic fundamentals of installation, maintenance and repair of machines. Methods of rigging and machine installation including location, leveling and fastening are covered. A major emphasis will be placed on devising a preventative maintenance program.
- MEC 1134 Machine Maintenance II** 3-6-5  
Study of those parts of the electrical code which affect the industrial maintenance. Practical experience is provided in wiring, installing and connecting the various types of services for lighting, heating and power installations. Training is provided in troubleshooting in the identification and testing of circuits, in making mechanical adjustments and related maintenance operations on various machines. Schematic diagrams showing the plan of operation for each system, electrical or mechanical, are used.
- MEC 1136 Industrial Water Treatment** 3-0-3  
A study of the common uses and problems concerning water used in various industries. Heat dissipation and contaminants will constitute a major portion of the lectures. Field trips will illustrate how problems have been solved in industry.



**MEC 1137 Sheet Metal Layout****2-3-3**

An introduction to the techniques of sheet metal fabrication. The student will gain an understanding of sheet metal blueprint reading, equipment usage, and safety techniques. "Hands-on" laboratory activities will include the use of the sheet metal shears, brake and other equipment.

**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.

**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 audition. Each student 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 0110, 0111, 0112 - Applied Voice (Major-Principal) I, II, III
- MUA 0210, 0211, 0212 - Advanced Applied Voice (Major-Principal) IV, V, VI
- MUA 0120, 0121, 0122 - Applied Piano (Major-Principal) I, II, III
- MUA 0220, 0221, 0222 - Advanced Applied Piano (Major-Principal) IV, V, VI
- MUA 0130, 0131, 0132 - Applied Brass (Major-Principal) I, II, III
- MUA 0230, 0231, 0232 - Advanced Applied Brass (Major-Principal) IV, V, VI
- MUA 0140, 0141, 0142 - Applied Woodwind (Major-Principal) I, II, III
- MUA 0240, 0241, 0242 - Advanced Applied Woodwind (Major-Principal) IV, V, VI
- MUA 0150, 0151, 0152 - Applied Percussion (Major-Principal) I, II, III
- MUA 0250, 0251, 0252 - Advanced Applied Percussion (Major-Principal) IV, V, VI
- MUA 0160, 0161, 0162 - Applied Organ (Major-Principal) I, II, III
- MUA 0260, 0261, 0262 - 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 ½ hour lesson per week (TBA); 1 credit hour.

- MUA 0113, 0114, 0115 - Applied Voice (Secondary) I, II, III
- MUA 0213, 0214, 0215 - Advanced Applied Voice (Secondary) IV, V, VI
- MUA 0123, 0124, 0125 - Applied Piano (Secondary) I, II, III
- MUA 0223, 0224, 0225 - Advanced Applied Piano (Secondary) IV, V, VI
- MUA 0133, 0134, 0135 - Applied Brass (Secondary) I, II, III
- MUA 0233, 0234, 0235 - Advanced Applied Brass (Secondary) IV, V, VI
- MUA 0143, 0144, 0145 - Applied Woodwind (Secondary) I, II, III
- MUA 0243, 0244, 0245 - Advanced Applied Woodwind (Secondary) IV, V, VI
- MUA 0153, 0154, 0155 - Applied Percussion (Secondary) I, II, III
- MUA 0253, 0254, 0255 - Advanced Applied Percussion (Secondary) IV, V, VI
- MUA 0163, 0164, 0165 - Applied Organ (Secondary) I, II, III
- MUA 0263, 0264, 0265 - Advanced Applied Organ (Secondary) IV, V, VI

**MUS 0101 Medieval and Renaissance Music History****3-0-3**

This course deals with the development of Western music after the Dark Ages. The course covers both vocal and instrumental works, with emphasis on Medieval musical instruments. Listening is emphasized. (F)

- MUS 0102 Baroque Music History** 3-0-3  
The lives and music of such composers as Bach, Handel, and Vivaldi are studied in relationship to their environment. Development of notation, temperament, and patronage are given close attention. Listening is emphasized. (W)
- MUS 0103 Eighteenth Century Music History** 3-0-3  
The lives and music of Handel, Mozart, and Beethoven are studied in relation to their environment. The development of the symphony and sonata form are given close attention. Listening is emphasized. (Sp)
- MUS 0104 Music Theory I** 3-2-4  
This course covers the elementary rudiments of music, specifically scales and intervals. The identification of these scales and intervals are practiced through melodic dictation. Also rhythmic dictation will be introduced. Lab activities will be ear-training and sight-singing. Three lectures and two laboratory periods per week. Required of music majors. (F)
- MUS 0105 Music Theory II** 3-2-4  
This course is a continuation of Music Theory I, but deals with key and triads. Melodic and rhythmic dictation are continued and combined. Ear-training and sight-singing continued in laboratory periods. Prerequisite: MUS 0104. (W)
- MUS 0106 Music Theory III** 3-2-4  
This course teaches the basic techniques of four-part harmony based on the principles of 18th and 19th century composers. Ear-training and sight-singing continued in laboratory periods. Prerequisite: MUS 0105. (Sp)
- MUS 0170 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. (F, W, Sp)
- MUS 0173 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 One through Five 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 his own rate. Open to all students. (F, W, Sp, Su)
- MUS 0174 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. Master 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. (F, W, Sp, Su)
- MUS 0175 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. Master 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. (F, W, Sp, Su)

**MUS 0176 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 the 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 III, or the approval of the instructor based on written tests and performance skills. (F, W, Sp, Su)

**MUS 0177, 0178, 0179 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. (F, W, Sp)

**MUS 0180 Piano Skills**

**0-3-1**

This course is required for all Music Majors. The basic fundamentals of piano technique, scales, harmonization, transposition, and an overview of piano literature will be emphasized. Successful mastery of the content of this course will be required before credit is given. Students will be required to repeat this course each quarter until the Piano Proficiency Examination is passed. (F, W, Sp)

**MUS 0181 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. (F, Sp, Su)

**MUS 0182 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. The course does not require previous musical training. (W, Su)

**MUS 0183 Choral Conducting**

**0-2-1**

This is a course of instruction 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 0201 Nineteenth Century Music History**

**3-0-3**

The lives and music Schubert, Brahms, Mendelssohn and other composers are studied in relation to their environment. The development of opera and art are studied closely. Listening is emphasized. (F)

**MUS 0202 Twentieth Century Music History**

**3-0-3**

The music of our century is discussed in relation to world events. Impressionistic, expressionistic, neo-classic, and twelve tone compositions are viewed in terms of origin and form. Listening is emphasized. (W)



**MUS 0204 Advanced Music Theory IV****3-2-4**

In this advanced musicianship course, the student will learn to recognize music by sight, chords and basic chord progressions. Sightsinging and dictation are continued. Lab activities will be ear-training and sightsinging. Three lectures and two laboratory periods each week. Prerequisite: MUS 0106 (F)

**MUS 0205 Advanced Music Theory V****3-2-4**

In this course the works of Western composers are studied closely in terms of harmony and content. Tonal counterpoint is also introduced. Lab activities will be ear-training and sightsinging. Three lectures and two laboratory periods per week. Prerequisite: MUS 0204. (W)

**MUS 0206 Advanced Music Theory VI****3-2-4**

This course deals with the basics of modern styles and techniques of composition used by Debussy, Stravinsky, Schoenberg, and other 20th century composers. The newest trends in electronic music are also discussed. Lab activities will be ear-training and sightsinging. Three lectures and two laboratory periods per week.

**MUS 0273, 0274, 0275, 0276 Advanced Class Piano IV, V, VI****0-3-1 (Each)**

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 equivalency. (F, W, Sp)

**MUS 0282 Opera Workshop****0-2-1**

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. (F)

**MUS 0283 Chamber Singers****0-2-1**

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. (W)

**MUS 0284 Wind Ensemble****0-3-1**

This course is designed to provide basic experience in the performance of traditional wind ensemble 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. Prior wind ensemble experience is not necessary, however, proficiency in playing an appropriate wind instrument is required. This course may be taken 6 quarters for credit. (F, W, Sp)

**MUS 0285 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. (F, W, Sp)

**NURSING****NUR 1101 Nursing Fundamentals****6-6-3-9**

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. Prerequisite: BIO 1102, NUR 1105, NUT 0101. (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 apply 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. Corequisite: BIO 1103, 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. Prerequisite: NUR 1101, NUR 1102, NUR 1107. (Sp)

#### **NUR 1104 Medical Surgery II**

**8-0-18-14**

This course is designed to develop knowledge and skills 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 1102. (Su)

#### **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 1106 Vocational-Adjustment I**

**3-0-0-3**

This course introduces the student to a brief history of nursing, the legal aspects of nursing, professional ethics, and varied positions available to them in the field of nursing. (Su)

#### **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. (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. Prerequisite: NUR 1101, NUR 1102, NUR 1107. Corequisite: PSY 0117. (Sp)

### **NURSING ASSISTANT/GERIATRIC**

#### **NUR 1115 Basic Nursing Assistant Procedures I**

**6-9-0-9**

Survey of basic health science. Introduction to role of nursing assistant, to understanding effects of illness and to 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. Corequisite: HEA 1101, HEA 1104. (F, Sp)

#### **NUR 1116 Basic Nursing Assistant Procedures II**

**4-3-0-5**

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. Corequisite: HEA 1103, HEA 1105, HEA 1106. (W, Su)

## **NUTRITION**

### **NUT 0101 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)

## **PHYSICAL EDUCATION**

### **PED 0101 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. (F, W, Sp, Su)

### **PED 0102 Archery**

**0-3-1**

Introduces the student to one of the fastest growing and exciting sports. Because of its few restrictions, archery can be performed by both sexes and is adaptable to the individual's physical and emotional needs. Included as the basics of the course are history, nature of the sport, fundamental skills, safety, competitive shooting, and scoring. (F)

### **PED 0104 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. (F, Sp, Su)

### **PED 0105 Tumbling/Gymnastics**

**0-3-1**

A course designed to develop various movement skills and body control techniques through basic tumbling skills; an introduction to basic gymnasium apparatus work. (W)

### **PED 0106 Adult Fitness**

**0-3-1**

Fitness in an individual matter. This course is designed to meet the personal needs of each individual enrolled. The program is designed to develop and maintain the following components of physical fitness: cardiovascular endurance, muscular endurance, strength, and flexibility. Diet, weight control, posture and low back pain will also be covered in this course. (F, W, Sp, Su)

### **PED 0107 Fitness and Figure Control**

**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. (F, W, Sp, Su)

### **PED 0108 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. (F, W, Sp, Su)

### **PED 0109 Yoga**

**0-3-1**

A basic course of instruction in Yoga Techniques designed to improve flexibility and relaxation techniques and contribute to total fitness. (F, W, Sp, Su)

### **PED 0110 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. (W, Sp)

- PED 0111 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. (F, Sp, Su)
- PED 0112 Intermediate Tennis** **0-3-1**  
 A course designed to develop and refine advanced playing skills. Emphasis is placed upon developing sound playing strategy. Not recommended for beginners or players with limited playing experience. (Su)
- PED 0114 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. (F, W, Sp, Su)
- PED 0115 Korean Karate I (Tae Kwon Do) Polk County**  
 An introduction to the martial arts utilizing the Korean form referred to as Tae Kwon Do. Emphasis will be placed on proper conditioning, exercises, and body control relating to the fundamentals of self-defense. Attention will be given to Korean terminology, including a historical overview of its foundation, ranks, promotion, and proper etiquette. (F, W, Sp)
- PED 0117 Korean Karate II (Tae Kwon Do) Polk County**  
 A course of instruction stressing the mental and physical development in the art of Tae Kwon Do. This is an advanced level course. Prerequisite: PED 0115. (F, W, Sp)
- PED 0124 Clogging** **0-3-1**  
 A course designed to teach various types of positions, formations, steps, and identifiable characteristics of clogging. (W)
- PED 0130 Adult Beginning Swimming** **0-3-1**  
 This course is designed for the adult non-swimmer. It is recommended for those who are afraid of the water, have had previous difficulty in learning to swim, have never tried, or have hesitated to take a course for other reasons. Each individual 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. (F, W, Sp, Su)
- PED 0131 Advanced Beginning 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. (F, W, Sp, Su)
- PED 0132 Swimming Techniques** **3-1-3**  
 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 0130 or 0131, and/or the ability to jump into deep water, swim 25 yards using the crawl stroke, turn, and swim on back 20 yards, stop and float motionless for 30 seconds in deep water. (F, W, Sp, Su)
- PED 0133 Basic Rescue and Water Survival** **0-3-1**  
 The objective of this course is to provide the individual with knowledge and skills designed to enable him to save his own life, aid others in danger, and to respond correctly in aquatic emergencies. Major emphasis on the course is on drownproofing, a skill designed to permit



survival for the longest possible time in the water, self-rescue skills, and non-swimming rescues. American Red Cross certification in Basic Rescue and Water Safety is obtainable through this course of instruction. Recommended for all swimmers, boaters, hunters, campers, pool owners, anyone who works, plays, or goes near water. Prerequisite: Jump into deep water, swim 20 yards; swim 20 yards on back; tread water or float motionless for 30 seconds. (Sp)

**PED 0134 Advanced Lifesaving**

**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. Training is not intended to be a complete lifeguard training course. American Red Cross certification is obtainable through this course of instruction. Prerequisite: 1) Perform standing front dive; 2) 500 yd. swim, using crawl, side, breast, and back strokes; 3) surface dive and swim 20 ft. underwater; 4) tread water 1 minute. (W, Sp)

**PED 0135 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 exercises and a self-paced cardiovascular endurance exercise program of alternate swimming and walking laps. (F, W, Sp, Su)

**PED 0136 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 0139 Swimmastics**

**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. (F, W, Sp, Su)

**PED 0140 Backpacking I**

**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. (F)

**PED 0141 Backpacking II**

**0-3-1**

A course of instruction in advanced backpacking techniques. The course emphasizes the theory and practical application of planning and execution of extended backpacking experiences in the wilderness. A substantial portion of the class will be spent on the trail in a selected wilderness area. This course is not recommended for individuals with limited hiking and backpacking skills. Prerequisite: PED 0140 or evidence of basic backpacking skills. (Sp)

**PED 0143 Winter Camping**

**0-3-1**

A course of instruction in the application of basic camping and backpacking skills to camping in cool weather. Emphasis is placed on theory and practical application of knowledge and skills that will enable the individual to adequately plan and experience the winter wilderness experience in safety and comfort. (W)

**PED 0144 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 on Table Rock or at a similar suitable location. (F, Sp)



- PED 0145 Basic Sailing** 0-3-1  
A course of instruction in the safe and correct handling of small sailing craft. (Sp)
- PED 0146 Basic Canoeing** 0-3-1  
A basic course of instruction in the safe and correct handling 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. (F, Sp)
- PED 0147 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 day trip on a scenic Carolina river. Prerequisite: Ability to swim and stay afloat in deep water for five minutes fully clothed. (Sp)
- PED 0148 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 the Green River. A small food fee may be required for overnight trips. (Su)
- PED 0150/0151 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. (W, Sp)
- PED 0160 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. Prerequisite: 1) Swim 200 yards; 2) Tread water 5 minutes; 3) Surface dive to a depth of 9 feet. (F, Sp, Su)
- PED 0162 Kayak** 0-3-1  
A basic course of instruction in the safe and correct handling of the kayak. Prerequisite: Ability to swim 100 yards demonstrating the use of at least two types of swimming strokes; ability to stay afloat in deep water, fully clothed, for five minutes. (Sp)
- PED 0161 Lifeguard Training** 0-3-1  
A course of instruction designed to teach students to: be aware of and eliminate hazards; develop skills necessary to recognize and respond to emergencies; understand the lifeguard/employer and lifeguard/patron relationship; master rescue skills; and be aware of lifeguard responsibilities. American Red Cross lifeguard certification is available through this course of instruction. Prerequisite: Standard First Aid, CPR, and Advanced Lifesaving certifications. (Sp)
- PED 0164 Advanced SCUBA Diving** 0-3-1  
A course of instruction designed to develop advanced SCUBA diving techniques in safety, equipment, knowledge, and skills. A student completing this course of instruction will be prepared to participate in open water diving required for advanced SCUBA certification. Prerequisite: P.A.D.I. Open Water Diver Certification. (Sp)
- PED 0201 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. (W, Sp)

**PED 0202 Soccer****0-3-1**

An introduction to the world's most popular team sport. Included in the course will be the history of the game, rules, equipment, and playing area. The student will learn the basic skills and techniques of play. (F)

**PED 0241 Adult/Infant Swimming****0-3-1**

Infant swimming is a new course with an old but valuable concept. The course is designed to provide parents with the skill, knowledge, and the opportunity to teach their young child how to swim. Course objectives are safety, development of strong health bodies, and above all offer a happy learning experience for the young child from nine months to five years old. Note: The parent is enrolled in the course and must be accompanied by the child. (F, W, Sp, Su)

**PED 0242 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 0244 Adapted Aquatics****0-3-1**

A course of instruction in aquatics for the handicapped. This course is designed to achieve two objectives: to provide individualized instruction in safety and basic aquatic skills for the handicapped; and to provide opportunities for individuals who desire to learn the characteristics, needs, and techniques of aquatic instruction for the handicapped. The course will offer classroom instruction and a personalized practical learning atmosphere for the handicapped student and the student of aquatics for the handicapped. (F, W, Sp, Su)

**PHILOSOPHY****PHI 0260 Introduction to Philosophy****3-0-3**

This course is designed to acquaint the student with the great original thinkers from Plato to some modern philosophers. It will deal with the philosophic approach to the classic problems that confront human society. (W)

**PHI 0261 Problems in Philosophy****3-0-3**

This is a continuation of PHI 0260 with special emphasis on metaphysics and the philosophy of Religion and its influence on morality and the forms of government. Prerequisite: PHI 0206. (Sp)

**PHI 0262 Deductive Logic****3-0-3**

A course in the general principles of deductive logic; both classical and symbolic. Emphasis will be placed on formal logic in analysis and language discourse and also covering ambiguity, fallacies, and the logic of propositions. (Sp)

**PHYSICAL SCIENCE****PHS 0101,0102,0103 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. (F, W, Sp)

**PHS 0160 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 0170 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 0100 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 0101,0102,0103 Technical Physics I, II, III**

**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 converters, transducers, vibrations, waves, time constants, and radiation. The topic are covered from mechanical, electrical, fluidal, and thermal references giving the student a broad background in basic physics.

### **PHY 0160 Descriptive Astronomy**

**2-2-3**

This course will study the structure, mechanics, and observation of the solar system, stars and nebulae. (W)

### **PHY 0201 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 taking MAT 0121 or higher. (F)

### **PHY 0202 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 0201. (W)

### **PHY 0203 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 0202. (Sp)

**PHY 0220, 0221, 0222 are calculus level courses for engineering and science majors.**

### **PHY 0220 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 0131, 0132. (F)

### **PHY 0221 Analytical Physics II**

**3-3-4**

A continuation of physics with emphasis upon the study of thermodynamics, sound and optics. Prerequisite: PHY 0220. (W)

### **PHY 0222 Analytical Physics III**

**3-3-4**

Electricity, magnetism and nuclear physics will be the major topics of study. Prerequisite: PHY 0221. (Sp)



**PHY 1100 Applied Science****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. Two laboratory hours per week. (Su)

**POLITICAL SCIENCE****POL 0260 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 0261 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 0262 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 0263 Special Topics in Political Science****variable**

This course will be concerned with special timely topics that occur in the political science area of study.

**PLUMBING****PLU 1011,1012 Basic Plumbing I and II****2-6-4**

The students are introduced to the tools, fittings, and equipment used by plumbers. They spend considerable time learning to handle these materials and tools correctly by cutting pipe, threading, caulking, and sweating joints of the various kinds of pipe and tubing. Plumbing installations are made to provide practical applications. Heating devices and the storage and circulation of hot water will be studied. The student will receive practice in the installation of various plumbing fixtures and the proper use of traps. Field trips should be taken to study various types of installations.

**PLU 1110 Plumbing Pipework****2-6-4**

Introduction to the tools, fittings, and small equipment used for pipe fitting. Time will be spent in the shop, where the student will learn how to work with these materials. The student will perform operations such as threading, cutting, caulking, and sweating of the various kinds of pipe and tubing used in the trade.

**PLU 1115 Plumbing Codes****3-0-3**

A study is made of plumbing codes and the minimum requirements for local, county, and state plumbing regulations.

**PSYCHOLOGY****PSY 0100 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 0101 Personality 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. (W, Su)



**PSY 0103 Stress Management****3-0-3**

Offered to assist students in better understanding and coping with various types and degrees of stress as it relates to everyday living experiences. Emphasis 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 0104 Introduction to Biofeedback****2-0-2**

The course is designed to familiarize the student with the history, usefulness, and application of biofeedback techniques. Emphasis will be placed on the importance and implications of controlling various physiological functions for better general health and various stress related ailments.

**PSY 0115 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 0116 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 0117 Human Growth and Development****3-0-3**

Considers the development sequence and characteristic behavior of the prenatal period through the life span. Special attention will be given to developmental changes and conditions necessary for optimal development and individual differences. (Sp)

**PSY 0201 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, Su)

**PSY 0260 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 0261 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 0262 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 transfer 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 0263 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 in human behavior. The human relations problems of the individuals are studied in relation to society, group membership, and relationships within the work situation. (Sp)

**PSY 1102 Self Awareness****2-0-2**

This course is designed to enable cosmetology students to better understand themselves and human behavior. Human relations problems are studied in relation to co-workers and relationships in the work situation.

**RECREATION****REC 0101 Introduction to Recreation Services****3-0-3**

This course is designed to introduce the student to the historical and philosophical foundations of leisure and recreation. It includes study of factors involved in the operation of basic recreation units, major program areas, organizational patterns, and the inter-relationship of special agencies and institutions which serve the recreation needs of society.

**REC 0102 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 0103 Recreational Activities II****2-3-3**

A study of the role of music, drama, arts and craft 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 0104 Recreational Activities III****2-3-3**

A study of methods and procedures for conducting a wide variety of individual and group recreational games, activities, tournaments, and special events. Recreation for the handicapped and special groups will be included.

**REC 0105 Arts 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.

**REC 0106 Small Craft Operation I****3-3-4**

A course on instruction in the safe and correct handling of the canoe and related small craft, selection and care of equipment, teaching and organizational methods. Emphasis is placed on preparing the student to be competent in the planning, direction, and instruction of basic small craft activities. Prerequisite: Ability to swim 50 yards; remain afloat in deep water, fully clothed, for 5 minutes.

**REC 0107 Small Craft Operation II****3-3-4**

A course on instruction in the safe and correct handling of sailing craft, selection and care of equipment, teaching, and organizational methods. Emphasis is placed on preparing the student to be competent in the planning, direction, and instruction of basic small craft activities. Prerequisite: Ability to swim 50 yards; remain afloat in deep water, fully clothed for 5 minutes.

**REC 0108 Pool/Spa Operations****4-0-4**

A course of instruction designed to prepare students to be qualified swimming pool and/or spa operators. All aspects of pool/spa operations will be thoroughly explored including such topics as filtration, health and safety, maintenance, water testing, etc. Students will be prepared to test for "Certified Pool Operator" status sponsored by The National Swimming Pool Foundation.

**REC 0109 Team Sports and Games****2-3-3**

A course of instruction designed to teach the fundamental skills, rules, and methods necessary to conduct a variety of group games and sports for varied age groups.

**REC 0110 Individual Sports and Games****2-3-3**

A course of instruction designed to teach the fundamental skills, rules and methods necessary to organize and conduct a variety of individual games and sports for varied age groups.

**REC 0111 Outdoor Recreation****3-0-3**

An overview of the scope, extent, history and development of outdoor recreation and its relationship to conservation and preservation of wilderness areas. Topics such as the role of man and recreation in the wilderness ecological system, state and federal land management practices, and the future of outdoor recreation will be studied. Familiarity with the inter-relationship of various wilderness components will be developed through field studies.

**REC 0112 Outdoor Recreational Activities****2-3-3**

A course designed to prepare the student to plan and direct recreational and educational activities in the out-of-doors. The student will be exposed to a variety of outdoor activities such as rock climbing, rafting, and nature walks.

**REC 0113 Camping and Backpacking****2-3-3**

A course of instruction designed to acquaint the student with the fundamentals of camping and backpacking. It includes such topics as equipment, meal planning and preparation, trail and camp safety, and shelter. Field work provides actual experience in camping and backpacking.

**REC 0114 Wilderness Experience****2-3-3**

A course designed to teach the principles of preparation and execution for extended wilderness outings. A field experience will be designed to expose class members to a variety of wilderness areas demonstrating the special planning required for each.

**REC 0115 Anatomy and Physiology of Exercise****4-0-4**

A study of basic human anatomy and physiology concentrating on the major body systems. Special emphasis is placed on the role of these systems in the production and control of movement, the acquisition of motor skills, and how they respond to exercise.

**REC 0116 First Aid and Safety in Recreation****4-0-4**

A study of accident and emergency situations; causes, prevention, and appropriate first aid treatment. A course on instruction designed to develop competency in recognition of the symptoms of common injuries and illnesses, and the performance of first aid skills. Special emphasis will be placed on safety in sports and recreation.

**REC 0117 Psychology of Leisure****3-0-3**

This course is designed to explore the psychological aspects of participation in sports and recreational activities. The role of individual personality traits in sports, aggression in sports, psychological benefits of recreation, leisure counseling, behavior problems and recreation, and related topics will be presented.

**REC 0120 Group Leadership and Supervision****3-0-3**

A study of factors which characterize various groups and the principles which promote leadership among and within the group. Topics studied will include the leadership functions, the leadership process, techniques of working with groups, supervision, personnel practices and policies, safety and liability. Emphasis will be placed on development of leadership skills.



**REC 0121 Program Planning** 3-0-3  
A study of essential elements and basic principles involved in the organization, supervision, promotion, and evaluation of programs for traditional and special groups.

**REC 0122 Facility Planning and Maintenance** 3-0-3  
A study of general principles and techniques employed in the design, construction and maintenance of recreation facilities from rustic camp sites to highly developed areas.

**REC 0123 Camp Management** 3-0-3  
A study of administrative and management principles and practices essential to the operation of a camp or outdoor recreation facility. Such topics as budget, personnel practices, legal principles and practices, and overall camp operations will be stressed.

#### READING

**RED 0102 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)

**RED 0103 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)

**RED 0260 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 ability to comprehend rapidly and retain concepts.

#### RELIGION

**REL 0160 Introduction to the Old Testament** 3-0-3  
A survey or introduction to the life, literature, geography, and religion connected with the Old Testament. (F, Su)

**REL 0161 Introduction to the New Testament** 3-0-3  
This course is designed to acquaint the student with the history, literature and personalities of the New Testament. (W)

**REL 0162 World Religions and Modern Man** 3-0-3  
A survey and comparison of the origins, developments, beliefs, or practices of the major faiths. (Sp, Su)

**REL 0170 Leaders in 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 0180 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)

#### RADIO AND TELEVISION BROADCASTING

**RTV 0116 Broadcasting Announcing** 3-6-6  
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 0120 Radio Control Room Procedures** 3-0-3  
Familiarization with basic radio equipment, test instruments, station interconnects, balanced and unbalanced lines, reel to reel recorders, cart machines, mics, mixing boards, EBS receivers, RC circuitry, monitoring equipment, transmitters, cassette recorders, antenna systems, phone lines, remote units and teletype equipment.
- RTV 0201 Introduction to Broadcasting** 5-2-6  
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 0202 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.
- RTV 0203 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 0204 Radio Production** 3-B-7  
Creation, development, production, and presentation of broadcast announcements, newscasts, interviews, commercials and dramatic program material with emphasis in the proper use of equipment to achieve effective idea communication.
- RTV 0205 Broadcasting Programming** 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 0206 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 0207 R/TV Production I** 3-B-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 0209 R/TV Production II** 2-B-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 0211 Broadcast Journalism** 5-6-B  
An introduction to the field of broadcasting journalism with special emphasis on the gathering, writing, delivery, editing and processing of news.
- RTV 0212 Broadcasting Management** 3-0-3  
The problems of managing a radio or TV station stressing the social, economic, and legal responsibilities of a broadcast operation.
- RTV 0218 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 0220 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, VITs, dropout compensators, projectors, tally lights and more.

**RTV 0221 Troubleshooting Broadcasting Equipment** 3-3-4

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 0222 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 0226 Supervised Work Experience I** 2-20-4

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 0227 Supervised Work Experience II** 2-20-4

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.

**SMALL BUSINESS**

**SBX 0100 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.

**SBX 0110 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.

**SBX 0111 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.

**SBX 0112 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.

**SBX 0143 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.

- SBX 0160 Microcomputer Use For Small Business** 1-2-2  
 This course is designed for persons committed to starting a small business or for those already in one. The participants will determine their business needs of a microcomputer, select software and hardware, and overcome any fears of a microcomputer.
- SBX 0215 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.
- SBX 0217 Federal Income Taxes for Small Business** 3-0-3  
 This course is an introduction to Federal Income Taxes 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.
- SBX 0219 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.
- SBX 0220 Small Business Marketing & Sales Strategies** 2-0-2  
 This course is designed for persons already in a small business or for 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.
- SBX 0221 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.
- SBX 0225 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.
- SBX 0250 Special Topics (1-3)** variable  
 A study of current business topics. Emphasis will be placed upon subjects which have particular applications for participants. Prerequisite: Permission of instructor. (On demand)

## **SOCIOLOGY**

- SOC 0160 Introduction to Sociology** 3-0-3  
 An analysis of the society and culture dealing with social organization, control, institution, stratification, and social change. (F, 5p)
- SOC 0161 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, 5u)
- SOC 0162 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, 5u)



**SOC 0170 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 0171 Human Sexuality** **3-0-3**  
A study of the biologic and physiologic 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 0215 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 0160,0161,0162 Fundamentals of Spanish I, II, III** **2-3-3 (each)**  
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 0260,0261,0262 Intermediate Spanish I, II, III** **2-3-3 (each)**  
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. Prerequisite: Fundamentals of Spanish I, II, III or two years of high school Spanish. (F, W, Sp)

## **TELECOMMUNICATIONS**

**TEL 0200 Introduction to Telecommunication** **3-0-3**  
This survey course will provide the student with a basic overview of the telecommunications industry. Topics to be covered include the history of voice/data communications, basic services and systems, career opportunities, and an overview of technical tasks.

**TEL 0205 Modulation and Transmission** **5-3-6**  
Topics included in this course include generation and amplification of carrier signals, various modes of modulations (AM, FM, SSB etc.) transmission lines, and antennas. Instruction will be included on proper alignment, tuning, and testing procedures.

**TEL 0206 Communications Receivers** **5-3-6**  
Various types of receivers including AM, FM, and SSB will be studied using a block diagram approach. Emphasis will be placed on specialized receiver circuits such as RF and IF amplifiers mixers, and detectors.

**TEL 0208 Data Transmission** **3-3-4**  
This course will address the theory and applications unique to data transmission. Major topics to be covered include digital processing and information theory, synchronous and asynchronous systems, protocols, circuit arrangements and interface testing.

**TEL 0210 Audio and Video Recording Systems** **5-3-6**  
Topics studied in this course will include storage and retrieval of information on magnetic recording tape as well as operational procedures involved with recording and playback of broadcast standard recordings. Special emphasis will be placed on noise, distortion, frequency response, resolution, color reproduction, etc.

**TEL 0215 Broadcast Standards** **5-3-6**  
This course will include extensive study of current FCC regulations pertinent to broadcast and hard wired communications systems. Emphasis will be placed on testing and adjustment of equipment to insure compliance with applicable standards and preparation for the FCC commercial license exam.



**TEL 0220 Supervised Work Experience****0-20-2**

The student will be employed at a telecommunication work site in a supervised situation. The student will be graded by his supervisor in the areas of technical competency and overall job performance.

**TEXTILES****TEX 0101 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 0102 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 0101. (W)

**TEX 0211 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. Prerequisites: TEX 0113 and 0114. (W)

**TEX 0212 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: Yarn Forming I. (Sp)

**TEX 0213 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)

\*Students may elect up to 8 additional hours in Cooperative Education to satisfy elective requirements.

**WELDING****WLD 0135 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.

**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 alloys 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 involved pipe welding and certification practices. Designed to provide practice in welding of pressure piping in horizontal, vertical, and horizontal fixed position using shielded metal arc welding processes according to Sections VIII and IX of the ASME code. Certification practices involve students' practice in welding the various materials meet certification standards. Students introduced to the various types of tests and testing procedures and perform the details of the test which gives adequate information as to the quality of the weld. Types of tests are guided bend, notched bend, and tensile strength test to check the quality of the work. (Su)
- WLD 1111 Basic Gas Welding** 1-3-2  
Welding demonstrations by the instructor and practice by the students in the welding shop. Safe and correct methods of assembling and operating the welding equipment. Practice is given for the surface welding, bronze welding, silver-soldering, and flame cutting methods applicable to mechanical repair work.
- WLD 1112 Basic Arc Welding** 0-3-1  
Welding practices on material applicable to the installation of body panels and repairs to doors, fenders, hoods, and deck lids. Students run beads, to butt and fillet welding. Perform tests to detect strength and weaknesses of welded joints. Safety procedures are emphasized throughout the course. Intended for students in Auto Body Repair.
- WLD 1113 Mig & Plastic & Spot Welding I** 1-3-2  
The basic principles in use of mig, plastic and spot welding will be taught and a thorough study of how individual panels are held in place.
- WLD 1114 Mig & Plastic & Spot Welding II** 1-3-2  
Further practice in replacing auto body panels. Using spot welding, mig welding and plastic welding. These panels are in hard to replace locations.
- WLD 1118 Welding Problems I** 2-6-4  
Special emphasis will be given to oxyacetylene cutting. Various cutting equipment and cutting techniques will be practiced.
- WLD 1119 Welding Problems II** 2-6-4  
Emphasis will be given to the different types of metal 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/her welding techniques.
- WLD 1121 Welding Problems IV** 2-6-4  
Special emphasis will be given to fabrication techniques. The student will be allowed to experiment by doing special projects.
- 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.
- WLD 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.

## ADMINISTRATORS AND FACULTY

Joyce Abernethy .....	Learning Place Instructor
B.S., Gardner-Webb College	
Marvie Alexander .....	Individualized Instruction Center
Arnold Atchley .....	Auto Body Repair
General Motors Training School	
Geoffrey E. Balkam .....	Vice President Polk County Campus
B.S., M.A., Central Michigan University; Ed.D., Western Michigan University	
Edward L. Barrier .....	Mathematics
A.B., University of North Carolina; M.M., University of Tennessee	
Burr Beard .....	Radio & Television
B.A., University of Pittsburgh; M.A.C., UNC-Chapel Hill	
Carole Blackburn .....	Coordinator, Continuing Education/Outreach
B.A., Salem College; M.Ed., Converse College	Polk County Campus
Carl Biggerstaff .....	Microcomputer Lab Assistant/Software Controller
A.A., Isothermal Community College; B.S., Gardner-Webb College; M.A., Appalachian State University	
Ruth Boehning .....	Special Services
B.A., Adelphi Suffolk College; M.A., Adelphi University; M.Ed., Converse College	
Susan Brainerd .....	Assistant Librarian
A.A., Cayuga County Community College; A.B., M.L.S., Syracuse University; Certification in Gerontology	
Mary B. Burgin .....	Director of Admissions and Development
B.S., East Carolina University; M.A., Appalachian State University	
Leonard Byers .....	Machinist
Barbara P. Hallatt .....	English
B.A., Wake Forest University; M.A.T., Converse College	
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	
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Treva Clayton .....	Business
A.A.S., Isothermal Community College; B.T., Appalachian State University; M.A., Appalachian State University	
Steve Coyne .....	English
B.A., Catawba College; M.A.C.T., UNC-Chapel Hill; Ph.D., University of Denver	
Michael Croushore .....	Physical Education
B.P.E., Purdue; M.A., University of Kentucky	
Rhonda Davis .....	Word Processing
A.A.S., Isothermal Community College; B.T., Limestone College; M.A., Appalachian State University	
Betty G. Deviney .....	Music
B.A., Columbia College; M.A.T., Duke University; M.M., Winthrop College	
Sarah Earley .....	Assitant for Admissions
B.A., UNC-Charlotte	
Royce Ellis .....	Librarian
B.S., University of Denver; M.L.S., George Peabody	
John Foster .....	Mathematics
A.A., Isothermal Community College; B.S., North Carolina State University; M.A.Ed., Western Carolina University	



Clara Fowler B.S., Barber-Scotia; M.A., Appalachian State University	Business
Charles Francis B.A., M.A.E.D., East Carolina University	Counselor, Special Services
Betty Gabriel B.S., Appalachian State University; M.A.Ed., Western Carolina University	Counselor
Jim Garren B.S., M.A., Appalachian State University	Physical Education
James E. Graham A.S., Paducah Jr. College; B.S., M.A., Middle Tennessee State University; M.S., University of Tennessee	Business
Herman Greene B.S., Wofford; M.A., Furman University	Learning Place Instructor
James L. Hall B.S., M.A., Appalachian State University	Mathematics
Frances Haney B.S., M.A., Appalachian State University	Business
Billy V. Hardin A.A.S., Mercer County Community College	Director, Plant Operations & Maintenance
Burton Harris B.S., University of Tennessee	Electrical Installation and Maintenance Instructor
Donna Harrison B.S., Man Hill College; M.A., Appalachian State University	Director, Special Services Program
Mary Ann Head B.A., UNC-Charlotte; M.A., Appalachian State University	Coordinator, Learning Place
Wesley Henderson B.S., University of Mississippi; M.A., State University of New York	Social Science
Charles A. Holcombe, III B.A., High Point College; M.Div., Emory University	Director of Financial Aid
Wayne Hutchins A.B., Duke University; M.A.T., University of North Carolina	Science
Augusta M. Hyde A.A., Isothermal Community College	Assistant for Special Projects
Myra Johnson B.S.B.A., M.B.A., Western Carolina University	Cooperative Education
Catherine Jolley	Controller
Carol Jones B.S., Appalachian State University; M.S.B.E., UNC-Greensboro; Ed.S. App. State University	Business
Chris Koone B.S., Western Carolina University; M.B.A., Golden Gate University; Ed.S., App. State University	Business
Willard L. Lewis B.A., State University of N.Y., Cortland; M.S., State University of N.Y., Oneonta; Ed.D., William and Mary	President
Dewalt Koone B.S., Western Carolina University; M.A., Appalachian State University	Mechanical Engineering
Helyn Lowery B.A. Limestone College; M.A., Ed.S., Appalachian State University	Dean, Business Division
Lowery Luckadoo Certificate, Isothermal Community College	Welding
Norman Marks A.A.S., Isothermal Community College; B.S., Limestone College	Individualized Instruction



- Cindy Martin ..... Physical Education  
A.B., M.A.T., UNC-Chapel Hill
- Janice Mathisen ..... Nursing  
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- Fay McIntyre ..... Retention Coordinator  
A.A.S., Isothermal Community College; B.T., Appalachian State University; M.A., Appalachian State  
University
- Ralph McNabb ..... Auto Mechanics  
B.A., Lenoir Rhyne College
- Frankie McWhorter ..... Public Information Officer  
B.A., Carson Newman College
- Marion Michalove ..... Director, HRD Program  
B.S., Duke University
- Barbara C. Moffitt ..... Librarian/Counselor, Polk Campus  
B.S., State University of New York at Genesee; M.A., Siena Heights College; M.L.S. Candidate, University  
of South Carolina
- Dillard L. Morrow ..... Vice President for Administration  
B.S., M.A., Western Carolina University; Ed.D., North Carolina State University
- Karen Murphy ..... Enrichment Studies  
B.S., California State Teacher's College
- Elizabeth Page ..... Learning Place Instructor  
B.S., Wake Forest University
- Evelyn Parks ..... Cosmetology  
Diploma, Alamance Beauty College; Teacher Certificate, North Carolina State Board of Cosmetic  
Examiners; Cosmetologist License, North Carolina State Board of Cosmetic Examiners
- John F. Paul ..... Dean of Students  
B.A., Cornell College; M.A., George Washington University
- Roy L. Ray, Jr. .... Electronics Engineering  
B.S.E.E., University of Washington (Seattle); M.S.E.E., U.S. Naval Postgraduate School (Monterey, Cal.)
- Linda Rhame ..... ABE Supervisor/Recruiter  
B.A., UNC-Greensboro
- William R. Rogers ..... Social Science  
B.S., M.A., University of Tennessee
- Gary Shipley ..... Science  
B.S., M.A., East Tennessee State University
- Vivian Sitton ..... Coordinator, Individualized Instruction Center  
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A.A., Southeastern Community College; B.S., Pembroke State University; M.A., Appalachian State  
University
- Iverson Smith ..... Occupational Extension Coordinator  
B.S., North Carolina State University; M.S., Ed.S., Western Carolina University
- Antonius Verbruggen ..... Food Service
- Paula Walker ..... Word Processing  
B.S., Gardner-Webb College; M.A., Appalachian State University
- Bob Waters ..... Cosmetology  
Southeastern College of Beauty Culture; Dale Streble University of Cosmetology

- Teresa Webb ..... Cosmetology  
 N.C. Academy of Cosmetic Arts; Instructor Training, Isothermal Community College
- Carl Williams.....Dean of Continuing Education  
 B.S., M.S., M.A., Louisiana State University
- Nancy Womack.....English  
 B.S., Western Carolina University; M.A., Florida Technological University
- Wilbur M. Wright.....Registrar/Director of Institutional Research  
 B.S., M.A., Appalachian State University

# INDEX

Academic Load .....	23	Computer Operations	
Academic Probation and		Certificate — Day .....	95
Suspension .....	21	Evening .....	96
Academic Procedures and Policies .....	20	Conduct, Student .....	38
Accreditation .....	13	Continuing Education .....	47
Administrators and Faculty .....	229	Cooperative Education .....	152
Admissions		Course Description .....	174
Conditional Admissions .....	17	Cosmetology	
Foreign Students .....	17	Course Description .....	174
General Requirements .....	16	Diploma — Day .....	139
High School Students .....	18	Evening .....	140
Readmission .....	18	Counseling, Student .....	33
Self-Enrichment .....	18	Criminal Justice	
Transfer Requirements .....	17	Course Description .....	169
Transient Students .....	17	Technical .....	100
Adult Basic Education .....	50	Curriculum Programs .....	57
Anthropology		Data Processing	
Course Description .....	156	Course Description .....	182
Art		Dean's List .....	28
Course Description .....	156	Developmental Studies	
Pre-Art College Transfer Program .....	75	Course Description .....	180
Associate Degree for Vocational		Diesel Mechanics	
Instructors .....	89	Course Description .....	179
Audio-Visual Services .....	41	Drafting and Design Technology	
Auditing Courses .....	25	Course Description .....	177
Auto Body Repair		Technical .....	103
Certificate Program .....	135	Dress Code .....	38
Course Description .....	158	Economics	
Diploma Program .....	134	Course Description .....	181
Automotive Mechanics		Education	
Certificate Program .....	136	Course Description .....	185
Course Description .....	158	Electrical Installation and Maintenance	
Diploma Program .....	135	Certificate — Evening .....	142
Beautician — See Cosmetology		Course Description .....	189
Biology		Diploma Program .....	141
Course Description .....	160	Electronic Servicing .....	142
Bookstore .....	39	Certificate Program .....	142
Business		Course Description .....	190
Certificate Program .....	94	Electronics Engineering Technology .....	105
Course Description .....	161	Engineering	
Pre-Business Administration .....	64	Course Description .....	188
Pre-Business Education .....	66	Pre-Engineering and Pre-Math College	
Technical — Day .....	92	Transfer Program .....	69
Evening .....	93	Technical Electronics Engineering	
Campus Visits .....	14	Technology .....	105
Career Development Center .....	33	Mechanical Engineering	
Career Planning		Technology .....	124
Course Description .....	186	English	
Carpentry		Course Description .....	192
Course Description .....	168	Estimating	
Changes		Course Description .....	195
Program .....	21	Fees, Student Activity .....	40
Chemistry		Financial Aid .....	41
Course Description .....	168	Foreign Language	
Child Care Worker Program		Course Description .....	197
Diploma .....	137	General Education Program .....	59
Class Attendance .....	23	G.E.D. (General Educational Development)	
Classifications, Student .....	23	Program .....	51
College Calendar .....	5	Geography	
College Transfer Program		Course Description .....	197
Associate of Arts .....	61	Geology	
Associate of Fine Arts .....	63	Course Description .....	197
Associate of Science .....	62	Grade Appeals .....	23

Grading System .....	24	Physical Education	
Graduation		Course Description .....	212
Honors .....	30	Physics	
Procedures .....	30	Course Description .....	217
Requirements .....	30	Placement Service .....	33
Grants		Placement Testing .....	32
North Carolina Student Incentive		Plumbing	
Grants .....	42	Course Description .....	218
PELL (formerly BEOG) Grant .....	42	Political Science	
Supplemental Education Opportunity		Course Description .....	218
Grants (SEOG) .....	43	Polk County Campus .....	53
Health		Pre-Computer Science College Transfer	
Course Description .....	190	Program .....	68
Health Services, Student .....	35	Pre-Law College Transfer Program .....	72
History		Pre-Medical and Pre-Science College	
College .....	11	Transfer Program .....	77
Course Description .....	199	Psychology	
Housing .....	36	Course Description .....	218
HRD Program .....	50	Reading	
Humanities		Course Description .....	181
Course Description .....	199	Real Estate	
ID Cards, Student .....	39	Certificate — Evening .....	129
Individualized Studies .....	151	Refunds, Tuition and Fees .....	40
Industrial Science		Registration .....	20
Course Description .....	200	Religion	
Industrial Supervision & Management		Course Description .....	222
Certificate .....	120	Repeating Courses .....	23
Technical — Day .....	118	Residence Status for Tuition Purposes .....	40
Evening .....	119	Scholarships .....	44
Insurance .....	121	Secretarial Programs	
Technical — Day .....	121	Technical Executive Secretarial	
Intercollegiate Athletics .....	37	Science .....	109
Law — See Pre-Law		General Office Technology	
Learning Disabilities Services .....	153	Day .....	115
Learning Laboratory .....	51	Evening .....	116
Liberal Arts		Social Work	
College Transfer Program .....	75	College Transfer Program .....	82
Loans		Sociology	
Emergency Fund .....	44	Course Description .....	225
Guaranteed Loan Program .....	43	Special Services Program .....	153
Scholarship Loan Fund for Prospective		Learning Disabilities Services .....	153
Teachers of North Carolina .....	43	Student Government Association .....	36
Machinist		Students' Rights .....	38
Certificate — Evening .....	146	Teaching	
Course Description .....	204	Pre-Teaching — College Transfer Program	
Diploma .....	145	Early Childhood Specialist .....	84
Management		Elementary .....	84
Course Description .....	203	Secondary .....	84
Marketing and Retailing		Teacher Associate Program .....	130
Technical — Day .....	122	Technical Programs	
Evening .....	123	Certificate List .....	88
Masonry		Testing, Placement .....	32
Course Description .....	201	Textiles	
Mathematics		Course Description .....	227
Course Description .....	201	Traffic Regulations .....	38
Pre-Math College Transfer Program .....	69	Transcripts .....	31
Mechanical Engineering Technology .....	124	Tuition	
Music		Non-residents .....	40
Course Description .....	207	Residents .....	40
Pre-Music College Transfer Program .....	79	Senior Citizens .....	40
Nondiscrimination Statement .....	14	Veterans Affairs .....	35
Nursing		Vocational Programs .....	134
Nurse Assistant .....	147	Welding	
Course Description .....	210	Certificate Program .....	150
Practical Nurse Education .....	147	Course Description .....	227
Office Hours .....	13	Diploma Program .....	149
Orientation .....	32	Withdrawals .....	21
Philosophy		Work-Study Program .....	43
Course Description .....	216		







**Curriculum Programs**

**College Transfer**

**Technical Programs**

**Vocational Programs**

**Course Descriptions**



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