

CATALOG
1984-1986



VANCE-GRANVILLE
COMMUNITY COLLEGE

Vance-Granville Community College is an equal opportunity, affirmative action institution. The college serves all students regardless of race, creed, color, sex, or national origin. The college is in compliance with Section 504 of the Rehabilitation Act of 1973 prohibiting discrimination with regard to handicap.

VANCE-GRANVILLE COMMUNITY COLLEGE

POST OFFICE BOX 917

HENDERSON, NORTH CAROLINA 27536

**TELEPHONE: Henderson 492-2061
Oxford 693-4088
Butner 575-4737**

Vance-Granville Community College issues this catalog to furnish information about the college and its programs to prospective students and other interested persons. Announcements contained in the catalog are subject to change without notice and may not be regarded in the nature of binding obligations on the college or the state.

CATALOG 1984-1986



TABLE OF CONTENTS

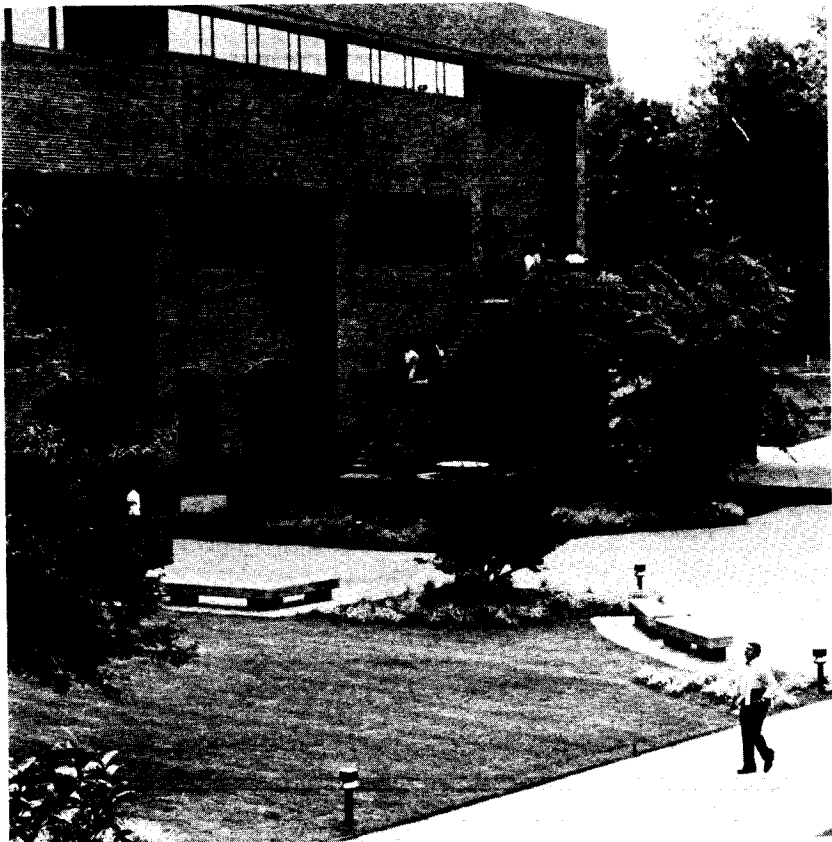
Message from the President	6
The College	8
Admissions	14
Admissions Procedures	
Selective Admissions	
Transfer Admissions	
Readmission	
Placement Testing	
Residency	
Calendar	20
Academic Information	24
Degrees, Diplomas, and Certificates	
Student Classification	
Auditing Courses	
Course Load	
Graduation Requirements	
Grading System and Quality Point Averages	
Contact Hours and Credit Hours	
Standards of Progress	
The Dean's List	
Examinations	
Credit by Examination	
Prerequisites	
Attendance	
Curricula	32
Accounting	
Automotive Mechanics	
Banking and Finance Technology	
Business Administration	
Business Computer Programming	
College Transfer	
Cosmetology	
Criminal Justice Technology	
Education Associate	
Education Aide	
Early Childhood Associate	
Special Education Associate	
Teacher Aide Associate	
Electrical Installation and Maintenance	
Electronic Engineering Technology	
General Office Technical Specialty	
General Office Technology	
Heating and Air Conditioning	
Industrial Maintenance	

Industrial Management	
Light Construction	
Nursing Education	
Associate Degree Nursing	
Practical Nursing	
Nursing Assistant	
Postal Service Technology	
Radiologic Technology (Radiography)	
Recreation	
Recreation Associate	
Therapeutic Recreation	
Secretarial Science — Executive	
Secretarial Science — Legal	
Secretarial Science — Medical	
Textile Technology and Management	
Welding	
Continuing Education	106
Admissions	
Costs	
CEUs/Certificates	
Visiting Artist Program	
Community Services	
Industry Services	
Human Resources Development	
Learning Resources Center	112
The Library	
Audio-Visual-Media Production	
Instructional Unit	
Developmental Studies	118
Language Skills	
Mathematics	
Registration and Records	121
Registration	
Change of Registration	
Student Records	
Expenses	127
Financial Information	
Financial Aid	
General Information	133
Academic Counseling	
Counseling Services	
Day Care Services	
Emergency Information	

- Grievance Procedures
- Health Services
- I.D. Cards
- Job Placement Services
- Orientation
- Parking
- Special Services
- Student Affairs
- Student Conduct
- Student Housing
- Student Organizations and Activities
- Student Activity Approval
- Testing
- Unattended Children on Campus

Course Descriptions 141

Faculty and Staff 195



MESSAGE FROM THE PRESIDENT

Vance-Granville Community College is committed to the ideal that educational opportunities must be available to all individuals who genuinely seek them. Through the efforts of a dedicated Board of Trustees, administration and faculty, and with essential community support, the college is able to fulfill its commitment.

We recognize the necessity for providing programs of study which will enable the citizens of our community to prosper in our rapidly changing society. To meet this objective, our curriculum has been expanded to include new technical programs designed to train individuals for employment in area industries, businesses, and health care facilities where such skills are in demand. Consequently, the community is served in two ways — by providing a well-trained work force for regional employers and by creating greater opportunity for economic advancement to the citizens of Vance, Granville, Franklin, and Warren Counties. Generous donations to the college's scholarship fund ensure that educational opportunity will continue to be available to students for years to come.

In addition to the technical and vocational programs, the college also offers a College Transfer Program for those students who wish to complete the first two years of college work in a familiar setting and at a minimum of expense. The faculty is committed to providing quality instruction to prepare our graduates for success at four-year institutions.

We believe that because education is a lifelong process, an individual who enrolls in any course is taking a step toward improving the quality of his life. Programs for self-improvement are available through Continuing Education to any adult who may wish to develop existing skills, to prepare for the High School Equivalency Exam, or to study one of the many general interest topics offered.

I am confident that this catalog contains a program of study that will be appropriate for you. I encourage you to visit the campus to talk with a counselor about your career opportunities, and I hope that you will decide to make education your investment in the future.

Ben F. Currin
President



BOARD OF TRUSTEES

John K. Nelms	Chairman
Thomas H. Crudup, Jr.	Vice-Chairman
John T. Church	Secretary
Charles E. Anderson	Vance County
John T. Church	Vance County
Thomas H. Crudup, Jr.	Vance County
Elizabeth T. Currin	Granville County
Dr. Robert G. Currin	Vance County
L. Opie Frazier, Jr.	Vance County
Hubert L. Gooch, Jr.	Granville County
Carolyn S. Green	Vance County
John K. Nelms	Granville County
W. D. Payne	Vance County
Bobby W. Rogers	Vance County
Ellen P. Stainback	Vance County

THE COLLEGE

Vance-Granville Community College was created as Vance County Technical Institute by the 1969 North Carolina General Assembly. The College enrolled its first students in Continuing Education classes during the same year.

The old Maria Parham Hospital building in Henderson was converted into an educational facility, and technical/vocational courses began the following fall. From the beginning, the institute's Board of Trustees desired permanent facilities. The Board of Trustees requested the Vance County Board of Commissioners to hold a two-million-dollar bond referendum. Granville County representatives expressed interest in supporting a joint effort to construct and maintain the new campus. With the passing of the bond issue by the two counties, the College changed its name to Vance-Granville Technical Institute. In 1976, the institution moved to the new campus located midway between Henderson and Oxford. Also during this year, the technical institute was approved for community college status, and its name was changed to Vance-Granville Community College.

Enrollment continued to increase as new programs of study were added to meet employment opportunities of the local region. A fifth building was added in 1978, and the College service area was expanded to include Vance, Granville, Franklin, and Warren Counties. The 1981 General Assembly funded a special appropriation for much-needed equipment.

LOCATION

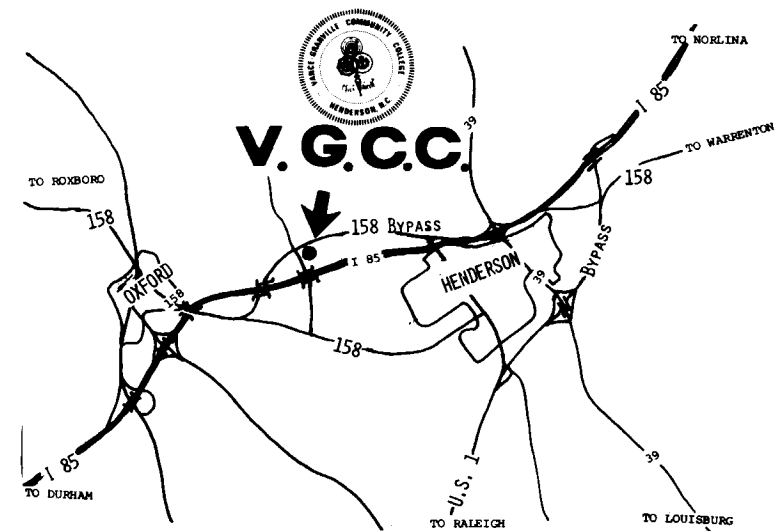
Vance-Granville Community College is located between Oxford and Henderson, North Carolina, on an 83-acre tract of land. The college consists of five classroom buildings valued at over eight million dollars. In addition to offering classes on the main campus, the college offers classes at other locations throughout the four-county area.

CAMPUS OFFICE HOURS

Administrative Offices: 8 a.m. - 5 p.m. Monday thru Friday

Counseling Center/Records Office: 8 a.m. - 8 p.m. Monday thru Thursday, 8 a.m. - 4 p.m. Friday

How To Locate



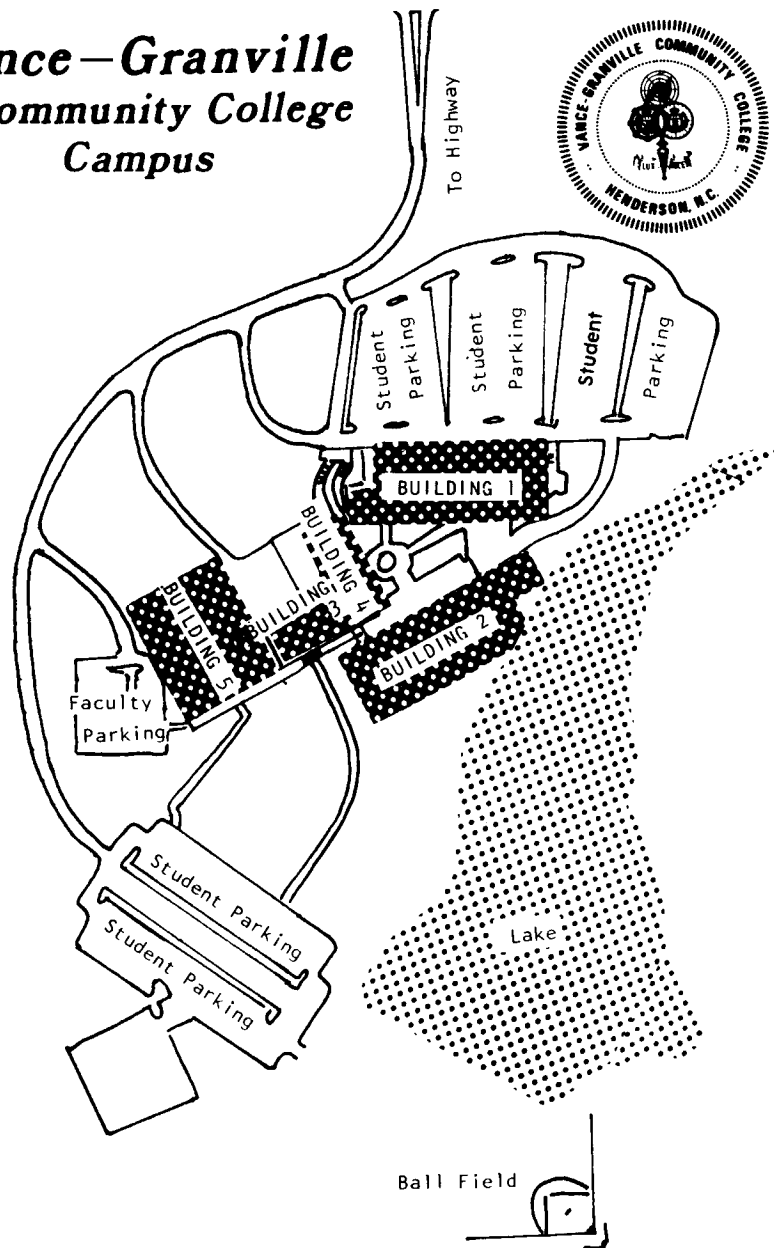
Henderson 492-2061
Oxford 693-4088

VISITORS

Visitors are always welcomed at Vance-Granville Community College. The Student Affairs Office will provide guided tours for groups or individuals. The main campus is open Monday through Thursday both day and evening and on Friday during the day, exclusive of holidays. Personnel from Student Affairs are always happy to answer questions about the college and its programs.

Visitors are not permitted to attend classes or contact students on campus without permission from the Dean of Student Affairs.

Vance-Granville Community College Campus



PHILOSOPHY

The philosophy which guides Vance-Granville Community College and that which gives purpose to the Community College System in North Carolina as a whole is that every individual has the right to advance his skills and knowledge to the limit of his abilities. This concept of the Open Door Policy is expressed succinctly in the words of Dr. Dallas Herring, former Chairman of the North Carolina State Board of Education:

"If they cannot read, then we will simply teach them to read. If they did not finish high school, then we will offer them a high school education. If their talent is technical or vocational, then we will simply offer them instruction they can sell in the market place of our state. If their needs are in the great tradition of liberal education, then we will provide them instruction extending through two years of standard college work."

In order to assure everyone an equal opportunity to learn and improve skills and to develop social abilities and responsible attitudes, the doors to Vance-Granville Community College will never be closed to anyone of eligible age who can profit from its programs. The college strives to take people where they are and take them as far as they can go within the purpose and capabilities of the college.

PURPOSE AND OBJECTIVES

The purpose of Vance-Granville Community College is to extend accessible and affordable lifelong learning opportunities that will enable the citizens of Vance, Granville, Franklin, and Warren counties and beyond to acquire the skills necessary to obtain gainful employment, overcome handicaps imposed by illiteracy and insufficient mastery of basic skills, acquire the first two years of a college education, and enhance the quality of life through the development of personal interests and talents.

- Specific objectives established to accomplish this purpose are to:
- Provide associate degree and diploma programs in technical and vocational areas, to prepare students for initial employment as qualified technicians and skilled craftsmen;
 - Offer a broad scope of occupational courses designed to upgrade the skills of workers in their present job situations;
 - Offer literacy training, high school preparation and development programs for adults to overcome barriers set by insufficient mastery of basic skills;
 - Provide a college transfer program extending through two years of college coursework;
 - Make available opportunities for people to pursue a vocational interest and cultural enlightenment;

- Provide administrative leadership sensitive to the community's educational needs and responsible in the management of the resources entrusted to the college;
- Provide student development services including personal, educational and vocational counseling;
- Provide competent and sensitive instructors and the essential academic support services to enhance the student's likelihood of success;
- Maintain articulation between this college and the public schools and other institutions and agencies to assure a complete educational program for all citizens.

In recognition of the legitimate claims of every person to develop to the fullest his educational potential, the doors of Vance-Granville Community College are open to anyone of suitable age who can benefit from what the college has to offer.

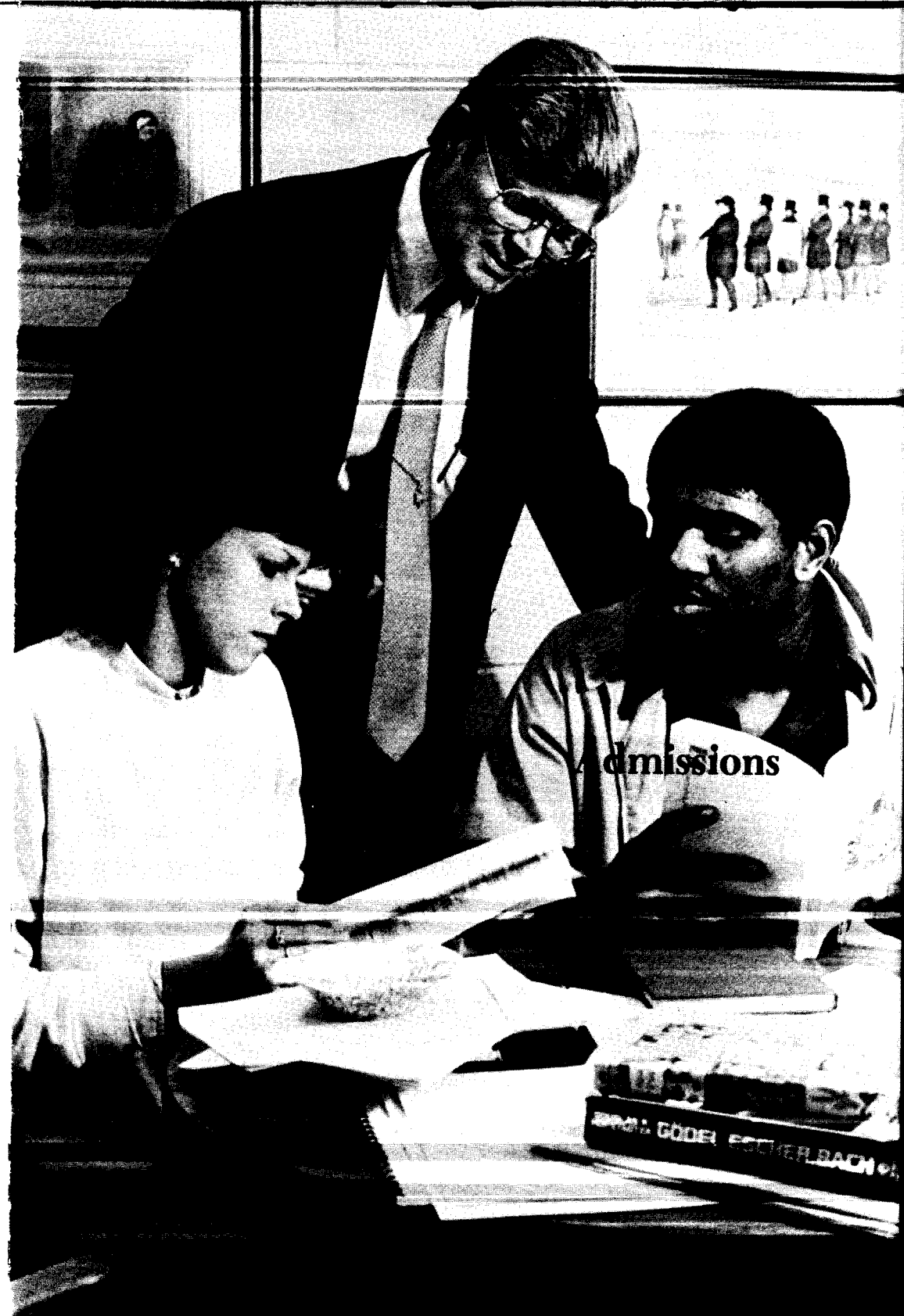
ACCREDITATION AND MEMBERSHIPS

Vance-Granville Community College is a member of the North Carolina Community College System and operates under the authority of a local Board of Trustees and the State Board of Education, as specified in chapter 115a of the General Statutes of North Carolina and Amendments thereto. Vance-Granville Community College is accredited by the Southern Association of Colleges and Schools and by the North Carolina State Board of Community Colleges.

Vance-Granville Community College is a member institution of the American Association of Community and Junior Colleges.

CONSUMER INFORMATION

In order to provide complete explanations on items of consumer information, the college makes available descriptive literature, which may be found in the Admissions area. This information considers related educational expenses; student rights and responsibilities; financial aid policies, procedures, and the award process; and Affirmative Action/Equal Opportunity policies. Much information is also described throughout this catalog.



ADMISSIONS

Vance-Granville Community College maintains an "open door" Admissions Policy for all applicants who are high school graduates or who are eighteen years old or older. Placement of students in the various programs of instruction is selective with special emphasis on career guidance and individual admissions counseling. The college serves all individuals who can profit from instruction regardless of race, creed, sex, age, religion, national origin, physical or mental disability or other non-relevant factors.

Admission to a specific course of study is based upon guidelines developed to help the student determine his/her chances of success in that career field. Before the student is admitted to any curriculum, a counseling interview and/or academic advising session is arranged, and a series of placement tests are scheduled. When scores on tests or other evidence indicates a lack of readiness to pursue a specific curriculum, the student will be assigned to the Developmental Studies Program, or he/she may be encouraged to reevaluate occupational and/or educational goals.

Selective admissions procedures will be followed in programs which limit enrollment due to regulatory agencies or space/equipment requirements.

Students entering degree programs are required to be high school graduates or the equivalent. Students entering programs which offer the vocational diploma or certificate should be high school graduates, but exceptions may be made for adults who have been out of school for some time, who can profit from instruction.

Admissions Procedures for College Transfer, Technical, and Vocational Programs.

The admissions process requires that the applicant:

1. Submit a completed admissions application.
2. Submit a transcript of all previous education beyond the eighth grade.
3. Report to the college for admissions placement testing. The student will be tested in the areas of English, mathematics and reading to determine entry level courses.
4. Participate in academic advising.

Admission of High School Students "Shared Time" or Dual Enrollment

By the authority of the North Carolina State Board of Education and agreements with the Vance-Granville Community College Board of Trustees, high school students may enroll at the college for credit and

non-credit courses. Students must be at least 16 years of age, have permission of their high school principal, and meet other criteria set forth in state and local guidelines.

Selective Admissions

Selective Admissions are used in programs of study which require additional standards to the "open door" philosophy. In addition to the standard procedures required of all curricular applicants, students desiring enrollment in Associate Degree Nursing, Business Computer Programming, College Transfer, Cosmetology, Electronics Engineering Technology and Radiologic Technology must meet specific departmental requirements.

Selective Admissions Procedures:

1. Qualify on entrance tests as prescribed for the program of study.
2. Schedule a personal interview for the purpose of evaluation.
3. Submit three personal references.
4. Meet secondary school or post secondary course requirements as established for specific programs of study.
5. After all admissions requirements have been met by the applicant, official admission is contingent upon satisfactory physical health as required by regulatory agencies.

Note: For selection to specific programs of study inquiries should be directed to the Admissions Office or the Admissions Counselors.

TRANSFER FROM POST-SECONDARY INSTITUTIONS

The student who has successfully completed courses at other institutions must adhere to the same procedures as an incoming freshman. The student is responsible for submitting his application and transcripts of all previous educational experience. A catalog of the college attended or an official statement giving description of the courses completed would be beneficial.

Courses completed at other institutions for which transfer credit is requested will be evaluated by the Registrar in accordance with the following statements:

- A. Transfer credit may not exceed fifty percent of the diploma or degree requirements as stated in the desired program of study.
- B. Credit for work taken ten or more years prior to the application for admission to Vance-Granville Community College must be approved by the appropriate Departmental Chairman.
- C. All credit to be transferred must be equated with curriculum offerings in the desired program of study.
- D. No grade lower than a "C" may be transferred.

E. Transfer of credit will not influence the student's grade point average and will not be evaluated in graduation honors or other awards.

Transfer Within the College

Students that desire to change from one program to another may have their records reviewed for possible transfer of credit. In cases where grades are acceptable and prior course work is applicable to the new curriculum, transfer may be allowed. Transfer of credits will not influence the student's grade point average in the new program.

PROVISIONAL STUDENTS

Students whose records are not complete *may be permitted* to enter the college as provisional students on the basis of a personal interview with a member of the Student Affairs staff. A provisional student will be required to complete the pre-entrance examinations and to submit all required transcripts prior to final acceptance into the desired program of study. No provisional student will be certified for veterans' benefits or Pell Grant awards until full admissions status is awarded.

SPECIAL STUDENTS

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

TRANSIENT STUDENTS (Visiting Students)

A person who has been accepted by or is enrolled at another institution may be admitted as a transient student at Vance-Granville Community College. An application, along with a statement from the Registrar of the home college, must be filed in the Admissions Office. Transient students may take approved courses for transfer credit provided the student meets any prerequisites for the course; approval of courses is the responsibility of the student and the home institution.

ADULT EDUCATION AND EXTENSION STUDENTS

Any student admitted to class must have reached his or her eighteenth (18th) birthday, and the student's regular public class must have graduated. Students who are not eighteen years of age may be admitted for special programs when approved by the appropriate school principal and superintendent.

FOREIGN STUDENTS

Students from other countries are admitted in the same manner as other applicants with these exceptions: Before being considered for admission, a foreign student must (1) present an acceptable score on the Test of English as a Foreign Language or take and pass the high school equivalency examination or present other acceptable proof of ability to speak, write and understand the English language; (2) submit official transcripts of high school or college records; and (3) submit a statement from a bank or other appropriate official certifying that the applicant has sufficient funds to cover all expenses incurred while attending Vance-Granville Community College including tuition, fees, incidental expenses, food, housing and transportation. For tuition purposes, a foreign student is classified as an out-of-state student and will, therefore, be charged out-of-state fees.

WAIVER OF TRANSCRIPT REQUIREMENTS

The transcript requirement is waived for applicants who enter to audit courses or enroll as special students.

REENTERING STUDENTS

A student who previously attended Vance-Granville Community College but was not enrolled the preceding quarter must make application for readmission. If the applicant was enrolled in another college during the interval, he must request that college to send an official transcript of academic work to the Records Office.

READMISSION OF STUDENTS DISMISSED FROM THE COLLEGE

Students who have been suspended for academic difficulties or other reasons may request readmission through the standard admissions procedures. Applicants will be reviewed with all aspects of the "open door" philosophy being considered.

Specific Readmission Policies:

1. Students who wish to reenter a curriculum from which they have been suspended must have written approval from the Dean of Students and the Program Head.
2. Students readmitted to the same program after suspension must earn a quality point average of 2.5 or better each quarter until satisfactory progress has been achieved.
3. Students readmitted to other programs of study will follow guidelines of transfer within the institute.

4. The Dean of Students and/or Program Head may impose certain restrictions such as course load, periodic grade reviews, or other conditions on readmitted students.
5. A readmitted student is subject to dismissal should he/she fail to meet the conditions stipulated by the Dean of Students.

PLACEMENT TESTING

Each new curricular student is required to take a placement test battery prior to the initial registration. The placement tests are not an entrance examination and will in no way deny admission to any applicant. Placement scores will be used in academic advising and in determining a student's chances of success in selected courses of study. Students who lack sufficient scores on the placement tests to meet the minimum prerequisites for selective admissions will be given opportunities to eliminate deficiencies through the Developmental Studies Program. All testing must be scheduled in advance through the Student Affairs Division. All individuals wishing to be tested must have a **completed application on file in the Admissions Office.**

WAIVER OF PLACEMENT TESTS

The placement test battery may be waived for the following applicants:

1. Transfer students who have earned a grade of "C" or better in one English and one mathematics course at a college, university, or technical college.
2. Applicants who scored at least 800 on the Scholastic Aptitude Test (SAT) with neither score below 400.
3. Applicants who enroll as special or audit students.

RESIDENCE STATUS FOR TUITION PAYMENT

The tuition charge for persons who have been legal residents of North Carolina for at least 12 months is less than for non-residents. G.S. 116-143.1 of N.C. State Statutes covers the requirements for determining resident status for tuition purposes. A portion of G.S. 116-143.1 is quoted as follows:

"To qualify as a resident for tuition purposes, a person must have established legal residence (domicile) in North Carolina and maintained that legal residence for at least 12 months immediately prior to his or her classification as a resident for tuition purposes. Every applicant for admission shall be required to make a statement as to his length of residence in the State.

To be eligible for classification as a resident for tuition purposes, a person must establish that his or her presence in the State currently is, and during the requisite 12-month qualifying period was, for purposes

of maintaining a bona fide domicile rather than of maintaining a mere temporary residence or abode incident to enrollment in an institution of higher education.

An individual shall not be classified as a resident for tuition purposes...until he or she has provided such evidence related to legal residence and its duration as may be required by officials of the institution..."

Information relating to claimed North Carolina residence for tuition purposes shall be required from all applicants claiming to be North Carolina residents, and a determination shall be made by the Dean of Student Affairs as to whether or not the applicant qualifies for in-state tuition rates. Should the ruling be contrary to the applicant's expectation, it may be appealed to the Student Affairs Committee of the College. Should the Student Affairs Committee's ruling be contrary to the applicant's expectation, it may be appealed to the State Residence Committee. In the event that an appeal is deemed necessary, full information on procedures shall be provided by the Dean of Student Affairs.

The burden of establishing facts which justify classification of a student as a resident entitled to in-state tuition rates is on the applicant for such classification. Decisions by the college will be based on the requirements of the General Statutes of North Carolina, and regulations specified in "A Manual to Assist the Public Higher Education Institutions of North Carolina in the Matter of Student Residence Classification for Tuition Purposes." Applicants with questions not covered by this section should contact the Dean of Student Affairs.

An information questionnaire will be supplied to each student upon acceptance. This questionnaire should be completed and returned to the Admissions Office prior to registration.

CALENDAR OF EVENTS

1984-1986

FALL QUARTER 1984

August 21, 22, 23	<i>Tuesday, Wednesday</i>	Registration/Payment of Fees
	<i>Thursday</i>	
August 22	<i>Wednesday</i>	New Student Orientation
September 11	<i>Tuesday</i>	New Student Orientation
September 12	<i>Wednesday</i>	Late Registration
September 13	<i>Thursday</i>	Curriculum Classes Begin
September 19	<i>Wednesday</i>	Last Day to Add a Class
September 26	<i>Wednesday</i>	Last Day to Withdraw Without Penalty
October 24	<i>Wednesday</i>	Last Day to Withdraw With a "W" Grade
November 22, 23	<i>Thursday, Friday</i>	Thanksgiving Holiday
November 30	<i>Friday</i>	Curriculum Classes End

WINTER QUARTER 1984-85

November 19, 20, 21	<i>Monday, Tuesday</i>	Registration/Payment of Fees
	<i>Wednesday</i>	
December 5	<i>Wednesday</i>	Late Registration/New Student Orientation
December 6	<i>Thursday</i>	Curriculum Classes Begin
December 12	<i>Wednesday</i>	Last Day to Add a Class
December 19	<i>Wednesday</i>	Last Day to Withdraw Without Penalty
December 20-		
January 2	<i>Thursday-Wednesday</i>	College Closed-Christmas Holiday
January 3	<i>Thursday</i>	Curriculum Classes Resume
January 30	<i>Wednesday</i>	Last Day to Withdraw with a "W" Grade
March 6	<i>Wednesday</i>	Curriculum Classes End

SPRING QUARTER 1985

February 26, 27	<i>Tuesday, Wednesday</i>	Registration/Payment of Fees
March 8	<i>Friday</i>	New Student Orientation/Late Registration
March 11	<i>Monday</i>	Curriculum Classes Begin
March 15	<i>Friday</i>	Last Day to Add a Class
March 22	<i>Friday</i>	Last Day to Withdraw Without Penalty
April 8	<i>Monday</i>	Easter Monday Holiday
April 22	<i>Monday</i>	Last Day to Withdraw with a "W" Grade
May 27	<i>Monday</i>	Curriculum Classes End

SUMMER QUARTER 1985 (11 Week Session)

May 15, 16	<i>Wednesday, Thursday</i>	Registration/Payment of Fees
June 7	<i>Friday</i>	New Student Orientation
June 7	<i>Friday</i>	Late Registration
June 10	<i>Monday</i>	Curriculum Classes Begin
June 14	<i>Friday</i>	Last Day to Add a Class
June 21	<i>Friday</i>	Last Day to Withdraw Without Penalty
July 1-5	<i>Monday-Friday</i>	Independence Day Holiday
July 26	<i>Friday</i>	Last Day to Withdraw with a "W" Grade
August 30	<i>Friday</i>	Curriculum Classes End
September 8	<i>Sunday</i>	Graduation

SUMMER QUARTER 1985 (7 Week Session)

May 15, 16	<i>Wednesday, Thursday</i>	Registration/Payment of Fees
June 7	<i>Friday</i>	New Student Orientation
June 7	<i>Friday</i>	Late Registration
June 10	<i>Monday</i>	Curriculum Classes Begin
June 13	<i>Thursday</i>	Last Day to Add a Class
June 19	<i>Wednesday</i>	Last Day to Withdraw Without Penalty
July 1-5	<i>Monday-Friday</i>	Independence Day Holiday
July 10	<i>Wednesday</i>	Last Day to Withdraw with a "W" Grade
August 1	<i>Thursday</i>	Curriculum Classes End

FALL QUARTER 1985

August 20, 21, 22	<i>Tuesday, Wednesday</i>	Registration/Payment of Fees
	<i>Thursday</i>	
August 22	<i>Thursday</i>	New Student Orientation
September 9	<i>Monday</i>	New Student Orientation
September 10	<i>Tuesday</i>	Late Registration
September 11	<i>Wednesday</i>	Curriculum Classes Begin
September 17	<i>Tuesday</i>	Last Day to Add a Class
September 24	<i>Tuesday</i>	Last Day to Withdraw Without Penalty
October 22	<i>Tuesday</i>	Last Day to Withdraw with a "W" Grade
November 26	<i>Tuesday</i>	Curriculum Classes End
November 28, 29	<i>Thursday, Friday</i>	College Closed-Thanksgiving Holiday

WINTER QUARTER 1985-86

November 18, 19, 20	<i>Monday, Tuesday</i>	Registration/Payment of Fees
	<i>Wednesday</i>	
December 4	<i>Wednesday</i>	Orientation/Late Registration
December 5	<i>Thursday</i>	Curriculum Classes Begin
December 11	<i>Wednesday</i>	Last Day to Add a Class
December 18	<i>Wednesday</i>	Last Day to Withdraw Without Penalty
December 23-		
January 3	<i>Monday-Friday</i>	College Closed-Christmas Holiday
January 6	<i>Monday</i>	Curriculum Classes Resume
January 29	<i>Wednesday</i>	Last Day to Withdraw with a "W" Grade
March 5	<i>Wednesday</i>	Curriculum Classes End

SPRING QUARTER 1986

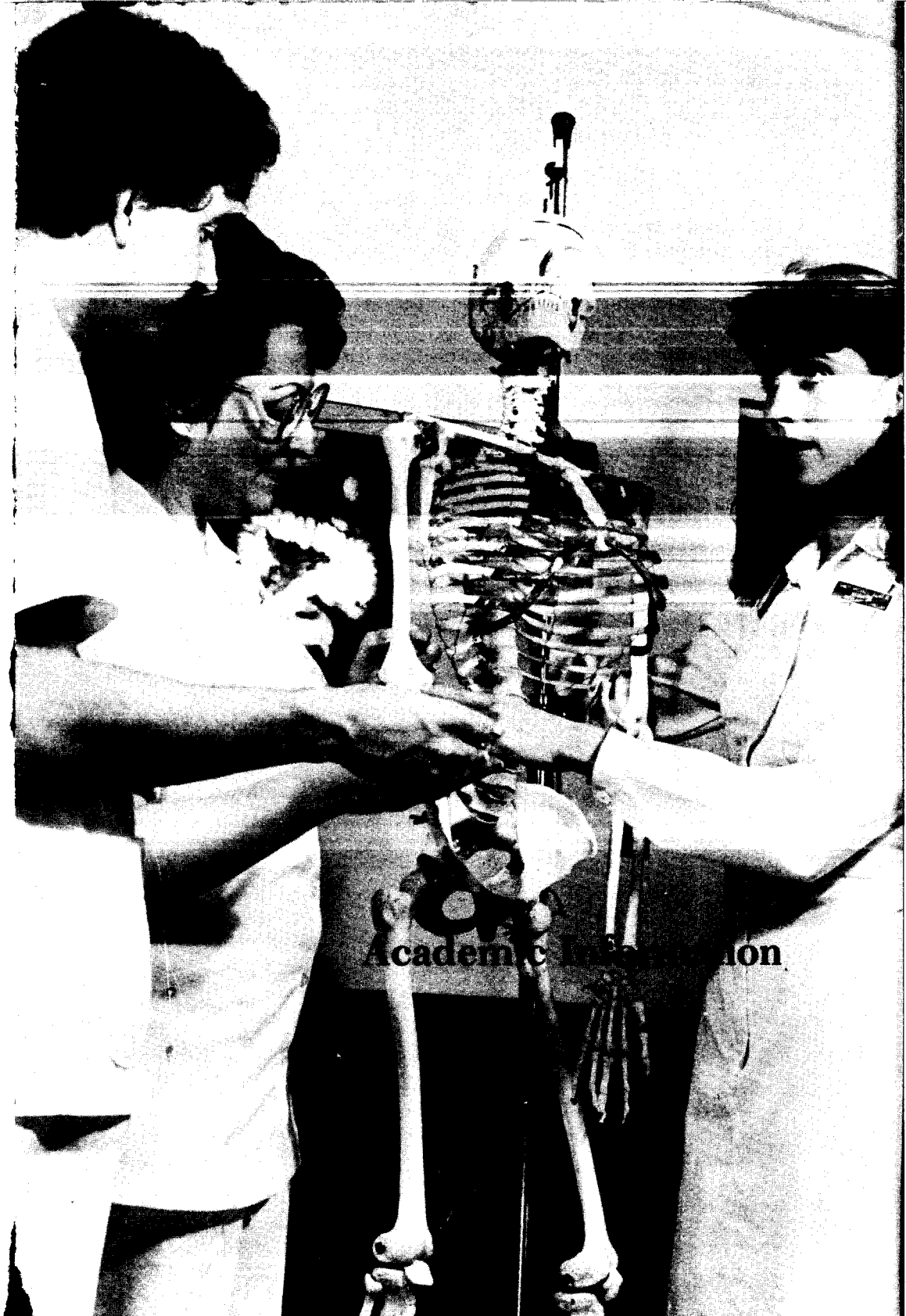
February 19, 20	<i>Wednesday, Thursday</i>	Registration/Payment of Fees
March 7	<i>Friday</i>	Orientation/Late Registration
March 10	<i>Monday</i>	Curriculum Classes Begin
March 14	<i>Friday</i>	Last Day to Add a Class
March 21	<i>Friday</i>	Last Day to Withdraw Without Penalty
March 31	<i>Monday</i>	Easter Monday Holiday
April 21	<i>Monday</i>	Last Day to Withdraw with a "W" Grade
May 26	<i>Monday</i>	Curriculum Classes End

SUMMER 1986 (11 Week Session)

May 14, 15	<i>Wednesday, Thursday</i>	Registration/Payment of Fees
June 6	<i>Friday</i>	Late Registration
June 9	<i>Monday</i>	Curriculum Classes Begin
June 13	<i>Friday</i>	Last Day to Add a Class
June 20	<i>Friday</i>	Last Day to Withdraw Without Penalty
June 30-July 4	<i>Monday-Friday</i>	Independence Day Holiday
July 25	<i>Friday</i>	Last Day to Withdraw with a "W" Grade
August 29	<i>Friday</i>	Curriculum Classes End
September 6	<i>Sunday</i>	Graduation

SUMMER QUARTER 1986 (7 Week Session)

May 14, 15	<i>Wednesday, Thursday</i>	Registration/Payment of Fees
June 6	<i>Friday</i>	Late Registration
June 9	<i>Monday</i>	Curriculum Classes Begin
June 11	<i>Wednesday</i>	Last Day to Add a Class
June 16	<i>Monday</i>	Last Day to Withdraw Without Penalty
June 30-July 4	<i>Monday-Friday</i>	Independence Day Holiday
July 10	<i>Thursday</i>	Last Day to Withdraw with a "W" Grade
July 28	<i>Thursday</i>	Curriculum Classes End



ACADEMIC INFORMATION

DEGREES, DIPLOMAS AND CERTIFICATES

The college offers the following degrees, diplomas or certificates for students who successfully complete approved programs of instruction:

1. The Associate in Arts is awarded to students majoring in college-transfer programs and who may plan to transfer to four-year colleges or universities after completing their community college program.
2. The Associate in Applied Science Degree is awarded to students majoring in one of the technical curricula and who plan to obtain full-time employment upon graduation from the college.
3. A Diploma is awarded to students who complete the one-year vocational curricula.
4. A Certificate is awarded to students who complete programs less than one year in length.
5. A High School Diploma is awarded to students qualifying through the Learning Resources Center program. The diploma is awarded by The Vance County Board of Education in cooperation with Vance-Granville Community College.
6. The Adult High School Equivalency Certificate is awarded by the North Carolina Department of Public Instruction to individuals who make satisfactory scores on the General Educational Development (GED) tests.

STUDENT CLASSIFICATION

- FRESHMAN** — A student who has earned less than 54 quarter hours of credit.
- SOPHOMORE** — A student who has earned 54 or more quarter hours of credit.
- FULL-TIME OR REGULAR STUDENT** — A student who is registered for 12 or more credit hours.
- PART-TIME STUDENT** — A student who is taking less than a full-time course of instruction.
- SPECIAL STUDENT** — An auditor or part-time student not seeking a degree.

AUDITING COURSES

A student may elect to audit a course or courses, and is responsible for informing the instructor he wishes to audit. Those students who audit receive no credit and do not have to take any examination; otherwise, participation in class is on the same basis as a credit student. The fee for auditing is the same as the fee for credit. The student who enrolls for a course cannot change from audit to credit or credit to audit after the drop/add period.

COURSE LOAD

A student's normal load will be from 16 to 20 credit hours per quarter. Students enrolled for 12 or more credit hours will be considered full-time students. Students who wish to carry credit hour loads of more than 20 hours per quarter must obtain the approval of their academic advisor and the Dean of Student Affairs.

GRADUATION REQUIREMENTS

Only one formal graduation is held annually.

To be eligible for graduation, a student must:

1. Successfully complete his course of study.
2. Earn a cumulative quality point average of 2.0 on all work attempted that is applicable toward graduation.
3. Have no outstanding balance due to the Business Office. No degree, diploma, certificate, or transcript of a record will be issued to a student who has not made *satisfactory settlement* with the Business Office for all *indebtedness to the college*.
4. Have submitted a graduation checklist to the Records Office. This checklist must be completed with the student's advisor within three weeks of the beginning of the student's last quarter.

APPLICATION FOR GRADUATION

It is the responsibility of the student to make application for graduation during the quarter preceding that in which he/she expects to complete curricular requirements (See "Academic Calendar" for dates to apply). The student should first see his/her advisor to: (1) determine status in regard to completion of curricular requirements, and (2) obtain an Application for Graduation Form. When this form has been completed by the student and signed by the advisor, the student files it with the Records Office, which will certify the student for graduation when all graduation requirements have been met. The graduation fee must be paid at this time.

Graduation exercises to award degrees and diplomas are held following Summer Quarter. The specific date is listed in the College Academic Calendar.

Candidates for degrees and diplomas must attend commencement exercises unless excused by the Dean of Students.

GRADING SYSTEM AND QUALITY POINT AVERAGE

A grading system is a method of recording faculty evaluations of student progress and the fulfillment of class objectives. All students officially enrolled in courses must be awarded a grade in accordance

with college policies. The grade is awarded by the instructor and may not be changed without proper authorization forms being completed by the instructor.

Grade	Explanation	Quality Points Per Credit Hour
A	Excellent Quality	4
B	High Quality	3
C	Average Quality	2
D	Minimum Satisfactory Quality	1
F	Unacceptable Quality	0
I	Incomplete Grades (No Credit)	0
R	Reschedule	0
X	Audit (No Credit)	0
W	Officially Withdrew	0

INCOMPLETE GRADE

(No Credit) The symbol "I" is assigned in place of a grade when students who are making satisfactory progress are unable to complete all class assignments. The requirements for satisfactory completion of a course will be established by the instructor in accordance with course objectives. The incomplete "I" is temporary and must be changed to a grade (A, B, C, D, F) within the time period designated by the instructor, but not to exceed six weeks from the close of the term in which the course was taken, or graduation. The "I" is used for verifiable unavoidable reasons and extends enrollment without requiring rescheduling of the course. The instructor will award a permanent grade based upon course objectives successfully completed, and it is the responsibility of the student to ensure satisfactory completion.

"R" GRADE

(No Credit) The "R" indicates the student is making *progress* but has not met the minimum course objectives. The student can profit by remaining in the course and should *reschedule* during the next registration. The "R" will not be computed in quality point averages and no credit is awarded. The "R" grade may only be used in designated developmental courses and in the AVT Center. (For financial aid purposes and veterans benefits, the "R" grade is classified as non-punitive.)

"W" GRADE

(No Credit) The "W" indicates the student officially withdrew from the course without academic penalty. The "W" requires the student to

reenroll in order to receive credit for the course. Students who officially register for a course may not withdraw merely by nonattendance.

Note: "I," "R," and "W" grades may also affect eligibility for financial aid and veterans benefits in accordance with academic standards of progress.

Students who fail to withdraw officially will receive an "F" on each course for which they were registered.

CHANGE OF GRADE

Awarding grades to students is the responsibility of the instructor. Once awarded, a grade may be changed only upon written explanation and authorization from the instructor to the Records Office using the Change of Grade form.

COMPUTING QUALITY POINT AVERAGES

The grades for each subject will be converted to quality points. A quality point average will be determined for an individual's academic standing for awards and probation. The grade for each subject will be converted to quality points by:

1. Multiplying the quarter hour credits times the quality points awarded.
2. The total quality points are then divided by the total quarter hour credits of courses attempted to obtain the quality point average.

CONTACT HOURS AND CREDIT HOURS

Quarterly credit hours are awarded for classes on the following arrangements:

Lecture: one quarter hour credit for each class hour per week for eleven weeks.

Demonstration Laboratory: one quarter hour credit for each two hours of laboratory work per eleven weeks.

Manipulative Laboratory: one quarter hour credit for each three hours of laboratory or shop per week for eleven weeks.

STANDARDS OF PROGRESS

Each student at Vance-Granville Community College is expected to maintain satisfactory academic progress toward completing requirements of a degree or diploma or certificate. At the end of each quarter a student's quality point average for that quarter and his cumulative quality point average are examined. To maintain academic progress a student must complete a certain number of credit hours (based on

enrollment status and program of study) and maintain a cumulative grade point average of 2.0. Individuals whose quality point average falls below a 2.0 (C) will be placed on academic probation.

All students are considered to be making satisfactory progress unless placed on academic probation for a second time in an academic school year. The student who receives a second probation is considered to be making unsatisfactory progress at the end of the second quarter of probation. Since federal regulations require aid recipients to be making satisfactory progress, students placed on probation a second time in one academic school year will be ineligible to receive federal financial assistance until they are returned to good standing, or the second probation is removed, whichever comes first. Students receiving federal financial assistance must consult with the Financial Aid Office for specific regulations regarding satisfactory progress.

Academic Probation

Students whose cumulative quality point average falls below a 2.0 (C) will be placed on academic probation. Academic probation will serve as a warning and students' course loads will be reduced accordingly.

Academic Suspension

Students who have received a second probation within a single academic year are in jeopardy of academic suspension. Students on suspension may be dismissed from the college if it is determined that they cannot achieve the 2.0 cumulative quality point average required to meet graduation standards. In cases where it is feasible, a student's course load may be reduced to less than full time in order to enable the student to return to good academic standing.

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.

DISMISSAL FROM A PROGRAM

If at any time during the quarter, the head of a program determines that a student is not a safe and dependable practitioner in the clinic, shop, lab, or a similar area, the student may be dismissed from the program with the concurrence of the Dean for Student Affairs. The student will be afforded the right of due process.

Certain occupational programs enroll students as a "class" and require them to take all courses in the sequential pattern shown in the catalog.

The courses are offered only once each year and there is no opportunity for repeating a course or offering a substitution. Accordingly, a student who fails one or more courses within one of these programs will be dismissed from the program at the end of the quarter during which the failure occurs.

Students dismissed from an occupational program under this policy may petition the Dean of Student Affairs for enrollment in a later class.

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. The Dean of Student Affairs will take appropriate steps to establish a hearing for the suspended student.

Grade Appeals

A student, after conferring with the instructor concerned, may present in writing to the Department Chairman an appeal of a course grade. No appeal may be made after the last day of classes of the next succeeding regular quarter. The Department Head will refer the appeal to the Vice President. No change of grade will be made except as a result of the Vice President's decision, which is final.

Forgiveness Policy

Students may petition, in writing, to the Dean of Student Affairs to have credits earned at the institution which are at least five (5) years old deleted from their transcript. The student will need to justify the request and provide evidence of re-enrollment or continued enrollment after approval of the request. Students not currently enrolled will need to complete a minimum of six (6) quarter hours with a "C" average or better for the petition to be considered favorably. If approved, a new transcript will be prepared deleting the approved courses. Veterans are required by law to have all credits earned appear on their transcript. Any deviation from this policy must be approved by a veterans advisor.

DEAN'S LIST

Students who are carrying a full load in courses leading to a diploma or degree will be included on the Dean's List, provided they have no grades of I or no grade lower than a B and provided that the quality point average of all their grades for that quarter is 3.25 or better.

ADVANCED PLACEMENT

Advanced placement is offered to those students who because of their demonstrated abilities are qualified to accelerate their studies. In some courses offered at VGCC, proficiency tests are given or can be requested for students who already have mastery of the subject matter contained within a given course. Such tests are generally administered during the drop/add period at the beginning of each quarter. Permission for such an examination must be obtained from the appropriate subject area department chairman.

CREDIT BY EXAMINATION

Regularly enrolled students who have reason to believe that previous educational studies, training programs or work experiences may entitle them to an adjustment in their graduation requirements may request credit by examination. Information on the college's policy on credit by examination may be obtained from the office of the Dean of Student Affairs. Vance-Granville Community College will allow up to forty-five (45) quarter hours credit by examination.

PREREQUISITES

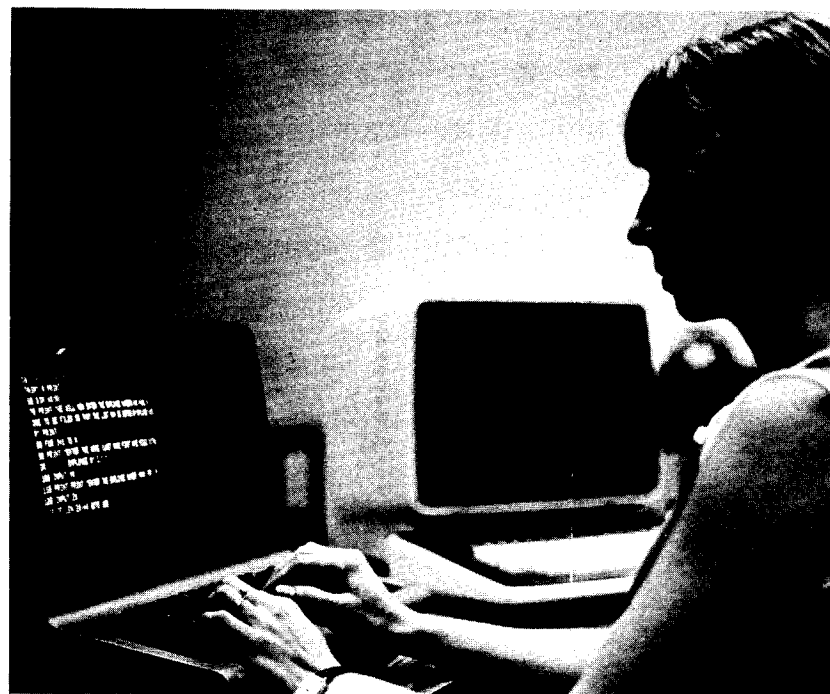
Prerequisites are indicated for many courses offered at Vance-Granville Community College. These are intended to give the student some measure of the proficiency expected for those beginning a given course. In the event other courses and/or experiences might qualify the student to take a course without the prescribed prerequisite, a student may request permission to exempt the prerequisite course by proficiency examination. This exam must be satisfactorily completed prior to entering the higher level course. Students failing to meet prerequisites prior to entering a course may be dropped from the class.

ATTENDANCE

Vance-Granville Community College is committed to the principle that class attendance is an essential part of an educational program. While urging regular class attendance, the college at the same time desires to allow students an opportunity to develop a sense of personal responsibility toward their studies. In keeping with these convictions, the following policy has been established.

At the beginning of each course, the instructor will announce the course's attendance requirements in accordance with departmental attendance regulations, and within institutional regulations, which require that a student who has not made contact with the instructor for two consecutive weeks be dropped. It is the responsibility of the student

to understand and abide by these requirements. Each student is accountable for any work missed because of class absence. Instructors, however, are under no obligation to make special arrangements for students who are absent. When class absence seems to be contributing to a student's unsatisfactory work or when the student is not fulfilling the attendance requirements, the instructor will warn the student and report that warning to the Dean of Student Affairs. If a student incurs other absences in a course after having been warned, he may be dropped from the course. Instructors have a right to officially withdraw a student from class any time they feel the student is jeopardizing the progress of the class. When a student has been dropped from a course, he may appeal the withdrawal case to the Dean of Student Affairs.



Curricula

- Accounting
- Automotive Mechanics
- Banking and Finance Technology
- Business Administration
- Business Computer Programming
- College Transfer
- Cosmetology
- Criminal Justice Technology
- Education Associate
 - Education Aide
 - Early Childhood Associate
 - Special Education Associate
 - Teacher Aide Associate
- Electrical Installation and Maintenance
- Electronic Engineering Technology
- General Office Technical Specialty
- General Office Technology
- Heating and Air Conditioning
- Industrial Maintenance
- Industrial Management
- Light Construction
- Nursing Education
 - Associate Degree Nursing
 - Practical Nursing
 - Nursing Assistant
- Postal Service Technology
- Radiologic Technology (Radiography)
- Recreation
 - Recreation Associate
 - Therapeutic Recreation
- Secretarial Science — Executive
- Secretarial Science — Legal
- Secretarial Science — Medical
- Textile Technology and Management
- Welding



Programs of Studies



ACCOUNTING

Accounting is often called the "language of business." It is defined as the process by which economic information is measured and communicated — information vital to owners, managers, and creditors involved in business enterprises.

The Accounting curricular student receives training in the organization and management of business operations, the fundamentals of accounting, and the analysis of financial statements. Students learn how to operate standard business machines related to accounting and receive an introduction to data processing systems.

The graduate of the two-year Accounting curriculum receives an Associate of Applied Science Degree and can look forward to employment in three main fields—industrial accounting, governmental accounting and public accounting.

Students in the Accounting curriculum have the option of obtaining a double major in Accounting and Business Administration. The students must meet the requirements of the Accounting curriculum and certain required courses in the Business Administration curriculum.**

Minimum Credit Hours Required for Degree:	110
Area I Core	18
All Required	
BUS 120; EDP 104; ENG 101, 102, 103	
Area II Major	86
All Required	
BUS 101, 102, 110, 111, 115, 116, 117, 118	
BUS 121, 122, 123, 124, 222, 223, 224, 225, 229	
BUS 230, 269	
ECO 102, 104	
Area III General Studies	6
*ENG 206 plus 3 other credits	
BUS 134, 232, 233, 235, 245, 247, 271, 272	
EDP 109; HEA 112; HUM 125, 126, 202;	
ISC 112, 113, 130, 212, 222, 224, 228, 229, 230	
POL 102, 110	
*Required	
**Double Major Requirements: 13	
BUS 239, 243, Two Electives	

Suggested Sequence of Courses for Accounting

Course No.	Course Title	Lec	Lab	Credit
FIRST QUARTER				
ENG ✓101	✓Technical Composition	3	0	3
BUS ✓102	✓Typewriting I	2	3	3
BUS ✓117	✓Business Math I	5	0	5
BUS ✓101	✓Introduction to Business	5	0	5
BUS ✓110	✓Office Machines I	1	2	2
SECOND QUARTER				
BUS ✓120	✓Accounting I	5	2	6
BUS ✓118	✓Business Math II	5	0	5
ENG ✓102	✓Oral Communications	3	0	3
BUS ✓111	✓Office Machines II	1	2	2
BUS ✓115	✓Business Law I	3	0	3
THIRD QUARTER				
ENG ✓103	✓Technical Report Writing	3	0	3
BUS ✓116	✓Business Law II	3	0	3
ECO ✓102	✓Economics I	3	0	3
BUS ✓121	✓Accounting II	5	2	6
BUS ✓123	✓Finance I	3	2	4
FOURTH QUARTER				
ECO ✓104	✓Economics II	3	0	3
BUS ✓124	✓Finance II	3	2	4
BUS ✓122	✓Managerial Accounting	5	2	6
BUS ✓222	✓Intermediate Accounting	5	2	6
FIFTH QUARTER				
ENG ✓206	✓Business Communications	3	0	3
BUS ✓223	✓Intermediate Accounting II	5	2	6
BUS ✓225	✓Cost Accounting	3	2	4
BUS ✓229	✓Taxes I	3	2	4
SIXTH QUARTER				
BUS 235	✓Business Management or Management Elective	3	0	3
BUS ✓269	✓Auditing	3	2	4
EDP ✓104	✓Introduction to Data Processing	3	0	3
BUS ✓224	✓Advanced Accounting	3	2	4
BUS ✓230	✓Taxes II	3	2	4

Evening Curriculum

Suggested Sequence of Courses

Course No.	Course Title	Lec	Lab	Credit
FIRST QUARTER				
ENG 101	Technical Composition	3	0	3
BUS 117	Business Math I	5	0	5
ECO 102	Economics I	3	0	3
BUS 115	Business Law I	3	0	3
SECOND QUARTER				
BUS 116	Business Law II	3	0	3
ECO 104	Economics II	3	0	3
BUS 118	Business Math II	5	0	5
BUS 110	Office Machines I	1	2	2
THIRD QUARTER				
BUS 101	Introduction to Business	5	0	5
BUS 120	Accounting I	5	2	6
BUS 111	Office Machines II	1	2	2
FOURTH QUARTER				
BUS 123	Finance I	3	2	4
BUS 121	Accounting II	5	2	6
BUS 235	Business Management	3	0	3
FIFTH QUARTER				
ENG 102	Oral Communications	3	0	3
BUS 122	Managerial Accounting	5	2	6
BUS 124	Finance II	3	2	4
SIXTH QUARTER				
ENG 103	Technical Report Writing	3	0	3
EDP 104	Introduction to Data Processing	3	0	3
BUS 222	Intermediate Accounting I	5	2	6
SEVENTH QUARTER				
ENG 206	Business Communication	3	0	3
BUS 223	Intermediate Accounting II	5	2	6
BUS 102	Typewriting I	2	3	3
EIGHTH QUARTER				
BUS 229	Taxes I	3	2	4
BUS 225	Cost Accounting	3	2	4
BUS 224	Advanced Accounting	3	2	4
NINTH QUARTER				
BUS 230	Taxes II	3	2	4
BUS 269	Auditing	3	2	4
—	Electives	3	0	3

AUTOMOTIVE MECHANICS

This curriculum provides training in the basic knowledge and skills needed to inspect, diagnose, repair or adjust components of automotive vehicles. Manual skills are developed in practical shop work using components mounted on stands. Thorough understanding of the operating principles involved in the modern automobile comes in class assignments, discussions, and shop practice. Diagnosing and repair work is assigned on vehicles in the shop.

The complexity of automobiles increases each year because of new scientific discovery and engineering. These changes are reflected not only in passenger vehicles, but also in trucks and buses powered by a variety of internal combustion engines. This curriculum provides a basis for the student to compare and adapt to new techniques for servicing and repair as vehicles are changed year by year.

Minimum Credit Hours Required for Diploma: 76

Area I	Core	3
	*WLD 1129	
Area II	Major	45
	All Required	
	*AHR 1101; AUT 1123, 1124, 1203	
	*PME 1101, 1102, 1221	
Area III	General Studies	28
	28 Credit Hours Required	
	BUS 117; ENG 93, *94; HEA *112; MAT 100,	
	MAT *1101, *1102; *PHY 1101; PSY 105,	
	PSY *114; SOC 105, 112	

*Required unless waived by exam. Other courses listed may be substituted upon approval of advisor.

Diploma Program

AUTOMOTIVE MECHANICS

Suggested Sequence of Courses

Course No.	Course Title	Lec	Lab	Shop	Credit
FIRST QUARTER					
PME 1102	Basic Electrical & Fuel Systems	5	0	15	10
*MAT 1101	Trades Mathematics I	4	0	0	4
PHY 1101	Applied Science	3	2	0	4
ENG 93	Vocational Language Instruction I	5	0	0	5
SECOND QUARTER					
PME 1101	Internal Combustion Engines	3	0	12	7
AUT 1203	Automotive Emission Controls	3	0	3	4
WLD 1129	Basic Welding	2	0	3	3
ENG 94	Vocational Language Instruction II	5	0	0	5

THIRD QUARTER

AUT	1123	Brakes, Chassis & Suspension Systems	3	0	9	6
HEA	112	First Aid and Safety	3	0	0	3
MAT	1102	Trades Mathematics II	4	0	0	4
PME	1221	Front Suspension, Alignment and Power Steering	3	0	9	6

FOURTH QUARTER

AUT	1101	Automotive Air Conditioning	3	0	6	5
AUT	1124	Automotive Power Train Systems	3	0	12	7
*PSY	114	Human Relations or approved elective	3	0	0	3



(Certificate Program)

AUTOMOTIVE MECHANICS

Evening Curriculum

Minimum Credit Hours Required for Certificate: 62

Area I	Core	.....	3
	*WLD 1129		
Area II	Major	.....	45
	All Required		
	*AHR 1101; AUT 1123, 1124, 1203		
	*PME 1101, 1102, 1221		
Area III	General Studies	.....	14
	*ENG 93, 94; MAT 1101		

*Required unless waived by exam or approval of advisor.

Course No.	Course Title	Lec	Lab	Shop	Credit
FIRST QUARTER					
AUT 1124	Auto Power Train Systems	3	0	12	7
ENG 93	Vocational Language Instruction I	5	0	0	5
SECOND QUARTER					
PME 1102	Basic Electrical & Fuel Systems	5	0	15	10
ENG 94	Vocational Language Instruction II	5	0	0	5
THIRD QUARTER					
PME 1101	Internal Combustion Engines	3	0	12	7
WLD 1129	Basic Welding	2	0	3	3
FOURTH QUARTER					
AUT 1123	Brakes, Chassis & Suspension Systems	3	0	9	6
AHR 1101	Automotive Air Conditioning	3	0	6	5
FIFTH QUARTER					
PME 1221	Front Suspension, Alignment and Power Steering	3	0	9	6
AUT 1203	Automotive Emission Controls	3	0	3	4
MAT 1101	Trades Math I	4	0	0	4

BANKING AND FINANCE TECHNOLOGY

With the rapid development and expansion of business and industry in North Carolina, there is a greater demand for qualified personnel to assist management in this economic growth. Graduates of the two-year program will be prepared to enter full-time employment in banking and finance. This program will also appeal to those currently employed in banking and finance occupations but who may wish to improve their positions. Additionally, this will provide an educational program for those bank employees who wish to receive the American Institute of Banking Certificate. Upon completion of this program, graduates will also be prepared for careers in retail credits, investment companies, savings and loan associations, mortgage companies, as well as banks and finance companies.

Upon completion of this two-year program, the graduate will be awarded the Associate in Applied Science Degree in Banking and Finance Technology. The first year of this program is similar to other curricula in business. In the second year each student will pursue his/her specialty in Banking and Finance. This curriculum includes professional courses in banking and finance, courses in related areas, and general education. Instruction will include both theoretical concepts and practical applications needed for future success.

Persons already employed in the banking and financial industry, but who do not wish to pursue a degree program, may pursue the required course of study for certificates. Four types of certificates awarded are: (1) Basic, (2) Standard, (3) Advanced, and (4) General.

Minimum Credit Hours Required for Degree: 111

Area I	Core	.....	18
	All Required		
	BUS 120; EDP 104; ENG 101, 102, 103		
Area II	Major	.....	86
	All Required		
	*AIB 202, 203, 205, 209, 210, **231,		
	*AIB 232, 235, 236; BUS 101, 102, 110,		
	*BUS 111, 115, 116, 117, 118, 121, 122, 123, 124,		
	*BUS 209, 219, 239, 280, 281, 283		
	*BUS 286, 287; ECO 102, 104		
Area III	General Studies	.....	7
	7 Credit Hours Required		
	BUS 229, 230, 233, 235, 271; ENG 206		
	ISC 228; PSY 105; SOC 105		

*Students may select these courses as specialized courses in the Banking and Finance Curriculum.

**For Savings and Loan Associations

Suggested Sequence of Courses

Two-Year Degree Program

Course No.	Course Title	Lec	Lab	Credit	
FIRST QUARTER					
ENG 101	✓ Technical Composition	3	0	3	
BUS 102	✓ Typewriting I	2	3	3	
BUS 117	✓ Business Math I	5	0	5	
BUS 101	✓ Introduction to Business	5	0	5	
BUS 110	✓ Office Machines I	1	2	2	18
SECOND QUARTER					
ENG 102	✓ Oral Communications	3	0	3	
BUS 118	Business Math II	5	0	5	
BUS 120	✓ Accounting I	5	2	6	
BUS 115	✓ Business Law I	3	0	3	19
BUS 111	✓ Office Machines II	1	2	2	
THIRD QUARTER					
ENG 103	Technical Report Writing	3	0	3	
ECO 102	✓ Economics I	3	0	3	
BUS 121	✓ Accounting II	5	2	6	19
BUS 116	✓ Business Law II	3	0	3	
BUS 123	✓ Finance I	3	2	4	
FOURTH QUARTER					
BUS 122	✓ Managerial Accounting	5	2	6	19
BUS 124	Finance II	3	2	4	
ECO 104	Economics II	3	0	3	
	✓ Specialized Course				
	✓ Specialized Course				
FIFTH QUARTER					
ENG 206	✓ Business Communications	3	0	3	
	Electives				
	✓ Specialized Course				
	✓ Specialized Course				
SIXTH QUARTER					
EDP 104	✓ Introduction to Data Processing	3	0	3	
	✓ Specialized Course				
	✓ Specialized Course				
	✓ Specialized Course				
	✓ Specialized Course				

CERTIFICATE REQUIREMENTS

Basic Certificate

(Required Courses)

Course	No.	Course Title	Lec	Lab	Credit
AIB	202	Principles of Banking	4	0	4
ECO	102	Economics I	3	0	3
ECO	104	Economics II	3	0	3
ENG	101	Technical Composition	3	0	3
		Elective	3	0	3
			16	0	16

Standard Certificate

(Required Courses)

BUS	120	Accounting I	5	2	6
AIB	210	Money and Banking	4	0	4
		Course in Banking Function	4	0	4
AIB	205	Bank Management (or management elective)	4	0	4
ENG	102	Oral Communications	3	0	3
		Elective	3	0	3
		Elective	3	0	3
			26	20	27

Advanced Certificate

(Required Courses)

		Foundation of Banking (Economics, Principles of Banking, etc.)	3	0	3
		Banking Functions (three courses)	12	0	12
AIB	205	Bank Management	4	0	4
		Management/Supervision	3	0	3
		General Elective	3	0	3
		General Elective	3	0	3
		General Elective	3	0	3
			31	0	31

General Certificate

(36 Hours Required)

No course or content area requirements, but only half of the 36 credits needed, may be transfer credits.

BUSINESS ADMINISTRATION

Wherever there is an office concerned with the handling of money, there is a place for a person trained in Business Administration. The knowledge required in a sound Business Administration program can be used effectively in a wide range of fields.

The Business Administration curriculum provides a solid background in the principles of organization and management of business operations, the system of the U.S. economy, and the role of production and marketing in the economic system. There is extensive work in accounting, finance, and business law. Students perfect their writing and speaking skills and become aware of basic human relations problems.

Graduates of the Business Administration curriculum receive Associate in Applied Science degrees and can look forward to jobs in manufacturing concerns, banks, insurance companies, shipping firms, real estate companies, government offices, educational institutions, and hospitals.

Students in Business Administration can obtain a double major in Business Administration and Accounting. The student must meet the requirements of the Business Administration Program and certain required courses in the Accounting Program.**

Minimum Credit Hours Required for Degree: 109

Area I Core18
All Required

BUS 120; EDP 104; ENG 101, 102, 103

Area II Major78
All Required

BUS 101, 102, 110, 111, 115, 116, 117
BUS 118, 121, 122, 123, 124, 229, 230
BUS 233, 239, 243, 247, 271
ECO 102, 104

Area III General Studies13
13 Credit Hours Required

BUS 223, 232, 235, 272; EDP 109
*ENG 206; HEA 112; HUM 125, 126;
ISC 112, 113, 130, 212, 222, 224, 228, 229, 230
MAT 105, 106; POL 102, 110

*Required

**Double Major Requirements: 18
BUS 223, 224, 225, 269

Suggested Sequence of Courses for Business Administration

Course No.	Course Title	Lec	Lab	Credit
FIRST QUARTER				
ENG 101	Technical Composition	3	0	3
BUS 117	Typewriting I	3	0	3
BUS 102	Introduction to Business	5	0	5
BUS 115	Office Machines I	2	0	2
BUS 116	Business Math I	5	0	5
SECOND QUARTER				
ENG 102	Oral Communications	3	0	3
BUS 117	Business Math II	5	0	5
BUS 118	Accounting I	2	0	2
BUS 119	Business Law I	3	0	3
BUS 120	Office Machines II	2	0	2
THIRD QUARTER				
ENG 103	Technical Report Writing	3	0	3
BUS 121	Business Law II	5	0	5
BUS 122	Accounting II	2	0	2
ECO 104	Economics I	3	0	3
BUS 123	Finance I	2	0	2
FOURTH QUARTER				
BUS 124	Finance II	2	0	2
ECO 105	Economics II	3	0	3
BUS 125	Managerial Accounting	2	0	2
BUS 126	Advertising	2	0	2
FIFTH QUARTER				
ENG 104	Business Communication	3	0	3
BUS 127	Taxes I	2	0	2
BUS 128	Personnel Management	3	0	3
BUS 129	Marketing	3	0	3
	Electives Lab (2)	0	6	6
SIXTH QUARTER				
EDP 101	Introduction to Data Processing	3	0	3
BUS 130	Office Management	3	0	3
BUS 131	Business Insurance or Elective SOC	3	0	3
BUS 132	Taxes II	2	0	2
	Elective cost (4)	0	3	3

12 hrs

Basic - 4
 Soft - 4
 HR - 3

Evening Curriculum

Suggested Sequence of Courses for Business Administration

Course No.	Course Title	Lec	Lab	Credit
FIRST QUARTER				
ENG 101	Technical Composition	3	0	3
BUS 117	Business Math I	5	0	5
ECO 102	Economics I	3	0	3
BUS 115	Business Law I	3	0	3
SECOND QUARTER				
BUS 116	Business Law II	3	0	3
ECO 104	Economics II	3	0	3
BUS 118	Business Math II	5	0	5
BUS 110	Office Machines I	1	2	2
THIRD QUARTER				
BUS 101	Introduction to Business	5	0	5
BUS 120	Accounting I	5	2	6
BUS 111	Office Machines II	1	2	2
FOURTH QUARTER				
BUS 123	Finance I	3	2	4
BUS 121	Accounting II	5	2	6
	Elective	3	0	3
FIFTH QUARTER				
ENG 102	Oral Communications	3	0	3
BUS 122	Managerial Accounting	5	2	6
BUS 124	Finance II	3	2	4
SIXTH QUARTER				
ENG 103	Technical Report Writing	3	0	3
EDP 104	Introduction to Data Processing	3	0	3
	Electives	6	0	6
SEVENTH QUARTER				
ENG 206	Business Communications	3	0	3
BUS 239	Marketing	3	0	3
BUS 233	Personnel Management	3	0	3
BUS 271	Office Management	3	0	3
EIGHTH QUARTER				
BUS 229	Taxes I	3	2	4
BUS 102	Typewriting I	2	3	3
BUS 235	Business Management	3	0	3
NINTH QUARTER				
BUS 230	Taxes II	3	2	4
BUS 247	Business Insurance or Elective	3	0	3
BUS 243	Advertising	3	2	4

3 hrs

BUSINESS COMPUTER PROGRAMMING

This curriculum is designed to give the student (1) an understanding of the principles of business operation and/or scientific techniques on problem solving, (2) experience in handling computers and in using programming techniques to solve assigned problems, (3) facility in using specialized problem-solving techniques where necessary, (4) ability to properly document his work and to communicate efficiently with concerned personnel.

The computer programming specialist applies programming techniques which are compatible with his computer to define problems with minimum supervision. The student analyzes and defines system requirements to develop a program for electronic data processing; conducts detailed analysis of systems requirements; develops all levels of block diagrams and logical flow charts; translates program details into coded instructions; establishes test data; tests, refines, and revises programs and documents procedures. The student ascertains if other combinations of instructions would achieve greater flexibility, better machine utilization, or more dependable results. He or she may prepare a complete set of operating instructions for use by a console operator; or on occasion, he or she may operate the console in processing programs.

Minimum Credit Hours Required for Degree: 108
Minimum Credit Hours Required for Diploma: 55

Area I	Core	18
	All Required	
	BUS 102, 115; ENG 101, 102, 103, 206	
Area II	Major	81
	All Required	
	BUS 120, 121, 225, 271; EDP 104, 105	
	EDP 109, 110, 202, 210, 211, 215, 220	
	EDP 224, 225, 226; MAT 105, 106, 214	
Area III	General Studies	9
	9 Credit Hours Required	
	BUS 110, 111, 229, 230, 233, 235, 273, 274	
	ECO 102; EDP 229; ISC 228; PSY 105	
	SOC 105	

Suggested Sequence of Courses

Two-Year Associate in Applied Science Degree in Business Computer Programming

Course	No.	Course Title	Lec	Lab	Credit
FIRST QUARTER					
ENG	101	✓ Technical Composition	3	0	3
EDP	104	✓ Introduction to Data Processing	3	0	3
MAT	105	✓ Pre-College Algebra I	5	0	5
BUS	102	✓ Typewriting I	2	3	3
EDP	109	✓ Basic Language I	2	4	4

SECOND QUARTER

BUS	120	✓ Accounting I	5	2	6
EDP	202	✓ COBOL I	2	4	4
ENG	102	✓ Oral Communications	3	0	3
MAT	106	✓ Pre-College Algebra II	5	0	5

THIRD QUARTER

BUS	121	✓ Accounting II	5	2	6
EDP	210	✓ COBOL II	2	4	4
EDP	110	✓ Basic Language II	2	4	4
ENG	103	✓ Technical Report Writing	3	0	3

FOURTH QUARTER

MAT	214	✓ Statistics	5	0	5
EDP	211	✓ COBOL III	2	4	4
EDP	224	✓ RPG Language	3	2	4
ENG	206	✓ Business Communications	3	0	3
		✓ Elective	3	0	3

FIFTH QUARTER

BUS	225	✓ Cost Accounting	3	2	4
EDP	225	✓ Advanced RPG	3	2	4
EDP	226	✓ FORTRAN Language	2	4	4
BUS	115	✓ Business Law I	3	0	3
		✓ Elective	3	0	3

SIXTH QUARTER

BUS	271	✓ Office Management	3	0	3
EDP	215	✓ Operating Systems	3	2	4
EDP	220	✓ Systems Analysis	3	2	4
EDP	105	✓ Assembler Language	2	4	4
		✓ Elective	3	0	3

Suggested Sequence of Courses

1-Year Diploma in Business Computer Programming

Course	No.	Course Title	Lec	Lab	Credit
FIRST QUARTER					
ENG	101	✓ Technical Composition	3	0	3
EDP	104	✓ Introduction to Data Processing	3	0	3
MAT	105	✓ Pre-College Algebra I	5	0	5
BUS	102	✓ Typewriting I	2	3	3
EDP	109	✓ Basic Language I	2	4	4
SECOND QUARTER					
BUS	120	✓ Accounting I	5	2	6
EDP	202	✓ COBOL I	2	4	4
ENG	102	✓ Oral Communications	3	0	3
MAT	106	✓ Pre-College Algebra II	5	0	5
THIRD QUARTER					
BUS	121	✓ Accounting II	5	2	6
EDP	210	✓ COBOL II	2	4	4
EDP	110	✓ Basic Language II	2	4	4
ENG	103	✓ Technical Report Writing	3	0	3

COLLEGE TRANSFER PROGRAM

TRANSFER OF CREDIT

Vance-Granville Community College is accredited by the Southern Association of Colleges and Schools, thus assuring students that the courses offered by the College are recognized as being academically sound by four-year colleges and universities in North Carolina and the region. Therefore, credit for College Transfer courses can normally be transferred to senior institutions.

College Transfer courses are those listed on the following pages under the Associate in Arts degree program. These courses are the equivalents of the freshman and sophomore level courses a student would take at a senior college or university. Credit may also be transferred for some courses outside the College Transfer area. Students in Business Administration, Accounting, Criminal Justice, and Electronic Data Processing, for example, often find that four-year institutions will accept some and, occasionally, most of their course work at Vance-Granville for credit. However, as a general rule, students wishing to transfer their credits to a senior college or university should confine their course choices to those in the College Transfer area (A.A. degree program) and to not more than three or four introductory courses in their technical or vocational field, e.g., Accounting I and II, Business Law I and II, and Economics I and II for prospective Business or Accounting transfers.

Although the College Transfer Program is designed to provide the first two full years of college work, culminating with the Associate in Arts degree, students may enroll in the program for a shorter period of time. Some senior colleges and universities allow transfer admission with as few as 36 quarter hours; others require as many as 75 quarter hours. In addition, students who are enrolled in universities but who return to their homes in the local area for the summer are able to transfer summer course work into their university programs.

Students should make their decisions with their faculty advisors concerning pursuit of the A.A. degree or putting together an appropriate program of courses for transfer to a senior institution. A faculty advisor is assigned each student admitted to the College Transfer program, and the student schedules a conference with that advisor before matriculation. Subsequent conferences occur prior to each quarterly registration period.

Senior colleges and universities usually require a minimum grade of "C" in a course for the purpose of transfer credit, and an average grade of "C" for the purpose of transfer admission. Students with questions about transfer credit and admission should consult their faculty advisors or the Chairman of General College/College Transfer Programs. It is the student's ultimate responsibility to acquire and complete the appropriate forms and procedures for application for admission to the senior institution.

ADMISSION TO COLLEGE TRANSFER PROGRAM

Students are admitted to the College Transfer Program upon application by achieving test scores sufficiently high to place into English 120 (College Composition I) and Mathematics 120 (College Algebra), or after satisfactory completion of English 100 (English Grammar and Composition) and Mathematics 106 (Pre-College Algebra). Applicants with a combined score of at least 800 on the Scholastic Aptitude Test, with neither Verbal nor Mathematics score below 400, are exempt from the foregoing test requirements.

ASSOCIATE IN ARTS DEGREE

This curriculum is designed for persons who plan to transfer to a four-year college or university to complete requirements for a Bachelor's degree. Students completing the requirements will receive the Associate in Arts degree. Those not completing the full program requirements may choose appropriate courses for purposes of transfer.

Minimum Credit Hours Required for Degree: 96

Area I Communications ^{3,3,3}14 ✓
All Required

ENG ~~120, 121, 122, 220~~ ^{120, 121, 122, 220}18 ✓ okay

Area II Humanities ^{3,3,5,5}18 ✓
18 Credit Hours Required from three departments.

*ENG 230, ~~231~~, 232, or *ENG ~~220, 221, 222~~
ENG 150, ~~152~~, 250, 251; FRE 101, 102, 103
FRE ~~201, 202~~, 203; HUM 114, ~~115~~, 116,
HUM ~~120, 126~~, 202 okay

Area III Social Science ^{5,3,5,5}18 ✓
18 Credit Hours Required from three departments.

ANT 100; ECO 102, 104;
*HIS 101, 102, 103 or *HIS ~~200, 201, 202~~
POL 101, 102, 110; PSY ~~101, 102, 103~~ ^{101, 102, 103}, 111, 112, 113, 114 10
3
13

Area IV Mathematics ^{5,5}10 ✓
10 Credit Hours Required

*MAT ~~120, 121~~, 122, 130, 131, 140, 214, 220, 221, 222, 223

Area V Science ^{4,4,4}12 ✓
12 Credit Hours Required in One Complete Sequence of Laboratory Science

BIO ~~101, 102, 103~~ CHM 101, 102, 103;
PHY 111, 112, 113 or PHY 211, 212, 213

Area VI Physical Education or Health ³3 ✓ okay
3 Credit Hours Required

~~HEA 112~~

Area VII Electives ^{3,5,4,4,4,3,3}21 ✓
21 Credit Hours Required

BIO 105, 108, 205;
~~206~~; GEO 110; PSY 209, 212
SOC 115, 116, 117, 211 or

Any of the courses listed in Areas I, II, III, IV, V, and VI not used to meet a requirement.

*Required
3,3 - Eco I+II
4,4,4 - Chem I, II, III
3 - Problems
Geo 3
Art 5
Music 5

Suggested Sequence of Courses for Accounting

Course No.	Course Title	Lec	Lab	Credit
FIRST QUARTER				
ENG 120	College Composition I	3	0	3
MAT 120	College Algebra	5	0	5
HIS 101	Western Civilization I	3	0	3
	or			
HIS 207	American History I	5	0	5
BIO 101	Biology I or CHM 101 or PHY 111	3	3	4
SECOND QUARTER				
ENG 121	College Composition II	3	0	3
MAT 121	Finite Mathematics	5	0	5
HIS 102	Western Civilization II	3	0	3
	or			
HIS 208	American History II	5	0	5
BIO 102	Biology II or CHM 102 or PHY 112	3	3	4
THIRD QUARTER				
ENG 122	College Composition III	3	0	3
MAT 122	Calculus	5	0	5
HIS 103	Western Civilization III	3	0	3
BIO 103	Biology III or CHM 103 or PHY 113	3	3	4
	*Elective	6	0	6
FOURTH QUARTER				
ENG 240	American Literature I	3	0	3
	or			
ENG 230	English Literature I	3	0	3
PSY 101	Introduction to Psychology	5	0	5
ENG 220	Speech	5	0	5
	Electives or HEA 111	6	0	6
FIFTH QUARTER				
ENG 241	American Literature II	3	0	3
	or			
ENG 231	English Literature II	3	0	3
SOC 101	Introduction to Sociology	5	0	5
	*Electives or HEA 112	9	0	9
SIXTH QUARTER				
ENG 242	American Literature III	3	0	3
	or			
ENG 232	English Literature III	3	0	3
	*Electives	12	0	12

BUSINESS ADMINISTRATION CONCENTRATION

Associate in Arts Degree

Course No.	Course Title	Lec	Lab	Credit
FIRST QUARTER				
ENG 120	College Composition I	3	0	3
MAT 120	College Algebra	5	0	5
BIO 101	Biology I or CHM 101 or PHY 111	3	3	4
	Foreign Language or Elective	5	0	5

SECOND QUARTER

ENG 121	College Composition II	3	0	3
MAT 121	Finite Mathematics	5	0	5
BIO 102	Biology II or CHM 102 or PHY 112	3	3	4
	Foreign Language or Elective	5	0	5

THIRD QUARTER

ENG 122	College Composition III	3	0	3
*MAT 122	Calculus	5	0	5
BIO 103	Biology III or CHM 103 or PHY 113	3	3	4
	Foreign Language or Elective	5	0	5

FOURTH QUARTER

ENG 230	English Literature I	3	0	3
*ECO 102	Economics I	3	0	3
HIS 207	American History I	5	0	5
MAT 214	Statistics	5	0	5
HEA 111	Personal & Community Health	3	0	3

FIFTH QUARTER

ENG 213	English Literature II	3	0	3
*ECO 104	Economics II	3	0	3
HIS 208	American History II	5	0	5
ENG 220	Speech	5	0	5

SIXTH QUARTER

ENG 232	English Literature III	3	0	3
POL 102	National Government	3	0	3
	Electives	9	0	9

THE ADVANTAGES OF BEGINNING A 4-YEAR TRANSFER PROGRAM AT VANCE-GRANVILLE COMMUNITY COLLEGE

A reputation for producing excellent transfer students at four-year colleges and universities

Lower costs

Smaller classes

Individual attention

Excellent instruction

Opportunity to improve reading, composition, and mathematics skills to college level

Students may be employed in their hometown communities while earning college credits

Loans, scholarships, and on-campus work opportunities

COSMETOLOGY

Professional hair styling and cosmetic care for today's women and men has attained professional status as this once-luxury has become a contemporary necessity. It is generally recognized that the demand for personal grooming in today's professional and personal encounters is essential. Cosmetologists are the experts who, in minimum time, provide many of the personal grooming services necessary to meet contemporary demands.

The cosmetology curriculum is designed to prepare the student for employment in the field of cosmetology. The curriculum provides instruction and practice in manicuring, shampooing, permanent waving, facials, massages, scalp treatment, haircutting, styling, hair pressing, chemical relaxing, thermal waving, curling, and wig service.

After fulfilling course work and passing the State Board of Cosmetology Examination, the cosmetology graduate may begin work immediately. A six-month apprenticeship is required to provide in-depth professional experience with a licensed, experienced cosmetologist while earning and learning. After that, the graduate may establish a business and be able to perform any duties designated by the State Board of Cosmetic Arts.

Minimum Credit Hours Required for Diploma: 84

Area I	Core	0
Area II	Major	65
	All Required	
	COS 1001, 1002, 1003, 1004, 1005, 1011 COS 1022, 1033, 1044, 1055	
Area III	General Studies	19
	Required	
	*HEA 112; *PSY 114; *ENG 93, 94, 102	

*Required unless waived by exam

Students may choose to complete 1500 hours in lieu of working the 6 months apprenticeship.

The fifth quarter will be a continuation of practice in fingerwaving, pincurling, roller patterns, permanent waving, chemical hair relaxing and hair tinting.

Scientific study will be a complete review of each subject covered in preparation for the State Board Examination.

Suggested Sequence of Courses for Cosmetology

Course	No.	Course Title	Lec	Lab	Credit
FIRST QUARTER					
COS	1001	Scientific Study I	4	6	6
COS	1011	Mannequin Practice	0	20	7
HEA	112	First Aid and Safety	3	0	3
ENG	93	Vocational Language Instruction I	5	0	5
SECOND QUARTER					
COS	1002	Scientific Study II	5	0	5
COS	1022	Clinical Application I	0	25	8
ENG	94	Vocational Language Instruction II	5	0	5
THIRD QUARTER					
COS	1003	Scientific Study III	5	0	5
COS	1033	Clinical Application II	0	25	8
PSY	114	Human Relations	3	0	3
FOURTH QUARTER					
COS	1004	Scientific Study IV	5	0	5
COS	1044	Clinical Application III	0	25	8
FIFTH QUARTER					
COS	1005	Scientific Study V	5	0	5
COS	1055	Clinical Application IV	0	25	8
ENG	102	Oral Communications	3	0	3

The college offers instruction in the evening for the above courses, but the sequence may differ and the time is extended beyond the normal fifteen-month period for completion of the program.

CRIMINAL JUSTICE TECHNOLOGY

Criminal Justice Technology is a program that encompasses the areas of law enforcement and corrections. In the last decade these specialty areas have evolved into highly complex professions requiring a variety of skills and special knowledge.

The Criminal Justice curriculum student receives instruction concerning the system of criminal justice, the principles of organization and management of criminal justice agencies and specialty courses related to law enforcement and corrections. Students also receive instruction in many areas of the social sciences.

Graduates of the Criminal Justice curriculum receive Associate in Applied Science Degrees and can look forward to jobs in such areas as law enforcement, security, investigation, corrections, counseling and many more related areas. The curriculum is also designed to transfer to many four-year colleges and universities.

Minimum Credit Hours Required for Degree: 110

Area I	Core		0
Area II	Major		66
All Required			
CJC 101, 102, 105, 112, 209, 210, 211, 212			
CJC 101, 102, 105, 209, 234, 210, 212			
SOC 105, 112			
Area III	General Studies		44
44 Credit Hours Required			
BUS 102; CJC 101, 255, 209, 282			
EDU 105, 106; *ENG 101, 102, 108, 105			
ENG 120, 121, 122, 220; *HEA 112			
HIS 101, 102, 209; MAT * 102, 120, 121			
MAT 122; POL 102, 210 ; *PSY 105, 209			
PSY 105, 212 ; *SOC * 105, 112, 113			
REC 112			

EDP-3

*Required unless waived by exam or by approval of advisor; other courses listed may be substituted upon approval of advisor.
 No more than 49 hours may be transferred from schools not in the State System of Community Colleges.

Suggested Sequence of Courses for Criminal Justice Technology

Course No.	Course Title	Lec	Lab	Credit
FIRST QUARTER				
CJC 101	✓Introduction to Criminal Justice	5	0	5
CJC 125	✓Court Procedure and Evidence	3	0	3
ENG 105	Library Services	3	0	3
HEA 112	✓First Aid and Safety	3	0	3
CJC 210	✓Criminal Investigation I Elective	3	0	3

17

SECOND QUARTER

CJC 115	✓Criminal Law	5	0	5
CJC 211	✓Criminal Investigation II	3	0	3
SOC 105	General Sociology	3	0	3
ENG 101	✓Technical Composition	3	0	3
MAT 100	Consumer Math	5	0	5

19

THIRD QUARTER

SOC 115	✓Criminology	3	0	3
SOC 117	✓Juvenile Delinquency	5	0	5
PSY 105	✓General Psychology	3	0	3
ENG 103	✓Technical Report Writing	3	0	3
POL 110	State & Local Government	3	0	3

17

FOURTH QUARTER

CJC 282	Constitutional Law	5	0	5
CJC 225	✓Seminar in Criminal Justice	3	0	3
CJC 202	✓Introduction to Corrections	3	0	3
CJC 260	✓Special Law Enforcement Certification Electives	4	0	4

15

FIFTH QUARTER

CJC 212	✓Drugs	3	0	3
CJC 209	Corrections Law	3	0	3
CJC 281	Protective Measures	5	0	5
PSY 209	✓Abnormal Psychology Electives	5	0	5

16

SIXTH QUARTER

CJC 220	✓Criminal Justice Administration	5	0	5
CJC 230	Counseling	5	0	5
ENG 102	✓Oral Communications Electives	3	0	3

13

SEVENTH QUARTER

CJC 206	✓Criminal Justice and Community	3	0	3
CJC 234	Community Based Correction	5	0	5
POL 102	National Government Electives	3	0	3

11

ELECTIVES

***The college offers instruction in the evening for the above courses, but the sequence may differ and the time is extended beyond the normal two-year period for completion of the program.

5
5
5
3
5
5
6
3
3
1
3942
61
110

EDUCATION ASSOCIATE PROGRAM

EDUCATION AIDE

The Education Associate Program is designed to train individuals who are interested in working in one of the subfields of education. The program is comprised of two levels: a diploma level and a degree level. All students in the program will take a core of courses, totaling 58 hours, which will lead to a one-year diploma as an education aide in the field of education.

A student may proceed to the second level of the program and take additional courses toward an associate degree in a specialized field of education. Associate of Applied Science degrees will be awarded in the areas of Early Childhood, Special Education and Teacher Aide.

All applicants for this program must take the Placement Tests in English, Reading and Mathematics, and score at the entrance level for ENG 101 — Technical Composition and MAT 100 — Consumer Math. Developmental education courses to improve skills are available for those students failing to meet these criteria. They can subsequently retake the tests for further consideration.

All applicants must be high school graduates or the equivalent. Before entering the Education Associate Program, each applicant is required to have a personal interview with the program admissions committee. Post-admission but prior to the practicum, each must submit a Health Examination Certificate.

Education Aide

Diploma Level

Minimum Credit Hours Required for Diploma: 58

Area I Core26
All Required

*EDU 101, 102, 103, 104, 105, 106, 112

*EDU 108, 149, 203, 234

Area II Major 0
None Required

Area III General Studies32
32 Credit Hours Required

BUS *102, 103, 127; ENG *101, *105;

HEA *105, *111, 112; MAT *100;

PSY *105, *115, *116, 209, 212;

SOC 105, *107, 112, 117

*Required

Suggested Sequence of Courses for Education Aide Diploma

Course	No.	Course Title	Lec	Lab	Credit
FIRST QUARTER					
EDU	234	Audio Visual Techniques	3	0	3
EDU	149	Role of Education Associate	1	0	1
EDU	104	Self-Dynamics	2	0	1
ENG	105	Library Services	3	0	3
EDU	101	Introduction to Education	3	0	3
ENG	101	Technical Composition Elective	3	0	3
SECOND QUARTER					
EDU	105	Group Dynamics	2	0	1
EDU	112	Safety Education	3	0	3
SOC	107	The Family	3	0	3
PSY	115	Human Growth & Development I	3	0	3
BUS	102	Typewriting I Elective	2	3	3
THIRD QUARTER					
EDU	106	Career Dynamics	2	0	1
PSY	116	Human Growth & Development II	3	0	3
PSY	105	General Psychology	3	0	3
HEA	111	Personal and Community Health	3	0	3
EDU	102	Educational Methods	3	2	4
FOURTH QUARTER					
HEA	105	Nutrition	3	0	3
EDU	103	Parent Education	3	0	3
EDU	108	Behavior Management	3	0	3
EDU	203	Exceptional Children	3	0	3

54

5

**EARLY CHILDHOOD ASSOCIATE
DEGREE LEVEL**

The Early Childhood Associate curriculum is designed to prepare individuals to work in programs devoted to the care and development of infants and young children. Through course work and application in such areas as the care and guidance of children, activities for young children, problems of childhood, and the administration of child care facilities, the student will be able to function effectively as a child care worker or director in facilities such as day care centers, nursery schools, child development centers, camps and recreational centers.

An optimal development of the pre-school child becomes increasingly emphasized, and as more and more parents enter the work force necessitating day care for their pre-schoolers, the job market for persons trained as early childhood associates will continue to grow.

All applicants for this program must take the Placement Tests in English, Reading and Mathematics, and score at the entrance level for ENG 101 — Technical Composition and MAT 100 — Consumer Math. Developmental education courses to improve skills are available for those students failing to meet these criteria. They can subsequently retake the tests for further consideration.

All applicants must be high school graduates or the equivalent. Before entering the Early Childhood Associate Program, each applicant is required to have a personal interview with the program admissions committee. Post-admission but prior to the practicum, each must submit a Health Examination Certificate.

Minimum Credit Hours Required for Degree: 101

Area I Core26
All Required

- *EDU 101, 102, 103, 104, 105, 106, 112
- *EDU 108, 149, 203, 234

Area II Major27
All Required

- *EDU 107, 111, 202, 206, 216, 217, 223
- *EDU 231, 244

Area III General Studies48
48 Credit Hours Required

- BUS *102, 103, 127, *293; ENG *101, *102, *105;
- HEA *105, *111, *112; MAT *100
- PSY *105, *115, *116, 209, *212;
- SOC 105, *107, *108, 112, 117

*Required

Suggested Sequence of Courses for Early Childhood Associate

Course No.	Course Title	Lec	Lab	Credit
FIRST QUARTER				
EDU 234	✓Audio Visual Techniques ✓	3	0	3
EDU 149	✓Role of Education Associate ✓	1	0	1
EDU 104	✓Self-Dynamics	2	0	1
ENG 105	✓Library Services ✓	3	0	3
EDU 101	✓Introduction to Education ✓ ✓Elective ✓	3	0	3
SECOND QUARTER				
EDU 105	✓Group Dynamics ✓	2	0	1
EDU 112	✓Safety Education ✓	3	0	3
SOC 107	✓The Family ✓	3	0	3
PSY 115	✓Human Growth & Development II ✓	3	0	3
BUS 102	✓Typewriting I ✓ ✓Elective	2	3	3
THIRD QUARTER				
EDU 106	✓Career Dynamics ✓	2	0	1
PSY 116	✓Human Growth & Development III ✓	3	0	3
PSY 105	✓General Psychology ✓	3	0	3
HEA 111	✓Personal and Community Health ✓	3	0	3
EDU 102	✓Educational Methods ✓	3	2	4
FOURTH QUARTER				
HEA 105	✓Nutrition ✓	3	0	3
EDU 103	✓Parent Education ✓	3	0	3
EDU 108	✓Behavior Management ✓	3	0	3
EDU 203	✓Exceptional Children ✓	3	0	3
HEA 112	✓First Aid and Safety ✓	3	0	3
FIFTH QUARTER				
ENG 101	✓Technical Composition ✓	3	0	3
EDU 244	✓Care of Pre-School Child ✓	3	0	3
EDU 217	✓Language and Literature ✓	2	2	3
EDU 107	✓Seminar in Reporting and Observation ✓	3	0	3
SIXTH QUARTER				
ENG 102	✓Oral Communications ✓	3	0	3
MAT 100	✓Consumer Math	5	0	5
EDU 216	✓Problems of Childhood ✓	3	0	3
EDU 111	✓Administration and Supervision of ✓ Day Care	3	0	3
SEVENTH QUARTER				
PSY 212	✓Child Psychology	3	0	3
EDU 243	✓Physical Education for Pre-Schoolers ✓	2	2	3
EDU 231	✓Creative Activities for Pre-School ✓	2	2	3
MAT 293	✓Small Business Enterprise	3	0	3
EIGHTH QUARTER				
EDU 206	✓Music for Young Children ✓	1	2	2
EDU 202	✓Science and Math for Pre-School ✓	3	0	3
SOC 108	✓Community Resources ✓	1	2	2
EDU 223	✓Internship and Seminar ✓	1	20	3

SPECIAL EDUCATION ASSOCIATE

DEGREE LEVEL

The Special Education Associate curriculum is designed to prepare individuals to work in programs devoted to the care and development of persons with exceptionalities. Through course work and application in such areas as mental retardation, emotional disturbance, physical handicaps, learning disabilities, and the gifted, the student will be able to function effectively as an employee in a sheltered workshop, group home, residential institution for persons with exceptionalities, developmental day care center, or special education classroom.

At present, there is an abundance of jobs available in the field of special education; and since the federal government mandates education of the handicapped, there will continue to be jobs available to persons interested in working with individuals with exceptionalities.

All applicants for this program must take the Placement Tests in English, Reading and Mathematics, and score at the entrance level for ENG 101 — Technical Composition and MAT 100 — Consumer Math. Developmental education courses to improve skills are available for those students failing to meet these criteria. They can subsequently retake the tests for further consideration.

All applicants must be high school graduates or the equivalent. Before entering the Special Education Associate Program, each applicant is required to have a personal interview with the program admissions committee. Post-admission but prior to the practicum, each must submit a Health Examination Certificate.

Minimum Credit Hours Required for Degree: 101

Area I Core26
All Required

- *EDU 101, 102, 103, 104, 105, 106, 112
- *EDU 108, 149, 203, 234

Area II Major31
All Required

- *EDU 107, 200, 201, 210, 212, 215, 222, 245
- *EDU 246, 248, 252

Area III General Studies47
47 Credit Hours Required

- BUS *102, 103, 127; ENG *101, *102, *103, *105
- HEA *105, *111, *112; MAT *100; PSY *105, *115,
- PSY *116, *209, 212; REC *222
- SOC 105, *107, 112, 117

*Required

Suggested Sequence of Courses for Special Education Associate

Course	No.	Course Title	Lec	Lab	Credit
FIRST QUARTER					
EDU	234	Audio Visual Techniques	3	0	3
EDU	149	Role of Education Associate	1	0	1
EDU	104	Self-Dynamics	2	0	1
ENG	105	Library Services	3	0	3
EDU	101	Introduction to Education	3	0	3
		Elective			
SECOND QUARTER					
EDU	105	Group Dynamics	2	0	1
EDU	112	Safety Education	3	0	3
SOC	107	The Family	3	0	3
PSY	115	Human Growth & Development I	3	0	3
BUS	102	Typewriting I	2	3	3
		Elective			
THIRD QUARTER					
EDU	106	Career Dynamics	2	0	1
PSY	116	Human Growth & Development II	3	0	3
PSY	105	General Psychology	3	0	3
HEA	111	Personal and Community Health	3	0	3
EDU	102	Educational Methods	3	2	4
FOURTH QUARTER					
HEA	105	Nutrition	3	0	3
EDU	103	Parent Education	3	0	3
EDU	108	Behavior Management	3	0	3
EDU	203	Exceptional Children	3	0	3
HEA	112	First Aid and Safety	3	0	3
FIFTH QUARTER					
ENG	101	Technical Composition	3	0	3
EDU	201	Introduction to Special Education	3	0	3
EDU	107	Seminar in Reporting and Observation	3	0	3
EDU	200	Teaching the Severely/Profoundly Handicapped	2	2	3
SIXTH QUARTER					
ENG	102	Oral Communications	3	0	3
MAT	100	Consumer Math	5	0	5
EDU	210	Emotional Disturbance	3	0	3
EDU	212	Sex Education for the Handicapped	2	0	2
EDU	246	Teaching the Moderately/Mildly Handicapped	2	2	3
SEVENTH QUARTER					
REC	222	Physical Education and Adaptive Recreation	3	0	3
EDU	245	Activities & Crafts for Exceptional Persons	2	2	3
EDU	215	Physical Handicaps	3	0	3
EDU	252	Learning Disabilities	3	0	3
EDU	248	Introduction to Protective Intervention Techniques	1	1	2
EIGHTH QUARTER					
PSY	209	Abnormal Psychology	3	0	3
ENG	103	Technical Report Writing	3	0	3
EDU	222	Internship and Seminar	1	20	3

**TEACHER AIDE ASSOCIATE
DEGREE LEVEL**

The Teacher Aide Associate curriculum is designed to prepare individuals to work as assistants to the teaching staff of public or private schools, particularly in kindergarten through third grade classrooms. In addition to procuring jobs as teacher aides, graduates of this program can be employed as nursery school teachers, child care workers, houseparents in a group home environment, or counselors in a camp or recreational facility.

All applicants for this program must take the Placement Tests in English, Reading and Mathematics, and score at the entrance level for ENG 101 — Technical Composition and MAT 100 — Consumer Math. Developmental education courses to improve skills are available for those students failing to meet these criteria. They can subsequently retake the tests for further consideration.

All applicants must be high school graduates or the equivalent. Before entering the Teacher Aide Program, each applicant is required to have a personal interview with the program admissions committee. Post-admission but prior to the practicum, each must submit a Health Examination Certificate.

Minimum Credit Hours Required for Degree: 102

Area I Core26
All Required

- *EDU 101, 102, 103, 104, 105, 106, 112
- *EDU 108, 149, 203, 234

Area II Major30
All Required

- *EDU 107, 115, 116, 206, 213, 216
- *EDU 218, 224, 229, 232

Area III General Studies47
47 Credit Hours Required

- BUS *102, 103, 127; ENG *101, *102, *105
- HEA *105, *111, *112; MAT *100; PHE *220;
- PSY *105, *115, *116, 209, *212; SCI *211
- SOC 105, *107, 112, 117

*Required

Suggested Sequence of Courses for Teacher Aide Degree Program

Course No.	Course Title	Lec	Lab	Credit
FIRST QUARTER				
EDU 234	✓ Audio Visual Techniques	3	0	3
EDU 149	✓ Role of Education Associate	1	0	1
EDU 104	✓ Self-Dynamics	2	0	1
ENG 105	✓ Library Services	3	0	3
EDU 101	✓ Introduction to Education	3	0	3
	✓ Elective: <i>Non Paid</i>			
SECOND QUARTER				
EDU 105	✓ Group Dynamics	2	0	1
EDU 112	✓ Safety Education	3	0	3
SOC 107	✓ The Family	3	0	3
PSY 115	✓ Human Growth & Development I	3	0	3
BUS 102	✓ Typewriting I	2	3	3
	Elective <i>CARE OF Pre-School</i>			
THIRD QUARTER				
EDU 106	✓ Career Dynamics	2	0	1
PSY 116	✓ Human Growth & Development II	3	0	3
PSY 105	✓ General Psychology	3	0	3
HEA 111	✓ Personal and Community Health	3	0	3
EDU 102	✓ Educational Methods	3	2	4
FOURTH QUARTER				
HEA 105	✓ Nutrition	3	0	3
EDU 103	✓ Parent Education	3	0	3
EDU 108	✓ Behavior Management	3	0	3
EDU 203	✓ Exceptional Children	3	0	3
HEA 112	✓ First Aid and Safety	3	0	3
FIFTH QUARTER				
ENG 101	✓ Technical Composition	3	0	3
EDU 213	✓ Levels of Reading & Readiness	3	0	3
EDU 116	✓ Math for K-3	2	2	3
EDU 107	✓ Seminar in Reporting and Observation	3	0	3
SIXTH QUARTER				
ENG 102	✓ Oral Communications	3	0	3
MAT 100	Consumer Math	5	0	5
EDU 115	✓ Language Arts for Children	2	2	3
EDU 216	✓ Problems of Childhood	3	0	3
SEVENTH QUARTER				
PSY 212	✓ Child Psychology	3	0	3
SCI 211	✓ Science & Health for K-3	2	2	3
EDU 218	✓ Children's Literature	2	2	3
EDU 224	Internship and Seminar	1	20	3
EIGHTH QUARTER				
PHE 220	✓ Games and Activities for Youth	2	2	3
EDU 229	Social Studies for K-3	2	2	3
EDU 206	✓ Music for Young Children	1	2	2
EDU 232	✓ Creative Activities and Crafts for K-3	2	2	3

Annual Pay

ELECTRICAL INSTALLATION AND MAINTENANCE

The expansion of the local economy and the increasing production of ever more sophisticated electrical products assure a continuing demand for qualified electricians. The need for hundreds of thousands of electricians grows each year. Skilled electrical installation workers are needed on construction sites, in factories which use electrically-powered machines and in repair shops.

The Electrical Installation and Maintenance curriculum trains skilled professionals who can enter the job market as electricians or as job trainee apprentices in the field of electrical installation. Students learn to test, wire, and repair actual circuits found in homes or factories. They also learn about the nature of electricity, the operation of circuit breakers, and the principles of electric motors.

Graduates of the one-year program receive vocational diplomas and can look forward to employment as construction electricians and maintenance electricians.

Minimum Credit Hours Required for Diploma: 75

Area I	Core	0
Area II	Major	47
	All Required	
	ELC 1110, 1111, *1112, *1113, *1124	
	ELC *1125; ELN *1118, 1119	
Area III	General Studies	28
	24 Credit Hours Required	
	BUS 101, 115, 116, 117, 118; ENG *93, *94	
	HEA *112; MAT *1101	
	PHY *1101, *1102; PSY *114; SOC 105	

Students may also elect from the following Math Courses: MAT 101, 102, 103.
*Required unless waived by exam or approval of advisor. Other courses listed may be substituted upon approval of advisor.

Electrical Installation and Maintenance

Suggested Sequence of Courses

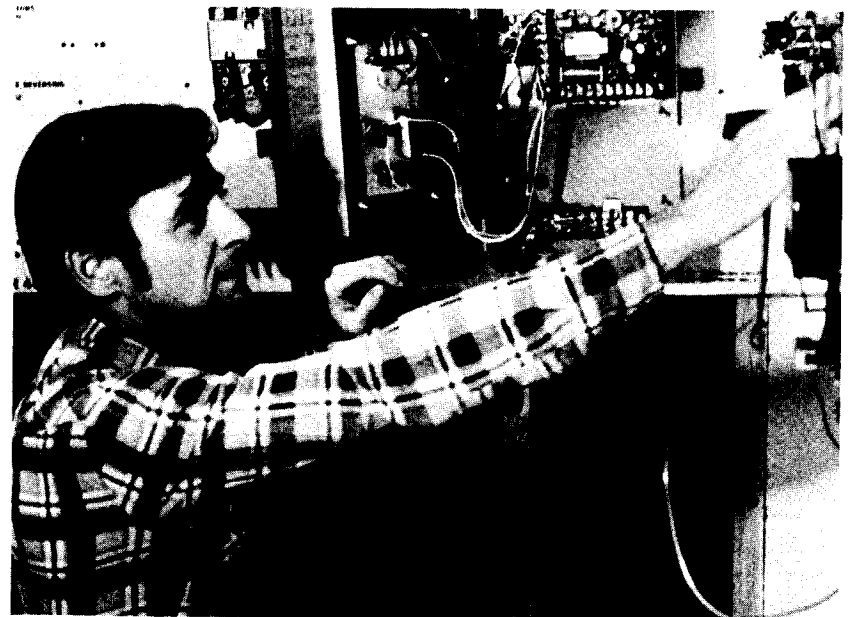
Course No.	Course Title	Lec	Lab	Shop	Credit
FIRST QUARTER					
ELC 1112	Direct and Alternating Current	5	0	12	9
ENG 93	Vocational Language Instruction I	5	0	0	5
*MAT 1101	Trades Mathematics I	4	0	0	4
PHY 1101	Applied Science I	3	2	0	4
SECOND QUARTER					
ELC 1113	Alternating and Direct Machine Controls	5	0	12	9
ELC 1110	Blueprint Reading: Building Trades	0	3	0	1
PHY 1102	Applied Science II	3	2	0	4
ENG 94	Vocational Language Instruction II	5	0	0	5

THIRD QUARTER

ELC 1124	Residential Wiring	5	0	9	8
ELN 1118	Industrial Electronics I	3	0	6	5
ELC 1111	Blueprint Reading: Electrical Trades	0	3	0	1
HEA 112	First Aid and Safety	3	0	0	3

FOURTH QUARTER

ELN 1119	Industrial Electronics II	3	0	6	5
ELC 1125	Commercial and Industrial Wiring	5	0	12	9
*PSY 114	Human Relations	3	0	0	3



ELECTRONICS ENGINEERING TECHNOLOGY

Electronics is undoubtedly the fastest growing field in the American economy. As electronics expands to more and more areas, there is a rapidly growing demand for men and women with education and training in the field. In order to meet this demand the Electronics Engineering Technology program is designed to provide a broad basic background in practical applications of electronics and in electronics related theory. Courses are designed to present material that will provide the student with progressive levels of job related skills and knowledge.

The opportunities open to the graduate of Electronic Engineering Technology program, which are extensive in scope and varied in number, are increasing each day. The electronics engineering technician may start in one or more of the following areas: research, design, development, production, maintenance, or sales.

The curriculum has been designed with the versatility to allow the student the option of a five-quarter diploma or the two-year associate in applied science degree. After completion of the five-quarter diploma program, the student should be prepared to enter employment as an electronics parts clerk, electronics serviceman, or an electronics installer. The graduate of the two-year AAS degree program may begin as an electronics engineering technician, electronics technician, engineering aide, laboratory technician, equipment specialist, technical sales representative, and supervisor.

Minimum Credit Hours Required for Degree: 123

Minimum Credit Hours for Diploma: 90

Area I Core44
All Required

DFT 113; ELC 112, 113
ISC 130; MAT 101, 102, 103
PHY 101, 102, 104

Area II Major55
All Required

ELN 121, 122, 123, 208, 218, 219, 220, 221, 241, 246
ELN 242/247/249; ELN 243/248/250

Area III General Studies24
24 Credit Hours Required

*ENG 101, 102, 103; **POL 102, 110
**PSY 105, 114; **SOC 105, 112

*Required

**Student may select 12 hours from these courses.

126

Suggested Sequence of Courses for Electronics Engineering Technology

Course	No.	Course Title	Lec	Lab	Credit
FIRST QUARTER					
DFT	113	Electronic Drafting ✓	2	4	4
ELC	112	Electrical Fundamentals I (DC) ✓	3	4	5
ENG	101	Technical Composition ✓	3	0	3
MAT	101	Technical Mathematics I ✓	5	0	5
SECOND QUARTER					
ELC	113	Electrical Fundamentals II (AC) ✓	3	4	5
ELN	121	Electronics I ✓	3	4	5
ENG	102	Oral Communications	3	0	3
MAT	102	Technical Mathematics II ✓	5	0	5
THIRD QUARTER					
ELN	208	Industrial Electronics ✓	3	4	5
ELN	122	Electronics II ✓	3	4	5
ENG	103	Technical Report Writing	3	0	3
MAT	103	Technical Mathematics III	5	0	5
FOURTH QUARTER					
ELN	218	Pulse, Logic, and Digital Circuits ✓	3	4	5
ELN	123	Electronics III	3	4	5
ISC	130	Industrial Safety ✓	3	0	3
PHY	101	Physics: Properties of Matter	3	2	4
PSY	114	Human Relations	3	0	3
FIFTH QUARTER					
ELN	219	Digital Fundamentals ✓	3	4	5
ELN	241	Electronic Systems I ✓	3	4	5
PHY	102	Physics: Work, Energy, Power	3	2	4
		Social Science Elective ✓	3	0	3
SIXTH QUARTER					
ELN	220	Introduction to Microprocessors I ✓	1	6	5
ELN		Electronic Systems II ✓	3	4	5
		Social Science Elective ✓	3	0	3
SEVENTH QUARTER					
ELN	221	Introduction to Microprocessors II ✓	1	6	5
ELN		Electronic Systems III	3	4	5
PHY	104	Physics: Light and Sound	3	2	4
		Social Science Elective	3	0	3
EIGHTH QUARTER					
ELN	246	Electronics Design Project ✓	0	6	3
		Electronics Elective ✓	3	4	5
		Social Science Elective	3	0	3

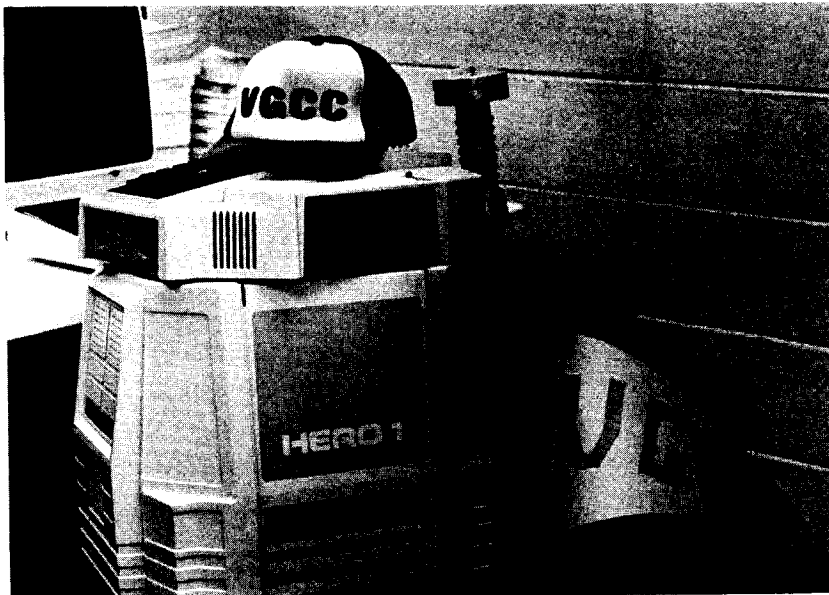
***Students must choose from the three options:

1. Communications
2. Computers
3. Industrial Electronics

Suggested Sequence of Courses

Five-Quarter Diploma Program in Electronic Engineering

Course No.	Course Title	Lec	Lab	Credit
FIRST QUARTER				
DFT 113	Electronic Drafting	2	4	4
ELC 112	Electrical Fundamentals I (DC)	3	4	5
ENG 101	Technical Composition	3	0	3
MAT 101	Technical Mathematics I	5	0	5
SECOND QUARTER				
ELC 113	Electrical Fundamentals II (AC)	3	4	5
ELN 121	Electronics I	3	4	5
ENG 102	Oral Communications	3	0	3
MAT 102	Technical Mathematics II	5	0	5
THIRD QUARTER				
ELN 208	Industrial Electronics	3	4	5
ELN 122	Electronics II	3	4	5
ENG 103	Technical Report Writing	3	0	3
MAT 103	Technical Mathematics III	5	0	5
FOURTH QUARTER				
ELN 218	Pulse, Logic, and Digital Circuits	3	4	5
ELN 123	Electronics III	3	4	5
ISC 130	Industrial Safety	3	0	3
PHY 101	Physics: Properties of Matter	3	2	4
PSY 114	Human Relations	3	0	3
FIFTH QUARTER				
ELN 219	Digital Fundamentals	3	4	5
ELN 241	Electronic Systems I	3	4	5
	Social Science Elective	3	0	3



GENERAL OFFICE—TECHNICAL SPECIALTY

One-Year Certificate Program

The General Office—Technical Specialty one-year certificate curriculum is designed for individuals entering, upgrading, or retraining in the office occupation relating to general and clerical duties. Special emphasis is on typing and basic office duties and responsibilities. Through studies in typewriting, basic accounting, office machines, and records management, the individual will be able to function effectively as an office clerk, machine operator, typist or receptionist.

Jobs available to graduates of this one-year certificate program are: adding machine operator, calculating machine operator, transcribing machine operator, clerk-typist, typist, file clerk I, general clerk, appointment clerk, and receptionist. The optional sequence provides graduates with the skills needed for jobs such as word processor and data entry operator.

Minimum Credit Hours Required for Certificate: 56

Area I Core12

All Required

BUS 120; ENG 101, 102

Area II Major44

All Required for Suggested Sequence

BUS 101, **102, 103, 104, 110, 111, 112

BUS 115, 117, 118, 134, 211, 214

All Required for Optional Sequence

BUS 101, **102, 103, 110, 111, 112

BUS 117, 211, 214, 273, 274

EDP 104, 109

BUS 106 - Shorthand may be taken in lieu of BUS 118 reducing major hours to 43 and total to 55 rather than 56.

**May be waived by examination.

Suggested Sequence of Courses

Course No.	Course Title	Lec	Lab	Credit
FIRST QUARTER				
BUS 101	Introduction to Business	5	0	5
BUS 102	Typing I	2	3	3
BUS 110	Office Machines I	1	2	2
BUS 117	Business Math I	5	0	5
ENG 101	Technical Composition	3	0	3
SECOND QUARTER				
BUS 103	Typing II	2	3	3
BUS 111	Office Machines II	1	2	2
BUS 112	Records Management	3	0	3
BUS 115	Business Law I	3	0	3
BUS 118	Business Math II	5	0	5
ENG 102	Oral Communications	3	0	3

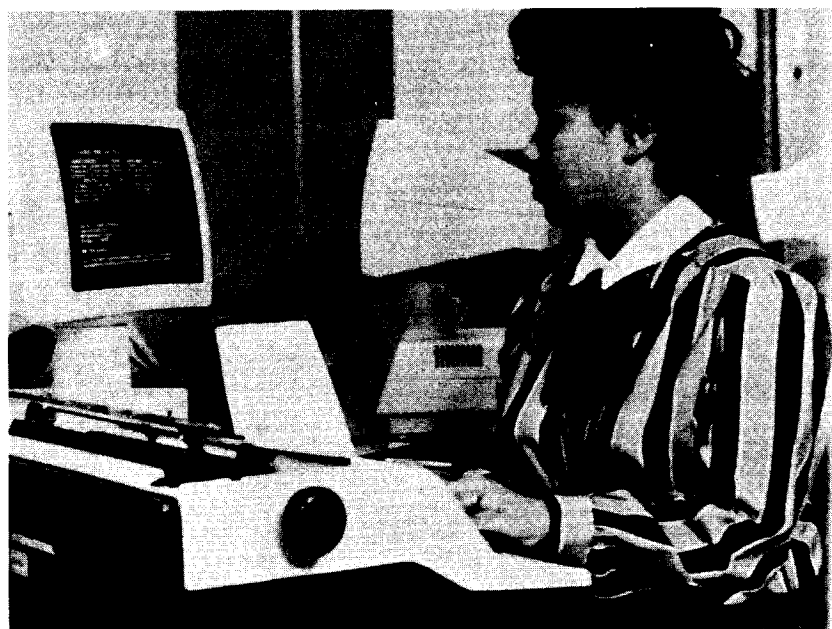
THIRD QUARTER

BUS	104	Typing III	2	3	3
BUS	134	Personal Development	3	0	3
BUS	120	Accounting I	5	2	6
BUS	211	Machine Dictation & Transcription I	2	2	3
BUS	214	Office Procedures	3	2	4

Optional Sequence of Courses

One-Year General Office-Technical Specialty Certificate

Course No.	Course Title	Lec	Lab	Credit
FIRST QUARTER				
BUS 101	Introduction to Business	5	0	5
BUS 102	Typing I	2	3	3
EDP 104	Introduction to Data Processing	3	0	3
BUS 117	Business Math I	5	0	5
ENG 101	Technical Composition	3	0	3
SECOND QUARTER				
BUS 103	Typing II	2	3	3
BUS 110	Office Machines I	1	2	2
BUS 112	Records Management	3	0	3
BUS 273	Word Processing I	3	0	3
EDP 109	BASIC Language I	2	4	4
ENG 102	Oral Communications	3	0	3
THIRD QUARTER				
BUS 111	Office Machines II	1	2	2
BUS 120	Accounting I	5	2	6
BUS 274	Word Processing II	3	0	3
BUS 211	Machine Dictation & Transcription I	2	2	2
BUS 214	Office Procedures	3	2	4



GENERAL OFFICE TECHNOLOGY

Two-Year Degree Program

More people are presently employed in clerical occupations than in any other single job category. Automation and increased production mean that those in clerical positions will need more technical skills and a greater adaptability for diversified types of jobs.

The General Office Technology curriculum is designed to provide students maximum exposure to the varied situations which are part of normal office routine. Students learn business philosophy, applied psychology, business practice, accounting, mathematics and business law. They are trained to efficiently operate office machines, such as typewriters, calculators and word processors, and adding machines.

Graduates of the two-year program receive Associate in Applied Science Degrees and can look forward to careers as administrative assistants, accounting clerks, assistant office managers, bookkeepers, file clerks, machine transcriptionists, and a variety of other clerical jobs.

Minimum Credit Hours Required for Degree: 112

Area I Core18
All Required

BUS 120; EDP 104; ENG 101, 102, 103

Area II Major82
All Required

BUS 101, *102, **103, 104, 110, 111, 112
BUS 115, 116, 117, 118, 121, 134, 204E
BUS 205, 211, 214, 215, 229, 247, 271
BUS 273, 274; ECO 102

Area III General Studies12
12 Credit Hours Required

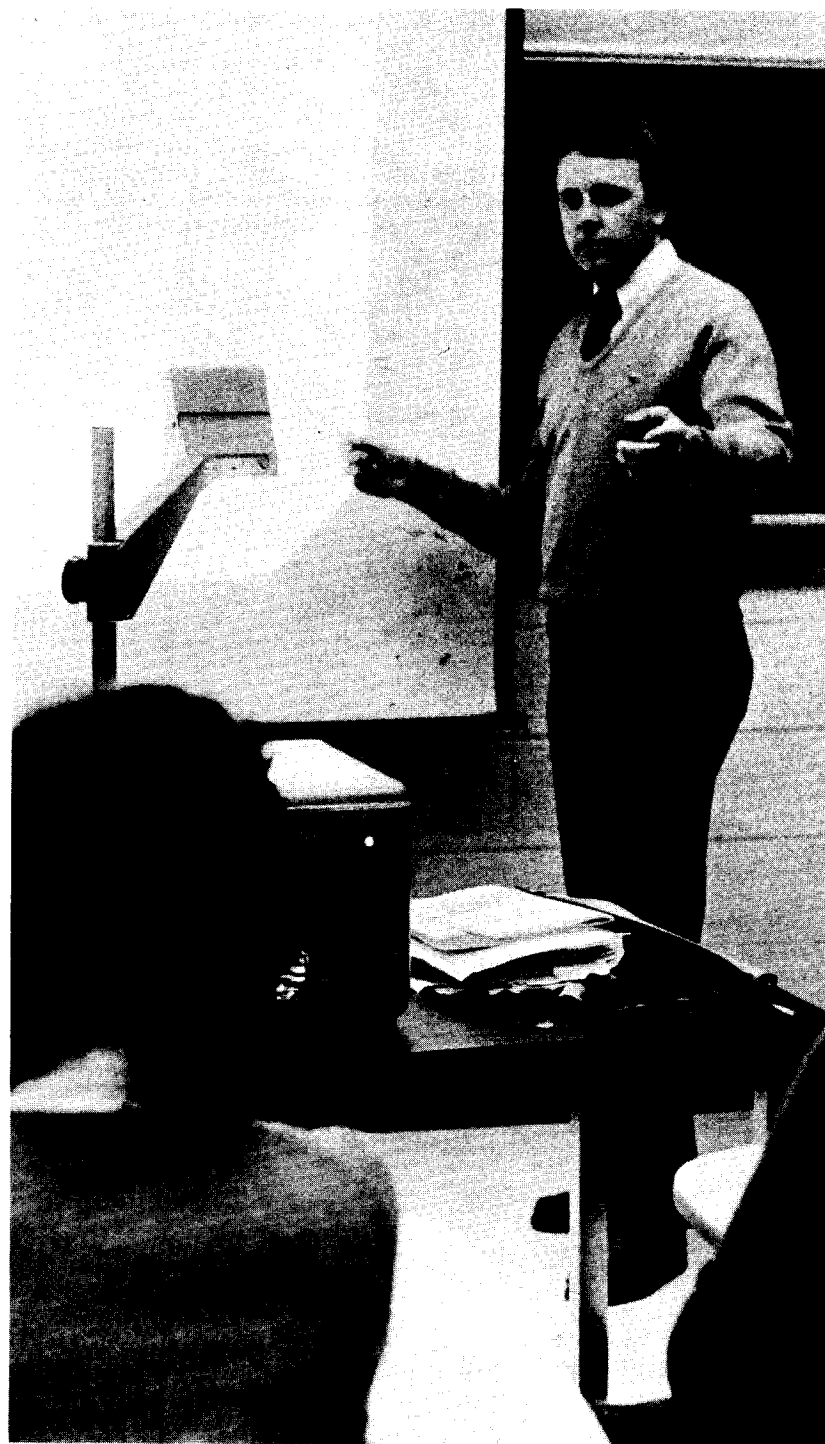
EDP 109; *ENG 206; BUS 106, **107, 233
BUS 235; MAT 105, 106; POL 110; PSY 105
SOC 105

*Required
**May be waived by examination.

Suggested Sequence of Courses
Two-Year Degree Program in General Office Technology

Course	No.	Course Title	Lec	Lab	Credit
FIRST QUARTER					
ENG	101	— Technical Composition	3	0	3
BUS	101	— Introduction to Business	5	0	5
✓ BUS	102	— Typewriting I	2	3	3
BUS	110	— Office Machines I	1	2	2
BUS	117	— Business Math I	5	0	5
SECOND QUARTER					
ENG	102	— Oral Communications	3	0	3
BUS	103	— Typewriting II	2	3	3
✓ BUS	111	— Office Machines II	1	2	2
BUS	112	— Records Management	3	0	3
BUS	115	— Business Law I	3	0	3
BUS	118	— Business Math II	5	0	5
THIRD QUARTER					
✓ ENG	103	— Technical Report Writing	3	0	3
✓ BUS	104	— Typewriting III	2	3	3
BUS	116	— Business Law II	3	0	3
BUS	120	— Accounting I	5	2	6
BUS	134	— Personal Development	3	0	3
FOURTH QUARTER					
✓ BUS	121	— Accounting II	5	2	6
✓ BUS	204E	— Advanced Typing — Executive	2	3	3
BUS	214	— Office Procedures	3	2	4
EDP	104	— Introduction to Data Processing	3	0	3
		— Elective <i>Shorthand</i>	3	0	3
FIFTH QUARTER					
ENG	206	Business Communications	3	0	3
BUS	205	— Typewriting V — Speedbuilding	2	3	3
BUS	229	— Taxes I	3	2	4
BUS	271	— Office Management <i>Pers Mgmt</i>	3	0	3
BUS	273	— Word Processing I	3	0	3
		— Elective <i>nat bus</i>	3	0	3
SIXTH QUARTER					
BUS	215	Office Application	1	9	4
BUS	247	Business Insurance	3	0	3
ECO	102	Economics I	3	0	3
BUS	211	— Machine Dictation & Transcription I	2	2	3
BUS	274	— Word Processing II	3	0	3
		— Social Science Elective <i>Psy</i>	3	0	3

*Pers Mgmt
Shorthand
Math Review*



HEATING AND AIR CONDITIONING

The growing use of air conditioning, heating, and refrigeration equipment throughout the nation requires many skilled mechanics who are trained to install, maintain, and repair such equipment. Additionally, the current energy crisis increases the demand for mechanics who can keep heating and air conditioning equipment running as efficiently as possible. New sources of energy and new types of heating and cooling equipment will require versatile mechanics trained in the latest processes and techniques.

Most skilled air conditioning and heating mechanics are employed by businesses that specialize in the repair, maintenance, and installation of commercial, industrial, and home equipment. These businesses also are involved in the conversion and modernization of obsolete air conditioning and heating installations.

Minimum Credit Hours Required for Diploma: 81

Area I Core 6
All Required

*WLD 1129; *ELC 1102

Area II Major 47
All Required

*AHR 1104, 1116, 1117, 1120, 1121, 1123

*AHR 1124, 1125, 1126, 1128, 1129

Area III General Studies 28
28 Credit Hours Required

BUS 101, 117, 127, 235; ENG *93, *94; HEA *112

*MAT 1101, *1102; PHY *1101; PSY 105

*PSY 114; SOC 105

*Required

Suggested Sequence of Courses for Heating & Air Conditioning

Course No.	Course Title	Lec	Lab	Shop	Credit
FIRST QUARTER					
AHR 1121	Principles of Refrigeration I	2	3	0	3
AHR 1116	Oil Burner Installation and Service	4	6	0	6
MAT 1101	Trades Mathematics I	4	0	0	4
ENG 93	Vocational Language Instruction I	5	0	0	5
PHY 1101	Applied Science I	3	2	0	4
AHR 1104	Blueprint Reading: Mechanical	0	3	0	1
SECOND QUARTER					
AHR 1125	Principles of Refrigeration II	3	6	0	5
AHR 1117	Gas Burners, Electric Heat and Liquid Heat Applications	4	3	0	5
MAT 1102	Trades Mathematics II	4	0	0	4
ENG 94	Vocational Language Instruction II	5	0	0	5
ELC 1102	Applied Electricity	2	3	0	3
AHR 1120	Blueprint Reading: A/C	1	3	0	2

THIRD QUARTER

AHR 1123	Principles of Air Conditioning	3	6	0	5
AHR 1124	Air Conditioning Service	2	9	0	5
WLD 1129	Basic Welding	2	3	0	3
HEA 112	First Aid and Safety	3	0	0	3

FOURTH QUARTER

AHR 1128	Automatic Controls	3	6	0	5
AHR 1126	All Year Comfort Systems	3	9	0	6
PSY 114	Human Relations	3	0	0	3
AHR 1129	Principles of Solar Heating	3	3	0	4



INDUSTRIAL MAINTENANCE

86

This curriculum is designed to meet the need for plant maintenance workers. Existing industries in North Carolina and new industries moving into the state express the need for skilled craftsmen with the background, knowledge, and potential to advance in the plant maintenance field. This curriculum is designed to prepare the individual, through theory and practice of various maintenance skills and related courses, to obtain employment in industrial maintenance occupations.

The Industrial Maintenance program is designed to prepare individuals to repair and maintain mechanical systems and equipment, plumbing, physical structure, and electrical wiring and fixtures of pipe and tubing for gas, water, and hydraulic lines using appropriate tools. They may install electrical equipment and repair or replace wiring and fixtures. They do welding repair work on metal structures and equipment. They may operate metalworking machines to repair or fabricate new parts. They may clean, lubricate, repair, and replace various machine parts including bearings, gears, pulleys, gauges, valves, and control devices.

The plant maintenance worker may start in one of the following areas: general maintenance helper, factory or mill maintenance repairer helper, and millwright helper. Advanced jobs in the field include plant maintenance worker, factory or mill maintenance repairer, millwright, powerhouse mechanic, maintenance electrician, mechanical maintenance supervisor, and utilities and maintenance supervisor.

Minimum Credit Hours Required for Diploma: 76

Area I	Core	0
Area II	Major	52
	All Required	
	AHR 1102; DFT 1104; ELC 1112, 1113 ISC 130, 228; MEC 1101, 1133, 1140; PLU 1110; WLD 1101, 1102	
Area III	General Studies	24
	24 Credit Hours Required	
	AHR 1117, 1123, 1124, 1126, 1128; ELC 1124, 1125; *ENG 93, 94; *HEA 112; MAT 1101, 1102; *PSY 114; SOC 105	

*Required unless waived by exam. Other courses listed may be substituted upon approval of advisor.

Suggested Sequence of Courses for Industrial Maintenance

Evening Curriculum

Course	No.	Course Title	Lec	Lab	Shop	Credit
FIRST QUARTER						
MEC	1133	Electrical and Mechanical Maintenance	3	0	6	5
MAT	1101	Trades Math I	4	0	0	4
PSY	114	Human Relations	3	0	0	3
ENG	93	Vocational Language Instruction I	5	0	0	5
SECOND QUARTER						
MAT	1102	Trades Math II	4	0	0	4
ELC	1112A	Direct and Alternating Current (Part I)	2	0	6	4
AHR	1102A	Introduction to Cooling and Heating Systems (Part I)	2	0	3	3
ENG	94	Vocational Language Instruction II	5	0	0	5
THIRD QUARTER						
ELC	1112B	Direct and Alternating Current (Part II)	3	0	6	5
AHR	1102B	Introduction to Cooling and Heating Systems (Part II)	1	0	6	3
FOURTH QUARTER						
DFT	1104	Blueprint Reading	0	3	0	1
WLD	1102	Basic Arc Welding	0	0	3	1
HEA	112	First Aid and Safety	3	0	0	3
MEC	1101A	Machine Shop (Part I)	2	0	6	4
FIFTH QUARTER						
ELC	1113A	AC & DC Machine Control (Part I)	3	0	6	5
MEC	1101B	Machine Shop (Part II)	1	0	6	3
SIXTH QUARTER						
ELC	1113B	AC & DC Machine Control (Part II)	2	0	6	4
PLU	1110	Plumbing and Pipework	2	0	6	4
SEVENTH QUARTER						
ISC	228	Industrial Supervision	3	0	0	3
ISC	130	Industrial Safety	3	0	0	3
MEC	1140	Hydraulics Fundamentals Elective	3	0	0	3
EIGHTH QUARTER						
AHR or						
ELC		Courses as needed	3	0	12	7
WLD	1101	Basic Gas Welding	0	0	3	1

INDUSTRIAL MANAGEMENT

Industry's needs in positions of supervision and management have grown extensively with the development of new methods of manufacturing and with increases in the national economy. This need has added emphasis to the necessity for well-trained individuals who can understand and apply new methods and keep abreast of trends in manufacturing. The supervisor and persons in management must be concerned daily with human behavior and the psychological factors which affect personnel working under their direction.

This course is designed to develop the individual's abilities by providing training in modern business and management, psychology, production methods, and general and social education. This training should provide the opportunity to enter into an industrial occupation and, with experience, assume the responsibilities that go with supervisory and management positions in industry.

The industrial supervisor coordinates the activities of workers in one or more occupations. Duties may encompass the interpretation of company policies, the planning of production schedules and estimation of man hour requirements for job completion. The supervisor may assist in the establishment or adjustment of work procedures, the analysis and resolution of work problems, and the initiation of plans to motivate workers to achieve work goals.

Minimum Credit Hours Required for Degree: 104

Area I	Core	18
	All Required	
	BUS 120; EDP 104; ENG 101, 102, 103	
Area II	Major	83
	All Required	
	BUS 101, 102, 121, 233; *ISC 112,	
	ISC 113, 130, 212, 213, 214, 222	
	ISC *224, 226, 228, 229, *230, 232	
	MAT 101, 102; ENG 206; *ECO 102; PSY 105	
Area III	General Studies	3
	3 Hours Required	
	BUS 115; EDP 109; PHY 101	

Suggested Sequence of Courses for Industrial Management

Course	No.	Course Title	Lec	Lab	Credit
FIRST QUARTER					
ENG	101	Technical Composition	3	0	3
BUS	233	Personnel Management	3	0	3
✓ISC	112	Fundamentals of Management I	5	0	5
✓MAT	101	Technical Mathematics I	5	0	5
SECOND QUARTER					
PSY	105	General Psychology	3	0	3
✓ISC	113	Fundamentals of Management II	5	0	5
MAT	102	Technical Mathematics II	5	0	5
THIRD QUARTER					
BUS	102	Typewriting I	2	3	3
BUS	120	Accounting I	5	2	6
✓ISC	120	Industrial Safety	3	0	3
FOURTH QUARTER					
BUS	121	Accounting II	5	2	6
ECO	102	Economics I	3	0	3
✓ISC	212	Labor Relations	3	0	3
FIFTH QUARTER					
ENG	103	Technical Report Writing	3	0	3
✓ISC	213	Labor Relations II	3	0	3
✓ISC	214	Work Measurement and Job Analysis	5	2	6
		Elective	3	0	3
SIXTH QUARTER					
BUS	101	Introduction to Business	5	0	5
ENG	102	Oral Communications	3	0	3
ISC	222	Labor Law	3	0	3
✓ISC	228	Industrial Supervision I	3	0	3
SEVENTH QUARTER					
ISC	224	Industrial Finance	3	0	3
ISC	229	Industrial Supervision II	3	0	3
ISC	230	Budgeting & Control	3	0	3
ISC	232	Quality Control	3	0	3
EIGHTH QUARTER					
✓EDP	104	Introduction to Data Processing	3	0	3
ENG	206	Business Communications	3	0	3
ISC	226	Industrial Planning & Control	3	2	4

LIGHT CONSTRUCTION

The light construction industry needs workers who are skilled in carpentry, masonry and concrete work, especially in the areas of residential construction and the production of small commercial buildings.

The Light Construction curriculum is designed to train students to skillfully use tools, handle construction materials and to knowledgeably employ the techniques of residential and light commercial construction. Students learn site layout, excavating, form work and foundations. They learn how to frame floors, walls, roofs and windows. The techniques of laying floors, plastering and putting in dry walls, installing windows and handling interior trim are taught. Students learn how to estimate the cost of a particular job and how to follow blueprints and sketches.

Students can complete one year of training and receive vocational diplomas. Graduates can then take positions in the housing and commercial construction industry, often later moving up to supervisory positions as foremen of sub-contractors. Some even acquire the experience and ability to begin their own small contracting firms.

Minimum Credit Hours Required for Diploma: 79

Area I	Core	0
Area II	Major	55
	All Required	
	CAR 1102, 1103, 1104	
	LCS 1104, 1111, 1112, 1113, 1114	
	MAS 1101, 1103	
Area III	General Studies	24
	24 Credit Hours Required	
	BUS 117, 127; *ENG 93, 94; *HEA 112; *MAT 1101, 1102;	
	PSY 105, *114, 115; SOC 111, 112	

*Required unless waived by exam. Other courses listed may be substituted upon approval of advisor.
Students may also elect from Math Courses: MAT 101, 102, 103.

Suggested Sequence of Courses for Light Construction

First Year

Course No.	Course Title	Lec	Lab	Shop	Credit
FIRST QUARTER					
MAT 1101	Trades Mathematics I	4	0	0	4
ENG 93	Vocational Language Instruction I	5	0	0	5
MAS 1101	Masonry I	5	0	15	10
LCS 1111	Blueprint Reading and Sketching	1	3	0	2
SECOND QUARTER					
MAT 1102	Trades Mathematics II	4	0	0	4
ENG 94	Vocational Language Instruction II	5	0	0	5
CAR 1102	Carpentry I	5	0	15	10
LCS 1112	Blueprint Reading: Building Trades I	2	3	0	3

THIRD QUARTER

CAR	1103	Carpentry II	5	0	15	10
MAS	1103	Masonry II	2	0	3	3
LCS	1113	Blueprint Reading: Building Trades II	2	0	0	2
HEA	112	First Aid and Safety	3	0	0	3

FOURTH QUARTER

LCS	1104	N.C. Building Code and N.C. Construction License	3	0	0	3
CAR	1104	Finish Carpentry	3	0	18	9
LCS	1114	Construction Estimating	3	0	0	3
PSY	114	Human Relations	3	0	0	3



NURSING EDUCATION

ASSOCIATE DEGREE NURSING (REGISTERED NURSING)

The Associate Degree Nursing curriculum prepares registered nurses (RN) to implement the nursing process for technical nursing care given to clients with physical and mental problems. The Associate Degree nurse is prepared to assess the client's problems, make the nursing diagnosis for common problems; plan, implement, and evaluate nursing care which includes both medical and nursing orders; and supervise licensed practical nurses and other auxiliary health care personnel. The registered nurse may practice in a variety of health care settings such as hospitals, nursing homes, doctor's offices, mental health centers, and industry.

Graduate and licensed practical nurses who qualify may enter the Associate Degree Nursing Program at the beginning of the fourth quarter and complete the program at the end of the seventh quarter. Graduates are eligible to take the National Council Licensure Examination which is given by the North Carolina Board of Nursing and is required for practice as a registered nurse.

PRACTICAL NURSING CURRICULUM ALTERNATIVE

The Practical Nursing Curriculum Alternative offers the nursing courses required for graduation with a diploma in practical nursing in the fourth quarter. The licensed practical nurse (LPN) is prepared to provide nursing care to selected clients under the supervision of a registered nurse or physician. The LPN is expected to use basic nursing knowledge and skills in carrying out medical and nursing orders. She/he may practice in hospitals, nursing homes, clinics, and doctors' offices.

The Practical Nursing Curriculum Alternative is offered on a full-time basis (4 quarters) and a part-time basis (8 quarters).

Graduates of the Practical Nursing Program are eligible to take the National Council Licensure Examination for Practical Nurses which is given by the North Carolina State Board of Nursing and is required for practice as a licensed practical nurse.

Individuals choosing either the Associate Degree or Practical Nursing Program must complete biology, algebra, and chemistry and complete high school prior to entering the program. The nursing student must make a grade of "C" or better on all nursing, science, sociology, and psychology courses in the curriculum in order to receive credit for the courses and to progress in the curriculum.

Minimum Number of Credits Required for Graduation With
Associate Degree: 121

Suggested Sequence of Courses for Associate Degree Nursing

Course No.	Course Title	Lec	Lab	Clinical	Credit
FIRST QUARTER					
✓BIO 106	Anatomy & Physiology I	3	2	0	4
✓PSY 105	General Psychology	3	0	0	3
✓NUT 101	Nutrition and Diet Therapy	3	0	0	3
✓NUR 101	Nursing Fundamentals	6	4	3	9

SECOND QUARTER					
✓BIO 107	Anatomy & Physiology II	3	2	0	4
✓PSY 117	Growth & Development—Life Span	3	0	0	3
MAT 110	Drug Dosages and Measurements	2	0	0	2
NUR 102	Nursing Adults & Children I	6	0	12	10
THIRD QUARTER					
✓BIO 203	Advanced Physiology	3	0	0	3
✓ENG 120	College Composition I	3	0	0	3
or					
✓ENG 101	Technical Composition	3	0	0	3
NUR 103	Nursing Adults and Children II	6	0	12	10
✓NUR 105	Pharmacology	3	0	0	3
FOURTH QUARTER					
✓BIO 204	Microbiology	3	2	0	4
✓NUR 202	Nursing Adults & Children III	6	0	15	11
or					
✓NUR 203	Maternal & Newborn Nursing	6	0	15	11
✓SOC 105	General Sociology	3	0	0	3
FIFTH QUARTER					
✓NUR 202	Nursing Adults & Children III	6	0	15	11
or					
✓NUR 203	Maternal & Newborn Nursing	6	0	15	11
✓ENG 121	College Composition II	3	0	0	3
or					
✓ENG 103	Technical Report Writing	3	0	0	3
SIXTH QUARTER					
✓NUR 204	Mental Health Nursing	8	0	15	13
✓ENG 122	College Composition III	3	0	0	3
or					
✓ENG 102	Oral Communications	3	0	0	3
SEVENTH QUARTER					
NUR 206	Nursing Seminar	2	0	0	2
NUR 205	Nursing of Adults & Children IV	6	0	15	11
	Required — General Education Elective	3	0	0	3

Minimum Credit Hours Required for Graduation by Returning Practical Nurse: 124

Transfer Credit Required for Returning Practical Nurse to enter Associate Degree Program57

Related: BIO 106, 107, 203; NUT 101; PSY 117; MAT 110

Major: NUR 101, 102, 103, 105

General Education: PSY 105; ENG 101

Suggested Sequence of Courses
Curriculum Alternative — Returning Practical Nurse

Course No.	Course Title	Lec	Lab	Clinical	Credit
THIRD QUARTER					
NUR 201	Nursing Process & Client Assessment	2	2	0	3
FOURTH QUARTER					
BIO 204	Microbiology	3	2	0	4
NUR 202	Nursing Adults & Children III or Maternal and Newborn Nursing	6	0	15	11
NUR 203	Maternal and Newborn Nursing	6	0	15	11
SOC 105	General Sociology	3	0	0	3
FIFTH QUARTER					
NUR 202	Nursing Adults & Children III or Maternal and Newborn Nursing	6	0	15	11
NUR 203	Maternal and Newborn Nursing	6	0	15	11
ENG 121	College Composition II or Technical Report Writing	3	0	0	3
ENG 103	Technical Report Writing	3	0	0	3
SIXTH QUARTER					
NUR 204	Mental Health Nursing	8	0	15	13
ENG 122	College Composition III or Oral Communications	3	0	0	3
ENG 102	Oral Communications	3	0	0	3
SEVENTH QUARTER					
NUR 206	Nursing Seminar	2	0	0	2
NUR 205	Nursing Adults and Children IV Required — General Education Elective	6	0	15	11
		3	0	0	3

Minimum Credits Required for Practical Nursing Diploma: 72

Suggested Sequence of Courses for Practical Nursing Curriculum
Alternative

Course No.	Course Title	Lec	Lab	Clinical	Credit
FIRST QUARTER					
BIO 106	Anatomy & Physiology I	3	2	0	4
PSY 105	General Psychology	3	0	0	3
NUT 101	Nutrition and Diet Therapy	3	0	0	3
NUR 101	Nursing Fundamentals	6	4	3	9
SECOND QUARTER					
BIO 107	Anatomy & Physiology II	3	2	0	4
PSY 117	Growth and Development-Life Span	3	0	0	3
MAT 110	Drug Dosages and Measurements	2	0	0	2
NUR 102	Nursing Adults and Children I	6	0	12	10
THIRD QUARTER					
ENG 120	College Composition I or Technical Composition	3	0	0	3
ENG 101	Technical Composition	3	0	0	3
NUR 103	Nursing Adults and Children II	6	0	12	10
NUR 105	Pharmacology	3	0	0	3
FOURTH QUARTER					
NUR 1121	Maternal and Newborn Nursing	3	0	9	6
NUR 1140	Nursing Adults and Children III	6	0	9	9
NUR 1141	Nursing Seminar	3	0	0	3

NURSING ASSISTANT

This program is designed to help the student develop an understanding of the role of the nursing assistant. It introduces different health care agencies and health care workers and assists the student in developing skills in simple nursing procedures and understanding some common effects of illness on clients and their families.

The course is one quarter in length. Those students who successfully complete the program will receive certificates.

Minimum Requirements for Certificate: 1 Quarter (16 credit hours)

Course No.	Course Title	Lec	Lab	Clinical	Credit
NUR 1150	Nurses' Assistant	9	6	12	16

POSTAL SERVICE TECHNOLOGY

(Program to Begin Fall, 1984, subject to approval by
North Carolina Board of Community Colleges)

The Postal Service Technology Program is designed to provide opportunities for advancement to present and future employees of the United States Postal Service. Graduates of the program will be prepared to function effectively within a variety of positions. This will be accomplished through the study of postal organization, mail processing, employee and customer services, mail delivery and collection, problem analysis, related business/management subjects, and general education courses.

Graduates of the Postal Service Technology Program will receive an Associate in Applied Science degree.

Minimum Credit Hours Required for Degree: 107

Area I	Core	18
	All Required	
	BUS 120; EDP 104; ENG 101, 102, 103	
Area II	Major	74
	All Required	
	BUS 101, 102, 110, 115, 116, 117, 118	
	BUS 121, 122, 271, 272; ECO 102, 104	
	24 Hours Required (Specialized Courses)	
	POS 101, 103, 105, 201, 202, 203, 205, 206, 208	
Area III	General Studies	15
	15 Credit Hours Required	
	BUS 223, 232, 235; EDP 109	
	*ENG 206; HEA 112; HUM 125, 126	
	ISC 112, 113, 130, 212, 222, 224, 228, 229, 230	
	MAT 105, 106; POL 102, 110; *PSY 105	

*Required

Suggested Sequence of Courses for Postal Service Technology

Course No.	Course Title	Lec	Lab	Credit
FIRST QUARTER				
BUS 101	Introduction to Business	5	0	5
BUS 117	Business Math I	5	0	5
ENG 101	Technical Composition	3	0	3
•	Specialized Course	3	0	3
•	Specialized Course	3	0	3
SECOND QUARTER				
ENG 102	Oral Communications	3	0	3
BUS 118	Business Math II	5	0	5
BUS 120	Accounting I	5	2	6
BUS 115	Business Law I	3	0	3
•	Specialized Course	3	0	3
THIRD QUARTER				
ENG 103	Technical Report Writing	3	0	3
ECO 102	Economics I	3	0	3
BUS 121	Accounting II	5	2	6
BUS 116	Business Law II	3	0	3
•	Specialized Course	3	0	3
FOURTH QUARTER				
BUS 122	Managerial Accounting	5	2	6
ECO 104	Economics II	3	0	3
BUS 110	Office Machines I	1	2	2
BUS 271	Office Management (or Mgt. Elective)	3	0	3
•	Specialized Course	3	0	3
FIFTH QUARTER				
ENG 206	Business Communications	3	0	3
BUS 272	Principles of Supervision	3	0	3
•	Specialized Course	3	0	3
•	Specialized Course	3	0	3
•	Elective	3	0	3
SIXTH QUARTER				
BUS 102	Typing I	2	3	3
EDP 104	Introduction to Data Processing	3	0	3
PSY 105	General Psychology	3	0	3
•	Specialized Course	3	0	3
•	Elective	3	0	3
•	Elective	3	0	3

RADIOLOGIC TECHNOLOGY (RADIOGRAPHY)

The Radiologic Technology (Radiography) Program may be completed in 24 consecutive months and leads to an Associate in Applied Science Degree in Radiologic Technology. The program has achieved national accreditation by the Committee on Allied Health Education and Accreditation. Graduates of this American Medical Association approved program are eligible to sit for the national examination of the American Registry of Radiologic Technologists (A.R.R.T.). Upon successfully passing the examination, graduates are credentialed as Registered Technologists in Radiography with the A.R.R.T.

Radiologic Technologists perform an important function in the rapidly growing branch of medicine known as Radiology. They are assistants to physicians who specialize in the use of ionizing radiation to help diagnose and treat diseases and injuries. The R.T. (R) A.R.R.T. credentialing abbreviations indicate that the technologist is a Radiographer who is primarily concerned with demonstrations of portions of the human body on x-ray film or other image recorder for diagnostic interpretation by a Radiologist.

The Radiographer adjusts x-ray equipment to the correct setting for a specific examination, positions the patient, makes the required number of radiographs, and develops and files the finished work. The R.T. may use mobile x-ray equipment at a patient's bedside and in surgery, or work in a variety of specialized areas within radiology.

Graduates may pursue additional training in ancillary areas such as Radiation Therapy, Nuclear Medicine, C/T Scanning or Ultrasound. A higher academic degree may be pursued in education, administration, the specialty area or may be combined with one of the ancillary areas. There are colleges in the state that will accept many of the courses from this program towards a four-year baccalaureate degree at their institution.

Most Radiologic Technologists are employed in hospital radiology departments, while others work in physicians' offices and clinics. Other possibilities include mobile radiology units, administration, teaching and commercial positions connected with the manufacture, sales and servicing of radiographic equipment.

Minimum Credit Hours Required for Degree: 144

Area I	Core	0
Area II	Major	110
	All Required	
	RDT 101, 102, 103, 104, 105, 110, 112	
	RDT 113, 114, 203, 205, 206, 207	
	RDT 208, 209, 215, 216, 217, 218, 219	
	BIO 115; PHY 107, 108	
Area III	General Studies	34
	34 Credit Hours Required	
	BIO 109, 110, 208	
	ENG 120, 121, 122 or ENG 101, 102, 103	
	EDP 104; HEA 112; MAT 108	
	PSY 105; SOC 105	

Suggested Sequence of Courses for Radiologic Technology (Radiography)

Course No.	Course Title	Lec	Lab	Clinic	Credit
FIRST QUARTER					
RDT 101	Introduction to Radiologic Technology	3	0	3	4
RDT 110	Medical Ethics/Patient Care	3	2	0	4
RDT 102	Radiologic Positioning I	3	2	0	4
BIO 109	Anatomy & Physiology	3	2	0	4
BIO 115	Medical Terminology	3	0	0	3
SECOND QUARTER					
RDT 103	Radiologic Positioning II	3	2	0	4
RDT 105	Radiographic Exposures	2	2	0	3
RDT 112	Clinical Education I	0	0	15	5
BIO 110	Anatomy & Physiology	3	2	0	4
MAT 108	Radiologic Mathematics	3	0	0	3
THIRD QUARTER					
RDT 104	Radiologic Positioning III	3	2	0	4
RDT 113	Clinical Education II	0	0	15	5
RDT 205	Radiographic Processing	3	0	0	3
PHY 107	Radiologic Physics	3	2	0	4
ENG 120	College Composition I	3	0	0	3
	or				
ENG 101	Technical Composition	3	0	0	3
FOURTH QUARTER					
PHY 108	Radiologic Physics	3	2	0	4
RDT 114	Clinical Education III	0	0	24	8
HEA 112	First Aid and Safety	3	0	0	3
ENG 121	College Composition II	3	0	0	3
	or				
ENG 102	Oral Communications	3	0	0	3
FIFTH QUARTER					
RDT 206	Radiobiology & Protection	4	0	0	4
RDT 209	Radiologic Equipment & QA	3	2	0	4
RDT 215	Clinical Education IV	0	0	24	8
ENG 122	College Composition III	3	0	0	3
	or				
ENG 103	Technical Report Writing	3	0	0	3
SIXTH QUARTER					
RDT 203	Radiographic Procedures	4	0	0	4
RDT 216	Clinical Education V	0	0	24	8
BIO 208	Radiographic Pathology	2	0	0	2
PSY 105	General Psychology	3	0	0	3
SEVENTH QUARTER					
RDT 207	Film Evaluation/Imaging	2	0	0	2
RDT 217	Clinical Education VI	0	0	24	8
EDP 104	Introduction to Data Processing	3	0	0	3
SOC 105	General Sociology	3	0	0	3
EIGHTH QUARTER					
RDT 208	Radiologic Management/Education	3	0	0	3
RDT 219	Registry Seminar	3	2	0	4
RDT 218	Clinical Education VII	0	0	30	10

RECREATION ASSOCIATE TECHNOLOGY

The Recreation Associate Program is designed to train leaders in the provision of recreation services in a public, private, or commercial agency. Field experiences in this program are usually with municipal recreation departments.

Students have the opportunity to specialize in a particular aspect of recreation. The programs available to students are in Recreation Associate Technology and Therapeutic Recreation Technology. The courses in the two programs are identical for the first year. The student, after the first year, selects the program of interest for the last year. Field experiences are required for both programs and give the student a comprehensive understanding of specialty functions.

The National Recreation and Park Association projects an unparalleled demand for recreation services in the future. This demand will create a deficit of personnel in positions requiring two years of college training. Recreation positions may be available in the following agencies: municipal recreation, hospitals, armed forces, state and federal recreation, church recreation, industrial recreation, commercial recreation, homes and communities for the aged, and detention institutions.

Minimum Credit Hours Required for Degree: 113

Area I Core69
69 Credit Hours Required

*REC 110, 111, 112, 113, 114, 120, 121
REC 122, 123, 130, 131, 132, 133, 134
REC 140, 141, 142, 143, 144, 210, 211
REC 212, 221, 222, 282

Area II Major15
All Required

*REC 213, 225, 226, 242, 243

Area III General Studies29
29 Credit Hours Required

BUS 102, 115; CJC 212; EDU 104, 105, 106
EDU 108, 200, 252; ENG *101, *102, *103
ENG *105, 120, 206, 220; MAT *100
POL 102, 110; PSY *105, 115, *209
SOC 105, 107, 112, 117
REC 214, 223, 240, 241, 244

*Required

Suggested Sequence of Courses for Recreation Associate

Course No.	Course Title	Lec	Lab	Credit
FIRST QUARTER				
ENG 105*	Library Services	3	0	3
REC 110*	Recreational Arts and Crafts	1	3	2
REC 111†	The Human Body in Health and Disease	2	3	3
REC 112†	Introduction to Recreation Services	3	0	3
REC 113†	Introduction to Ill and Handicapped	3	0	3
REC 114†	Social Aspects of Sport	3	0	3

SECOND QUARTER

PSY 105*	General Psychology	3	0	3
ENG 101†	Technical Composition	3	0	3
REC 120	History, Philosophy, and Contemporary Nature of Recreation	3	0	3
REC 121†	Principles of Motor Development	3	0	3
REC 122†	Health Practices In Recreation Management	3	0	3
REC 123†	Social Recreation	3	0	3

THIRD QUARTER

ENG 102†	Oral Communications	3	0	3
REC 130	The Psychology of Sport and Recreation	3	0	3
REC 131†	Recreation Leadership I	3	0	3
REC 132†	Team Sports and Games in Recreation	1	3	2
REC 133†	Sports Officiating	1	3	2
REC 134†	Nature and Outdoor Recreation	3	0	3

FOURTH QUARTER

REC 140†	Recreation Leadership II	3	0	3
REC 141*	Individual Sports and Games	1	3	2
REC 142	Folk, Square, and Social Dance	1	3	2
REC 143†	Effective Supervisory Practices	3	0	3
REC 144†	Safety and First Aid in Recreation	3	0	3

FIFTH QUARTER

REC 210	Leisure Counseling	3	0	3
REC 211	Recreational Drama	1	3	2
REC 212†	Introduction to Gerontology	3	0	3
REC 213†	Recreation Areas and Facilities and Program Planning I	3	0	3
ENG 103†	Technical Report Writing	3	0	3
	Elective	3	0	3

SIXTH QUARTER

REC 221	Recreation Administration	3	0	3
REC 222†	Adaptive Physical Education & Recreation	3	0	3
REC 225	Recreation Areas and Facilities and Program Planning II	3	0	3
REC 226	Organization of Recreation Activities	3	0	3
	Elective	3	0	3

SEVENTH QUARTER

REC 282	Recreation Internship and Seminar	1	20	3
---------	-----------------------------------	---	----	---

EIGHTH QUARTER

MAT 100†	Consumer Mathematics	5	0	5
REC 242	Resident and Day Camp Administration	3	0	3
REC 243	Landscaping in Recreation	3	0	3
	Elective	3	0	3

THERAPEUTIC RECREATION TECHNOLOGY

This program is designed to train associate level technicians to meet changing needs and trends in constructive leisure activities. The technician, in most situations, will work under the supervision of a professional recreator and will be responsible for planning and directing programs and supervising activities in public, private, commercial, industrial and institutional settings.

Students have the opportunity to specialize in a particular aspect of recreation. The programs available to students are in Recreation Associate Technology and Therapeutic Recreation Technology. The courses in the two programs are identical for the first year. The student, after the first year, selects the program of interest for the last year. Field experiences are required for both programs and give the student a comprehensive understanding of specialty functions.

The Therapeutic Recreation Program is designed to train leaders in the provision of recreation services to people who are ill, disabled, or handicapped, or who otherwise would not be able to participate in community recreation programs. Field experiences for students in this program are usually with institutions serving special populations.

The National Recreation and Park Association projects an unparalleled demand for recreation services in the future. This demand will create a deficit of personnel in positions requiring two years of college training. Recreation positions may be available in the following agencies: municipal recreation, hospitals, armed forces, state and federal recreation, church recreation, industrial recreation, commercial recreation, homes and communities for the aged, and detention institutions.

Minimum Credit Hours Required for Degree: 112

Area I Core69
All Required

- *REC 110, 111, 112, 113, 114, 120, 121
- *REC 122, 123, 130, 131, 132, 133, 134
- *REC 140, 141, 142, 143, 144, 210, 211
- *REC 212, 221, 222, 282

Area II Major14
All Required

- *REC 214, 223, 240, 241, 244

Area III General Studies29
29 Credit Hours Required

- BUS 102, 115; CJC 212; EDU 104, 105, 106
- EDU 108, 200, 252; ENG *101, *102, *103
- ENG *105, 120, 206, 220; MAT *100
- POL 102, 110; PSY *105, 115, *209
- SOC 105, 107, 112, 117
- REC 213, 225, 226, 242, 243

*Required

Suggested Sequence of Courses for Therapeutic Recreation Technology

Course No.	Course Title	Lec	Lab	Credit
FIRST QUARTER				
ENG 105*	Library Services	3	0	3
REC 110*	✓Recreational Arts and Crafts	1	3	2
REC 111*	✓The Human Body in Health and Disease	2	3	3
REC 112*	✓Introduction to Recreation Services	3	0	3
REC 113*	✓Introduction to Ill and Handicapped	3	0	3
REC 114*	✓Social Aspects of Sport	3	0	3
SECOND QUARTER				
PSY 105*	✓General Psychology	3	0	3
ENG 101*	✓Technical Composition	3	0	3
REC 120	✓History, Philosophy, and Contemporary Nature of Recreation	3	0	3
REC 121*	✓Principles of Motor Development	3	0	3
REC 122*	✓Health Practices in Recreation Management	3	0	3
REC 123*	✓Social Recreation	3	0	3
THIRD QUARTER				
ENG 102*	✓Oral Communications	3	0	3
REC 130	The Psychology of Sport and Recreation	3	0	3
REC 131*	✓Recreation Leadership I	3	0	3
REC 132*	✓Team Sports and Games in Recreation	1	3	2
REC 133*	✓Sports Officiating	1	3	2
REC 134*	✓Nature and Outdoor Recreation	3	0	3
FOURTH QUARTER				
REC 140*	✓Recreation Leadership II	3	0	3
REC 141*	✓Individual Sports and Games	1	3	2
REC 142	✓Folk, Square, and Social Dance	1	3	2
REC 143*	✓Effective Supervisory Practices	3	0	3
REC 144*	✓Safety and First Aid in Recreation	3	0	3
FIFTH QUARTER				
REC 210	✓Leisure Counseling	3	0	3
REC 211	✓Recreational Drama	1	3	2
REC 212*	✓Introduction to Gerontology	3	0	3
REC 214	✓Introduction to Therapeutic Recreation	3	0	3
	✓Elective	3	0	3
ENG 103*	✓Technical Report Writing	3	0	3
SIXTH QUARTER				
REC 221	✓Recreation Administration	3	0	3
REC 222*	✓Adaptive Physical Education and Recreation	3	0	3
REC 223	✓Leisure and the Aging	3	0	3
PSY 209	✓Abnormal Psychology	3	0	3
	✓Elective	3	0	3
SEVENTH QUARTER				
REC 282	✓Recreation Internship and Seminar	1	20	3
EIGHTH QUARTER				
MAT 100*	✓Consumer Mathematics	5	0	5
REC 240*	✓Recreation in Institutions for Special Populations	3	0	3
REC 241*	✓Camping for Special Populations	3	0	3
REC 244	✓Recreational Music	1	3	2

SECRETARIAL SCIENCE (EXECUTIVE)

Two-Year Degree Program

The demand for better qualified secretaries is expanding. Opportunities abound in a variety of business and industrial fields.

The Secretarial Science curriculum provides training in secretarial skills and generally accepted business principles. Students receive specialized training in the areas of typing, business math, accounting, filing, office machines, psychology, and English. Dictation, transcription, and business terminology are especially emphasized.

Graduates of the two-year program receive Associate in Applied Science degrees and are ready to accept the many types of secretarial positions open to skilled people.

Minimum Credit Hours Required for Degree: 111

Area I Core18
All Required

BUS 120; EDP 104; ENG 101, 102, 103

Area II Major81
All Required

BUS 101, **102, 103, 104, **106, 107, 108

BUS 110, 111, 112, 115, 117, 134, 204E

BUS 205, 206, 207, 211, 214, 215

BUS 271, 273, 274; ECO 102

Area III General Studies12
12 Credit Hours Required

BUS 116, 118, 121, 233, 235; *ENG 206

EDP 109; MAT 105, 106; POL 110; PSY 105

SOC 105

*Required

**May be waived by examination.

Suggested Sequence of Courses for Secretarial Science: (Executive)

Course	No.	Course Title	Lec	Lab	Credit
FIRST QUARTER					
BUS	101	Introduction to Business ✓	5	0	5
BUS	102	Typewriting I ✓	2	3	3
BUS	110	Office Machines I ✓	1	2	2
BUS	117	Business Math I ✓	5	0	5
ENG	101	Technical Composition ✓	3	0	3
SECOND QUARTER					
BUS	103	Typewriting II ✓	2	3	3
BUS	106	Shorthand I ✓	3	2	4
BUS	111	Office Machines II ✓	1	2	2
BUS	112	Records Management ✓	3	0	3
BUS	115	Business Law I ✓	3	0	3
ENG	102	Oral Communications ✓	3	0	3
THIRD QUARTER					
BUS	104	Typewriting III ✓	2	3	3
BUS	107	Shorthand II ✓	3	2	4
BUS	120	Accounting I ✓	5	2	6
BUS	134	Personal Development ✓	3	0	3
ENG	103	Technical Report Writing ✓	3	0	3
FOURTH QUARTER					
BUS	108	Shorthand III ✓	3	2	4
BUS	204E	Advanced Typing — Executive ✓	2	3	3
BUS	211	Machine Dictation & Transcription I ✓	2	2	3
BUS	214	Office Procedures ✓	3	2	4
EDP	104	Introduction to Data Processing ✓ Elective	3	0	3
FIFTH QUARTER					
BUS	205	Typing V — Speedbuilding ✓	2	3	3
BUS	206	Dictation & Transcription I ✓	3	2	4
BUS	271	Office Management ✓	3	0	3
BUS	273	Word Processing ✓	3	0	3
ENG	206	Business Communications ✓ Elective	3	0	3
SIXTH QUARTER					
BUS	207	Dictation & Transcription II ✓	3	2	4
BUS	215	Office Application ✓	1	9	4
ECO	102	Economics I ✓	3	0	3
BUS	274	Word Processing II ✓ Social Science Elective ✓	3	0	3

SECRETARIAL SCIENCE (LEGAL)

Two-Year Degree Program

Highly skilled secretaries with specialized training in the legal field are entering a new era of demand. Legal secretaries are essential members in any law office, and well-qualified legal secretaries are in constant demand.

The Legal Secretarial Science curriculum provides training in secretarial functions as well as specialized training in legal terminology and transcription of legal records and documents. The special training is supplemented by related courses in mathematics, accounting, business law, and personality development.

Graduates of the two-year program receive Associate in Applied Science degrees and can accept positions with attorneys' offices as well as with a multitude of governmental offices and agencies.

Minimum Credit Hours Required for Degree: 111

Area I	Core	18
	All Required	
	BUS 120; EDP 104; ENG 101, 102, 103	
Area II	Major	84
	All Required	
	BUS 101, *102, **103, 104, *106, **107, 108	
	BUS 110, 111, 112, 115, 117, 134, 204L	
	BUS 205, 206, 207, 211, 212L, 214	
	BUS 215, 271, 273, 274; ECO 102	
Area III	General Studies	9
	9 Credit Hours Required	
	CJC 115, *125; ENG *206; MAT 105, 106	
	POL 110; PSY 105; SOC 105	

- *Required
- **May be waived by examination.

Suggested Sequence of Courses for Secretarial Science: (Legal)

Course No.	Course Title	Lec	Lab	Credit
FIRST QUARTER				
BUS 101	Introduction to Business	5	0	5
BUS 102	Typewriting I	2	3	3
BUS 110	Office Machines I	1	2	2
BUS 117	Business Math I	5	0	5
ENG 101	Technical Composition	3	0	3
SECOND QUARTER				
BUS 103	Typewriting II	2	3	3
BUS 106	Shorthand I	3	2	4
BUS 111	Office Machines II	1	2	2
BUS 112	Records Management	3	0	3
BUS 115	Business Law I	3	0	3
ENG 102	Oral Communications	3	0	3
THIRD QUARTER				
BUS 104	Typewriting III	2	3	3
BUS 107	Shorthand II	3	2	4
BUS 120	Accounting I	5	2	6
BUS 134	Personal Development	3	0	3
ENG 103	Technical Report Writing	3	0	3
FOURTH QUARTER				
BUS 108	Shorthand III	3	2	4
BUS 204L	Advanced Typing — Legal	2	3	3
BUS 214	Office Procedures	3	2	4
CJC 125	Court Procedures and Evidence	3	0	3
EDP 104	Introduction to Data Processing	3	0	3
	Social Science Elective			
FIFTH QUARTER				
BUS 205	Typing V — Speedbuilding	2	3	3
BUS 206	Dictation & Transcription I	3	2	4
BUS 211	Machine Dictation & Transcription I	2	2	3
BUS 271	Office Management	3	0	3
BUS 273	Word Processing	3	0	3
ENG 206	Business Communications	3	0	3
SIXTH QUARTER				
BUS 207	Dictation & Transcription II	3	2	4
BUS 215	Office Application	1	9	4
ECO 102	Economics I	3	0	3
BUS 212L	Machine Dictation & Transcription II	2	2	3
BUS 274	Word Processing II	3	0	3

SECRETARIAL SCIENCE (MEDICAL)

Two-Year Degree Program

As our communities grow, the demand for the medical profession grows. As our medical world grows, usually the demand for more qualified medical secretaries becomes greater. The purpose of the Medical Secretarial curriculum is to outline a program that will provide specialized training in the procedures required by the medical profession and to enable persons to become proficient soon after accepting employment in the medical office.

The Medical Secretarial curriculum is designed to offer students the necessary courses in order to gain skills in typing, dictation, transcription, and terminology so that graduates will be prepared for employment in the medical profession. In addition to the required specialized courses; related courses in mathematics, accounting, business law, and data processing are offered.

Since the duties of a medical secretary consist of taking dictation and transcribing letters, memoranda, and reports, keeping patient records, keeping financial records, filing, and typing medical reports, the graduates of this curriculum should have a knowledge of medical terminology, skill in dictation and accurate transcription of medical reports, letters, and forms. The many positions that exist for Medical Secretary graduates may be secured in hospitals, doctors' offices, and federal and state health programs.

Minimum Credit Hours Required for Degree: 110

Area I Core18
All Required

BUS 120; EDP 104; ENG 101, 102, 103

Area II Major75
All Required

BUS **102, 103, 104, **106, 107, 110
BUS 111, 112, 115, 117, 134, 204M, 205
BUS 211, 212M, 214, 215, 247M, 271
BUS 273, 274; ECO 102

Area III General Studies17
9 Credit Hours Required

*BIO 105, 115; BUS 116, 118, 121, 233, 235
EDP 109; ENG 206; MAT 105, 106; POL 110
PSY 105; SOC 105

*Required

**May be waived by examination.

Suggested Sequence of Courses for Secretarial Science (Medical)

Course No.	Course Title	Lec	Lab	Credit
FIRST QUARTER				
BUS 101	Introduction to Business	5	0	5
BUS 102	Typewriting I	2	3	3
BUS 110	Office Machines I	1	2	2
BUS 117	Business Math I	5	0	5
ENG 101	Technical Composition	3	0	3
SECOND QUARTER				
BUS 103	Typewriting II	2	3	3
BUS 106	Shorthand I	3	2	4
BUS 111	Office Machines II	1	2	2
BUS 112	Records Management	3	0	3
BUS 115	Business Law I	3	0	3
ENG 102	Oral Communications	3	0	3
THIRD QUARTER				
BUS 104	Typewriting III	2	3	3
BUS 107	Shorthand II	3	2	4
BUS 120	Accounting I	5	2	6
BUS 134	Personal Development	3	0	3
ENG 103	Technical Report Writing	3	0	3
FOURTH QUARTER				
BUS 204M	Advanced Typing — Medical	2	3	3
BUS 211	Machine Dictation & Transcription I	2	2	3
BUS 214	Office Procedures	3	2	4
BIO 105	Basic Anatomy and Physiology	4	2	5
EDP 104	Introduction to Data Processing	3	0	3
	Elective	3	0	3
FIFTH QUARTER				
BUS 205	Typing V — Speedbuilding	2	3	3
BUS 212M	Machine Dictation & Transcription II	2	2	3
BUS 271	Office Management	3	0	3
BUS 273	Word Processing I	3	0	3
BIO 115	Medical Terminology	3	0	3
ENG 206	Business Communications	3	0	3
SIXTH QUARTER				
BUS 215	Office Application	1	9	4
BUS 247M	Business Insurance — Medical	3	0	3
ECO 102	Economics I	3	0	3
BUS 274	Word Processing II	3	0	3
	Social Science Elective			

TEXTILE TECHNOLOGY AND MANAGEMENT

Two-Year Degree Program

The future in textiles for a young person with an understanding of the fundamentals of textiles and the ability to work with people has never been brighter. Textiles is broader than the name implies. It covers almost every aspect of our daily lives — in households, transportation, recreation and sports, medicine, environmental improvement and control, personal safety, building and construction, and outer space. As our world becomes more and more complex and technologically oriented, the interaction of men, materials, and products continues to grow in importance.

Employment opportunities in supervision and mid-management have grown extensively during the decade. Supervisory personnel must be concerned daily with human behavior and the physiological factors which affect personnel. They must also be conscious of the responsibilities of their position toward the total economic well-being of the industry.

The Textile Management curriculum is designed to develop the individual's abilities in management, textile fundamentals, psychology, production methods, and the general and social education that broadens one's perspective. This training should provide one with the opportunity to enter an industrial occupation, and with experience, assume the responsibilities that go with supervisory and mid-management positions in the textile industry.

The supervisor or foreman in industry coordinates the activities of workers. His duties may encompass interpreting of company policies to workers, planning production schedules and estimating man hour requirements for job completion, establishing or adjusting work procedures, analyzing and resolving work problems, and initiating or suggesting plans to motivate workers to achieve work goals.

Minimum Credit Hours Required for Degree: 108

Area I Core18
All Required

BUS 120; EDP 104; ENG 101, 102, 103

Area II Major90
All Required

CHM 111; EGR 101; ISC 112, 130
ISC 214, 222, 226, 228, 232
MAT 101, 105, 106; PHY 110; TEX 101
TEX 201, 202, 203, 204, 206; ECO 102; PSY 105

Suggested Sequence of Courses for Textile Technology and Management

Course No.	Course Title	Lec	Lab	Credit
FIRST QUARTER				
ENG 101	Technical Composition	3	0	3
EGR 101	Introduction to Engineering Technology or ISC Elective	1	2	2
MAT 105	Pre-College Algebra I	5	0	5
TEX 101	Fundamentals of Textiles	3	0	3
SECOND QUARTER				
ENG 102	Oral Communications	3	0	3
ECO 102	Economics I	3	0	3
MAT 106	Pre-College Algebra II	5	0	5
TEX 202	Yarn Forming Systems	5	2	6
THIRD QUARTER				
ENG 103	Technical Report Writing	3	0	3
ISC 112	Fundamentals of Management I	5	0	5
MAT 101	Technical Mathematics I	5	0	5
PHY 110	Technical Physics	3	2	4
TEX 203	Fabric Forming — Weaving	3	2	4
FOURTH QUARTER				
EDP 104	Introduction to Data Processing	3	0	3
ISC 130	Industrial Safety	3	0	3
ISC 222	Labor Law	3	0	3
ISC 232	Quality Control	3	2	4
TEX 204	Fabric Forming — Knitting & Non-Conventional	5	2	6
FIFTH QUARTER				
BUS 120	Accounting I	5	2	6
CHM 111	Technical Chemistry for Non-Health Majors	4	0	4
ISC 214	Work Measurement & Job Analysis	5	2	6
TEX 201	Fiber Science	5	2	6
SIXTH QUARTER				
PSY 105	General Psychology	3	0	3
ISC 226	Industrial Planning & Control or ISC Elective	3	2	4
ISC 228	Industrial Supervision I	3	0	3
TEX 206	Dyeing & Finishing	5	2	6

WELDING

There is a tremendous need for welders in North Carolina and beyond. A recent Manpower Survey shows that many welders will be needed annually to fill present and projected vacancies within the State.

The Welding curriculum provides a sound background in the principles, methods and techniques of welding. Students receive practical shop experience in oxyacetylene cutting, arc welding, pipe welding and inert gas welding. They are taught how to safely handle tools and machines used in their trade.

Graduates of the one-year program receive vocational diplomas or certificates in the 18-month evening program and can look forward to steady advancement in almost any industry, including shipbuilding, automotive shops and factories, aircraft industries, railroads, construction trades, pipe fitting enterprises, production shops and job shops.

At the end of the year the students are given a welding certification examination, and if they pass they are certified under the American Welding Society Codes.

Minimum Credit Hours Required for Diploma: 74

Area I Core 0
None Required

Area II Major50
All Required

WLD 1104, 1110, 1117, 1118, 1120, 1130
WLD 1131, 1140, 1141

Area III General Studies24
24 Credit Hours Required

BUS 117, 127; ENG *93, *94; HEA *112; MAT *1101, *1102
PSY 105, *114, 115; SOC 112

*Required unless waived by exam. Other courses listed may be substituted upon approval of advisor.

Suggested Sequence of Courses for Welding Day Curriculum

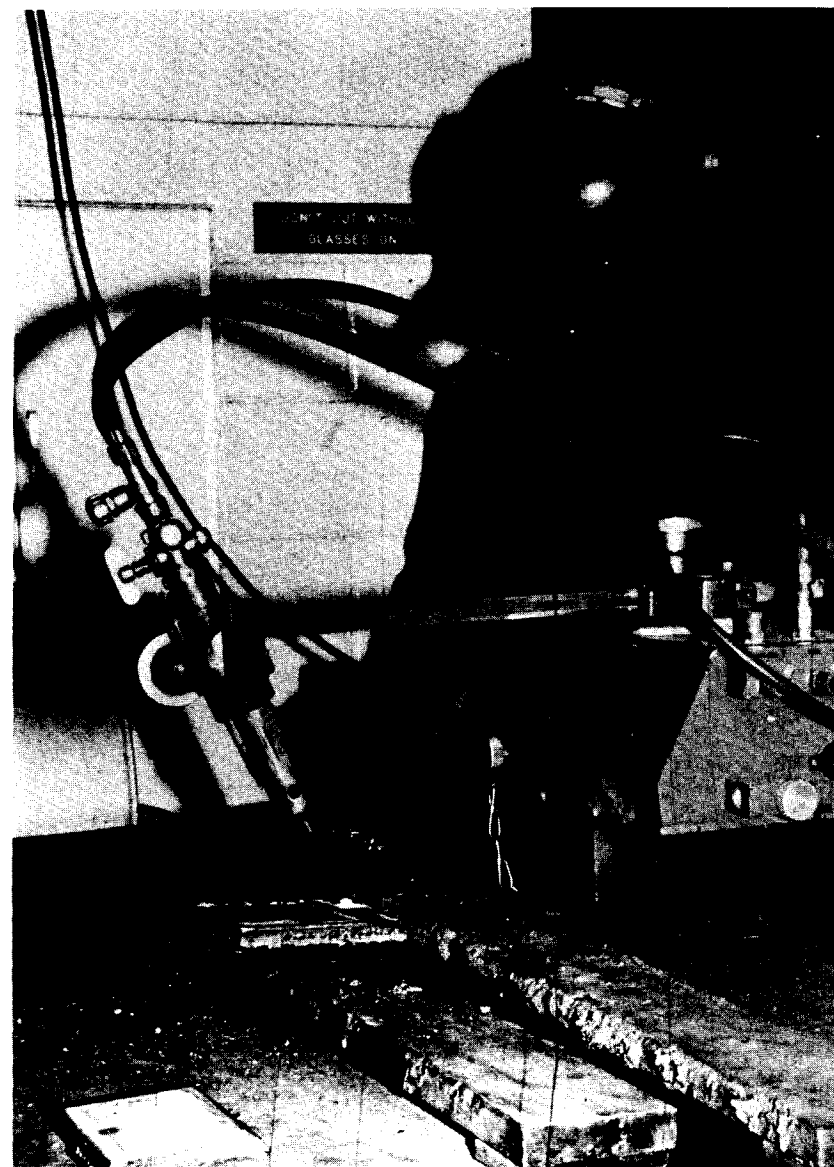
Course No.	Course Title	Lec	Lab	Shop	Credit
FIRST QUARTER					
WLD 1110	Beginning Oxyacetylene Welding	5	0	15	10
MAT 1101	Trades Math I or Approved Elective	4	0	0	4
WLD 1104	Blueprint Reading: Mechanical	0	3	0	1
ENG 93	Vocational Language Instruction I	5	0	0	5
SECOND QUARTER					
WLD 1120	Arc Welding	5	0	15	10
MAT 1102	Trades Math II or Approved Elective	4	0	0	4
WLD 1117	Blueprint Reading: Welding	0	3	0	1
ENG 94	Vocational Language Instruction II	5	0	0	5

THIRD QUARTER

WLD 1131	Mechanical Testing and Inspection	1	0	3	2
WLD 1130	Pipe Welding	5	0	15	10
WLD 1118	Pattern Development & Sketching	0	3	0	1
HEA 112	First Aid and Safety	3	0	0	3

FOURTH QUARTER

WLD 1140	Inert Gas Welding	5	0	12	9
WLD 1141	Certification Practices	4	0	6	6
PSY 114	Human Relations or Approved Elective	3	0	0	3



WELDING

Suggested Sequence of Courses for Certificate Program Evening Curriculum

Minimum Credit Hours Required for Welding Certificate: 55

Area I Core 0
None Required

Area II Major 41
All Required

WLD 1104, 1110, 1117, 1118, 1120
WLD 1130, 1131, 1140, 1141

Area III General Studies 14
14 Credit Hours Required

*ENG 93, 94; *MAT 1101

*Required unless waived by exam.

Course No.	Course Title	Lec	Lab	Shop	Credit
FIRST QUARTER					
WLD 1110A	Beginning Oxyacetylene Welding, Part I	4	0	10	7
WLD 1104A	Blueprint Reading, Part I	0	2	0	1
ENG 93	Vocational Language Instruction I	5	0	0	5
SECOND QUARTER					
WLD 1110B	Beginning Oxyacetylene Welding, Part II	1	0	5	3
WLD 1117A	Blueprint Reading, Part I	0	2	0	1
WLD 1120A	Arc Welding, Part I	2	0	6	4
WLD 1104B	Blueprint Reading, Part II	0	1	0	0
ENG 94	Vocational Language Instruction II	5	0	0	5
THIRD QUARTER					
WLD 1120B	Arc Welding, Part II	3	0	9	6
WLD 1130A	Pipe Welding, Part I	1	0	3	2
WLD 1117B	Blueprint Reading, Part II	0	1	0	0
FOURTH QUARTER					
WLD 1130B	Pipe Welding, Part II	4	0	12	8
MAT 1101	Trades Math I	4	0	0	4
FIFTH QUARTER					
WLD 1131	Mechanical Testing & Inspection	1	0	3	2
WLD 1141	Certification Practices	4	0	6	6
WLD 1118	Pattern Development and Sketching	0	3	0	1
SIXTH QUARTER					
WLD 1140	Inert Gas	5	0	12	9



CONTINUING EDUCATION

The Continuing and Adult Education program at Vance-Granville Community College provides an opportunity for adults to meet the following objectives:

1. To improve the ability to read, speak and write the English language.
2. To finish high school.
3. To obtain pre-employment training in order to find a job.
4. To upgrade and to update skills used in a present job in order to increase abilities and future opportunities.
5. To improve personal and family life.
6. To learn new hobbies and skills for greater enjoyment of leisure time.

Admission

Any adult who has reached his eighteenth birthday, or whose regular high school class has graduated, is eligible to participate. Any individual having special high school educational needs, but who does not meet the admission requirements, may enroll with written permission of the superintendent and the principal of his high school.

Cost

Registration fees vary according to length and content of courses. There are no charges for ABE or high school completion (GED) courses.

Adults 65 years of age and older may attend at no charge.

Additional costs may be charged for materials, textbooks and supplies depending on the nature and scope of the class.

CEUs/Certificates

Continuing Education Units (CEUs) are awarded for all extension courses approved by the Division. CEUs are an established method of recording an individual's participation in an organized continuing education experience under responsible sponsorship, capable direction and qualified instruction.

Anyone earning CEUs at Vance-Granville Community College can obtain a transcript of those CEUs for his personal file by requesting in writing a transcript from the Records Office. A \$1.00 per copy transcript fee should be included with the request. Certificates of completion are normally awarded to classes.

Schedules

Continuing Education classes are offered on a quarterly basis. Classes are scheduled when a need for a class is established, space exists to teach the class, and an instructor is available.

Types of Program Areas

Adult Basic Education (ABE)	Human Resources Development (HRD)
Adult High School Diploma (AHS)	Cooperative Skill Training
General Educational Development (GED)	New and Expanding Industry
Occupational Extension	Visiting Artist
Academic Education Extension	Job Training Partnership Act (JTPA)
Practical Skills	Community Service
Avocational	Recreational
Apprenticeship	

THE VISITING ARTIST PROGRAM

Vance-Granville Community College is one of the forty-three North Carolina Community College System institutions which participated in the Visiting Artist program which is unique nationally. The program was established in 1971. It provides communities with creative artists whose talents encompass a wide range in both the performing and the visual arts.

The services of the Visiting Artist at Vance-Granville Community College are available to schools, civic organizations and interested groups and individuals in the counties of Vance, Granville, Warren and Franklin.

COMMUNITY SERVICES

The Community Services Division of the college provides educational and training programs for law enforcement agencies, emergency care units, fire service units, and governmental agencies. In addition, other academic, vocational and technical courses are offered. Community Services program offerings and services include, but are not limited to, the following:

1. Fire Service training designed to train beginning firemen and upgrade experienced firemen in all aspects of firefighting procedures and equipment.
2. Law Enforcement training designed to meet the needs of state, county, city and other law enforcement agencies. The training includes basic courses required for certification.
3. Emergency Medical Technician training designed to aid persons in becoming state-certified Emergency Medical Technicians.
4. First Responder training allows agencies and industries to train personnel to provide emergency care on site.
5. CPR and First Aid courses are designed to train persons to properly administer first aid to victims of accident or sudden illness.

CEUs

Continuing Education Units (CEUs) are awarded for all community service courses approved by the Division.

Costs

Registration fees, costs of texts and supplies vary according to length and content of courses. However, fees are usually minimal. There are no registration fees for most of the law enforcement, fire service, and emergency care courses provided through Community Services for agency personnel. Persons 65 years of age and older (in-state) may attend with no registration fee.

Schedules

Courses are offered on a quarterly basis and as needed.

INDUSTRY SERVICES

The Industry Services Division of the college works with new, expanding, and existing industries in providing custom training programs tailored to meet the needs of the industry and its employees. These training programs terminate when immediate needs for employment have been met. The training programs are flexible in design to accomplish specific objectives.

Courses sponsored by Industry Services include:

1. New and Expanding Industry training courses designed to promote the expansion of existing industries and to assist in the training of employees for new industries being established in North Carolina. It is offered at no cost to the participating industry.
2. Business and Industrial training courses designed to train personnel to increase efficiency of business organization and to update employee vocational skills. A minimal registration fee may be charged.
3. Management Development courses to broaden the educational background of supervisors, to develop the leadership abilities of supervisors and to provide preparatory supervision training. A minimal registration fee may be charged.
4. Apprenticeship courses which are a coordinated effort among employers, employees and the college to provide related instruction for skills learned on the job. Examples include machinist and tool and die apprenticeships.

CEUs/Certificates

Continuing Education Units (CEUs) are awarded for all industry services courses approved by the Division.



HUMAN RESOURCES DEVELOPMENT

Human Resources Development (HRD) is a jobs orientation and motivation program designed to equip its participants with survival skills in employment and daily activities.

Classes Offered

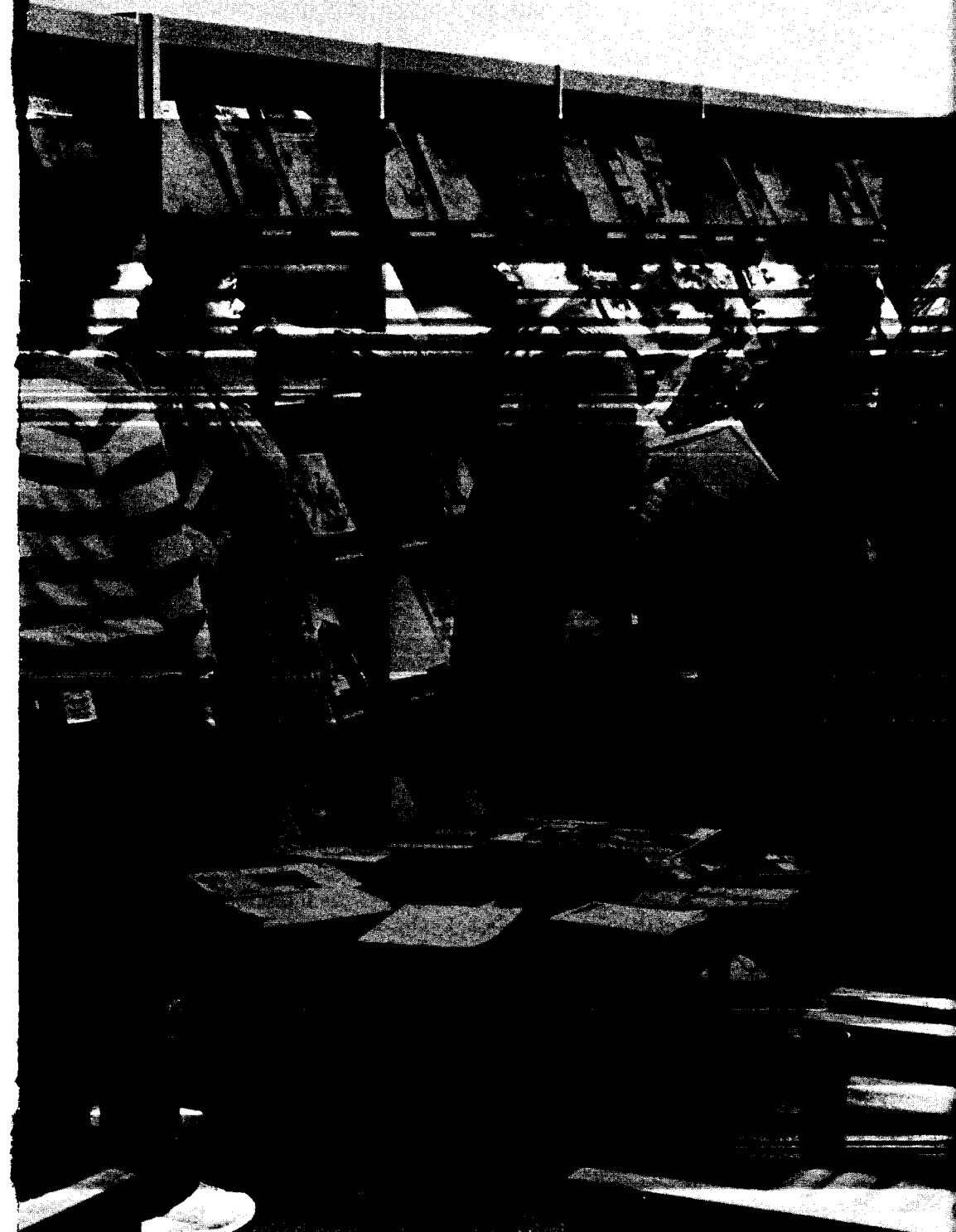
1. **Adult Education** — designed to prepare participants who are non-high school graduates to pass the high school equivalency examination (GED), and for those who are already high school graduates or equivalent, to broaden individual perspectives by exposure to unfamiliar subjects.
2. **Career Explorations** — an overview of occupations in both the public and private sector, along with an introduction to business practices and office skills.
3. **Human Resources Development** — a human relations approach in developing effective, interpersonal communication, social adjustment, and good salable skills for the world of work.

Supportive Services Provided

1. Individual Counseling
2. Job Development and Placement
3. Educational Placement
4. Follow-up Counseling After Placement



The Learning Resources Center



THE LEARNING RESOURCES CENTER

The Learning Resources Center (LRC) is the area where reference and institutional services, media, materials and equipment supportive of the college's total educational program are housed and made available to students, faculty, staff, and the community. The LRC provides library, audiovisual-media production and instructional services.

The proper functioning of the Learning Resources Center at Vance-Granville Community College is vital to the institution's educational effectiveness. The objectives of the institutional programs, the nature of the student body, and the needs of the community require that media be carefully selected, abundantly supplied, and continuously evaluated. Media is an all encompassing term and includes all types of printed and non-printed materials with related equipment.

The Learning Resources Center has available reference books, general interest books, special book collections, current periodicals, bound periodicals, newspapers and magazines on microfilm, vertical file materials, college catalogs, 16 mm. films and super 8 mm. film loops, film strips, media kits, wall maps, pictures, records, slides, sound filmstrips, reel-to-reel and cassette tapes, transparencies, programmed and self-instructional materials and professional materials.

Orientation programs are held for new students and staff members. Guided tours are conducted upon request. Audiovisual materials are produced, and audiovisual equipment is available. Free and rental film service is provided. Interlibrary loan service is available upon request.

THE LIBRARY

The Library Unit of the Learning Resources Center contains print and non-print media which support the programs of Vance-Granville Community College. All media are located on shelves in open stack areas, giving easy access to all users for knowledge and enjoyment. Equipment is available for use with all non-print media.

In order to use the materials in the library, a patron must register for a library card. He must give his name, address, telephone number and present, at least, two identification cards, one preferably being a valid NC driver's license. The borrower's card is typed from this information and is kept on file at the circulation desk. Each borrower must ask for his card when ready to check out any media.

Circulation Regulations

General

Most books and audiovisual materials may be checked out for a period of two weeks and may be renewed for an additional two weeks if no one else has requested that the media be placed on hold. The renewal must be made in person and the media must be presented to be restamped. Students will not be permitted to register until media is returned.

References

Reference books are for library use only; however, upon special request, an exception may be made to permit reference books to be circulated as reserve books.

Reserve

Books and other materials may be placed on reserve by an instructor for class use. The reserve collection is located behind the circulation desk, and each item must be requested there. The instructor will give any specific instructions, but the general rule is that reserve material may be checked out at 9:00 P.M. for overnight use. On Fridays, reserve material may be checked out at 3:00 P.M. The material must be returned by 9:00 A.M. the following school day.

Periodicals

The library subscribes to 12 newspapers and over 200 magazines. Current newspapers are located on the newspaper stand. Current magazines are placed on the magazine racks. Older issues are stored in the storage unit under the appropriate magazine. Back issues of magazines for the entire current year are stored in this manner. Back issues for past years of some titles are on microfilm and are available in the microforms room.

Back issues of periodicals may be checked out for overnight use. All periodicals on microfilm must be used in the library. Two microfilm readers and two reader-printers are available for patron use.

A complete list of the holdings of periodicals is located in the Kardex File on the circulation desk. It shows all periodicals in the library, whether they are loose, bound, or on microfilm and which years of each magazine are held in the library.

AUDIOVISUAL-MEDIA PRODUCTION

The Audiovisual-Media Production Unit of the Learning Resources Center is divided into two sections — Audiovisual Equipment and the Media Production sections.

Audiovisual Equipment

The Learning Resources Center has a variety of audiovisual equipment: 16 mm and 8 mm projectors, slide projectors, filmstrip projectors, reel-to-reel and cassette tape recorders, record players, sound film-strip projectors, microfilm readers and reader-printers, microfiche readers, language masters, opaque projectors, overhead projectors, thermocopier, cassette copier, dry mount press, slide synchronizer and laminator.

Patrons borrowing equipment from the Audiovisual unit of the Learning Resources Center are responsible for any damage due to negligence. Equipment must be returned within twenty-four hours.

Media Production

The Learning Resources Center's staff can produce transparencies, posters, cassette copies and laminated articles.

Films may be requested through the Media Technical Assistant. Three weeks' ordering time should be allowed for films from the North Carolina State and Health Libraries.

INSTRUCTIONAL UNIT

The Individualized Instructional Unit of the Learning Resources Center is designed so that the individual learner has access to the most effective programmed and self-instructional materials available in the educational marketplace. Materials are available in various formats to accommodate the learning style and needs of each student. The students study and progress at their own rate in a non-competitive environment, and have the option of pursuing almost any program of study which fulfills their needs and goals.

Students desiring to enroll in the Instructional Unit meet with the Individualized Instruction Coordinator and establish educational goals. The Coordinator helps students select the most convenient schedules. Schedules are flexible and realistic, with a recommendation of at least ten hours in the area per week. Data sheets and registration forms are part of initial enrollment procedures. Students also take appropriate placement inventories. The Coordinator prescribes assignments based upon students' performance levels. Students receive time cards on which time schedules are registered and program assignments are written.

The Individualized Instruction Coordinator is in constant contact with laboratory students to offer guidance and additional materials as needed and to evaluate students' progress.

Students are provided all materials necessary for a course of study with the exception of pencil and paper. The materials are provided for use in the area and are not generally circulated for at-home use by students. Materials may be checked out on a short-term basis by faculty members. Faculty requests may be made to the Coordinator, and materials checked out at the library circulation desk.

Adult High School Diploma

Any adult who is 18 years old or older and who wishes to complete his or her education may enroll in the Adult High School Diploma Program in the Individualized Instructional Unit. There are no prior educational requirements. Students who have completed high school courses may receive credit for units completed by transferring units to the LRC.

Persons wishing to enroll in the Adult High School Diploma Program take a diagnostic reading inventory to determine reading proficiency. They must have a high school reading proficiency before beginning other course work. Those who have a weakness in reading skills or in vocabulary can be assigned to programs which will build proficiency.

The curriculum of the Adult High School Diploma Program consists of nine units of course work.

Required Units	Number
English and Literature	4
Social Studies: American Studies (1)	2
American Government (1)	
Science: General Science (1)	2
Biology (1)	
General Mathematics	<u>1</u>
	9

A standardized test will be administered upon completion of each course. A minimal score of the twentieth percentile at the appropriate grade norm must be attained before credit is awarded. A spelling test is required before graduation. Students must be able to correctly spell eighty-five percent of a total of 50 words in order to pass the test. An arithmetic test which indicates that the student possesses adequate computational skills is also required. In addition to the successful completion of the course requirements, the student must pass the State of North Carolina's High School competency test.

Special Needs

A student with "special needs" who is between 16 and 18 years of age and has not been enrolled in a high school for six months can be enrolled in the Individualized Instructional Unit to complete school if certain conditions are met.

"Special needs" include hardship situations that prevent successful progress, health conditions, and other circumstances that result in the cessation of regular high school studies. The student must have written permission of the principal and superintendent of the school system in the county in which he or she resides. The parent of the student must present a notarized petition granting permission for the student to enroll in the program.

It is not the purpose of the Individualized Instructional Unit to operate a high school diploma program in competition with the public school system; therefore, only students whose situations indicate that their educational needs can best be served through individualized instruction will be accepted. The acceptance of students released from public schools is subject to recommendation of the Coordinator, approval of the Director of the LRC and approval of the President of Vance-Granville Community College.

Transfer Credits

High school students between the ages of 16 and 18 may attend the Individualized Instructional Unit for the purpose of acquiring one-half, one or two units of credit for transfer to the public school.

Credit may be obtained for transfer purposes in English, general math, biology, social studies (American studies, world history, American government), general science, home economics (child care and development, health and safety), geography, chemistry, algebra I and II, and foreign languages (German, Spanish, French).

To receive a transfer credit, the student must attend for a minimum of 150 hours per unit and complete all materials assigned. The final test may not be taken prior to completion of assigned course work. The final test, if standardized, must be passed at twentieth percentile or the score specified by the institution receiving the credit (whichever is higher).

General Educational Development Tests High School Equivalency Preparation

Any person who is 18 years of age or older may prepare for the GED test in the Individualized Instructional Unit. The preparation program is composed of two parts: reading-vocabulary skills improvement and GED subject areas.

Each GED preparatory student is given a diagnostic reading placement inventory to determine reading proficiency. Students should attain a reading proficiency on the GED test level before beginning GED subject areas preparation. Weaknesses in reading-vocabulary proficiency should be corrected through programs available.

The GED test covers five subject areas: writing skills, social studies, science, reading skills, and mathematics. Students build proficiency in these areas through programmed and other self-instructional materials. Students who have taken the GED tests before but whose scores were below the passing level may wish to take subject preparation only in the area or areas where low scores were made.

Veterans' Benefits

Veterans and war orphans in the Adult High School Program and the General Educational Development Test (GED) Preparatory Program may qualify for veteran benefits from the Veterans Administration. Veterans who are considering one of these programs of study should contact the Veterans Coordinator at the college to help determine eligibility and to select programs which best meet their needs and goals.

The Veterans Administration requires that an accurate record of attendance be kept for each veteran student. Certification of attendance is submitted periodically for each veteran enrolled.

Veterans must attend 18 hours of study each week in the Individualized Instructional Unit in order to qualify for full-time benefits. Three-quarters time benefits require 14 hours of study each week, and half-time benefits require 9 hours of study every week.

Developmental Studies

DEVELOPMENTAL STUDIES

In an effort to maintain the "open door" concept and to offer students a means to remove deficiencies in basic skills for entry into post-secondary level curricula, the Developmental Studies program provides instruction in mathematics and English language.

Placement tests are administered as part of the admissions process, and the results of these tests are used to place the student in the appropriate classes. After successfully completing these courses, the student may begin his regular curricular program of study.

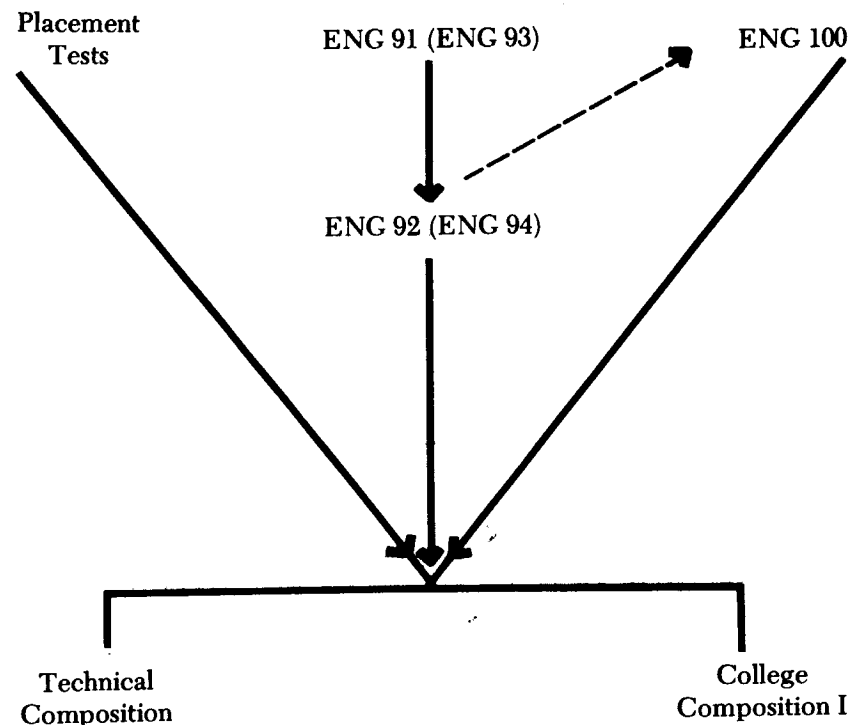
Directed by an instructor in individualized classroom settings, the courses assist students in gaining the basic academic skills necessary to succeed in vocational, technical, and college transfer curricula. These courses carry instructional credit, and the grades earned are figured in the student's quality point average.

Developmental Courses		Contact	Lab	Credit
Education 104	Self Dynamics	2	0	1
Education 105	Group Dynamics	2	0	1
Education 106	Career Dynamics	2	0	1
English 91	Basic Language Instruction I	10	0	10
English 92	Basic Language Instruction II	10	0	10
Mathematics 90	Arithmetic I	5	0	5
Mathematics 91	Arithmetic II	5	0	5
Mathematics 92	Arithmetic III	5	0	5
Mathematics 105	Pre-College Algebra I	5	0	5

Courses may be applied as Electives and General Studies in some trades and occupational programs. If applied in these areas, credit will count towards graduation.

ENGLISH

During the admissions process the language abilities of the prospective student are assessed by administration of relevant sections of the California Achievement Test. Scores on these tests provide the basis for tentative placement in English courses. During the first week of his/her English class the student is asked to write an essay of no fewer than three paragraphs, choosing a topic listed on an instructional sheet. This essay, limited to one-half hour's writing time, should be a sample of the best the student can do in a limited time. Evaluation of the essay by the English faculty may result in a change in English course placement.

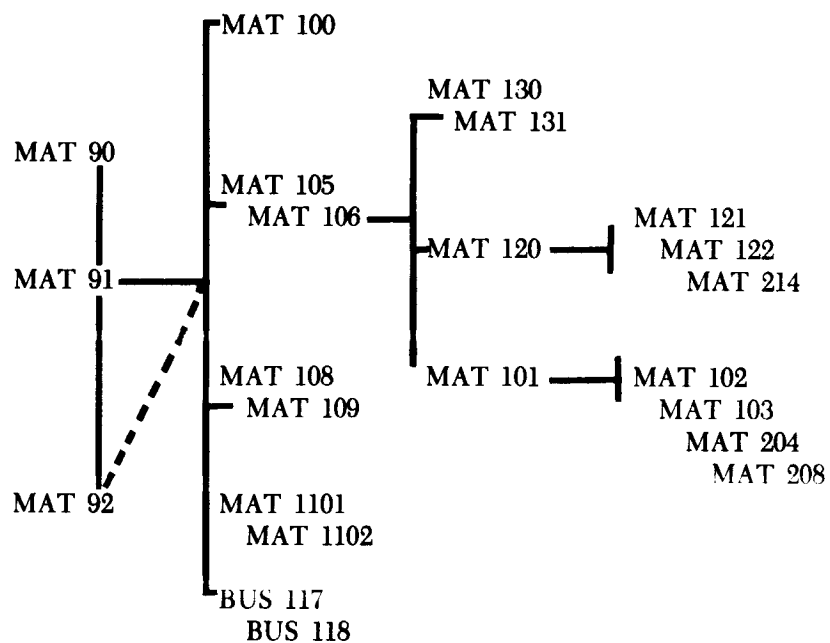


*English 93 and 94 are intended to meet the special language instruction needs of vocational students.

MATHEMATICS

Students are placed in entry level mathematics courses from recommendations of scores on the placement examination. All students will be administered the mathematics fundamentals portion of the examination. Students who are successful on the short fundamentals portion of the test should elect the pre-college algebra placement examination. Students should investigate the specific mathematics requirements for their major career field.

Mathematics Sequence



Registration and Records



REGISTRATION AND RECORDS

REGISTRATION

Registration is the process of enrolling in a schedule of courses or a program at the beginning of each quarter or at other specified times. Whether or not a student is in a particular course is determined by registration. If a student registers and neither attends nor withdraws, he is in the course; conversely, if he attends all classes and does all the work, but does not register, he is not in the course. A student who is registered in a course must be assigned a grade by the course instructor at the end of that course. The number of quarter hours for which a student is registered becomes effective at the end of drop/add period.

Late Registration

A late registration fee of \$5.00 will be charged to all students who register after the regular registration date on the school calendar or in other published material. Exception may be made in individual cases at the discretion of the Dean of Student Affairs and the Registrar.

New Students

All new students are required to register on the dates designated in the academic calendar. Students entering in the Fall Quarter may participate in a Summer Quarter Orientation Program which will include registration for the fall. For registration purposes, new students are defined as those students who are enrolling at Vance-Granville Community College for the first time.

Reentry Students

Reentry students are those students who have attended the institution previously but not during the immediately preceding quarter. For registration purposes, reentry students, except those who missed the Summer Quarter, will be required to complete a new application for readmission to the institution. Reentry students will register on the registration dates designated in the academic calendar.

Continuing Students

For registration purposes continuing students are defined as those students who are currently enrolled. All continuing students are strongly urged to PRE-REGISTER for the following quarter. This will help insure student getting the courses in his/her program for graduation purposes. Each student should: (1) schedule a meeting with his/her advisor and fill out a Student Registration form, (2) submit the form

during the Pre-Registration period, and (3) complete the process by paying tuition and fees.

CHANGE IN REGISTRATION

Authorization

Any changes in registration must be approved by the academic advisor. Course changes proposed by the student and approved by the academic advisor must be shown on the drop/add form obtainable from the Records Office.

Addition of a Course

A student may not enter a new class after the first week of a quarter. Any request for entry after that period must be approved by the instructor concerned and the department chairman.

Drop and Add

Courses may be added or changed only during the first five class days of the quarter. To accomplish the process the students will:

1. Obtain a drop/add form from the Records Office and fill it out completely;
2. Have the instructor and academic advisor or counselor approve the change and sign the form;
3. Have Veterans Affairs and Financial Aid approve the change by signing the form, if appropriate;
4. Sign the form and return it to the Records Office for updating registration; and
5. Take the form to the Cashier for validation, as well as tuition payment, if appropriate.

Withdrawal from a Course(s)

Withdrawal without academic penalty may be accomplished prior to the twenty percent date as established each quarter. No grade will be recorded for official withdrawals during this time period. All withdrawals after the established twenty percent date (see quarterly calendars) and before the end of the sixth week will be recorded as "W." No student may officially withdraw from a course during the last five weeks of the quarter except under mitigating circumstances which must be documented, and a copy of this documentation must be placed in the student's academic file. Mitigating circumstances must be evaluated by the Dean of Student Affairs or his designee after certification by the instructor.

If a student discontinues attending class without officially withdrawing from the class, the student will receive an "F" for the course.

Course Substitution

Under extenuating circumstances, a student may apply to his/her advisor for approval of a course substitution. A course substitution requires final approval by the appropriate Department Chairman. A course substitution form must be on file in the Records Office for audit purposes for graduation.

Change of Curriculum

There are times when a student's aptitude and interests may be better served by a change of curriculum. Should a change be advisable, a counselor should be consulted to explore possibilities which will serve the interests of the student.

A student desiring to change his/her program of study must file a Change of Major form with the Registrar. Forms are available in the Records Office. The change must be approved by the Program Head of the desired program of study and shall be effective at the beginning of the ensuing quarter, or later, as specified by the student. Veterans should consult with the Veterans Officer before making a change; the Veterans Administration will not pay for some types of training and also will place a limit on the number of changes permitted in program choice during the benefit period.

Because of the nature of the associate degree and vocational diploma programs, each student requesting a change of curriculum will have his/her record evaluated in terms of his/her goals.

STUDENT RECORDS

Release of Information: Family Educational Rights and Privacy Act

Vance-Granville Community College, in compliance with the Family Educational Rights and Privacy Act of 1974, releases no personal identifiable information about students without the expressed written consent of the student. Exceptions to this practice are those types of information defined by law as "directory information."

The directory information may be published or made available without the consent of the student. However, any student not wishing any of these types of information released may request in writing to the Dean of Student Affairs that it not be released. This written request must be made during the first two weeks of the student's initial enrollment.

Procedures Governing Release of Information

Written approval of the student concerned is required before a transcript from his or her official record may be released. Exceptions to the above include:

- a. The Records Office may release transcripts or information from official records including reports of standing to academic and administrative staff members of Vance-Granville Community College whose responsibilities require this information.
- b. The Records Office may honor appropriate requests for directory-type information from student records.
- c. The Records Office may release information pertaining to honor achievements for publication.

The Official Academic Record

A report of grades earned in each course is sent to the student at the end of each term.

An official record of all the student's courses, credits, and grades earned is kept in the Records Office. The student should maintain a record of his courses, credits and grades each term and check from time to time to see that his record agrees with that of the college. The record may also help him determine his eligibility for any activity that requires him to meet specific scholastic standards. Copies of the official record are available to the student upon request.

Each student who is in attendance or who has been in attendance at the college or parents of a dependent student who claim the student as an exemption on their Federal Income Tax Return have the right to inspect and review the student education records maintained by the college. The college will comply with a request to review an education record within a reasonable time but in any event not more than 30 days after the request is made. Any student or parent desiring to review the student education records should make his/her request directly to the Dean of Student Affairs.



FINANCIAL INFORMATION

BUSINESS OFFICE

The receipt of tuition and fees, collection of parking fines, disbursement of financial aid funds, and the payment of refunds are responsibilities of the Business Office. Students may use the services of the Business Office between the hours of 8:00 a.m. and 5:00 p.m. Monday through Friday, excluding holidays.

TUITION

Vance-Granville Community College receives financial support from local, state, and federal sources. These funds allow each student to continue his education at minimum cost. Tuition fees are set by the State Board of Community Colleges and are subject to change without notice. Cost of textbooks, laboratory fees, 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. No student is officially registered until fees are paid.**

Vocational, Technical and College Transfer	Costs Per Quarter	
	In-State	Out-of-State
12 quarter hours or more	\$ 51.00	\$255.00
Less than 12 quarter hours	\$ 4.25	\$ 21.25
Activity Fee (prorated if less than 12 hours)	\$ 5.00	\$ 5.00
Insurance (voluntary - annually)	\$ 6.50	\$ 6.50
Graduation Fee	\$ 19.00	\$ 19.00
Parking Fee	\$ 1.00	\$ 1.00
Late Registration Fee	\$ 5.00	\$ 5.00

Continuing and Adult Education Fees

Registration fees vary according to length and content of courses. There are no charges for ABE or high school completion (GED) courses; however there is a \$5.00 fee for GED Testing.

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.

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 of operation are posted quarterly.

The bookstore is operated on a strictly cash basis and there is no refund on books and supplies. It would be to the student's advantage to meet each class at least once before attempting to purchase texts and materials.

TEXTBOOKS AND SUPPLIES

Costs of textbooks and supplies are additional expenses for which the student should plan. These expenses vary according to the program of study but average about \$100.00 per quarter.

STUDENT ACTIVITY FEE

A student activity fee of \$5.00 per quarter will be charged. The proceeds from this fee are budgeted cooperatively by students and faculty in support of non-curricular activities. Part-time students are charged on a prorated basis.

GRADUATION FEE

A graduation fee of \$19.00 will be due and payable to the Business Office once a curricular student applies for a degree or diploma and is notified by the Student Affairs Office that he is eligible for graduation. The fee covers the cost of the diploma, the rental of a cap and gown, and other graduation expenses not paid for by the college or the state. The fee is payable at registration during the last quarter of enrollment.

CAR REGISTRATION FEE

Students who park vehicles on campus are required to pay a parking fee of \$1.00 per quarter per vehicle.

CONTINUING EDUCATION AND ADULT BASIC EDUCATION FEES

General adult education and extension students may be required to purchase books and supplies required for a course. A charge of \$8.00 per course is collected from each person enrolled. No charge is made for Adult Basic Education classes. Adult Education students taking classes on campus will also be required to purchase a \$1.00 parking sticker per quarter.

INSURANCE

Accident insurance covering the student while in school and while traveling to and from school is available. Students desiring this coverage may make payment during Fall Registration or at other times designated by the Business Office. This fee is not refundable. While the taking of insurance is optional, all students enrolled in courses with shops or labs and those who will participate in athletics are strongly encouraged to take advantage of this insurance. Mal-practice insurance is required by students enrolled in certain areas of study such as nursing, nursing assistant, radiological technology and emergency medical training.

TRANSCRIPT FEE

A fee of \$1.00 will be charged for each transcript requested by the student.

REFUND POLICY

Tuition refunds for students shall not be made unless the student is, in the judgement of the college, compelled to withdraw for unavoidable reasons. In such cases, two-thirds (2/3) of the student's tuition may be refunded if the student withdraws within ten (10) calendar days after the first day of classes as published in the school calendar and if he officially withdraws through the Records Office. Tuition refunds will not be considered after that time. Tuition refunds will not be considered for tuitions of five dollars (\$5.00) or less, unless a course or curriculum fails to materialize. Insurance premium fees, graduation fees, and continuing education fees and special fees such as late registration are not refundable.

INDEBTEDNESS TO COLLEGE

No student will be permitted to register or enroll in college-sponsored activities if he or she has an indebtedness to the college.

FINANCIAL AID

Vance-Granville Community College makes every effort within the limitations of its available financial aid resources to assure that no qualified student will be denied the opportunity to attend the college. Financial assistance is available to help students who meet the eligibility requirements. Scholarships, grants, and part-time employment may be used singly or in combination to meet a student's total financial need.

Financial aid is awarded on the basis of a demonstrated need for financial assistance. Since the purpose of financial assistance is to supplement the resources of the student, the primary responsibility for

meeting college expenses resides with the student and his family. Because the amount of a financial aid award reflects the financial situation of the student, it is considered confidential information which will only be released with the approval of the individual student. It is necessary that all students receiving any type of financial aid, whether federal, state or local, maintain satisfactory progress. Those students who fail to maintain satisfactory progress will not be eligible to continue to receive financial assistance from the college.

All inquiries concerning student aid should be directed to the Financial Aid Office. Financial aid applications and documentation must be completed two weeks prior to the beginning of the quarter in which the student wishes to enroll.

TYPE OF AID AVAILABLE

Pell Grant
College Work Study Program
Guaranteed Student Loan Program
North Carolina Student Incentive Grant (NCSIG)
Migrant and Seasonal Farmworkers Association, Inc.
Job Partnership Training Act (JPTA)
Vocational Rehabilitation
Bureau of Indian Affairs
Social Security

Scholarships

Deborah Bullock Scholarship
Carolina Power and Light Scholarship
John T. Church Scholarship
Endowment Scholarships
Harriet and Henderson Scholarships
I.V.A.C. Scholarships
Pruitt Scholarship
Walters Scholarship

VETERANS AND WAR ORPHANS

Veterans and war orphans in any curricular program offered at Vance-Granville Community College may qualify for benefits from the Veterans Administration under Chapter 35, Title 38, United States Code. Individuals who served in the Armed Forces for 180 days or longer and who were honorably discharged may qualify for benefits.

Veterans are admitted under the same admission requirements as other students. They pay tuition and attend school under the same regulations as others. The only difference between veterans and other students is that they are paid monthly by the Veterans Administration an

amount determined by the hours attended and by the number of dependents.

Veterans Administration payments for veterans in a college transfer or technical program are based on credit hours per quarter.

College Transfer and Technical Programs

12 or more	Full Time
9-11	$\frac{3}{4}$ Time
6-8	$\frac{1}{2}$ Time

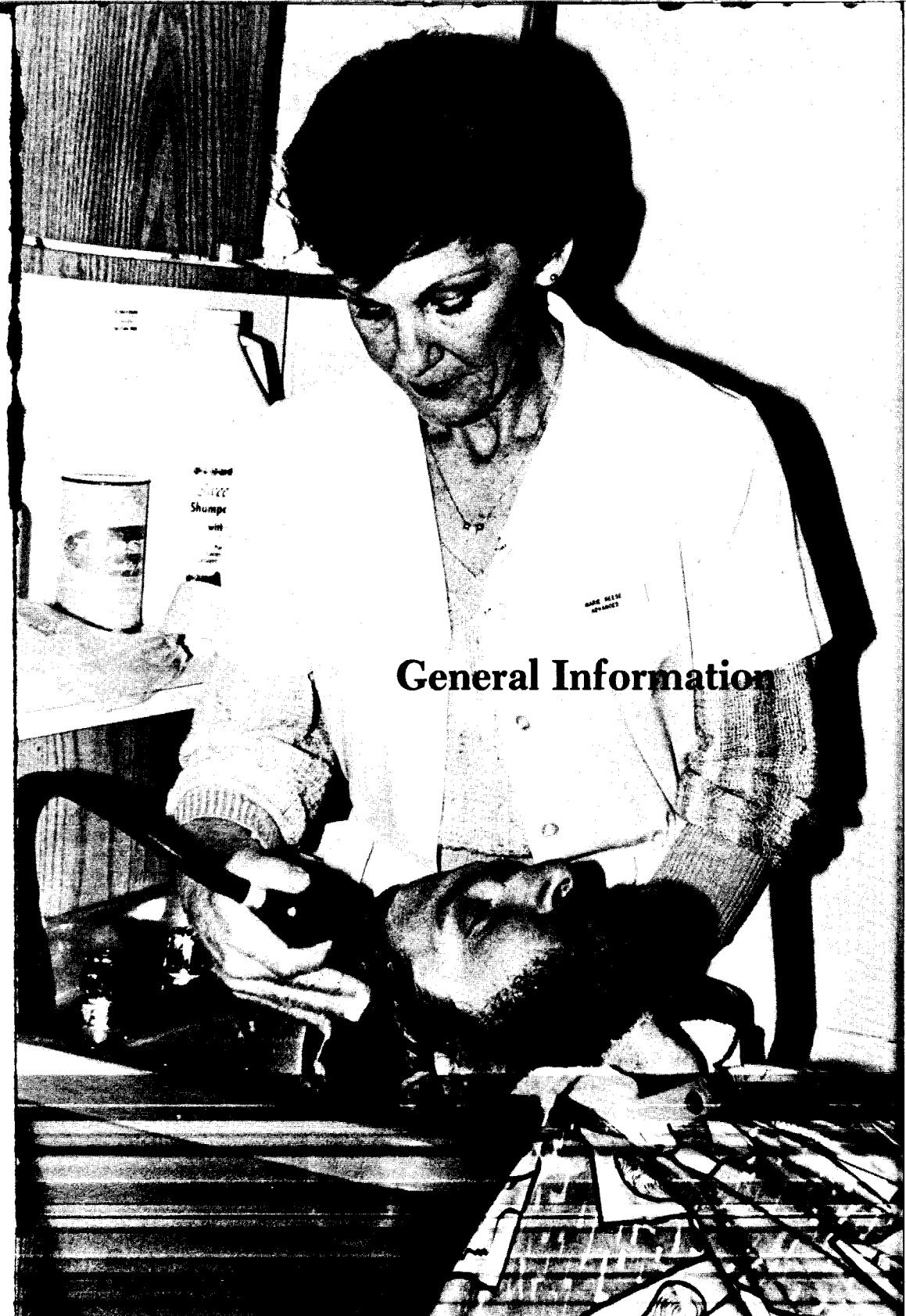
V.A. payments for veterans in a vocational program are based on contact hours (hours in class per week) per quarter as indicated below:

22 or more	Full Time
16-21	$\frac{3}{4}$ Time
11-15	$\frac{1}{2}$ Time

Full details on veterans training programs may be obtained from the Financial Aid Office at Vance-Granville Community College.

Monthly benefits for students attending under the "G.I. Bill" are as follows:

All veterans and eligible dependents of veterans who have applied for V.A. educational benefits must maintain satisfactory progress. If satisfactory progress is not maintained during the probationary quarter, V.A. educational benefits are terminated for academic reasons. Satisfactory progress is determined on the cumulative quality point average.



General Information

GENERAL INFORMATION

ACADEMIC COUNSELING

To assist students in their academic programs, the college has established a system of academic counseling whereby the student is assigned to a faculty member or counselor who serves as his/her advisor. The advisor helps to plan the student's academic program, particularly during pre-registration and registration periods; keeps a record of his progress; and is available throughout the year for additional counseling.

Advisors will make every attempt to give effective guidance to students in academic matters and to refer students to those qualified to help them in other matters, but the final responsibility for meeting all academic requirements for a selected program rests with the student.

COUNSELING SERVICES

Counseling services related to career development, educational objectives, personal concerns, and program choice are available to all students and prospective students. Students are invited to utilize these services as they plan and/or consider changes in their educational objectives.

DAY CARE SERVICES

The college operates a full-time Day Care Center as a training laboratory for the Early Childhood Associate program. Children of students, staff and others are eligible for admittance to the center. Full-time students at Vance-Granville Community College are encouraged to use this resource for placement of their children. The center opens at 7:30 A.M. and closes at 6:00 P.M. Breakfast, lunch, and snacks are served.

EMERGENCY INFORMATION

The office of the Dean of Student Affairs has a first-aid kit and will assist in minor emergencies. In case of emergency the Vance County Sheriff's Office or Henderson Fire Department will respond if called. All emergency cases will be referred to the nearest hospital. The Dean of Student Affairs should be notified of all campus accidents.

When an emergency exists that requires the attention of a physician on campus, the nearest physician will be notified and any expense will be the responsibility of the injured individual and his family. The right to call for outside medical assistance in medical emergencies will be left up to the judgment of the faculty member, student, or administrator present at the scene of the emergency.

GRIEVANCE PROCEDURES

In matters pertaining to student conduct or suspensions, any student who feels he has been treated unjustly may present his case to the Student Affairs Committee. The committee will review all cases and make an appropriate recommendation to the President. The decision of the President on disciplinary action is final.

In all disciplinary cases, due process procedures are followed, and include the right to a hearing, presentation of charges in writing, the right of counsel chosen by the accused, etc. The results of the hearing are presented in writing.

All academic grievances should be referred to the Program Head, Department Chairman and/or Vice President. Grievances should be in writing or through personal visits with the officials concerned.

HEALTH SERVICES

Since Vance-Granville Community College is a commuter institution, the college maintains no health facilities other than first aid equipment. The responsibility for medical services rests with the student and his parents or guardian.

The college has made arrangements with local physicians who will take emergency calls. Emergency facilities are also available at Maria Parham Hospital in Henderson.

The entering student is required to complete a health questionnaire. This record becomes a part of the student's permanent record.

I.D. CARDS

All students taking six or more hours will be issued I.D. cards at the beginning of each quarter. Continuing Education students and those taking special credit classes should maintain their validated registration receipts as proofs of enrollment.

A student may be required to show identification and identify himself anytime he or she is on campus. All student activities will admit only those students who have validated I.D. cards or validated registration receipts in the case of Continuing Education or special credit students.

INCLEMENT WEATHER

Should it appear that adverse weather or other factors would necessitate closing of Vance-Granville Community College for either full-time or extension classes, the President, or his representative, shall make the final decision. Classes missed as the result of the closing of school due to adverse weather or other factors shall be made up using a method to be determined by the President of the college.

Notice of school closings will be made through local radio stations.

JOB PLACEMENT SERVICES

The primary purpose of the Job Placement Office is to help place graduates and early leavers of curriculum programs in jobs related to their field of study. The Job Placement Office also assists current students as well as students of prior years in finding full or part-time employment as necessitated by the student's needs. Contact is maintained with local businesses and industries to help fill employment needs. Information about employment opportunities is advertised on bulletin boards and through instructional personnel.

The College does not guarantee employment; the primary responsibility for securing employment lies with the student. The Placement Office is a service provided for those needing assistance.

ORIENTATION

A special orientation program is provided for entering freshmen and other new students to help acquaint them with the college. Academic programs and campus regulations are discussed during orientation and college personnel are present to answer any questions which may arise. With the assistance of the counseling staff, student academic programs for the first quarter are scheduled as an integral part of orientation.

PARKING

The campus has paved well-lighted parking areas. Short-term parking for visitors is available in front of Building One. All campus students are required to obtain, and properly display, a parking permit. Parking permits and Campus Parking Rules and Regulations are available during registration at the Business Office.

The institution provides handicapped parking spaces in a number of locations throughout the campus. All parking lots are equipped with ramps, which make the institution accessible to the handicapped. Eligibility for a handicapped parking space generally requires display of the Handicapped Placard from the North Carolina Division of Motor Vehicles. Persons with temporary disabilities may utilize the handicapped parking spaces by contacting the Dean of Student Affairs Office and presenting a statement from a physician describing the injury and recommending special parking.

SPECIAL SERVICES

The Special Services Program provides free counseling, tutoring, and instruction in self-improvement, group dynamics, and career development. The program is available to a limited number of students who feel that they may need these support services during their adjustment period to college life.

Special Services students are given special assistance with financial aid, child care, transportation and community service agencies. The main purpose of the Special Services Program is to assist any interested students in attaining their goals of achieving a good education by providing any support services needed to meet these goals.

STUDENT AFFAIRS

The purpose of the Student Affairs Division is to provide assistance to prospective and enrolled students, former students and graduates, and faculty and staff in those areas which relate to students. Services are focused on the implementation of the philosophy, purpose, and objectives of the college and the Community College System. The goal of the Student Affairs Division is to assist the student in becoming more self directed, to be responsible for what he/she must learn, and to be capable of making his/her own decisions. These services are dedicated to the full development of each student who enrolls at the college. Those services currently provided include Counseling, Testing, Admissions, Recruiting, Job Placement, Student Activities, Financial Aid, Veterans Affairs, and Registration and Records.

STUDENT CONDUCT

Students will be expected to conduct themselves at all times as mature and responsible individuals, and should show a high regard for college facilities and property and for the personal property of others.

College regulations concerning student conduct are published in the Student Handbook and/or Code of Conduct. Enrolling students are responsible for acquainting themselves with all regulations.

College regulations which serve to control such activities as traffic, parking, smoking, and other aspects of personal conduct must be observed. Students may be suspended or dismissed for conduct which is considered incompatible with standards of propriety and good judgment while on campus and/or participating in school-sponsored activities either on campus or off.

The decision to suspend or dismiss students for violations of the College Code of Conduct will be at the discretion of the Dean of Student Affairs after consultation with appropriate personnel.

STUDENT HOUSING

The college does not have dormitory facilities nor does it assume any responsibility for student housing. If the student attending Vance-Granville Community College must secure housing, it will be his or her responsibility to investigate possible sources and make the necessary financial arrangements. The student is urged to do this well in advance of his anticipated enrollment date.

STUDENT ORGANIZATIONS AND ACTIVITIES

The college encourages student participation in student organizations and activities. Although student activities are viewed as secondary to the central purpose of academic preparation, they are nevertheless an important phase of student growth and development.

The student activities program is designed to provide a variety of meaningful educational, cultural, and social experiences.

The student activities program may include student government, publications, intramural athletics, departmental clubs, and special interest groups. A faculty advisor is required by the administration for each student group and organization. All organizations must be chartered and approved by the Student Government Association and the President. Should a sufficient number of students desire a particular activity, they can petition the Student Government for official recognition. All campus organizations are prohibited from discrimination according to race, creed, color, sex, age, or handicap.

STUDENT ACTIVITIES APPROVAL

All extra-curricular or co-curricular activities — doughnut sales, car washes, field trips, intramural sports, off-campus trips, etc. — must be approved by the office of the Dean of Student Affairs. The activities are to be recorded on a college activity calendar to ensure that they are coordinated throughout the entire college.

Solicitations and sales, both on campus and off-campus, must be authorized prior to such activity. No organization, department or class may sell, solicit, or carry on any extra-curricular activities without prior authorization.

TESTING

A well-planned testing program for all students is coordinated by the Student Affairs staff. Placement Tests will be administered to all new students planning to enter degree or diploma programs. In addition, other tests and interest inventories are available in the Counseling Center or Learning Resources Center.

Vance-Granville Community College offers the General Educational Development Program (G.E.D.) to adults who did not complete their high school education. Upon successful completion of a series of tests, a North Carolina Certificate of High School Equivalency will be awarded. Individuals interested in applying for the G.E.D. Program should contact the Student Affairs Office for application procedures.

UNATTENDED CHILDREN ON CAMPUS

The recreational facilities, classrooms, and other areas of the college are designated primarily for the student population. In order to insure that these facilities are available for the student body, children must be accompanied by parents. The college cannot assume responsibility for unattended dependents of students or other individuals who are accompanying students while attending Vance-Granville Community College.



COURSE DESCRIPTIONS

- AHR 1101 Automotive Air Conditioning** 3 6 - 5
 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.
- AHR 1102 Introduction to Cooling and Heating Systems** 3 - 9 6
 Covers the basic principles of cooling and heating related to industrial systems. Air conditioning, refrigeration, and heating systems are studied as well as fluid flow, air distribution, and control systems. Special industrial cooling and heating systems are included.
- AHR 1104 Blueprint Reading: Mechanical** 0 3 - 1
 An interpretation and reading of blueprints. Information on the basic principles of the blueprint; lines, views, dimensioning procedures and notes.
- AHR 1116 Oil Burner Installation & Service** 4 6 - 6
 Introduction to the principles of heating, terminology, and the use and repair of equipment. Includes maintenance and service of heating units and diagnosing troubles within installations. Thermostat controls are reviewed.
- AHR 1117 Gas Burners, Electric Heat & Liquid Heat Applications** 4 3 - 5
 Introduction to the principles of heating with the use of gas, electric, or liquid heat units. Includes installation and service to the above forms of heating units. Covers servicing and corrective maintenance techniques.
- AHR 1120 Blueprint Reading: Air Conditioning** 1 3 - 2
 A specialized course in drafting for the heating, air conditioning and refrigeration student. Emphasis upon reading of blueprints that are common to the trade: blueprints of mechanical components, assembly drawings, wiring diagrams and schematics, floor plans, heating system plans including duct and equipment layout plans, and shop sketches. The student makes tracings of floor plans and layouts of air conditioning systems.
- AHR 1121 Principles of Refrigeration I** 2 3 - 3
 Introduction to the principles of refrigeration, terminology, the use and care of tools and equipment, and the identification and the function of the component parts of a system. Also includes the basic laws of refrigeration; characteristics and comparison of the various refrigerants; the use and construction of valves, fittings, and basic controls. Practical work includes tube bending, flaring and soldering. Standard procedures and safety measures are stressed in the use of special refrigeration service equipment and the handling of refrigerants.
- AHR 1123 Principles of Air Conditioning** 3 6 - 5
 Includes the selection of various heating, cooling and ventilating systems, investigation and control of factors affecting air cleaning, movement, temperature, and humidity. Use is made of psychometric charts in determining needs to produce optimum temperature and humidity control. Commercial air conditioning equipment is assembled and tested. Practical sizing and balancing of ductwork is performed as needed.

- AHR 1124 Air Conditioning Service** 2 9 - 5
 Covers the installation, maintenance, and servicing of equipment used in the cleaning, changing, humidification and temperature control of air in an air conditioning space. Installation is made of various ducts and lines needed to connect various components. Shop work involves controls, testing and adjusting of air conditioning equipment, and location and correction of equipment failure.
- AHR 1125 Principles of Refrigeration II** 3 6 - 5
 A continuation and more advanced study in refrigeration principles.
 Prerequisite: AHR 1121
- AHR 1126 All Year Comfort Systems** 3 9 - 6
 Auxiliary equipment used in conjunction with refrigeration systems to provide both heating and cooling for "all year" comfort is studied and set up in the laboratory. Included are oil-fired systems, gas-fired systems, water-circulating systems, and electric-resistance systems. Installation of heat pumps is studied, along with servicing techniques. Reversing valves, special types of thermostatic expansion valves, systems of de-icing coils, and electric wiring and controls are also studied.
- AHR 1128 Automatic Controls** 3 6 - 5
 Types of automatic controls and their function in air conditioning systems. Reviews electric and pneumatic controls for domestic and commercial cooling and heating; zone controls, unit heater and ventilator controls, commercial fan systems controls, commercial refrigeration controls, and radiant panel controls.
- AHR 1129 Principles of Solar Heating** 3 3 - 4
 A study and application of the principles of solar heating and current equipment usage. A "state of the art" survey intended to acquaint the student with principles that will be beneficial as solar heating gains as an alternate to fossil fuel heating systems.
- AIB 202 Principles of Bank Operations** 4 0 4
 This course presents the fundamentals of bank functions in a descriptive fashion so that the beginning banker may acquire a broad and operational perspective. It reflects the radical changes in banking policy and practice which have occurred in recent years. Topics covered are banks and monetary system, negotiable instruments, the relationship of the commercial bank to its depositors, types of bank accounts, the deposit function, the payments function, bank loans and investments, other banking services (trust, international, and safe deposit), bank accounting and marketing, external and internal controls, and the public service obligations of banks.
- AIB 203 Bank Investments** 4 0 4
 Describes investment funds, the way the bank's needs for primary reserves and loanable funds limit the funds available for investments, and how their uses are determined. Analyzes primary and secondary reserve needs of commercial banks, sources of reserves; their random and cyclical fluctuations, and studies yield changes as they affect long-term holdings.
- AIB 205 Bank Management** 4 0 4
 This course is based on the second edition of the text that presents new trends which have emerged in the philosophy and practice of management. The study and application of the principles outlined provide new and experienced bankers with a working knowledge of bank management. It should be noted that the course is not one of personnel management, but rather of business management. It touches on objective planning, structure, control, and the interrelationship of various bank departments. Since case study is becoming well established as an effective management learning technique, the text also uses illustrative cases.

- AIB 209 Installment Credit** 4 0 4
This modular course emphasizes the programmatic "how to" details of installment credit. Topics covered are principles of credit evaluation, open-end credit, marketing bank services, collection policies and procedures, legal aspects, financial statement analysis, direct and indirect installment lending, leasing and other special situations, installment credit department management, insurance, and rate structure and yields.
- AIB 210 Money and Banking** 4 0 4
Stresses practical aspects of money and banking basic monetary theory: economic stabilization, types of spending, the role of gold, limitations of central bank control, government fiscal policy, balance of payments, and foreign exchange.
- AIB 231 Savings and Time Deposit** 4 0 4
This course reflects recognition of the fact that a knowledge of the historical development of savings institutions and an awareness of the basic economic function of the savings process are necessary to an understanding of the current operations and policies of these institutions. It begins with a review of the economics of the savings process in order to clarify important differences between financial savings by individuals or organizations and real savings that appear as capital formation. Different types of financial flow from income to capital investment are covered. Also covered are interest rates, types of savings accounts, and the management of savings institutions (asset management, operations and control, supervision, liquidity and marketing).
- AIB 232 Agricultural Finance** 4 0 4
Reflecting the rapid growth of the off-farm agribusiness sectors (the suppliers of farm inputs), this course emphasizes general principles associated with the evaluation of management and the use of capital, rather than stressing the examination of land and labor resources, which are more closely aligned with agricultural finance which should help the banker in satisfying the credit needs of modern agriculture.
- AIB 235 Loan and Discount** 4 0 4
Includes promissory notes; guaranties; general collateral agreements; examining and processing documents accompanying notes secured by stocks, bonds, and savings account passbooks; and the concept of attachment, perfection, priority, default, and foreclosure. It can be presented as a concentrated workshop or as a twelve-session seminar.
- AIB 236 Home Mortgage Lending** 4 0 4
A course to assist mortgage loan officers in developing sound mortgage portfolios. Includes a picture of the mortgage market; the acquisition of a mortgage portfolio, mortgage plans and procedures; mortgage loan processing and servicing; and the obligations of the mortgage loan officer in overall portfolio management.
- AUT 1123 Brakes, Chassis & Suspension Systems** 3 - 9 6
A complete study of various braking systems employed on automobiles and lightweight trucks. Emphasis is on how brakes operate, proper adjustment and repair as well as the servicing of parking brakes. Principles and functions of the components of automotive chassis. Practical job instruction in adjusting and repairing suspension systems.
- AUT 1124 Automotive Power Train Systems** 3 - 12 7
Principles and functions of automotive power train systems: clutches, transmission gears, torque converters, drive shaft assemblies, rear axles and differentials. Identifying troubles, servicing, and repairing.

- AUT 1203 Automotive Emission Controls** 3 - 3 4
A complete study of engine operating fundamentals, batteries, basic electricity, fuel pumps, carburetor circuits, crankcase ventilation systems, exhaust emission control systems and their assist units, evaporation emission control systems, complete coverage of charging systems, complete ignition system coverage and a step-by-step tune-up procedure. Covers theory of operation, testing, diagnosis and adjustment procedures.
- BIO 101 Biology I** 3 3 4
The first of a three-part sequence. Lecture and lab center upon the genetics, origin, composition, and organization of life, and energy processes associated with living systems.
- BIO 102 Biology II** 3 3 4
Life processes, reproduction, growth and development are covered and include the basic homeostatic processes of circulation, gas exchange, hormones, nerves, and excretion.
Prerequisite: BIO 101 or consent of instructor
- BIO 103 Biology III** 3 3 4
The life processes of plants are thoroughly covered in the first third of this unit. Animal and plant diversity and ecological dynamics are surveyed in the final two-thirds of this quarter. The laboratory sessions will emphasize independent research procedures and reports.
Prerequisite: BIO 101, BIO 102 or consent of instructor
- BIO 105 Basic Anatomy & Physiology** 4 2 5
A study of the normal structure and related functioning of the human body, with man identified as a living organism composed of living cells, tissues, organs, and systems. The normal body is studied as a basis for understanding variations from the normal man's need to maintain homeostasis. Included are the skeletal, muscular, digestive, circulatory, respiratory, urinary, reproductive, endocrine, integumentary, and nervous systems, and the special sense organs. Elementary principles and concepts of chemistry, microbiology, and physics are presented with the emphasis on the application of these principles to the relationships between structure and functions of the normal human body. Encompasses bacterial anatomy, physiology, and immunology in laboratory portions, with relevant experiments to augment the students' learning of the body structure and functions.
- BIO 106 Anatomy and Physiology I** 3 2 0 4
Part I of an introductory course in the normal structure and function of the human body systems designed to provide knowledge and understanding of the integumentary, digestive, urinary, cardiovascular, lymphatic, and skeletal systems as well as the basic cellular physiology of tissues. Interrelationships between these organ systems and their tissues will be emphasized. Selected laboratory exercises will demonstrate structure and function.
- BIO 107 Anatomy and Physiology II** 3 2 0 4
A continuation from BIO 106 covering the nervous, endocrine, respiratory, reproductive, muscular, and special sense systems.
Prerequisite: BIO 106 or permission of instructor
- BIO 108 Microbiology** 3 3 4
The morphological and physical characteristics of bacteria, protozoa, and fungi are studied in lecture and laboratory. General principles of cultivation, observation, infection, microbial control, and immunity are included.
Prerequisite: Permission of instructor

- BIO 109 Anatomy and Physiology** 3 2 0 4
This course is a study of the normal structure and functions of the human body, with man identified as a living organism composed of living cells, tissues, organs, and systems. The normal body is studied as a basis for understanding variations from the normal man's need to maintain homeostasis. Elementary principles and concepts of chemistry and physics are presented with the emphasis on the application of these principles to the relationships between structure and functions of the normal human body. Course is designed primarily for radiological applications.
- BIO 110 Anatomy and Physiology** 3 2 0 4
This course is a continuation of BIO 109. The same concepts and educational principles that were used in BIO 109 will be applied. Completion of this course will ensure that the student has adequately covered the structure and function of all the body's major systems, including: skeletal, muscular, digestive, circulatory, respiratory, urinary, reproductive, endocrine, integumentary, nervous, and the special sense organs.
Prerequisite: BIO 109
- BIO 111 Biology I** 5 0 5
Lecture only. The first of a two-part sequence centering on the activities, origin, composition and organization of life and the energy process of life. In addition several of the life processes such as circulation, reproduction, etc. are covered.
- BIO 112 Biology II** 5 0 5
Lecture only. Life processes and systems, heredity, plant and animal diversity and ecology are studied.
Prerequisite: BIO 111
- BIO 115 Medical Terminology I** 3 0 3
This course is designed to develop a vocabulary and proficiency in medical terminology. Topics include Latin and Greek roots, prefixes, suffixes, and the abbreviations and symbolism necessary for a complete understanding of the terms used in health fields and medical record keeping. Course is primarily for pre-medical, pre-dental, pre-veterinary, nursing, medical secretarial and radiologic technology students.
- BIO 116 Medical Terminology II** 3 0 3
Continuation of previous quarter.
Prerequisite: BIO 115 or instructor's approval
- BIO 200 General Botany I** 4 4 6
A survey of plants and their diversities in structure, life cycle, habitat, and economic importance.
Prerequisite: BIO 101
- BIO 201 Vertebrate Zoology** 4 4 6
General characteristics, anatomy, physiology, taxonomy, ecology, and evaluation of the vertebrates.
- BIO 202 Invertebrate Zoology** 4 4 6
Basic principles: morphology, physiology, embryology composition, and metabolism; general characteristics, life histories, taxonomy, ecology, and evaluation of the invertebrates.
- BIO 203 Advanced Physiology** 3 0 0 3
Designed to provide the Associate Degree student with an understanding of the various physiological processes characteristic of living organisms. The functioning of the individual organ systems with the focus on interrelationships between

- organ systems in the maintenance of homeostasis and other selected topics in vertebrate physiology. Characteristics of muscles, electrical properties of nerve conduction, reflex function, blood and circulation, respiration and kidney function will be included.
Not required for PN candidates.
Prerequisite: BIO 107
- BIO 204 Microbiology** 3 2 0 4
An introduction to microorganisms — viruses, rickettsia, bacteria, fungi, and protozoa. The emphasis will be medical and nursing oriented providing basic principles of microbiology, immunology and various methods of control as related to pathogenic organisms. Selected laboratory assignments will demonstrate these principles.
Prerequisite: BIO 203
- BIO 205 Horticulture** 4 2 5
The cultivation, propagation, and breeding of plants, with emphasis on ornamentals. Control of environmental factors for optional plant growth. The laboratory exercises include plant culture, propagation, pruning, and identification of common ornamentals.
Prerequisite: BIO 200
- BIO 206 Introduction to Ecology** 3 3 4
An introduction to the study of organisms in natural habitats with emphasis on growth of populations, the chemical role of organisms, energy flow through food chains and the development of ecological system involving present and future ecological concerns.
- BIO 208 Radiographic Pathology** 2 0 0 2
This course presents the student with an overview of the study of diseases. The basic characteristics of viral, bacterial, fungal, and parasitic diseases will be presented. Emphasis will be placed on studying the more common diseases that involve the major body systems, with particular attention to those that are often diagnosed with radiographic procedures.
Prerequisites: BIO 109 and RDT 104
- BUS 101 Introduction to Business** 5 0 5
Survey of the business world with particular attention devoted to the structure of the types of business organization, methods of financing, internal organization, and management.
- BUS 102 Typing I (Waiver by Testing)** 2 3 3
Introduction to the touch typewriter system with emphasis on correct techniques, mastery of the keyboard, simple business correspondence, tabulation, and manuscripts. Minimum speed requirement: 21 words per minute for five minutes.
- BUS 103 Typing II** 2 3 3
Emphasizes the development of speed and accuracy with further mastery of correct typewriting techniques. These skills and techniques are applied in tabulation, manuscript, correspondence, and business forms. Minimum speed requirement: 40 words for five minutes.
Prerequisite: BUS 102 or the equivalent
- BUS 104 Typing III** 2 3 3
Emphasis on production typing problems and speed building. Attention to the development of the student's ability to function as an expert typist, producing mailable copies. The production units are tabulation, manuscript, correspondence, and business forms. Speed requirements: 46 words per minute for five minutes.
Prerequisite: BUS 103 or equivalent

BUS	106 Shorthand I (Waiver by Testing)	3 2 4
	Beginning course in the theory and practice of reading and writing shorthand. Emphasis on phonetics, penmanship, word families, brief forms, and phrases.	
BUS	107 Shorthand II	3 2 4
	Continued study of theory with greater emphasis on dictation and elementary transcription. Prerequisite: BUS 106 or the equivalent	
BUS	108 Shorthand III	3 2 4
	Theory and speed building. Introduction to office style dictation. Emphasis on development of speed in dictation and accuracy in transcription.	
BUS	110 Office Machines I	1 2 2
	A general survey of business and office machines. Students receive training in techniques, processes, operation, and application of the electronic printing calculator.	
BUS	111 Office Machines II	1 2 2
	The student will refine his/her keying skills and integrate these skills with various operating procedures. Emphasis will be placed on simulated office work and individual production rates. Prerequisite: BUS 110	
BUS	112 Records Management	3 0 3
	Fundamentals of indexing and filing, combining theory and practice using miniature letters, filing boxes and guides. Alphabetic, geographic, subject and numeric filing are included.	
BUS	115 Business Law I	3 0 3
	Acquaints the student with fundamentals and principles of business law, including contracts, negotiable instruments, and agencies.	
BUS	116 Business Law II	3 0 3
	Includes the study of laws pertaining to bailments, sales, risk-bearing, partnership-corporation, mortgages, and property rights. Prerequisite: BUS 115	
BUS	117 Business Math I	5 0 5
	Stresses fundamental operations and their application to business problems. Topics covered include payrolls, price marking, interest and discount, commission, taxes, and pertinent uses of mathematics in the field of business.	
BUS	118 Business Math II	5 0 5
	A continuation of Business Math I emphasizing the calculations associated with the time value of money, present worth, bonds, insurance and analytics of finance. Also included are perpetuity, capitalization, depletion, annuities, and advanced management in industry and banking. Prerequisite: BUS 117	
BUS	120 Accounting I	5 2 6
	Principles, techniques and tools necessary to understand the mechanics of accounting. Collecting, summarizing, analyzing, and reporting information about service and mercantile enterprises, including practical application of the principles learned. Prerequisite: BUS 117	

BUS	121 Accounting II	5 2 6
	Partnership and corporation accounting, including a study of payrolls, federal and state taxes. Emphasis is placed on the recording, summarizing, and interpreting of data for management control rather than on bookkeeping skills. Accounting services are shown as they contribute to the recognition and solution of management problems. Prerequisite: BUS 120	
BUS	122 Managerial Accounting	5 2 6
	Emphasizes the use of accounting data as a basis for decision making and for planning, control, and evaluation of organizational activities. Introduces budgeting, cost-volume-profit analysis, and product costing systems. Prerequisite: BUS 121	
BUS	123 Finance I	3 2 4
	Financing business units, such as individuals, partnerships, corporations, and trusts. A detailed study is made of short-term, long-term and consumer financing.	
BUS	124 Finance II	3 2 4
	Emphasis is placed on solving actual short and long-term financing problems faced by private business institutions.	
BUS	127 Consumer Economics	3 0 3
	Helps the student use his time, energy, and money to get the most out of life. Gives the student an opportunity to build useful skills in buying, managing his finances, increasing his resources, and understanding the economy in which he lives.	
BUS	134 Personal Development	3 0 3
	This course is designed to help the student look and feel more attractive and to complement development in other meaningful areas. Areas of study include physical control and visual poise; personal grooming; wardrobe selection; communication skills; social and business etiquette; techniques for getting a job, handling a job efficiently and relating to employers and co-workers.	
BUS	204E Advanced Typing (Executive)	2 3 3
	Emphasis is placed on development of individual production rates. Student learns techniques needed in planning and typing projects approximating work appropriate in the field of study. Projects include review of letter forms, methods of duplication, statistical tabulation and the typing of reports. Speed requirement: 55 words per minute. Prerequisite: BUS 104	
BUS	204L Advanced Typing (Legal)	2 3 3
	Develops individual production rates. Students plan and type projects approximating work appropriate in the field of law. Projects include typing of all legal documents. Speed requirement: 55 words per minute.	
BUS	204M Advanced Typing (Medical)	2 3 3
	Emphasis is placed on development of individual production rates. Student learns techniques needed in planning and typing projects approximating work appropriate in the field of study. Projects include the typing of various medical forms. Speed requirement: 55 words per minute for five minutes. Prerequisite: BUS 104	

BUS	205 Typewriting V — Speedbuilding	2 3 3
	Emphasis in this course is on production and speed building. The student will improve typing techniques including stroke control, accuracy, forced speed building and will retain speed for long periods of time by typing straight copy. All production work will be timed.	
BUS	206 Dictation and Transcription I	3 2 4
	Develops skills in dictation and transcription of typewriter materials. Includes a review of the theory and the dictation of familiar and unfamiliar material at varying rates of speed. Minimum dictation rate of 90 words per minute for five minutes on new material.	
BUS	207 Dictation and Transcription II	3 2 4
	Covers materials appropriate to the course of study. Develops the accuracy, speed, and vocabulary that will enable a student to meet the stenographic requirements of business and professional offices. Minimum dictation rate of 100 words per minute required for five minutes on new materials. Prerequisite: BUS 206	
BUS	209 Real Estate Finance	4 0 4
	A study of real estate finance including an analysis of financial techniques and instruments necessary in real estate financing. Topics include the structure of the mortgage market, the sources of funds, types of mortgages, role of government agencies, interest rates, loan origination and servicing, and competition in the money market.	
BUS	211 Machine Dictation & Transcription I	2 2 3
	A study and practice course in the use of transcribing machines in business dictation. Develops proficiency in word usage, correct grammar, and letter styles. Prerequisites: BUS 103, ENG 101	
BUS	212L Machine Dictation & Transcription II - Legal	2 3 3
	A study and practice course in the use of transcribing machines in legal dictation. Proficiency in the usage of legal terminology is emphasized. Prerequisite: BUS 211	
BUS	212M Machine Dictation & Transcription II - Medical	2 3 3
	A study and practice course in the use of transcribing machines in medical dictation. Proficiency in the usage of medical terminology will be emphasized. Prerequisite: BUS 211	
BUS	214 Office Procedures	3 2 4
	Acquaints the student with the responsibilities encountered by a secretary during the workday, such as: receptionist duties, handling mail, telephone techniques, travel information, telegrams, office records, purchasing supplies, office organization, and insurance claims.	
BUS	215 Office Application	1 9 4
	During the sixth quarter only, students are assigned to work in a business, technical, or professional office for 9 hours per week. Provides actual work experience for secretarial students and allows practical application of the skills and knowledge previously learned. Prerequisite: Fifth Quarter Standing; 2.0 average	
BUS	219 Credit Procedures and Problems	3 0 3
	Principles and practices in the extension of credit; collection procedures; laws pertaining to credit extension and collection. Prerequisite: BUS 120	

BUS	222 Intermediate Accounting I	5 2 6
	Reviews the accounting cycle and presents an in-depth study of income measurement and valuation and reporting issues relating to assets and current liabilities. Prerequisite: BUS 121	
BUS	223 Intermediate Accounting II	5 2 6
	Continues the in-depth study of valuation and reporting issues relating to long-term liabilities and stockholder's equity. Prerequisite: BUS 222	
BUS	224 Advanced Accounting	3 2 4
	Application of advanced accounting principles to partnership accounting, governmental and non-profit accounting, fiduciary accounting, and accounting for combined corporate entities and consolidations. Prerequisite: BUS 223	
BUS	225 Cost Accounting	3 2 4
	Covers nature and purpose of cost accounting; accounting for direct labor, materials, factory burden, job cost, and standard cost principles and procedures. Selling and distribution cost; budget; and executive use of cost figures. Prerequisite: BUS 121	
BUS	229 Taxes I	3 2 4
	Application of federal and state taxes as it applies to individuals. Prerequisite: BUS 120	
BUS	230 Taxes II	3 2 4
	Application of federal and state taxes as it applies to business and business conditions. Prerequisite: BUS 229	
BUS	232 Sales Development	3 0 3
	A study of retail, wholesale and specialty selling. Emphasizes mastering and applying the fundamentals of selling. Preparation for sales demonstration required.	
BUS	233 Personnel Management	3 0 3
	Principles of organization and management of personnel, including procurement, placement, training, performance checking, supervision, remuneration, labor relations, fringe benefits, and security.	
BUS	235 Business Management	3 0 3
	Principles of business management including overview of major functions of management, such as planning, staffing, controlling, directing, and financing. Clarification of the decision-making function versus the operating function. Role of management in business — qualifications and requirements.	
BUS	239 Marketing	3 0 3
	A general survey of the field of marketing, with a detailed study of the functions, policies, and institutions involved in the marketing process.	
BUS	241 Sales Promotion Management	3 0 3
	Scope and activities of sales promotion with emphasis on the coordination of advertising, display, special events, and publicity. External and internal methods of promoting business, budgeting, planning and implementing the plan.	

BUS	243 Advertising	3 2 4
	The role of advertising in a free economy and its place in the mass media. 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.	
BUS	245 Retailing	3 0 3
	Deals with the role of retailing, including development of present retail structure, functions performed, principles governing effective operation and managerial problems resulting from current economic and social trends.	
BUS	247 Business Insurance	3 0 3
	Presents basic principles of risk insurance and their application. Includes a survey of the various types of insurance.	
BUS	247M Business Insurance - Medical	3 0 3
	Presents basic principles of medical insurance and their application. Includes a survey of various federal, state, and private health insurance plans and acquaints the student with the handling of various medical insurance claims.	
BUS	260 Commercial Display and Design I	3 0 3
	Introduction to basic layouts and design of commercial displays. Discusses design as needed by retail stores, banks, restaurants, motels and various offices, specifying equipment and fixtures required. Prerequisite: BUS 245	
BUS	261 Commercial Display and Design II	1 3 2
	An advanced continuation of BUS 260. Introduces the use of fabric construction in clothing, draperies, furniture covers, bath rugs, and carpets. Prerequisite: BUS 260	
BUS	262 Fashion in Retailing	2 2 3
	Acquaints the student with the relationship between fashion and style. Areas of study include characteristics of styles, fashion trends, coordination, application of color and design analysis. Prerequisite: BUS 245	
BUS	268 Marketing and Retailing Internship	3 12 3
	A minimum 132 hours of approved on-the-job work experience related to marketing and retailing jobs. Individual arrangements may be made on a different basis as approved by the advisor. The employer and the type of work experience must be approved by the advisor. Each student conducts and makes a written report on a practical project related to his internship.	
BUS	269 Auditing	3 2 4
	Principles of conducting audits and investigations; setting up accounts based upon audits; collecting data on working papers; arranging and systemizing the audit and writing the audit report. Emphasis placed on detailed audits, internal auditing, and internal control. Prerequisite: BUS 223	
BUS	271 Office Management	3 0 3
	Presents the fundamental principles of office management. Emphasis on the role of office management, including the functions, office automation, planning, controlling, organizing, actuating office problems.	
BUS	272 Principles of Supervision	4 0 4
	Introduces the basic responsibilities and duties of the supervisor and his relationship to superiors, subordinates, and associates. Emphasis on securing an effective work force and the role of the supervisor. Methods of supervision are stressed.	

BUS	273 Word Processing I	3 0 3
	The student will be provided a thorough background of word processing concepts and skills for both administrative and correspondence positions. Prerequisite: BUS 104 or equivalent	
BUS	274 Word Processing II	3 0 3
	This course is designed to continue the student's learning experience on word processing equipment with emphasis on application.	
BUS	280 The Federal Reserve System	4 0 4
	This course examines the operations and policies of the Federal Reserve System during the past sixty years. The origins, administrative structure, and crucial periods in the history of the system are reviewed. A treatment of international monetary relations following the end of World War II is also included. The course concludes with a review and analysis of monetary instruments and of the goals of monetary policy.	
BUS	281 Commercial Banking Services	4 0 4
	The purpose of this course is to identify topics and issues which bankers must be prepared to address and discuss the quest for solution and responses. Coverage includes: a historical overview of the American Banking System, the constitutions of commercial banks, effective management, sources of bank funds, use of funds, retail banking, wholesale banking, electronic funds transfer systems, multi-national banking, specialized service areas, regulatory constraints, and the new world of banking.	
BUS	283 International Banking	4 0 4
	An introduction to a vast field of those working in international departments, as well as for those involved in the domestic activities of their banks. The essential objective of this course is to present the basic framework and fundamentals of international banking: how money is transferred from one country to another, how trade is financed, what the international agencies are and how they supplement the work of commercial banks, and how money is changed from one currency to another.	
BUS	286 Federal Regulation of Banking	4 0 4
	This course provides a comprehensive treatment of the "why" and "what" of federal bank supervision. Some of the topics covered are agencies regulating banks, banks' charters, bank reports and examinations, federal limitations on banking operations, and the regulation of bank expansion. Emphasis is on supervision rather than the role of the federal government as it indirectly influences the operations of banks through fiscal and monetary policy decisions.	
BUS	287 Trust Functions and Services	4 0 4
	This course presents a complete picture of the services rendered by institutions engaged in trust business. Providing an introduction to the services and duties involved in trust operations, the course is intended for all bankers, not only those who are engaged in trust business.	
BUS	293 Small Business Enterprises	3 0 3
	Introduces the business world and problems of small business operations, basic business law, business forms and records, financial problems, ordering and inventory, layout of equipment and offices, methods of improving business, and employer-employee relations.	
CAR	1102 Carpentry I	5 15 10
	A brief history of carpentry and present trends in the construction industry. Involves operation, care and safe use of carpenter's handtools and power tools in cutting, shaping and lining construction materials. Major topics of study include theoretical and practical applications involving materials and methods of	

construction, building layout, preparation of site, footings and foundation, and wall construction including form construction and erection.

- CAR 1103 Carpentry II** 5 15 10
Study and practice in the building of residential structures, including floor joists, subflooring, wall studding, and rough interior finishing.
Prerequisite: CAR 1102
- CAR 1104 Finish Carpentry** 3 18 9
Study and practice in finishing carpentry techniques for residential buildings, including wall finishing, floor finishing, ceiling finishing, cabinetry and other finish carpentry areas.
Prerequisites: CAR 1103, CAR 1102
- CHM 99 Introduction to Chemistry** 3 0 3
Basic concepts of general, organic, and biochemistry are presented and related to medically important processes. This course is designed for students who need credit for high school chemistry.
- CHM 101 General Chemistry** 3 3 4
General college chemistry for science and nonscience majors. Concepts emphasized are atomic structure and periodicity of the elements, chemical bonding, equations and stoichiometry, states of matter and phase change. Laboratory includes basic lab techniques and quantitative determinations of relationships of matter.
Corequisite: MAT 103 or 120
- CHM 102 General Chemistry II** 3 3 4
CHM 102 is a continuation of CHM 101. Principles included are solutions, equilibrium and kinetics, electro chemistry, ionic equilibria, solubility, product, principle and hydrolysis. Lab is a continuation of CHM 101.
Prerequisite: CHM 101
- CHM 103 General Chemistry III** 3 3 4
CHM 103 is a continuation of CHM 102. Principles included are descriptive study of elements, coordination compounds, introduction to organic chemistry and radiochemistry. Laboratory includes basic qualitative analysis.
Prerequisite: CHM 102
- CHM 111 Technical Chemistry for Non-Health Majors** 4 0 4
An introduction to chemistry course involving chemical terminology, atomic structure, properties of some elements, and the function of the periodic table. Properties of compounds and mixtures are studied as are types of chemical reactions. Laboratory work consists of various inorganic reactions and preparations.
Prerequisite: MAT 101
- CJC 101 Introduction to Criminal Justice** 5 0 5
Familiarizes the student with a philosophy and history of law enforcement, its legal limitations in our society, the primary duties and responsibilities of the various agencies in the criminal justice field, the basic processes of justice, and evaluation of law enforcement's current position, and an orientation relative to the profession as a career.
- CJC 115 Criminal Law** 5 0 5
Presents a basic concept of criminal laws and provides legal groundwork for those who seek to enter the criminal justice field.

- CJC 125 Court Procedures and Evidence** 3 0 3
Reviews court systems, procedures from incident to final disposition, the kinds and degrees of evidence, and the rules governing the admissibility of evidence in court.
- CJC 202 Introduction to Corrections** 3 0 3
Application of the knowledge of criminology to the control and treatment of criminally deviant behavior. It includes an examination of society's agencies of social control that attempt to punish and rehabilitate the adult and juvenile delinquent. The formal and informal implementation of the correctional function is studied.
- CJC 206 Criminal Justice and the Community** 3 0 3
Provides an understanding of community structures as they relate to minority groups, peer groups, socioeconomic groups, leader groups, and group relations. Emphasizes the organization and function of these groups as they relate to the profession of criminal justice-protective service.
- CJC 209 Correction Law** 3 0 3
Familiarizes the student with the specific laws as they pertain to correction, care, custody, and control.
- CJC 210 Criminal Investigation I** 3 0 3
Introduces the fundamentals of investigation; crime scene search; recording, collection and preservation of evidence; sources of information; interview and interrogation, case preparation, and court presentation.
- CJC 211 Criminal Investigation II** 3 0 3
Includes the study of the investigation of specific offenses and preparing evidence for court.
Prerequisite: CJC 210
- CJC 212 Drugs** 3 0 3
Prepares the student to identify and classify drugs. Emphasizes the investigation techniques and effects of drugs on the human body as they relate to a profession in criminal justice-protective service.
- CJC 217 Patrol Procedures** 5 0 5
Gives a technical overview of the "why" as well as the "how to" of the patrol function. Areas of the patrol function addressed are techniques and methods of traffic enforcement, crises intervention (i.e. domestic disputes), eyewitnesses and the mechanics of identification, arrest, handling civil disorders, stolen motor vehicles, and misdemeanor felony cases.
- CJC 220 Criminal Justice Administration** 5 0 5
Introduces principles of organization and administration of criminal justice agencies.
- CJC 225 Seminar in Criminal Justice** 3 0 3
Supervised reading and independent research to analyze and evaluate modern criminal justice strategies and system innovations.
Prerequisite: CJC 101
- CJC 230 Counseling** 5 0 5
Presents the basic elements of counseling and applies them to the different socioeconomic groups in our society.
- CJC 234 Community Based Correction** 5 0 5
Examines community resources that can be utilized in the correctional process, such as vocational rehabilitation, alcohol detoxification and other units, welfare

construction, building layout, preparation of site, footings and foundation, and wall construction including form construction and erection.

CAR	1103 Carpentry II	5 15 10
	Study and practice in the building of residential structures, including floor joists, subflooring, wall studding, and rough interior finishing. Prerequisite: CAR 1102	
CAR	1104 Finish Carpentry	3 18 9
	Study and practice in finishing carpentry techniques for residential buildings, including wall finishing, floor finishing, ceiling finishing, cabinetry and other finish carpentry areas. Prerequisites: CAR 1103, CAR 1102	
CHM	99 Introduction to Chemistry	3 0 3
	Basic concepts of general, organic, and biochemistry are presented and related to medically important processes. This course is designed for students who need credit for high school chemistry.	
CHM	101 General Chemistry	3 3 4
	General college chemistry for science and nonscience majors. Concepts emphasized are atomic structure and periodicity of the elements, chemical bonding, equations and stoichiometry, states of matter and phase change. Laboratory includes basic lab techniques and quantitative determinations of relationships of matter. Corequisite: MAT 103 or 120	
CHM	102 General Chemistry II	3 3 4
	CHM 102 is a continuation of CHM 101. Principles included are solutions, equilibrium and kinetics, electro chemistry, ionic equilibria, solubility, product, principle and hydrolysis. Lab is a continuation of CHM 101. Prerequisite: CHM 101	
CHM	103 General Chemistry III	3 3 4
	CHM 103 is a continuation of CHM 102. Principles included are descriptive study of elements, coordination compounds, introduction to organic chemistry and radiochemistry. Laboratory includes basic qualitative analysis. Prerequisite: CHM 102	
CHM	111 Technical Chemistry for Non-Health Majors	4 0 4
	An introduction to chemistry course involving chemical terminology, atomic structure, properties of some elements, and the function of the periodic table. Properties of compounds and mixtures are studied as are types of chemical reactions. Laboratory work consists of various inorganic reactions and preparations. Prerequisite: MAT 101	
CJC	101 Introduction to Criminal Justice	5 0 5
	Familiarizes the student with a philosophy and history of law enforcement, its legal limitations in our society, the primary duties and responsibilities of the various agencies in the criminal justice field, the basic processes of justice, and evaluation of law enforcement's current position, and an orientation relative to the profession as a career.	
CJC	115 Criminal Law	5 0 5
	Presents a basic concept of criminal laws and provides legal groundwork for those who seek to enter the criminal justice field.	

CJC	125 Court Procedures and Evidence	3 0 3
	Reviews court systems, procedures from incident to final disposition, the kinds and degrees of evidence, and the rules governing the admissibility of evidence in court.	
CJC	202 Introduction to Corrections	3 0 3
	Application of the knowledge of criminology to the control and treatment of criminally deviant behavior. It includes an examination of society's agencies of social control that attempt to punish and rehabilitate the adult and juvenile delinquent. The formal and informal implementation of the correctional function is studied.	
CJC	206 Criminal Justice and the Community	3 0 3
	Provides an understanding of community structures as they relate to minority groups, peer groups, socioeconomic groups, leader groups, and group relations. Emphasizes the organization and function of these groups as they relate to the profession of criminal justice-protective service.	
CJC	209 Correction Law	3 0 3
	Familiarizes the student with the specific laws as they pertain to correction, care, custody, and control.	
CJC	210 Criminal Investigation I	3 0 3
	Introduces the fundamentals of investigation; crime scene search; recording, collection and preservation of evidence; sources of information; interview and interrogation, case preparation, and court presentation.	
CJC	211 Criminal Investigation II	3 0 3
	Includes the study of the investigation of specific offenses and preparing evidence for court. Prerequisite: CJC 210	
CJC	212 Drugs	3 0 3
	Prepares the student to identify and classify drugs. Emphasizes the investigation techniques and effects of drugs on the human body as they relate to a profession in criminal justice-protective service.	
CJC	217 Patrol Procedures	5 0 5
	Gives a technical overview of the "why" as well as the "how to" of the patrol function. Areas of the patrol function addressed are techniques and methods of traffic enforcement, crises intervention (i.e. domestic disputes), eyewitnesses and the mechanics of identification, arrest, handling civil disorders, stolen motor vehicles, and misdemeanor felony cases.	
CJC	220 Criminal Justice Administration	5 0 5
	Introduces principles of organization and administration of criminal justice agencies.	
CJC	225 Seminar in Criminal Justice	3 0 3
	Supervised reading and independent research to analyze and evaluate modern criminal justice strategies and system innovations. Prerequisite: CJC 101	
CJC	230 Counseling	5 0 5
	Presents the basic elements of counseling and applies them to the different socioeconomic groups in our society.	
CJC	234 Community Based Correction	5 0 5
	Examines community resources that can be utilized in the correctional process, such as vocational rehabilitation, alcohol detoxification and other units, welfare	

	services, child guidance and mental health clinics, employment services, probation volunteer, professional assistance, legal aid, and other pertinent services.			
CJC	255 Motor Vehicle Law and Accident Investigation Reviews the motor vehicle code of North Carolina and basic concepts of modern accident investigation techniques and procedures. Enable students to apply violations of the motor vehicle code for traffic enforcement safety accident liability determination.	3	0	3
CJC	260 Special Law Enforcement Certification Addresses the specific areas of police driver training, firearms training, and ABC Laws and enforcement techniques.	4	0	4
CJC	261 Protective Measures Gives a historical perspective on unarmed self-defense. Explores the moral and ethical use of force. Prepares the student to defend himself against sudden attack by single and multiple opponents. Emphasizes methods to subdue and maintain control of personnel without resorting to deadly force during arrest and detention situations. Introduces the student to use of the baton, security devices, and come-along holds in law enforcement-correctional settings. Explores the theories and methods of disarming tactics against firearms and edged weapons.	5	0	5
CJC	262 Constitutional Law This course is an introduction to constitutional law. It covers the constitutional amendments and their application through Supreme Court interpretation to the Criminal Justice system in the United States. The student is introduced to the application of these amendments to procedure within the system to comply with their requirements. Special emphasis is placed on recent court decisions and the application of these decisions within the criminal justice system.	5	0	5
CJC	263 Constitutional Law II This course is designed to introduce the student to the 5th through 14th amendments to the U.S. Constitution. Subject areas covered include self-incrimination, right to counsel, and other amendments dealing with due process of law. Special emphasis is placed on recent court decisions and the application of these decisions within the Criminal Justice system.	5	0	5
CJC	282 Internship and Seminar Provides an opportunity to relate theory to practice through observation and experience in an approved criminal justice agency, under the supervision of an instructor. Students participate as volunteer workers in law enforcement agencies, juvenile courts, probation/parole departments, correctional institutions, delinquency control programs, and public and private voluntary agencies. Prerequisite: Approval of instructor	1	20	3
COS	1001 Scientific Study I 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.	4	6	6
COS	1002 Scientific Study II A classroom study of skin, scalp, hair, nails, and their disorders, salesmanship, permanent waving, marcelling, relaxing, hairdressing, wigs, and hair coloring.	5	0	5
COS	1003 Scientific Study III A classroom study of anatomy, manicuring, chemistry, cosmetics-facials, hair styling, theory of massage, scalp treatments, superfluous hair removal, grooming and hygiene.	5	0	5
COS	1004 Scientific Study IV 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.	5	0	5
COS	1005 Scientific Study V Scientific Study will be a complete review of each subject covered in preparation for the State Board Examination. Students may choose to complete 1500 hours in lieu of working the 6 months apprenticeship.	5	0	5
COS	1011 Mannequin Practice 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.	0	20	7
COS	1022 Clinical Application I A study of live model performance. This course is designed to develop skills and understanding of techniques and applications 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.	0	25	8
COS	1033 Clinical Application II This course gives continued laboratory practice and application of techniques in hair shaping, professional ethics, manicuring, chemistry, cosmetics-facials, hair styling, hair coloring (rinses, etc.) and scalp treatments.	0	25	8
COS	1044 Clinical Application III 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.	0	25	8
COS	1055 Clinical Application IV The fifth quarter will be a continuation of practice in fingerwaving, pincurling, roller patterns, permanent waving, chemical hair relaxing and hair tinting.	0	25	8
DFT	113 Electronics Drafting The fundamentals of drafting are presented with an emphasis on applications in the electronics field. Basic skills and techniques are included such as the use of drafting instruments, and freehand, lettering and dimensioning, and how to read prints. In addition to basic skills, specialized experience will be included which directly relates to the electronics industry, such as types of drawings common to electronics, special symbols used, schematic diagrams, and layout diagrams with an emphasis on printed circuit work.	2	4	4
DFT	1104 Blueprint Reading Interpretation and reading of blueprints. Information on the basic principles of the blueprint; lines, views, dimensioning procedures and notes.	0	3	1
ECO	102 Economics I Fundamental principles of economics including the institutions and practices by which people gain a livelihood. Included is a study of the laws of supply and demand and the principles bearing upon production, exchange, distribution and consumption.	3	0	3

ECO 104 Economics II 3 0 3
 Greater depth in principles of economics, including a penetration into the composition and pricing of national output, distribution of income, international trade and finance, and current economic problems.
 Prerequisite: ECO 102

EDP 104 Introduction to Data Processing 3 0 3
 Covers fundamental concepts and operational principles of data processing systems, as an aid in developing a basic knowledge of computers. Course is a prerequisite for all programming courses.

EDP 105 Assembler Language 2 4 4
 A course to introduce the student to Z-80 Assembler Language.
 Prerequisites: EDP 109, EDP 110, EDP 226 or consent of instructor

EDP 109 BASIC Language I 2 4 4
 An introduction to digital computing techniques through the study of the BASIC Language. Students learn the techniques of problem solving and program development. Concepts of microcomputer hardware and computer applications areas will be introduced when appropriate.

EDP 110 BASIC Language II 2 4 4
 A continuation of EDP 109, this course examines the use of advanced programming techniques and develops the skills required in the handling of data through various input/output devices. Students will design a program system and supporting documentation utilizing these data handling techniques.
 Prerequisite: EDP 109

EDP 202 COBOL I 2 4 4
 A course to vigorously introduce to the student structured COBOL. Topics include an introduction to structural program design, I.P.O. charts, pseudocode, COBOL language divisions, arithmetic comparing operations, and report editing. At least four error free and tested programs are required.
 Prerequisites: EDP 104, EDP 109, or consent of instructor

EDP 210 COBOL II 2 4 4
 A continuation of EDP 202 - COBOL I. Topics covered include nested if statements, single and multiple control breaks, table processing and additional COBOL statements. STRUCTURED programming designs are emphasized.
 Prerequisite: EDP 202

EDP 211 COBOL III 2 4 4
 A continuation of EDP 202 - COBOL I and EDP 210 - COBOL II. Topics include designing and writing good programs, data editing, sequential file updating, sorting, multiple input files, and indexed sequential files.
 Prerequisites: EDP 202, EDP 210

EDP 215 Operating Systems 3 2 4
 A course to introduce the student to the concepts of operating systems. The course covers both general operating systems and specific techniques of operating the Burroughs B920.
 Prerequisites: EDP 202, EDP 210, EDP 211 or approval of instructor

EDP 220 Introduction to Systems Analysis 3 2 4
 A course to introduce the student to the procedures of systems analysis and design through the use of a realistic case study.
 Prerequisites: EDP 109 and EDP 110 or EDP 202, EDP 220, and EDP 221, or consent of instructor

EDP 224 RPG Language 2 4 4
 A course to introduce the student to the RPG II Language. Topics covered include input/output processing, arithmetic operations, editing, comparing, control breaks, fetch overflow, multiple record types, look ahead, and exception output.
 Prerequisites: EDP 104, EDP 202, EDP 210, or consent of instructor

EDP 225 Advanced RPG 2 4 4
 A course designed as a continuation of EDP 224 - RPG Language. Topics include array processing, table look-up, array look-up, matching records, magnetic tape, sequential disk, read-demand files, and the Indexed Sequential Access Method.
 Prerequisites: EDP 224 or consent of instructor

EDP 226 FORTRAN Programming 2 4 4
 This is a fundamental course in FORTRAN programming. The FORTRAN language structure, statements, and programming methods and techniques are studied. The student will develop program logic and write FORTRAN programs for solving sample problems.
 Prerequisites: EDP 104, EDP 109, EDP 110, or consent of instructor

EDP 229 EDP Project 1 8 5
 The student will complete a special project assigned by the instructor.
 Prerequisite: Approval of instructor

EDU 101 Introduction to Education 3 0 3
 Overview of the history of education in the United States and different educational philosophies.

EDU 102 Educational Methods 3 2 4
 Study of the types of experiences, facilities and media which promote maximum development of the child, including skill development in arranging classrooms, designing bulletin boards, preparing materials and lesson plans. Guidelines for identifying, planning, organizing and implementing appropriate programs for various levels of development are emphasized through group discussion and individual projects.

EDU 103 Parent Education 3 0 3
 Study of ways parents can be involved in their child's educational process, of the purposes and value of home visitation, and of techniques for reporting child's progress to parents. Aiding parents in guidance of the child's development is emphasized.

EDU 104 Self Dynamics 2 0 1
 Develops self-confidence, positive attitudes, positive characteristics and personalities. Students gain strength in awareness of personal values, inner resources and individual capabilities. Course designed to involve students in effective exercises using major study skills in various subject areas.

EDU 105 Group Dynamics 2 0 1
 Develops skills in communication, motivation, and understanding people. Projects review handling the emotional risks of life and friendship, relating hopes and dreams to reality, revealing how students are affected by being a member of many groups (an age group, a job group, a racial group, a neighborhood group, a family group, and a social group). Stresses importance of improving interpersonal relationships.

EDU 106 Career Dynamics 2 0 1
 Acquaints individuals with decision making, anticipation, and expectation of setting goals for a career. Projects review the using of time, using resources, growth and accomplishment through self-management, learning to release the talent potential, gaining control over an individual's resources, and learning occupational information and skills.

EDU 107 Seminar in Reporting and Observation 3 0 3
 The application and practice of the various forms and methods used in reporting observations. Students participate in activities to develop skills in writing measurable and specific observations, baseline data, progress summaries and behavior reports.

EDU 108 Behavior Management 3 0 3
 Practical principles and techniques of behavioral management to strengthen existing appropriate behaviors develop and maintain new behaviors, extinguish inappropriate behaviors and modify emotional responses.

EDU 111 Administration and Supervision of Day Care Facilities 3 0 3
 Concepts of organizing and operating day care and child development centers, including how to establish operational policies and procedures, and day care governmental requirements for licensing and/or certification. The student will plan activities, select equipment and materials, define the adult role in the center and develop techniques for managing children in a group situation.

EDU 112 Safety Education 3 0 3
 This course introduces the student to the basic principles underlying safety education. The causes of accidents in various situations and counter measures to prevent them, including legal responsibilities and liability are included.

EDU 115 Language Arts for Children 2 2 3
 Various approaches to the teaching of language skills appropriate for young children. Emphasis is placed on centers for listening, writing, reading, word recognition, and oral communication. Includes flannel board, finger play, and role plays.

EDU 116 Math for K-3 2 2 3
 Study of activities, methods and materials for introducing young children to basic mathematical concepts. Consideration is given to group and individual instruction, remedial skill building and promoting and encouraging interest in number concepts.

EDU 149 Role of Education Associate 1 0 1
 Overview of the responsibilities and duties of a paraprofessional in an educational setting. Introduction of various job settings such as schools, day care centers, community agencies and institutions. Strengths and weaknesses for a profession in education are evaluated.

EDU 200 Teaching the Severely and Profoundly Handicapped 2 2 3
 Objectives, assessment, methods and materials for teaching severely and profoundly retarded individuals, including adaptive aids for those with multiple handicaps.

EDU 201 Introduction to Special Education 3 0 3
 An overview of the philosophy, approaches and development of special education. Emphasis will be given to the classification systems, the organization of programs and services, professional roles and careers, methods of assessment and goal-planning, state and federal legislation, and the influence of social, political, and economic factors on both regular and special education.

EDU 202 Science and Math for Preschool 3 0 3
 Study of activities and materials for developing mathematic and science experiences for preschool children, including how to assist the child in manipulating, experimenting and discovering basic number and science concepts.

EDU 203 The Exceptional Child 3 0 3
 A comprehensive survey of the various exceptionalities: gifted and talented, mental retardation, emotional disturbance, learning disabilities, speech impaired, deaf, blind and physically handicapped.

EDU 206 Music for Young Children 1 2 2
 Study of music appropriate for young children, and methods of integrating music into a total program of activities. A theory approach introduces the musical elements and performance on the piano and autoharp are required.

EDU 210 Emotional Disturbance 3 0 3
 Development, identification, characteristics and treatment of emotional disorders, with an orientation to needs, approaches and techniques.

EDU 212 Sex Education for the Handicapped 2 0 2
 Attitudes, goals, and special concerns of sex education for the handicapped including counseling, parent communication, and teaching techniques.

EDU 213 Levels of Reading & Readiness 3 0 3
 The application of methods and approaches to the teaching of reading including phonics, informal assessment of reading difficulties, instructional materials, and strategies for improving reading skills.

EDU 215 Physical Handicaps 3 0 3
 An overview of the characteristics and special needs of physically handicapped, with an emphasis on strategies, curriculums and adaptive materials and equipment.

EDU 216 Problems of Childhood 3 0 3
 Study of family crises in a child's life and its effect, how to deal with common behavior problems and the discussion of many of the problems intrinsic to childhood: bedwetting, fears, school phobia, etc.

EDU 217 Language and Literature 2 2 3
 Study of various types of literature appropriate for young children and language development in relation to the child's early experiences. Analysis of adult-child communication and guidelines for establishing effective communication patterns with children.

EDU 218 Children's Literature 2 2 3
 A survey of the types and categories of literature designed especially for students in the elementary school. Evaluation of modern writers, illustrators, and books will be emphasized.

EDU 222 Internship and Seminar (Special Education Associate) 1 20 3
 Internship in a work setting which allows the student to receive training and "Hands on" experience in his/her chosen field of education.

EDU 223 Internship and Seminar (Early Childhood Associate) 1 20 3
 Internship in a work setting which allows the student to receive training and "hands on" experience in his/her chosen field of education.

EDU	224 Internship and Seminar (Teacher Aide Associate)	1 20 3
	Internship in a work setting which allows the student to receive training and "hands on" experience in his/her chosen field of education.	
EDU	229 Social Studies for K-3	2 2 3
	Techniques and methods of teaching social studies with emphasis on developing the classroom, bulletin boards, and interest centers, cultural awareness, and promoting interest in the child's surrounding world.	
EDU	231 Creative Activities for Preschool Children	2 2 3
	Activities and materials used to promote self-expression, aesthetic appreciation and creativity in young children. Techniques for presenting creative activities and learning to use art media will be included.	
EDU	232 Creative Activities & Crafts for K-3	0 0 0
	Study of materials, methods and procedures in crafts and original activities. Special emphasis is placed on the selection and organization of materials and seasonal projects.	
EDU	234 Audiovisual Techniques	3 0 3
	The student will be able to select, use and evaluate the use of audiovisual and instructional equipment and materials. Experiences in the operation and proper care of equipment and materials will be provided. The preparation of inexpensive, teacher-student made audiovisual and instructional materials will also be emphasized.	
EDU	243 Physical Education for Preschool	1 2 2
	Activities and materials for promoting the physical development of young children. Special emphasis will be on various instructional techniques to use in music, dance, drama, exercise and physical education.	
EDU	244 Care of the Preschool Child	2 2 3
	Practical suggestions for setting up classrooms, for developing curriculums for infants, toddlers and preschool children, for meeting the social-emotional needs of children and for working effectively with parents and staff.	
EDU	245 Activities and Crafts for Persons With Exceptionalities	2 2 3
	Activities and materials for promoting self-expression in the handicapped. Emphasis on the use of various art forms as therapy with consideration of appropriate age-level activities.	
EDU	246 Teaching the Moderately and Mildly Handicapped	2 2 3
	Assessment, curricular planning, individualized instruction, and special materials designed for moderately/mildly (developmentally delayed) individuals.	
EDU	248 Introduction to Protective Intervention Techniques	1 1 2
	Identifies behaviors which are characteristic of aggression and methods and techniques to prevent or forestall aggression. Appropriate measures/techniques to take when intervening in aggressive situations for best protection of staff and residents are taught.	
EDU	252 Learning Disabilities	3 0 3
	Characteristics, causes, identification and special concerns of learning disabilities with emphasis on teaching strategies and remedial techniques.	
EGR	101 Introduction to Engineering Technology	1 2 2
	An overview of the field of engineering technology with discussion of the technician's work and his role in the engineering organization. The social aspects of technology will be stressed along with the requirements in training, character,	

		and professional ethics. The students will be oriented to the social and academic life at Vance-Granville with particular emphasis on good study habits. Occupational safety and first aid will be a vital part of this course.
ELC	112 Electrical Fundamentals I	3 4 5
	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	113 Electrical Fundamentals II	3 4 5
	Additional electrical concepts and circuit analysis procedures as applied to more complex two terminal and simple two port networks are introduced. Laboratory work will include additional measurement techniques with emphasis on verification of theoretical concepts. Prerequisites: ELC 112, MAT 101	
ELC	1102 Applied Electricity	2 3 3
	The use and care of test instruments and equipment used in servicing air conditioning and refrigeration installations. Principles and procedures for trouble-shooting air conditioning, heating and refrigeration equipment. Included are transformers, various types of motors and starting devices, switches, electrical heating devices and wiring. Prerequisite: PHY 1101	
ELC	1110 Blueprint Reading: Building Trades	0 3 0 1
	Principles of interpreting blueprints and trade specifications common to the building trades. Develops proficiency in making three-view and pictorial sketches.	
ELC	1111 Blueprint Reading: Electrical	0 3 0 1
	Interpretation of schematics, diagrams, and blueprints for electrical installation, with emphasis on electrical plans for domestic and commercial buildings. Sketching schematics, diagrams, and plans for electrical installations, using appropriate symbols and notes according to the national electric codes. Prerequisite: ELC 1110	
ELC	1112 Direct and Alternating Current	5 0 12 9
	Study of the electrical structure of matter and 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. Study of the sources of direct current voltage potentials. Fundamental concepts of alternating current flow, reactance, impedance, phase angle power and resonance. Analysis of alternating current circuits.	
ELC	1113 Alternating Current and Direct Current Machine Controls	5 0 12 9
	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. Basic concepts of AC and DC machines and simple system controls. Introduction to the controls used in small appliances such as thermostats, time or sequencing switches. Prerequisite: ELC 1112	

- ELC 1124 Residential Wiring** 5 0 9 8
Instruction in the fundamentals of blueprint reading, planning, layout, and installation of wiring in residences, including services, switchboards, lighting, fusing, wire sizes, branch circuits, conduits, and National Electrical Code regulations in actual building mock-ups.
Prerequisite: ELC 1112
- ELC 1125 Commercial and Industrial Wiring** 5 0 12 9
Layout, planning and installation of wiring systems in commercial and industrial complexes, with emphasis upon blueprint reading and symbols and the related National Electrical Codes. The experience of wiring conduits and installing simple systems will be incorporated into the course.
Prerequisites: ELN 1118 and ELC 1124
- ELN 121 Electronics I** 3 4 5
Presents qualitative electronics concepts beginning with systems and networks and proceeding to devices. Typical networks such as power supplies, amplifiers, oscillators, and feedback circuits are introduced. Solid state devices and vacuum tubes are introduced as idealized devices. Experience is provided in basic troubleshooting techniques. Instruments are introduced as needed for simple testing and measurements.
Corequisite: ELC 113
- ELN 122 Electronics II** 3 4 5
A quantitative study beginning with active control devices and proceeding to networks. A variety of equivalent circuit models are used to evaluate device and system parameters and predict circuit performance. Instruments are used in the laboratory to collect data, verify math predictions, and troubleshoot.
Prerequisite: ELN 121
- ELN 123 Electronics III** 3 4 5
Continues the study of active networks. Emphasis is on the analysis and design of both networks and active circuits. In addition fundamentals, design techniques, and typical applications of linear integrated circuits are introduced.
- ELN 208 Industrial Electronics** 3 4 5
Electronics as applied to a production system rectification electronically controlled rectifiers, servomechanisms, motors; magnetic amplifiers; ultrasonic cleaning; and variable strobe light.
Prerequisite: ELN 121
- ELN 218 Pulse, Logic and Digital Circuits** 3 4 5
Emphasizes the study of wave shaping and non-sinusoidal wave generating circuits using discrete and integrated components. Wave shaping topics include simple passive wave shaping circuits and more complicated wave shaping circuits using active devices. Topics covered under non-sinusoidal wave generating circuits include multivibrators, sweep generators, and other types of special purpose circuits using discrete and integrated components. An introduction to Boolean algebra and its applications for the simplification of logic circuits is also included.
Prerequisite: ELN 123
- ELN 219 Digital Fundamentals** 3 4 5
Emphasizes the study of combinational and sequential logic circuits using discrete and integrated components. Topics include: binary arithmetic, numbering systems, Boolean algebra storing, timing, gating, and counting. Typical applications in industry will be presented.

- ELN 220 Introduction to Microprocessors I** 1 6 5
Provides an introduction to the basic components and functional logic of microprocessors. A systematic study of various number systems, programming techniques, input-output techniques, logical arithmetic, memory addressing, program editing, peripheral interfacing, branching and looping techniques. Microprocessor electrical signals are studied in depth with the oscilloscope and trainer.
Prerequisites: ELN 122, ELN 219
- ELN 221 Introduction to Microprocessors II** 1 6 5
Provides a continuing study of programming techniques and an introduction to microprocessor troubleshooting. Stack control and subroutines interrupt concepts monitor interface, keyboard and display interface as well as chip select and Data/Address Bus Performance checks. Display performance and keyboard performance check with a final exercise in system troubleshooting using system performance checks and an oscilloscope to localize and identify inserted faults.
Prerequisite: ELN 220
- ELN 222 Microprocessor Troubleshooting** 3 4 5
Previous troubleshooting and basic fundamentals of microprocessors are expanded through the study of digital logic probes, static control testing, oscilloscope multiplexer and signature analyzers. This course provides comprehensive hands-on training employing the latest state-of-the-art test technology.
- ELN 241 Electronic Systems I** 3 4 5
A general survey of electronic systems with emphasis on their description in block diagram format. Systems to be studied are those used in communications, computing, measurement, automatic control, and others of a specialized nature as appropriate.
Prerequisite: ELN 123
- ELN 242 Electronic Systems II: Communications** 3 4 5
Introduction to fundamental aspects of electronic communication systems with special emphasis on need for modulation, types of modulation, frequency spectra and bandwidth requirements. Qualitative study of the principles of AM, SSB, and FM including the generation and detection of signals and their frequency spectra. Transmission and propagation of radio signals will be studied.
Prerequisite: ELN 241
- ELN 243 Electronic Systems III: Communications** 3 4 5
Study of specialized electronic communication systems such as TV, microwave, radar, and optical communication systems. Discussion of sampling and pulse systems including techniques of multiplexing such as PAM, PSM, PCM, and PPM.
Prerequisite: ELN 242
- ELN 246 Electronics Design Project** 0 6 3
A laboratory class emphasizing independent research and design work by the student. The student will select a project in consultation with the instructor; perform the required research; compile data; formulate a theoretical model; and construct, test, and evaluate a working model of the selected project.
Prerequisite: ELN 241
- ELN 247 Electronic Systems II: Computers** 3 4 5
This course consists of a functional block diagram analysis of a number of digital computer systems. Emphasis is placed on the mini-micro computer variety currently being used in industry. The lab will provide practice in manipulating the hardware and software associated with such computers.

ELN 248 Electronic Systems III: Computers 3 4 5
 This course deals with the detailed theory of the computer systems previously covered followed by troubleshooting and maintenance procedures. The lab consists of digital measurements in support of operation theory followed by actual troubleshooting practice, dealing with systems analysis and diagnostic procedures.
 Prerequisite: ELN 247

ELN 249 Electronic Systems II: Automatic Control 3 4 5
 Automatic control concepts including calibration, measurement and standards are introduced. Laboratory exercises are provided on simulated or generalized measurement and control systems that include indicators, recorders, and controllers. Emphasis is placed on process or system stability using various types of controllers. Final control elements and their characteristics are studied. Graphical analysis and solutions of process control systems are included.
 Prerequisite: ELN 241

ELN 250 Electronic Systems III: Automatic Control 3 4 5
 A study of automatic control theory and processes including the characteristics and mathematical models of linear systems. Practice is provided in specifying and selecting process or automatic control parameters and equipment. Electronic and mechanical controls are introduced as well as the use of the mini-computer in the control loop. Practical analysis and evaluation on actual or simulated processes or systems is covered in the laboratory.
 Prerequisite: ELN 249

ELN 1101 Basic Electronics 11 12 16
 A definitive course outlining scientific principles and theories involved in the study of physics and electricity. An introduction to physical properties such as solids, liquids, and gases and their uses and effects on electricity. A study of the structure of matter and the electron theory, definition of voltage, current, and resistance in series, parallel, and series-parallel circuits by the use of Ohm's Law. Concepts of alternating current and a study of reactance, impedance, phase angle, power, and resonance circuits. A study of two-terminal active and passive components. A study of three-terminal components used in electronic circuits, which includes a study of the theory and operating characteristics of vacuum tubes and semiconductor devices. An introduction to electro-magnetic components and how they are used in electronic circuits. An introduction to active and passive transducers and their uses. Familiarization and utilization of simple test equipment.

ELN 1118 Industrial Electronics I 3 0 6 5
 Basic theory, operating characteristics, and application of vacuum tubes such as diodes, triodes, tetrodes, pentodes, and gaseous control tubes. An introduction to amplifiers using triodes, power supplies using diodes, and other basic applications.
 Prerequisite: ELC 1113

ELN 1119 Industrial Electronics II 3 0 6 5
 Basic industrial electronic systems such as motor controls, alarm systems, heating systems and controls, magnetic amplifier controls, welding control systems using thyratron tubes and other basic types of systems commonly found in most industries.
 Prerequisite: ELN 1118

ELN 1122 Basic Electronics II 8 15 13
 An in-depth study of the relationship between two and three terminal components and how they react when combined in various circuit configurations. A study of various configurations of power supplies, the principle of bias for both vacuum tubes and solid state devices, voltage and power amplifiers,

oscillators, integrated circuits, basic logic circuits, feedback systems, and the principles of AM and FM transmission. Familiarization and use of more complicated test equipment and proper use of hand tools and soldering equipment.
 Prerequisite: ELN 1101

ENG 91 Basic English Language Instruction I 10 0 10
 Designed to aid the student in distinguishing between Standard and Non-Standard sound patterns at the level of words, phrases and basic sentences. Emphasis will be placed on spelling and practice in reading and writing basic Standard English patterns with particular attention given to how words work together for meaning. Placement of students in ENG 91 is determined by individual performance on the English placement examination.

ENG 92 Basic English Language Instruction II 10 0 10
 Designed to aid the student in practicing writing and reading according to Standard English patterns. Students will generate their own material in reading and writing exercises and will practice reading materials generated by professional writers. Emphasis will be placed on writing paragraphs and critically evaluating written material. Placement of student in ENG 92 is determined by satisfactory completion of ENG 91 or by individual performance of the English placement examination.

ENG 93 Vocational Language Instruction I 5 0 5
 Designed to aid students in the trades areas in reading the materials associated with their work and to develop appropriate communication skills. Placement of students in ENG 93 is determined by individual performance on the English placement examination.

ENG 94 Vocational Language Instruction II 5 0 5
 Continuation of ENG 93. Placement by satisfactory completion of ENG 93 or by performance on the English placement examination.

ENG 100 English Grammar and Composition 5 0 5
 Designed to aid the student in learning the fundamental principles of English grammar and writing paragraphs and essays. Placement of students in ENG 100 is determined by prior performance on placement tests or in courses and by students' preferences of curricula requiring the command of Formal English Grammar.

ENG 101 Technical Composition 3 0 3
 The student reviews fundamental writing skills and studies the techniques of organization necessary to the development of short essays and reports. Attention is given to writing, proofreading and revising.
 Prerequisite: Acceptable score on placement test or satisfactory completion of ENG 91 & 92

ENG 102 Oral Communications 3 0 3
 Designed to promote effective oral communications through appropriate language usage in group situations. Focus is on the nature of the communication process, including self-perception, group interaction and language as a symbolic process.

ENG 103 Technical Report Writing 3 0 3
 Designed to develop proficiency in writing various types of short reports which one may be called upon to write in a business or industrial setting. The student has an opportunity to gain experience with standard forms such as the accident report and work order.
 Prerequisite: ENG 120 or 101

ENG	105 Library Services	3 0 3
	Develops skills in retrieving information in the Learning Resources Center and introduces the use of audiovisual equipment. The approach stresses application of research and demonstration techniques to occupational needs.	
ENG	120 College Composition I	3 0 3
	The study and practice of basic elements in expository writing. Upon successful completion of English 120, the student will be able to write a grammatically correct, multi-paragraph expository theme which has a clear beginning, a well-developed body, and a suitable conclusion. Prerequisite: Acceptable score on placement test or satisfactory completion of ENG 91 and 92.	
ENG	121 College Composition II	3 0 3
	Emphasis on writing grammatically correct expository and argumentative themes based on assigned short stories and one novel. Upon completion of this course, students will be able to analyze the ideas in the short story and the novel and synthesize these ideas in their own compositions. Prerequisite: ENG 120	
ENG	122 College Composition III	3 0 3
	Emphasis on writing grammatically correct expository and argumentative themes on assigned poems and plays. A short research paper is required. Upon completion of this course, students will be able to write critically and objectively about ideas expressed in drama and poetry. Prerequisite: ENG 121 or permission of program head	
ENG	150 Major American Authors	5 0 5
	Extensive readings in six to eight authors concentrating on novels and collected works. Credit counts towards fulfillment of humanities requirement. Prerequisite: ENG 121 or permission of program head	
ENG	152 Major European Authors	5 0 5
	Extensive readings in six to eight British and Continental authors concentrating on novels and collected works. Credit counts toward fulfillment of humanities requirement. Prerequisite: ENG 121 or permission of program head	
ENG	206 Business Communications	3 0 3
	Develops skills and techniques in writing business communications. Emphasis is placed on writing to achieve a desired response in letters and memoranda involving credit and collections, claims and adjustments, orders, inquiries, acknowledgements, and employment. In addition to these writings, the student also organizes a usable resume. Prerequisite: ENG 120	
ENG	220 Speech	5 0 5
	Develops speaking skills in both formal and informal speaking situations. Emphasis is placed on improving one's own self-concept in relation to communication and working toward overcoming self-consciousness and stage fright. Prerequisite: ENG 120	
ENG	227 Afro-American Literature	5 0 5
	A survey of Afro-American literature which will focus on twentieth century authors. Explains the significant themes, events, and trends in the fiction, poetry, drama, and essays of Afro-American writers.	

ENG	230 English Literature I	3 0 3
	A survey of English literature from Beowulf to Milton. Prerequisite: ENG 121 or permission of Program Head	
ENG	231 English Literature II	3 0 3
	A survey of English literature from Milton to the Victorians. Prerequisite: ENG 121 or permission of Program Head	
ENG	232 English Literature III	3 0 3
	A survey of English literature from Victorians to the present. Prerequisite: ENG 121 or permission of Program Head	
ENG	240 American Literature I	3 0 3
	A survey of American literature from its Puritan beginnings through Whitman. Prerequisite: ENG 121 or permission of Program Head	
ENG	241 American Literature II	3 0 3
	A survey of American literature from Dickinson through Realism. Prerequisite: ENG 121 or permission of Program Head	
ENG	242 American Literature III	3 0 3
	A survey of American literature from the imagist and symbolist poets to the present. Prerequisite: ENG 121 or permission of Program Head	
ENG	250 World Literature I	5 0 5
	A survey of selected authors of the western world from the Greeks to the Renaissance. Credit counts toward fulfillment of humanities requirement. Prerequisite: ENG 121 or permission of Program Head	
ENG	251 World Literature II	5 0 5
	A survey of selected authors of the Western World from the Renaissance to the present day. Credit counts towards fulfillment of humanities requirement. Prerequisite: ENG 121 or permission of Program Head	
FRE	101, 102, 103 Beginning French I, II, III	4 0 4
	A study of the basic elements of French. Fundamentals of grammar, drill in pronunciation, reading, and special emphasis on oral expression in the language. This sequence is designed for students with less than two units of high school French. Prerequisites: FRE 101, none; FRE 102 and 103, the preceding course	
FRE	201, 202, 203 Intermediate French I, II, III	4 0 4
	An intermediate sequence designed to provide a systematic review of basic grammar and to develop the ability to read with comprehension material dealing with French Civilization. Prerequisites: FRE 201, FRE 103 or two high school units of French; FRE 202 & 203, the preceding course	
GEO	110 Introduction to Geography	3 0 3
	A study of the earth's surface in its areal differentiation as the home of man. Emphasizes the concepts of geography and the methods and techniques used by the geographer in the study of the physical, cultural, political, and economic aspects of world regions.	
HEA	105 Nutrition	3 0 3
	Study of nutritional concepts with introduction to use of cooking in the classroom.	

HEA	111 Personal & Community Health	3 0 3
	Covers various aspects of personal and community health with underlying science to clarify and support health education.	
HEA	112 First Aid and Safety	3 0 3
	Basic study of health education designed to teach the fundamentals of administering first aid including artificial respiration and cardiopulmonary resuscitation techniques. Emphasizes accident prevention and skilled practical application.	
HIS	101 Western Civilization I	3 0 3
	Western Civilization I course covers pre-history to the Middle Ages (1000 A.D.).	
HIS	102 Western Civilization II	3 0 3
	Western Civilization II course covers the period from the Middle Ages to the Reformation.	
HIS	103 Western Civilization III	3 0 3
	Western Civilization III course covers the period from the Seventh Century to the present.	
HIS	207 American History I	5 0 5
	A survey of the development of the American Nation, from the discovery of America to the outbreak of the Civil War.	
HIS	208 American History II	5 0 5
	A continuing survey of the development of the American Nation from the outbreak of the Civil War to the present.	
HIS	209 Afro-American History	5 0 5
	The role of Afro-Americans in the development of the United States with particular attention to African heritage, forced migration, Americanization, and influence.	
HUM	114 Art History	5 0 5
	A general overview of the leading artists and periods of art in Western Europe. The changes in art and styles beginning 476 to present. Two field trips planned: Duke Chapel and N.C. Museum of Art in Raleigh.	
HUM	115 Art Appreciation	5 0 5
	Introduces the visual arts with emphasis on understanding and personal enjoyment.	
HUM	116 Music Appreciation	5 0 5
	A study of the important periods of music history with emphasis upon listening to music for personal enjoyment and cultural enrichment.	
HUM	125 Survey of the Old Testament	5 0 5
	Introduces the literature of the Old Testament to acquaint the student with the history and religion of the ancient Hebrews.	
HUM	126 Survey of the New Testament	5 0 5
	Introduces the literature of the New Testament in the context of early Christian history.	
HUM	202 Introduction to Philosophy	5 0 5
	An introductory course covering such topics as theories of reality, the nature of mind and knowledge, and values.	

ISC	112 Fundamentals of Management	5 0 5
	A survey of managerial theories and philosophies associated with typical organizational structures.	
ISC	113 Fundamentals of Management II	5 0 5
	A continuation of ISC 112 with emphasis on case studies.	
ISC	130 Industrial Safety	3 0 3
	Study of the fundamentals of industrial safety and accident programs; costs and insights into causes of accidents and injuries; legal aspects of safety and OSHA regulations.	
ISC	212 Labor Relations I	3 0 3
	A study of the industrial relation function with emphasis on labor laws, unionism, and the legal and socio-economic aspects.	
ISC	213 Labor Relations II	3 0 3
	A continuation of ISC 212 with emphasis on current labor problems. Also, an in-depth study of landmark cases concerning the labor movement will be researched and studied by the students.	
ISC	214 Work Measurement	5 2 6
	Covers time study and time study techniques to determine work standards; methods of standards development including job descriptions, elements and standard data.	
ISC	222 Labor Law	3 0 3
	A survey of federal and state labor laws and regulations and their effects on the actions of employees and employers.	
ISC	224 Industrial Finance	3 0 3
	A survey of financial policies, methods and procedures utilized by industry, business and individuals.	
ISC	226 Industrial Planning & Control	3 2 4
	Analytical methods for production and inventory control emphasizing forecasting techniques, inventory and network models, sequencing and scheduling techniques, and line balancing. Prerequisite: MAT 102	
ISC	228 Industrial Supervision I	3 0 3
	Presents the fundamental principles of supervision and relates supervisory responsibilities to the demands imposed by a modern industrial environment.	
ISC	229 Industrial Supervision II	3 0 3
	A continuation of ISC 228 with emphasis on the development of the interpersonal skills needed in supervision.	
ISC	230 Budgeting & Control	3 2 4
	A survey of the techniques for accomplishing long and short range management objectives and the basic functions of planning, coordination and control. Emphasizes the first line supervisor's role in a dynamic comprehensive budgeting system. Prerequisites: BUS 120 & MAT 101	
ISC	232 Quality Control	3 2 4
	The law inherent in product liability determination; statistical evidence of process faults; aspects of product control concepts; reliability and quality control organization.	

ISC	236 Plant Layout and Material Handling	3 2 5
	A practical study of factory planning with emphasis on the most efficient arrangements of work areas to achieve lower manufacturing cost combined with the best methods to move materials. Manpower and material management are included. Prerequisite: ISC 214	
LCS	1104 N.C. Building Code and N.C. Construction License	3 0 3
	Familiarizes the student with state and local building codes. Discusses interpretation of the building code and requirements for licenses and bonding. Prerequisites: CAR 1102, 1103	
LCS	1111 Blueprint Reading & Sketching	1 3 2
	Principles of interpreting blueprints and specifications common to the building trades. Development of proficiency in making three-view and pictorial sketches.	
LCS	1112 Blueprint Reading: Building Trades I	2 3 3
	Principles of interpreting blueprints and specifications common to the building trades. Practice in reading details for grades, foundations, floor plans, elevations, walls, doors and windows, and roofs of buildings. Development of proficiency in making three-view and pictorial sketches. Prerequisite: LCS 1111	
LCS	1113 Blueprint Reading: Building Trades II	2 0 2
	A study of the writing of specifications with correlation to blueprints. Practical application of using blueprints and specifications to determine working drawings, cost analysis, and materials. Prerequisite: LCS 1112	
LCS	1114 Construction Estimating	3 0 3
	Practical course in quantity "take off" from prints of jobs to be performed by the builder. Practical problems dealing with volumes, weights, ratios, mensuration, and basic estimating practices for building materials.	
MAS	1101 Masonry I	5 15 10
	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. Selecting the proper mortars, layout and construction of various building elements.	
MAS	1103 Masonry II	2 3 3
	Study and practical application of the construction of brick walls, veneers, fireplaces, and chimneys. Prerequisite: MAS 1101	
MAT	90 Arithmetic I	5 0 5
	Basic mathematics course designed to build skills in the addition, subtraction, multiplication, and division of whole numbers.	
MAT	91 Arithmetic II	5 0 5
	Basic mathematics course designed to build skills in operations involving fractions, decimals, proportions, and percents.	
MAT	92 Applications of Arithmetic	5 0 5
	This course is especially designed to increase the confidence and ability of weaker students in problem solving. Topics include: applications using whole numbers, fractions, decimals, proportions, and percents; place value; expo-	

	ments; roots; measurement; geometry; statistics; and beginning algebra. Prerequisite: MAT 91 or satisfactory score on placement test
MAT	100 Consumer Mathematics 5 0 5
	This course provides the student with thorough review of whole numbers, fractions, decimals, percents, measurement, and simple linear equations. Applications relating to everyday life are stressed. Prerequisite: MAT 91 or satisfactory score on placement test
MAT	101 Technical Mathematics I 5 0 5
	This is the first course in four-quarter sequence. Topics include: algebra review, functions and graphs, right triangle trigonometry, and systems of equations. Prerequisite: MAT 106 or satisfactory score on placement test
MAT	102 Technical Mathematics II 5 0 5
	A continuation of MAT 101. Topics include: factoring and fractions, quadratic equations, trigonometric functions of any angle, vectors and oblique triangles, graphs of trigonometric functions, exponents and radicals, exponential and logarithmic functions, and additional types of equations. Prerequisite: MAT 101
MAT	103 Technical Mathematics III 5 0 5
	A continuation of MAT 102. Topics include: determinants and matrices, inequalities, variation, progressions and the binomial theorem, advanced topics in trigonometry, and an introduction to analytic geometry. Prerequisite: MAT 102
MAT	105 Pre-College Algebra I 5 0 5
	This is the first course in a two-quarter sequence to provide the understanding and manipulative skills of elementary algebra. Topics include: number systems, operations with real numbers, solving equations and inequalities, polynomials, and factoring. Prerequisite: MAT 92 or satisfactory score on placement test
MAT	106 Pre-College Algebra II 5 0 5
	A continuation of MAT 105. Topics include: rational expressions, graphic linear equations, linear systems, roots and radicals, and quadratic equations. Prerequisite: MAT 105
MAT	108 Radiologic Mathematics 3 0 3
	This course is especially designed to prepare Radiologic Technology students for mathematical applications in their field of study. Topics include fundamental operations, significant figures and scientific notation, basic algebra, geometry, trigonometry, graphs, and logarithms.
MAT	110 Drug Dosages and Measurements 3 0 0 3
	This course includes a review of basic mathematical skills and an introduction to the systems used in measuring drugs and solutions. Methods of conversion between the systems and drug dosage calculations are included.
MAT	120 College Algebra 5 0 5
	A vigorous first course in college mathematics designed to prepare students for further study in non-rigorous mathematics. Topics covered include a review of sets, algebraic manipulations, equations, and inequalities; functions and relations; linear, quadratic, polynomial, exponential, and logarithmic functions; permutations, combinations, and the binomial theorem; and mathematical induction. Prerequisite: MAT 106 or satisfactory score on placement test

MAT	121 Finite Mathematics	5 0 5
	A valuable course to introduce the serious student to some of the modern approaches to solving problems which occur in the management, life, and social sciences. Topics include solutions to simultaneous systems by Gauss-Jordan elimination, Cramer's Rule, and Inverse Matrices; properties of matrices and determinants; linear programming and the simplex method; sequences and series; properties of probability functions; and the mathematics of finance. Prerequisite: MAT 120 or consent of the instructor	
MAT	122 Calculus	5 0 5
	A non-rigorous first course in calculus which stresses "picture proofs," curve analysis, and applications. Topics covered include properties of the derivative; the chain rule; derivatives of polynomial, exponential, and logarithmic functions; first and second derivative tests; antiderivatives; integration by parts; integration and the Fundamental Theorem of Calculus; area between curves; partial derivatives; extrema of functions of two variables; and Lagrangian Multipliers. Prerequisite: MAT 120 or consent of the instructor	
MAT	130 Pre-Calculus I	3 0 3
	This is the first course in a two-course sequence designed to effectively prepare the student to undertake a rigorous calculus sequence. Topics include: properties of real numbers, relations and functions, linear and quadratic functions, systems of equations, conic sections, translations, and circular functions. Prerequisite: 3 years of college preparatory high school mathematics	
MAT	131 Pre-Calculus II	3 0 3
	A continuation of MAT 130. Topics include: trigonometric relations and equations, exponential and logarithmic functions, complex numbers and DeMoivre's Theorem, polynomial and rational functions, zeros of polynomials, and mathematical induction.	
MAT	140 College Trigonometry	5 0 5
	A course with both theory and applications to provide the student with a firm foundation in analytical and triangle trigonometry. Topics covered include relations and transformations; the properties and graphs of the trigonometric functions and their inverses; properties of triangles and vectors; polar coordinates, properties of complex numbers, and Demoivre's Theorem. Prerequisite: Three years of college preparatory high school mathematics or consent of instructor MAT 120 - College Algebra is a recommended corequisite	
MAT	204 Technical Mathematics IV	5 0 5
	A continuation of MAT 103. This course introduces the fundamental concepts of differential and integral calculus. Applications of these concepts to technical situations are stressed. Prerequisite: MAT 103	
MAT	214 Statistics	5 0 5
	A course covering elementary descriptive and inferential statistics. Applications are stressed. Topics include: classification of data; measures of central tendency, dispersion, and position; elementary probability; fundamentals distributions and the central limit theorem; hypothesis testing; differences in means and proportions; and linear correlation and regression. Prerequisite: MAT 120, MAT 101, or consent of instructor	
MAT	220 Calculus with Analytic Geometry I	5 0 5
	The first of a rigorous four-quarter sequence to provide the student with a firm foundation in elementary calculus and analytic geometry. Topics covered	

	include a review of the algebraic and numeric prerequisites, the theory and properties of derivatives, extrema, antiderivatives, and an introduction to integration. Prerequisites: MAT 120 or MAT 140 or consent of instructor
MAT	221 Calculus with Analytic Geometry II 5 0 5
	A continuation of MAT 220. Topics covered include the fundamental theorem of calculus; properties of integrals; areas; surfaces and volumes of revolution; moments; the calculus and development of logarithmic, trigonometric, and hyperbolic functions and their inverses; techniques of integration; L'hospital's Rule; and improper integrals. Prerequisite: MAT 220
MAT	222 Calculus with Analytic Geometry III 5 0 5
	A continuation of MAT 221. Topics covered include Taylor polynomials, numerical integration, summation techniques of infinite series, power series, Taylor series, conic sections, polar coordinates, parametric representations, curvature, vector geometry, and the cross product. Prerequisite: MAT 221
MAT	223 Calculus with Analytic Geometry IV 5 0 5
	The last of a rigorous four-quarter sequence in rigorous calculus and analytic geometry. Topics covered include surfaces in three-space; cylindrical and spherical coordinates; functions of several variables; partial derivatives; gradients; extrema; Lagrangian multipliers; double, triple, and iterated integrals; vector fields; line and surface integrals; the theorems of Green, Gause, and Stokes; and an introduction to linear differential equations. Prerequisite: MAT 222
MAT	1101 Trades Mathematics I 4 0 4
	This course is the first course in a two-quarter sequence especially designed for students in trade programs. Topics include: whole number arithmetic review, fractions, decimals, percentages, and measurement. Prerequisite: MAT 91 or satisfactory score on placement test
MAT	1102 Trades Mathematics II 4 0 4
	A continuation of MAT 1101. Topics include: introductory algebra, formulas, ratios and proportions, right triangle trigonometry, graphs, and additional algebraic topics. Applications will be stressed. Prerequisite: MAT 1101
MEC	1101 Machine Shop Theory and Practice 3 0 12 7
	An introduction to the metalworking trade as it relates to machinery 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. Prerequisite: MAT 1101, DFT 1104
MEC	1133 Electrical and Mechanical Maintenance 3 0 6 5
	To acquaint the student with the basic fundamentals of installation, maintenance and repair of machines. Miscellaneous electrical, mechanical, hydraulic, pneumatic and lubrication devices are installed and maintained. Methods of rigging and machine installation including location, leveling and fastening are covered. The use of precision measuring tools and checking for accuracy, squareness and correct center line distances is stressed for pre-start inspection. Prerequisites: MEC 1101, DFT 1104 Corequisite: ELC 1112

- MEC 1140 Hydraulics - Fundamentals** 3 0 0 3
This course is arranged to give the student 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.
Prerequisite: MAT 1101
- NUR 101 Nursing Fundamentals** 6 4 3 9
An introduction to nursing, the health care system, the concept of wellness-illness continuum and the nursing process. The nursing process is used to assess the 14 basic human needs of man. Emphasis is placed on the therapeutic communication. Theory, scientific principles, and procedures for basic nursing skills are taught, demonstrated, and practiced in class, the nursing laboratory and clinical area.
Corequisites: BIO 106, PSY 101, NUT 101
- NUR 102 Nursing Adults and Children I** 6 0 12 10
An introduction to medical-surgical nursing theory and clinical practice utilizing the nursing process and nursing diagnosis concepts. Client assessment, identification of common problems, making the nursing diagnosis, and planning and evaluating client care will be discussed for children and adult clients with alterations in health and illness, surgical needs, cancer, terminal illness, and diseases of musculo-skeletal and gastro-intestinal systems. Diet therapy and pharmacotherapeutics are included in the client care plan. Orem's Self-Care Model and Roy's Adaptation Model will be used as a basis for planning nursing care.
Prerequisites: BIO 106, PSY 101, NUT 101, NUR 101
Corequisites: BIO 107, PSY 117, MAT 110
- NUR 103 Nursing Adults and Children II** 6 0 12 10
Continuation of medical-surgical nursing theory and clinical practice utilizing the nursing process and nursing diagnosis concepts. Client assessment, identification of common problems, making the nursing diagnosis and planning client care will be discussed for adults and children with diseases of cardiovascular, urinary, reproductive, integumentary, auditory and speech systems. Diet therapy and pharmacotherapeutics are included in the care plan. Orem's Self-Care Model and Roy's Adaptation Model will be used as a basis for planning nursing care.
Prerequisite: NUR 102
- NUR 105 Pharmacology** 3 0 0 3
An introductory course in pharmacotherapeutics. Medication sources, preparations, actions, standards, and names are presented. Emphasis is placed on correct preparation, safe administration, and client's response to medications. Actions and other pharmacologic properties of medications in each classification are presented. Assessment of the client before and after medication administration is stressed. Practice in preparation and steps in administration of oral and parenteral medication are planned for in the laboratory and the clinical areas.
Prerequisite: MAT 110
- NUR 201 Nursing Process and Client Assessment** 2 2 0 3
Designed to give the practical nurse theory and practice in using the nursing process and client assessment skills. The class will introduce theory by lecture and discussion. The laboratory will include demonstration and practice of techniques useful in assessing the head, neck, chest, cardiovascular system, breasts, genito-urinary system, abdomen, musculoskeletal system, neurosensory system, nutritional status, and health history. Required for practical nurses

- before entry into fourth quarter of the Associate Degree Nursing Program.
Prerequisite: Admission into ADN Program or permission of instructor
- NUR 202 Nursing Adults and Children III** 6 0 15 11
Continuation of medical surgical nursing theory and clinical practice utilizing the nursing process, nursing diagnosis, client care management, and client teaching concepts. Client assessment, identification of common problems, making the nursing diagnosis and planning client care will be discussed for adults and children with alterations and diseases of the respiratory, neurosensory, visual, and endocrine systems. Diet therapy and pharmacotherapeutics are included in the client care plan. Orem's Self-Care Model and Roy's Adaptation Model will be used as a basis for planning nursing care.
Prerequisites: BIO 203, NUR 105
Corequisite: BIO 204
- NUR 203 Maternal and Newborn Nursing** 6 0 15 11
Introduces the basic and more complex concepts in obstetrical nursing. Nursing process and nursing diagnosis are used to assess the family, identify common problems, and plan family care during the antepartal, intrapartal, postpartal, and newborn periods. Common and more complex problems of pregnancy and the newborn will be discussed. Clinical will include using the nursing process to assess, plan, implement, and evaluate nursing care for the intrapartal, postpartal, and newborn clients in normal and more complex situations.
Prerequisites: BIO 203, NUR 103, NUR 105
Corequisites: BIO 204, SOC 101
- NUR 204 Mental Health Nursing** 8 0 15 13
The course is designed to aid the student in assessing the dynamics of behavior and in identifying interpersonal needs. Emphasis is placed on communications and interpersonal interviews as a means of attaining these goals. Selection of learning experiences in class and clinical is influenced by an assessment of students' needs in relation to the course objectives. Students are encouraged to view themselves and the patients as individuals with individual needs and mechanisms of adjustment.
Prerequisites: PSY 101, PSY 117, NUR 103
- NUR 205 Nursing Adults and Children IV** 5 0 15 11
Introduction to medical-surgical nursing intensive care theory and clinical practice utilizing the nursing process and nursing diagnosis concepts. Client assessment, identification of common problems, making nursing diagnosis and planning client care will be discussed for clients with complex health problems related to the cardiovascular, respiratory, urinary and gastrointestinal systems. Leadership concepts in the management of client care delivered by other nursing team members will be emphasized.
Prerequisites: NUR 202, BIO 204, NUR 105
- NUR 206 Nursing Seminar** 2 0 0 2
Designed to help the student seek employment and prepare for practicing the role of the nurse. The seminar classes are designed to give the student opportunities to discuss issues and trends in nursing education, nursing practice, and the legal realm. Responsibilities of the nurse to self, to the health team and community are stressed.
Prerequisites: NUR 202, NUR 203, NUR 204
Corequisite: NUR 205
- NUR 208 Cardiac Assessment and EKG Interpretation** 3 0 0 3
This course is designed to provide basic knowledge in cardiac assessment and EKG interpretation for clients with coronary diseases. Anatomy and physiology of the heart will be reviewed. Cardiac assessment will include the client

interviews, physical examination and recording of data. The focuses for EKG interpretation will be (1) the Normal EKG, (2) common non-life threatening arrhythmias and (3) life threatening arrhythmias. (Offered upon request by group or institution for RN's and LPN's)

NUR 209 Cardiac Care (Intermediate) 3 0 0 3
This course is designed to build on the fundamental concepts of cardiac care started in NUR 208. The remaining most common-occurring arrhythmias will be covered. Special equipment and drugs used in the care of the cardiac patient are also included. Care of the cardiac patient thru the acute phase to the rehabilitation phase will be discussed. (Offered upon request by group or institution for RN's and LPN's)

NUR 1121 Maternal and Newborn Nursing 3 0 9 6
Using nursing process and nursing diagnosis, the basic concepts in maternal and child nursing are introduced. Client assessment, identification of common problems, making the nursing diagnosis, and planning client care will be discussed for clients in the antepartum, intrapartum, postpartum, newborn, and childhood periods. Common problems of pregnancy and the newborn will be introduced.
Prerequisites: NUR 103, NUR 105

NUR 1140 Nursing Adults and Children III 6 0 9 9
Continuation of medical-surgical nursing theory and clinical practice utilizing the nursing process and nursing diagnosis concepts. The role of the LPN in client assessment, identification of common problems, making the nursing diagnosis, and planning client care will be discussed for adults and children with infectious, respiratory, neurosensory, and endocrine systems diseases and drug overdoses and toxic substance reactions.
Prerequisites: NUR 103, NUR 105

NUR 1141 Practical Nursing Seminar 3 0 0 3
This course provides an introduction to the legal aspects of nursing practice. The more common legal problems and ways to avoid legal entanglements are discussed. Ethical and legal responsibility in controversial nursing situations are presented and discussed. Professional organizations are presented with emphasis placed on those applicable for the Licensed Practical Nurse. The role of the Licensed Practical Nurse and job opportunities are explored in depth.
Corequisites: NUR 1140, NUR 1121

NUR 1150 Nurses Assistant 9 6 12 16
This course prepares the student to assist registered nurses, licensed practical nurses, and physicians in giving client care. Special characteristics of different ages and types of clients are taught. Roles of health care workers and the health care setting are discussed. Simple client care procedures such as bathing, feeding, positioning, admitting, transferring, discharging, ambulating, and positioning clients are taught. Other procedures taught include preparing and applying hot and cold treatments, giving enemas, douches, and suppositories, measuring and recording vital signs, applying binders and bandages, making beds, implementing isolation, safety and fire procedures, collecting specimens, and postmortem care. Procedures will be demonstrated and students will practice these until they can do them safely before working in the health care setting.

NUT 101 Nutrition and Diet Therapy 3 0 0 3
Introduces the learning concepts of change and balance as the fundamental framework for the study of nutrition. Deals with composition of food, the digestion, absorption, and metabolism of the seven basic nutrients, and the basic four food groups. The results of deficiencies, the factors that influence good habits, and nutritional requirements in all age groups are discussed. Therapeutic diets are introduced.

NUT 105 Nutrition 3 0 3
Study of basic nutrition, with emphasis on (1) methods of helping young children and their families learn nutritional concepts, (2) planning balanced diets for young children, and (3) use of cooking in the classroom.

PHE 220 Games and Activities for Youth 2 2 3
Principles, practices and procedures of teaching physical education to elementary school children. Special emphasis on simple games, relays, creative rhythm exercises and dance and body movements.

PHY 101 Physics: Properties of Matter 3 2 4
A fundamental course covering several basic principles of physics. The divisions included are solids and their characteristics, liquids at rest and in motion, gas laws and applications. Laboratory experiments and specialized problems dealing with these topics are part of this course.

PHY 102 Physics: Work, Energy, Power 3 2 4
Major areas covered in this course are work, energy, and power. Instruction includes such topics as statics, forces, center of gravity and dynamics. Units of measurement and their applications are a vital part of this course. A practical approach is used in teaching students the use of essential mathematical formulas.
Prerequisites: MAT 101, PHY 101

PHY 104 Physics: Light & Sound 3 2 4
A survey of the concepts involving wave motion leads to a study of sound, its generation, transmission and detection. The principles of wave motion also serve as an introduction to a study of light, illumination and the principles involved in optical instruments. Application is stressed throughout.
Prerequisites: MAT 101, PHY 101

PHY 107 Radiologic Physics I 3 2 4
This course covers fundamentals of mechanics, properties of matter, and heat and temperature.

PHY 108 Radiologic Physics II 3 2 4
This course covers electricity and magnetism, and atomic and nuclear physics. Emphasis is placed on those principles underlying the operation of x-ray equipment and auxiliary devices.

PHY 110 Technical Physics 3 2 4
An introduction to general physics with related lab experiences. Course includes: physical measurement, kinematics, dynamics, statics, energy, momentum, rotational motion, simple harmonic motion, properties of matter, kinetic theory, heat and heat transfer, wave motion, light and sound. Problem solving and laboratory work are emphasized.

PHY 111 Mechanics 3 3 4
An analytical approach to the principles of mechanics. Subject matter includes measurement, vector and scalar quantities, force and motion, work and energy, statics, elasticity, and fluids. Emphasis is placed on problem solving and engineering applications. Lectures, problem drill, and laboratory work are coordinated to enable a better understanding of physical principles. This is not a calculus based course.
Prerequisites: MAT 120 and MAT 140 or MAT 101

PHY 112 Heat, Sound, and Light 3 3 4
An introduction to the principles of heat, sound, and light. Subject matter to include thermal behavior of matter, heat transfer, wave motion, sound production, sound reception and control, illumination, refraction, dispersion,

lenses, interference and diffraction. Laboratory work and problem solving to parallel work in the classroom. This is not a calculus based course.
Prerequisite: PHY 111

- PHY 113 Electricity, Magnetism and Modern Physics** 3 3 3
A study of electricity, magnetism, and modern physics. Subject matter includes electrostatics, magnetism, basic electric circuits, electromagnetism, alternating-current, introduction to vacuum-tube and solid state electronics, relativity, quantum theory of the atom, and nuclear energy. Emphasis is placed on problem solving appropriate to engineering technology. Laboratory work to parallel work in classroom. This is not a calculus based course.
Prerequisite: PHY 112
- PHY 211 Mechanics** 4 3 5
An introduction to mechanics. Subject matter includes vector and scalar quantities, static and dynamic systems of forces, translational and rotational motion with variable acceleration, work, and energy, hydrostatics and hydrodynamics, elastic properties of matter and harmonic motion. Laboratory exercises are coordinated with classroom work. Designed for students whose curriculum requires a calculus oriented course.
Prerequisite: MAT 220
- PHY 212 Heat, Sound & Light** 4 3 5
An introduction to the principles of heat, sound, and light. Subject matter includes heat measurements, heat transfer, the laws of thermodynamics; wave motion; acoustical phenomena; the nature and propagation of light; reflection and refraction; lenses and optical instruments; interference and diffraction; and polarization. Emphasis is placed on problem solving and engineering applications. Laboratory exercises are coordinated with classroom work. Designed for students whose curriculum requires a calculus oriented course.
Prerequisite: PHY 211
- PHY 213 Electricity and Magnetism: Atomic Physics** 4 3 5
An introduction to electricity and magnetism and atomic physics. Subject matter includes electrostatics, capacitance and dielectrics, potential; chemical and thermal electromotive force; electromagnetism; electrical instruments; electromagnetic induction, motors and generators, alternating currents; transient circuits; thermionic emission; wave mechanics; radioactivity; and nuclear reactions. Emphasis placed on problem solving and engineering applications. Laboratory exercises are coordinated with classroom work. Designed for students whose curriculum requires a calculus oriented course.
Prerequisite: PHY 212
- PHY 1101 Applied Science I** 3 2 4
Introduces physical principles and their application in industry. Topics include measurement; properties of solids, liquids, and gases; basic electrical principles.
- PHY 1102 Applied Science II** 3 2 4
Second in a series of two courses concerning applied physical principles. Topics introduced include heat and thermometry, principles of force, motion, work, energy and power.
Prerequisite: PHY 1101
- PLU 1110 Plumbing and Pipework** 2 6 4
This course will introduce students to the tools, fittings, and small equipment used by plumbers. Most of the time will be spent in the shop, where the student can learn how to handle these materials correctly. The student will perform operations such as threading, cutting, caulking, and sweating of the various kinds of pipe and tubing used in the trade.

- PME 1101 Internal Combustion Engines** 3 - 12 7
Develops 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.
- PME 1102 Basic Electrical & Fuel Systems** 5 - 15 10
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 fuel systems, special tools, and testing equipment for the fuel and electrical system.
- PME 1121 Front Suspension, Alignment, and Power Steering** 3 - 9 6
Theory of operation, correct disassembly and mounting of all front suspension parts on various types of cars and light trucks. A thorough understanding of the function and repair of both standard and power steering gears. Theory and application of steering geometry, diagnosis and correction of steering problems, and the proper use of alignment and wheel balancing machines. Analysis and correction of tire wear problems.
- POL 101 Law and the Political Process** 5 0 5
A study of law and the legal system as elements of the policy-making processes of American society. Emphasis is on law and social values, legal reasoning, and on the role of the judiciary. Extensive use is made of primary sources.
- POL 102 National Government** 3 0 3
A general survey of the Federal System with special emphasis placed on its operation within the constitutional framework of the United States.
- POL 110 State and Local Government** 3 0 3
A study of the roles of state and local government including a consideration of the origin, function and powers of state and local units. Studies the differences that are encountered from state to state and community to community by means of comparative analysis.
- POL 201 20th Century History and Politics** 3 0 3
A survey course of major European and American historical events from the outbreak of World War I to the present with emphasis on political and social developments in 20th century Europe and the United States. Uses historical novels and primary sources as reading material and incorporates films, television shows and outside speakers in its format.
Prerequisite: Instructor's permission
- POS 101 Postal Service History and Organization** 3 0 3
This course gives the history of the Postal Service beginning in Ben Franklin's time to the present, including historical facts such as street delivery, air mail, Pony Express, railway post offices (RPO), highway post offices (HPO), Postal Inspection Service, use of machinery, and automation.
- POS 103 Mail Processing I** 3 0 3
Mail processing is one of the main functional areas of the Postal Service. This course includes processing mail, distribution of mail locally, distribution of mail to other cities and counties, types of machinery used for cancellation and distribution, training methods, transportation systems, and scheduling dispatches mail via truck, train, or airline.

POS	105 Mail Processing II	3 0 3
	This course is a continuation of POS 103, Mail Processing I. It provides a more indepth study of all areas of mail processing.	
POS	201 Postal Labor-Management Relations	3 0 3
	Presents an overview of laws and practices as related to labor-management in the Postal Service. Emphasis is placed on the National and Local Agreements, the various bargaining units and associations in the Postal Service, the grievance procedures, the National Labor Relations Board, and the Fair Labor Standards Act.	
POS	202 Postal Service Finance	3 0 3
	A support function that funds all activities. It covers postal accounting procedures, time and attendance, real property and leased property, motor vehicle accounting, procurement, mail classification and planning, budgeting, and control of funds.	
POS	203 Postal Employee Services	3 0 3
	This course is designed to provide a functional knowledge of types of recruitment, examinations, selection procedures, types of appointments, benefits, training, safety and health requirements, and compensation.	
POS	205 Postal Service Delivery and Collection	3 0 3
	This course is designed to provide a functional knowledge of mail delivery and collection systems within the Postal Service. The duties, responsibilities and skills needed in the carrier crafts are covered. "Methods Improvement Plan/Standard Operating Procedures" (MIP/SOP) and "Route Inspections and Evaluation" are explained and emphasized throughout the course. Management of rural delivery service and the Fair Labor Standards Act (FLSA) policies are also part of this course.	
POS	206 Postal Customer Services	3 0 3
	Designed to provide a functional knowledge of the operation of window units and stations and branches within the Postal Service. The course covers sales and services, budget and planning, product knowledge, retail revenue generation, express mail, duties of Customer Service Representatives, and duties and responsibilities of Station and Branch Managers.	
POS	208 Postal Problems Analysis	3 0 3
	Presents actual postal problems for analysis and solution. It utilizes the following systematic approach to problem solving: (1) identify the problem; (2) determine and analyze the dimensions of the problem; (3) determine probable causes of the problem; (4) assess adverse consequences of the problem; (5) determine and analyze alternative solutions; and (6) specify and defend the best solution to the problem.	
PSY	101 Introduction to Psychology	5 0 5
	This course is designed to acquaint the student with psychology as a behavioral science. The historical development of psychology introduces this body of knowledge. An in-depth study will be made of the various subdivisions of psychology: clinical, developmental, abnormal, industrial, educational, and social. Students will pursue a wide range of theoretical viewpoints concerning the psychology of learning, personality development, the physiological basis for behavior, human growth and development, and abnormal behavior. Scientific, social, and philosophical perspectives influencing human behavior will emphasize the extent to which people are affected by a thorough knowledge of psychology. Content of the course is especially designed for the student who plans to transfer to a four-year institution to pursue a bachelor's degree.	

PSY	105 General Psychology	3 0 3
	Study of the various fields of psychology, the developmental processes, motivation, emotion, frustration and adjustment, mental health, attention and perception and problems in living.	
PSY	114 Human Relations	3 0 3
	A study of basic principles of human behavior. Problems of the individual studied in relation to society, group membership and relationships within the work situation.	
PSY	115 Human Growth & Development I	3 0 3
	A detailed study of the developmental sequence of the infant through the preschool period, with emphasis on developmental influences and conditions necessary for optimal development of individuals. Emphasis is given to factors influencing development, the importance of experiences in establishing patterns of behavior, attitudes, interpersonal skills; language usage; and the relationship of early childhood to later realization of potential.	
PSY	116 Human Growth & Development II	3 0 3
	A detailed study of the developmental sequence during middle childhood and adolescence; emphasis is given to environmental and social factors which influence developmental rates, formulation of behavior patterns, and establishment of value systems and interests.	
PSY	117 Growth and Development - Life Span	3 0 0 3
	This developmental course provides the student an opportunity to study human growth and development from conception through death. The course emphasizes the genetic, biological, environmental, and socio-cultural influences on development. Students will learn the different characteristic changes, when they occur, and what causes them to occur during the various stages of growth and development. Prerequisite: PSY 105	
PSY	209 Abnormal Psychology	3 0 3
	A study of the symptoms, causes and treatment or care of persons suffering from neuroses, psychoses, behavior disorders and mental deficiencies. Field trips to mental clinics and hospitals. Prerequisite: PSY 105	
PSY	212 Child Psychology	5 0 5
	A study of developmental processes from conception to puberty with emphasis on theory, principles, and recent research on physical and motor, mental and language, emotional and social development. Includes behavioral theories of development. Prerequisite: PSY 105	
RDT	101 Introduction to Radiologic Technology	3 0 3 4
	This course is designed to acquaint the new students with the profession of Radiologic Technology and to prepare them for the clinical components of the program. The rules and philosophies of the radiography program, radiology departments and radiology profession are discussed in detail. Other topics presented include: career advancement, specific radiographic terminology, professional organizations, certification, licensure, and professional development. Students are also given an orientation to radiographic equipment and its manipulation. The clinical component of this course will allow the students to familiarize themselves with each of the clinical affiliates that they will later rotate through. Finally, students are given a thorough presentation of radiation protection, its purpose and how to apply it to protect the patients, themselves, and others.	

RDT	102 Radiologic Positioning I	3 2 0 4
	This course presents an introduction to the basic principles and terminology of radiographic positioning techniques. Emphasis will be placed on the positioning techniques necessary to adequately visualize the appendicular skeleton and the anatomy demonstrated. Students will observe, practice, and be evaluated according to a competency level in a laboratory situation, as well as in the classroom.	
RDT	103 Radiologic Positioning II	3 2 0 4
	This course is a continuation of RDT 102. The student is taught the positioning techniques necessary to adequately visualize the axial skeleton and all aspects of skull radiography, as well as the anatomy demonstrated. Students will observe, practice, and be evaluated according to a competency level in a laboratory situation, as well as in the classroom. Prerequisite: RDT 102	
RDT	104 Radiologic Positioning III	3 2 0 4
	This course is a continuation of RDT 103. The student is taught the positioning techniques necessary to adequately visualize the body systems of the thoracic and abdominal viscera. Other specialized techniques such as fluoroscopy, tomography and angiography, are also presented. Students will observe, practice and be evaluated according to a competency level in a laboratory session, as well as in the classroom. Prerequisite: RDT 103	
RDT	105 Radiographic Exposures	2 2 0 3
	This course presents the prime factors involved in creating a radiographic image, as well as the major factors which influence radiographic qualities. Accessory devices and equipment and the formation of technique charts are discussed. The course allows laboratory time to demonstrate the effects that variables have on the resultant image and to manipulate factors to produce an optimum radiograph.	
RDT	110 Medical Ethics/Patient Care	3 2 0 4
	This course introduces basic medical ethics, confidentiality, interpersonal relationships and medicolegal considerations. The role of the Radiologic Technologist is considered in relation to the patient and general patient care. Specific nursing procedures are presented and those which directly relate to Radiology are practiced and evaluated in a laboratory situation.	
RDT	112 Clinical Education I	0 0 15 5
	Students will begin clinical rotations through the affiliate radiology departments under the direct supervision of a registered technologist. They will be allowed to apply the previously learned principles of radiographic exposure, radiation protection, and patient positioning. Clinical competency evaluations will be performed on areas previously covered in the laboratory and classroom. Prerequisite: RDT 101, RDT 102	
RDT	113 Clinical Education II	0 0 15 5
	A continuation of Clinical Education I; students continue to be evaluated on competency levels, under direct supervision of a registered technologist, that have previously been covered in the classroom and laboratory. Prerequisite: RDT 112	
RDT	114 Clinical Education III	0 0 24 8
	This course is a continuation of RDT 113. The student will continue to improve basic skills learned in classroom, lab, and previous clinical sessions, and to improve competency covered procedures. Direct supervision will be provided by a registered radiologic technologist. Prerequisite: RDT 113	

RDT	203 Radiographic Procedures	4 0 0 4
	This course is designed to present unique areas in Radiology. Topics covered include: nuclear medicine, ultrasound, radiation therapy, pediatrics, and other specialized imaging modalities. Prerequisite: RDT 104	
RDT	205 Radiographic Processing	3 0 0 3
	This course presents the students with the basic design and function of processors and darkrooms. It is designed to demonstrate the relationship between the latent and visible image and the role processing takes in resultant image quality. Students evaluate film characteristics, artifacts, and silver recovery techniques. The quality control of processors will be discussed and appropriate tests analyzed. Prerequisite: RDT 105	
RDT	207 Film Evaluation/Imaging	2 0 0 2
	This course presents students with a logical film evaluation procedure to assist them in differentiating between diagnostic and poor quality radiographs. Students will present a variety of radiographs which will be critiqued for quality and demonstrated anatomy. Poor quality radiographs will be discussed to discern the best methods to be used to improve the film to a diagnostic level. Prerequisite: RDT 204 and BIO 208	
RDT	208 Radiologic Management/Education	3 0 0 3
	This course explores basic managerial techniques applicable to radiologic technologists including personnel management, planning, organizing, directing and controlling functions. Radiology room designs and budgeting are discussed. Basic educational techniques are introduced such as classroom preparation and evaluations, as well as preparing objectives for cognitive behavioral and psychomotor domains. This course allows students additional flexibility in preparing for their future in the profession whether at staff, management or educational levels.	
RDT	209 Radiologic Equipment & QA	3 2 0 4
	This course is designed as a continuation of PHY 108. Unique radiographic equipment, such as image intensifiers, automatic exposure controls, and cinefluoroscopy will be discussed in detail. In addition, other specialized techniques will be presented. Concepts of equipment quality assurance will be stressed and specific tests will be performed by the students and analyzed to determine problem areas. Prerequisite: PHY 108	
RDT	215 Clinical Education IV	0 0 24 8
	This course is a continuation of RDT 114. The student will now be under indirect supervision and will apply ionizing radiation and patient positioning with a R.T. (R) A.R.R.T. in the vicinity. Competency levels will continue to be evaluated as they are reached. Prerequisite: RDT 114	
RDT	216 Clinical Education V	0 0 24 8
	This course is a continuation of RDT 215. The student will continue to perform all types of radiographic procedures under the indirect supervision of a registered technologist. Competency levels will continue to be evaluated. Prerequisite: RDT 215	
RDT	217 Clinical Education VI	0 0 24 8
	This course is a continuation of RDT 216. The students will continue to enhance their skills and perform all types of radiographic procedures under the indirect supervision of a registered technologist. Elective rotations in specialty areas will	

be used to complement clinical experiences. Competency levels will continue to be evaluated.

Prerequisite: RDT 216

- RDT 218 Clinical Education VII** 0 0 30 10
This course is the culmination of all of the clinical courses. Students will concentrate on refining weak skills or investigating areas of particular interest under the indirect supervision of a registered technologist. Competency levels will continue to be evaluated.
Prerequisite: RDT 217
- RDT 219 Registry Seminar** 3 2 0 4
This course is designed to help the students prepare to take the American Registry of Radiologic Technologists. Students will participate in "mock" or simulated registries, and use the results to help identify any educationally weak areas. Seminars on important topics and/or particularly weak areas will be presented.
Prerequisite: RDT 207
- REC 110 Recreational Arts and Crafts** 1 3 2
Develops specific talents in recreational arts and crafts. Presents the methods, materials and techniques for teaching arts and crafts to children and adults, with special emphasis on projects for the handicapped. Skill areas taught include pottery camp crafts.
- REC 111 The Human Body in Health and Disease** 2 3 3
This course is designed to develop an understanding of the human body with regard to prevalent diseases and disorders of the body systems as well as related medical terminology. A discussion of the recreational limitations of the diseases and disorders will be an integral part of the course.
- REC 112 Introduction to Recreation Services** 3 0 3
Introduces the historical and philosophical foundation of recreation and leisure. The basic principles, the definition, and the impact and trends of recreation are presented. The different agencies providing recreational services are included.
- REC 113 Introduction to the Ill and Handicapped** 3 0 3
Introduces the student to the ill and handicapped person to develop a general knowledge of the different handicapping conditions, their causes, and limitations resulting from the disability. To aid the students' understanding, a trip will be made to an institution for the retarded, mentally ill, hearing impaired, or physically handicapped.
- REC 114 Social Aspects of Sport** 3 0 3
Focuses on sport and social values, socialization in sport, academic achievement and social mobility in relation to sport participation, and attitudinal and behavioral concomitants of sport.
- REC 120 History, Philosophy, & Contemporary Nature of Recreation in America** 3 0 3
The history of recreation in the United States is briefly covered. The various philosophies of recreation and leisure time are discussed with emphasis on their relation to the formulation of recreational patterns in present-day America. The course concludes with a discussion of the contemporary nature of recreation.
- REC 121 Principles of Motor Development** 3 0 3
Gives the student an understanding of the sequential development of fundamental movements, motor patterns and sports skills.

- REC 122 Health Practices in Recreation Management** 3 0 3
Emphasizes health problems, disease prevention, communicable diseases and their control, public health administration, school hygiene, and other health problems related to recreation management.
- REC 123 Social Recreation** 3 0 3
Develops skill in planning social recreational activities. Party planning, special events, social games, quiet games, trips and picnics, and decorating are emphasized.
- REC 130 The Psychology of Sport and Recreation** 3 0 3
Explores the psychology of competition, the underlying personality dimensions of sport, the personality trait structure of athletes, and achievement and aggression in sport.
- REC 131 Recreation Leadership I** 3 0 3
Focuses on various leadership principles and procedures and the different types of leaders prevalent today. Discusses techniques for conducting a recreation survey and the relationship between behavior problems and recreation.
- REC 132 Team Sports and Games in Recreation** 1 3 2
Develops the students' knowledge and ability in team sports and games. The rules and regulations, field dimensions, equipment and safety factors are reviewed. Activities for groups of different ages and abilities are presented. Students participate in baseball, softball, tag and flag football, soccer, basketball, volleyball, relays and other team sports and events.
- REC 133 Sports Officiating** 1 3 2
Introduces the student to the techniques of officiating lead-up games and team sports such as volleyball, softball, and basketball, with emphasis on learning the rules of team sports.
- REC 134 Nature and Outdoor Recreation** 3 0 3
Acquaints the student with recreation and its relationship to our natural surroundings. Focuses on conservation, wildlife, nature, projects for all seasons, and other activities. Stresses planning a nature and outdoor recreation program for the handicapped.
- REC 140 Recreation Leadership II** 3 0 3
Basic skills in working with people is an essential asset to the recreation leader working with program participants, volunteers, staff, and the public. This course focuses on human relations, giving the student an opportunity to make applications from the material covered in Recreation Leadership I.
Prerequisite: REC 131
- REC 141 Individual Sports and Games** 1 3 2
Develops the students' understanding of individual sports and games. Class instruction is on the proper techniques, rules, and equipment with emphasis on adapting the activity to the abilities for the handicapped. Sports and games included are bowling, golf, archery, fishing, tennis, hiking, and cycling.
- REC 142 Folk, Square and Social Dance** 1 3 2
Develops specific talents in the area of recreational dance. Activity sessions stress the different types of dances, the skills involved, and the techniques used in teaching dancing to difficult age groups. Appropriate dances with adaptations for the different handicapped groups are also stressed. Adequate class time is used for student participation and practice.

REC	143 Effective Supervisory Practices in Recreation	3 0 3
	Develops a knowledge of effective supervisory skills. It is important for any recreation leader to be able to properly direct the participants, staff, and volunteers in his program. Stresses basic concepts of supervision with emphasis on work methods, orientation, job instruction, discipline, public relations, cooperation, and evaluation. Reviews the types of supervision.	
REC	144 Safety and First Aid in Recreation	3 0 3
	Includes first aid procedures and an analysis of safety problems in recreation areas and facilities. Emphasis is on accidents which are most prevalent in the recreation environment.	
REC	210 Leisure Counseling	3 0 3
	The goal of leisure counseling is to aid the individual in selecting activities which will enhance the quality of life through the better use of leisure. This course aids the student in helping others to explore leisure interests and to pursue their interests in a constructive way.	
REC	211 Recreation Drama	1 3 2
	Explores the use of drama in a recreational setting. Particular attention is placed upon the type of drama activities which can be used effectively with handicapped children and adults. Creative activities such as pantomime, plays, stunts and kits, charades, storytelling, and costuming are included. To develop skill in drama, student participation is encouraged.	
REC	212 Introduction to Gerontology	3 0 3
	Addresses the needs and concerns faced by the aged such as income, disability, transportation, religion, and voluntary activities.	
REC	213 Recreation Areas and Facilities and Program Planning I	3 0 3
	Explores the different types of indoor recreational facilities and their use. Emphasizes the essential elements and basic principles involved in the organization and supervision of various types of recreation programs.	
REC	214 Introduction to Therapeutic Recreation	3 0 3
	Provides coverage of therapeutic recreation and human service models, the therapeutic recreation process, the specialist, and personal professional development.	
REC	221 Recreation Administration	3 0 3
	Introduces the student to basic principles and concepts of recreation administration. Primary emphasis is on the administration of municipal recreation programs. Administrative concern in personnel management, public relations, budgeting and finance, and legislation is presented.	
REC	222 Adaptive Physical Education and Recreation	3 0 3
	A study of modifications and adaptations used in recreation and physical education activities for handicapped persons. Discussions and demonstrations of techniques and equipment used in adapting various sports, games and other activities to fit the limitations of the handicapped. Students have the opportunity to observe adaptations for the mentally ill and retarded, blind, the elderly, physically handicapped and other special groups.	
REC	223 Leisure and Aging	3 0 3
	Emphasis is on the social aspects of aging, health and illness among the aged, the economics of being old and special leisure activities available for senior citizens.	

REC	225 Recreation Areas and Facilities and Program Planning II	3 0 3
	A continuation of REC 213, with additional research of recreational areas and facilities with emphasis on principles in planning the dimensions and standards, maintenance, and the operation of areas and facilities. Special attention is focused on accessibility to areas and facilities by special populations. Prerequisite: REC 213	
REC	226 Organization of Recreation Activities	3 0 3
	Gives the student a specific and comprehensive knowledge of recreation activities. Special attention is given to legal liability, Title IX legislation, awards, point systems and special recreation activities.	
REC	240 Recreation in Institutions for Special Populations	3 0 3
	An extension of REC 214 relating the therapeutic recreation process to youthful and adult offenders, the mentally ill, the mentally retarded, and alcoholic and drug addict, the economically deprived, and racial minorities. Prerequisite: REC 214	
REC	241 Camping for Special Populations	3 0 3
	An overview of camping for special populations. Aids the student in developing activities to match each camper's individual abilities. Includes a discussion of programming, physical facilities, equipment and materials needed to effectively operate a camp for special populations.	
REC	242 Resident and Day Camp Administration	3 0 3
	Develops an understanding of the total camping program to include programming, the role of the counselor, use of volunteers, and maintenance of grounds.	
REC	243 Landscaping in Recreation	3 0 3
	Emphasizes the application of design principles to landscaping recreation areas and facilities to include selecting and planting trees, shrubs, flowers and lawn grasses. Students will prepare detailed landscape plans for a recreation area or facility.	
REC	244 Recreational Music	1 3 2
	Develops an understanding of the value and use of music in a recreation program. The instruments, aids, and materials used are given special attention. Practice sessions and demonstration of teaching techniques and skills.	
*REC	282 Recreation Internship and Seminar	1 20 3
	Actual work experience in which the student serves as an intern with a recreation department, park, summer camp, school, hospital, nursing home, or state institution. A one-hour-per-week seminar serves as a forum for discussion of problems and experiences. Prerequisite: Successful completion of three quarters of recreation course work.	
	*Students, upon recommendation of department, may fulfill REC 282 requirement by approved co-operative work experience.	
SCI	99 Introduction to Science	5 0 5
	A pre-curriculum course intended to introduce or strengthen students' knowledge and abilities in major areas of scientific principles and applications. Included will be specifically areas of scientific thought and basic science concepts oriented to animal life processes. Orientation, study skills and time management will be covered also. Prerequisite: Permission of instructor	
SCI	211 Science and Health for K-3	2 2 3
	Techniques, methods and materials for promoting the development of skills, group instruction, and individualized learning in science and health concepts.	

SOC	101 Introduction to Sociology	5 0 5	Sociology is the study of human group behavior and its numerous complex related elements. This course emphasizes the basic theoretical, methodological, and conceptual frameworks of sociology. The development of sociology, its history and founders, sociological research, culture and society, social organization, and socialization will provide an in-depth study in all the subdivisions of sociology. The content of the course is especially designed for the student who plans to pursue a bachelor's degree at a four-year institution.
SOC	105 General Sociology	3 0 3	This course is a study of the nature, concepts, and principles of human group behavior. The area covered includes society, culture, socialization, the class systems, social change and social processes.
SOC	107 The Family	3 0 3	Study of the family as a social unit, with primary focus on the influence of family relationships during infancy and childhood. Also the family in the American culture, changing patterns in family roles, the influence of socio-economic factors on family relationships, cultural deprivation, and the effects of such on children.
SOC	108 Community Resources	1 2 2	Survey of Community agencies concerned with the family's physical and mental health and socio-economic problems. Analysis of child needs which can be met through community planning through the identification of local, state and national resources.
SOC	112 Modern Social Problems	3 0 3	Nature, extent, causes and consequences of social problems in America today. Prerequisite: SOC 101
SOC	113 Sociology of the Family	3 0 3	Study of the American family with attention given to courtship, marriage, family relationships, and interdependences, social or cultural stresses emerging from contemporary family life. Prerequisite: SOC 101
SOC	114 Social and Philosophical Foundations of Education	5 0 5	A study of the basic assumptions, perspectives and conflicts in education and schooling in American society. (Field experience as a "teaching assistant" is required.)
SOC	115 Criminology	3 0 3	Introduces the causes of crime and delinquency. Discusses the historical and contemporary aspects of crime, law enforcement, and punishment.
SOC	116 Sociology of Religion	3 0 3	A study of religion as a social institution with emphasis on individual and social behavior.
SOC	117 Juvenile Delinquency	5 0 5	A general survey of juvenile delinquency as an individual and social problem. Deals with delinquency, causation, methods of correction and prevention. Prerequisite: SOC 101
SOC	211 Marriage and Family	3 0 3	The student studies marriage and family relationships and the role families play in the development of children. An in-depth study of the five major areas of conflict. Sexuality and family planning are also covered in depth.

SPA	101, 102 & 103 Beginning Spanish I, II, III	4 0 4	A study of the basic elements of Spanish. Fundamentals of grammar; drill in pronunciation, reading, and special emphasis on oral expression in the language. This sequence of courses is designed for students with less than two units of high school Spanish. Prerequisites: SPA 101, none; SPA 102 and 103, the preceding course
SPA	201, 202, 203 Intermediate Spanish I, II, III	4 0 4	An intermediate sequence designed to provide a systematic review of basic grammar and to develop the ability to read with comprehension material dealing with Spanish Civilization. Prerequisites: SPA 201, SPA 103 or two high school units of Spanish; SPA 202 & 203, the preceding course
TEX	101 Fundamentals of Textiles	3 0 3	An introduction to textiles, including the history of the industry, description of textile materials and products and their utilization. Presentation of the basic manufacturing systems, materials flow, terminology and calculations.
TEX	201 Fiber Science	5 2 6	This course emphasizes: the chemical constitution and properties of fiber forming polymers; theories of fiber structure; the relationship between the molecular structure of linear polymers and physical properties of natural and man-made fibers; the principles and methods of producing man-made fibers; the chemical behavior of natural and man-made fibers. Prerequisites: TEX 101, CHM 111, MAT 101
TEX	202 Yarn Forming Systems	5 2 6	A study of the principles of staple and filament yarn systems and structures. The influence of the manufacturing systems and the input materials on product characteristics is established. Prerequisites: TEX 101, MAT 101
TEX	203 Fabric Forming - Weaving	3 2 4	A study of fabric forming by the weaving process. Emphasis is on fabric construction and geometry. Structures of fabrics and resulting properties are related to raw materials and product performance. Prerequisite: TEX 202
TEX	204 Fabric Forming - Knitting and Non-Conventional Processes	5 2 6	A study of fabric forming by the knitting and non-conventional processes. Emphasis is on fabric construction and geometry. Structures of fabrics and resulting properties are related to raw materials and product performance. Prerequisite: TEX 202
TEX	206 Dyeing and Finishing	5 2 6	A comprehensive course designed to familiarize the student with the basic principles involved in the procedures used for the preparation, dyeing, printing, and finishing of natural and man-made fibers. Some emphasis is placed upon the chemical nature of dyes and fastness properties, and the chemical nature of finishes used to impart specific end-use properties. Prerequisite: TEX 201
WLD	1101 Basic Gas Welding	0 0 3 1	Welding demonstrations by the instructor and practice by students in the welding shop. Safe and correct methods of assembling and operating the welding equipment. Practice will be given for surface welding; bronze welding, silver soldering, and flame-cutting methods applicable to mechanical repair work.

- WLD 1102 Basic Arc Welding** 0 0 3 1
Welding demonstrations by the instructor and practice by students in the use of the arc welding process to fabricate steel. Welded joints are discussed and welded in various positions. Care and maintenance of the arc welder are applied in this course.
- WLD 1104 Blueprint Reading: Mechanical** 3 - 1
Interpretations and reading of blueprints. Information on the basic principles of the blueprint; lines, views, dimensioning procedures and notes.
- WLD 1110 Beginning Oxyacetylene and Arc Welding** 5 - 15 10
Introduction to the history of oxyacetylene and arc welding, the principles of welding and cutting, nomenclature of the equipment, assembly of unit. The operation of various AC transformers, AC and DC rectifiers, and DC motor generator arc welding units. Welding procedures such as puddling and carrying the puddle, running flat beads, butt welding in the flat, vertical and overhead positions, and cutting of straight lines with the torch. Safety procedures are stressed throughout the program of instruction.
- WLD 1117 Blueprint Reading: Welding** 3 - 1
A thorough study of trade drawings in which welding procedures are indicated. Interpretation, use and application of welding symbols, abbreviations, and specifications.
Prerequisite: WLD 1104
- WLD 1118 Pattern Development and Sketching** - 3 - 1
This is a continued study of different welding symbols, lines, and views, etc. Students will be assigned different patternings of blueprints from the blueprint book to be drawn to scale in either one view or several views.
Prerequisite: WLD 1117
- WLD 1120 Arc Welding** 5 - 15 10
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.
Prerequisite: WLD 1110
- WLD 1129 Basic Welding** 2 3 3
Presents basic characteristics of metals, equipment; its construction and operation, by means of audiovisuals and other educational media. Welding demonstrations by the instructor and practice by students in the welding shop. Instruction in safe and correct methods of assembling and operating gas and arc welding equipment. Students practice surface welding, bronze welding, silver-soldering, and flamecutting and arc welding methods applicable to mechanical repair work.
- WLD 1130 Pipe Welding** 5 - 15 10
Designed to provide practice in the welding of pressure piping in the horizontal, vertical, and horizontal fixed position using shielded metal arc welding processes according to Sections VIII and IX of the ASME code.
Prerequisite: WLD 1120
- WLD 1131 Mechanical Testing & Inspection** 1 - 3 2
This class is for project making design where the student will draw a blueprint to specifications of a project such as a trailer, clothes line, wood heater, fish pan, etc. The student will make a copy of the blueprint to give to the instructor to be

used in inspecting and giving a grade after fabricating the project in the shop.
Prerequisites: WLD 1110, 1120

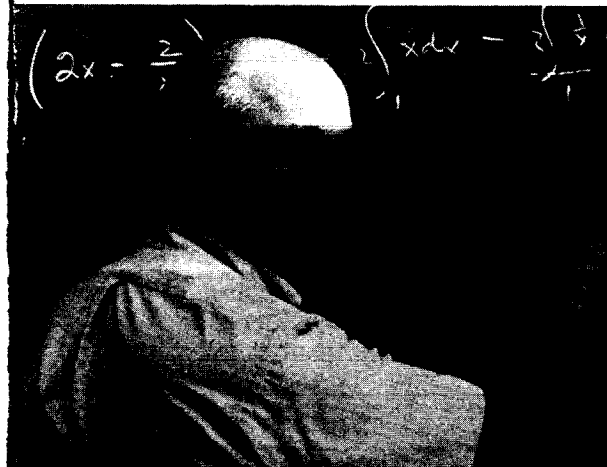
- WLD 1140 Inert Gas Welding** 5 - 12 9
Introduction and practical operations in the use of inert-gas-shield arc welding. A study is made of the equipment, operation, safety and practice in the various positions. A thorough study of principles of operation, shielding gases, filler rods, process variations and applications, manual and automatic welding.
Prerequisites: WLD 1120, 1130

- WLD 1141 Certification Practices** 4 - 6 6
Practice in welding the various materials to meet certification standards and codes. The student uses various tests, including the guided bend and the tensile strength tests, to check the quality of his work. Emphasis on attaining skill in producing quality welds. Students who have met the requirements will be permitted to take the certification examination.





Faculty and Staff



Administrative Officers

Dr. Ben F. Currin President
 Elton L. Newbern, Jr. Vice President
 W. L. (Bill) Hardison Business Manager
 Frank H. Madigan Dean of Student Affairs

Full-Time Administration and Faculty

Judith D. Allen, M.P.H. Coordinator/Instructor,
 Maternal-Newborn Nursing
 Ruth S. Askins, M.S.N. Coordinator/Instructor,
 Mental Health Nursing
 Rachel C. Baskerville, M.S. Instructor, Secretarial Science
 Billie Jean Bazemore, B.S.N. Instructor, Nursing
 Martha Bergeron, M.A. Program Head, English
 Marilyn G. Boone, B.A. Instructional Coordinator/LRC
 Frances L. Brewer, B.S. Supervisor/Instructor, Math Lab
 J. Harry Bryan, B.A. Registrar
 Verna S. Bullock, B.A. Instructor, Commerce
 Kenneth Clark, Computer Programmer Instructor,
 Computer Programming
 H. LaDena Cotten, M.S.N. Instructor, Nursing
 Ben F. Currin, Ed.D. President
 Elton Leon Dillard, Vocational Diploma,
 Contractor's License Program Head, Electrical Installation
 and Maintenance
 Brenda L. Dunn, M.Ed. Instructor, History
 Carl B. Flippin, Jr., M.S. Program Head, Social Sciences
 Julius M. Frazier, Vocational Diploma,
 Certified Mechanic, NIASE Program Head, Automotive
 Katherine P. Frazier, B.S.N. Instructor, Nursing
 Sherry R. Gallopes, B.S. Instructor, Criminal Justice
 Terry E. Garrison, M.S. Director, Human Resources
 Development
 Samuel G. Gregory, Vocational Diploma,
 Military Experience Instructor, Automotive
 Daniel W. Guin, M.Ed. Director, Community Services
 James E. Hale, M.B.A. Chairman, Commerce and Technical
 Education
 William L. Hardison, M.A.,
 Advanced Certificate Business Manager
 Jacquelin Heath, M.S. Instructor, Teacher Aide
 Nannette S. Henderson, Ph.D. Program Head, Science

Willie Henderson, Vocational Diploma Program Head,
 Light Construction
 William Michael Huffaker, M.S. Coordinator/Instructor,
 Science
 Jane K. Jackson, B.S. Instructor, Recreation
 William J. Jones, A.A.S., A.W.S.
 Certification Program Head, Welding
 Leo Kelly, Jr., M.S. Director, Continuing Education
 Thomas J. Long, B.S. Program Head, Criminal Justice
 Frank H. Madigan, M.A. Dean of Student Affairs
 Karl A. Markuson, B.S. Instructor, Electronics Engineering
 David V. Martin, Ed.D. Chairman, General College/
 College Transfer
 Sandra J. McDaniel, B.S. Instructor, Radiologic Technology
 Frances J. Meadows, B.S. Evening Instructor, AVT
 Robert A. Miller, M.Ed. Director, Industry Services
 Lora L. Moyle, B.S. Program Head, Radiologic Technology
 Marie Murdock, B.A. Instructor, Early Childhood Associate
 Joyce R. Myers, M.S.N. Coordinator/Instructor,
 Medical-Surgical Nursing
 Patsy C. Nelms, B.S.N. Instructor, Nursing
 Marsha J. Nelson, M.Ed. Program Head, Secretarial Science
 Elton L. Newbern, Jr., M.Ed. Vice President
 Carolyn C. Oakley, M.A.Ed. Coordinator, Library
 Robert E. Perkins, A.A.S. Coordinator, Evening Programs
 Elsie H. Pernell, M.A.T. Director, Learning Resources Center
 Billie Rose Petrou, B.A. Instructor/Tutorial Coordinator,
 Special Services
 Robert M. Porterfield, M.A. Instructor, Mathematics
 James R. Powell, Jr., M.A. Instructor, English
 Lydia C. Powell, B.A. Program Head, Education Associate
 Walter J. Rublein, M.A.T. Program Head, Business
 Computer Programming
 Carl R. Shafer, Ph.D. Program Head, Mathematics/Physics
 R. Frank Sinclair, M.L.S. Librarian/Instructor
 Wilbur O. Slaughter, Vocational Diploma Instructor, Welding
 William M. Spain, Jr., B.A. Director, Special Services
 Vicky Statham, M.A. Instructor, English
 Charlie T. Stegall, A.A. Program Head, Electronics Engineering
 Tamara L. Strickland, M.A. Instructor, English
 Nyoka S. (Jackie) Sutton, A.A.S.,
 State License Program Head, Cosmetology
 Leonard L. Terry, A.A.S.,
 A.W.S. Certification Instructor, Welding

Nancy A. Tunstall, M.A. Instructor, Business Computer Programming
 Reba R. Walters, M.S.N. Chairman, Health Education
 James H. Wheeler, Jr., M.E. Instructor, Business Administration
 Peggy S. Whittaker, M.A. Counselor, Student Affairs
 Dorothy M. Williams, M.S. Coordinator, Human Resources Development
 Doris Terry-Williams, Ed.D. Counselor, Special Services
 Fred H. Wilson, Jr., M.S. Chairman, Public Service & Vocational Education
 Lucille W. Wilson Counselor/Instructor, Human Resources Development
 Alex G. Winston, A.A.S., Contractor's License. Program Head Heating and Air Conditioning
 Robert G. Wood, B.S. Program Head, Textile Technology and Industrial Management

Note: The faculty includes many part-time instructors, whose expertise is invaluable to the college's educational program; however, space will not allow an appropriate listing of names in the catalog.

Clerical and Support Staff

Nancy A. Ayscue Faculty Secretary
 Brenda W. Beck Admissions Specialist
 Nancy F. Catlett Cashier/Accounting Technician, Business Office
 Frank A. Clark Coordinator, Student Placement
 Jeanene T. Clopton Secretary, Community Services
 Amine C. Crumpton Receptionist, Day
 Miriam R. Currin Technical Assistant, LRC
 Barbara N. Davis Technical Assistant, AVT Center
 Helen W. Davis Technical Assistant, AVT Center
 Mary H. Dawson Day Care Cook
 Deborah K. Edwards Secretary/Accounting Clerk, Business Office
 Jacqueline H. Egerton Secretary, Special Services
 Roxanne R. Fleming Personnel Officer/Bookstore Manager
 Mary Ann Fuller Assistant Financial Aid Officer
 Rebecca D. Fuller Faculty Secretary
 Vera R. Gatano Publicity Specialist
 Denise B. Gill Director, Day Care Center
 Patricia P. Graham Secretary to President

Betsy B. Grissom Secretary, Vice President
 Deborah J. Harris Child Care Specialist, Day Care Center
 Mary E. Harris Record's Clerk, Curriculum, Student Affairs
 Dorothy J. Heath Receptionist, South Campus
 Katherine Hedgepeth Hughes Child Care Specialist, Day Care Center
 Beth F. King Child Care Specialist, Day Care Center
 Carolyn Mayfield Coordinator/Faculty Secretary
 Shelia H. McCall Accounting Clerk/Computer Operator, Business Office
 Linda R. McFadden Records Clerk/Continuing Education, Student Affairs
 Theresa S. McFall Accounting Clerk, Business Office
 Ruth N. Neal Technical Assistant, LRC
 Vicky M. Owen Secretary, Industry Services
 Ernestine J. Peace Accounting Clerk/Payroll/Purchasing, Business Office
 Dezel Richardson Secretary, Human Resources Development
 Stella S. Rideout Secretary, Dean of Student Affairs
 Jerry D. Rose Financial Aid Officer and Veterans Coordinator
 David W. Spence Printing/Property Officer, Business Office
 Dorothy Stephens Secretary, Continuing Education
 William A. Wagner Bookstore Clerk
 Helen M. Walker Outreach Recruiter
 Mary Frances Watkins Accounting Supervisor, Business Office
 Ella W. Wilkins Secretary, Director of Continuing Education
 Ginger L. Wilson Testing Specialist/Chief GED Examiner, Student Affairs

Maintenance Staff

John Alston Night Custodian
 Deloris C. Bryant Housekeeper
 James Bullock Night Custodian
 Junious H. Campbell Groundskeeper
 William Crews Night Supervisor
 James R. Edwards Supervisor, Plant Maintenance & Operations
 Brenda Howell Housekeeper, South Campus
 Mary Ann Jones Housekeeping Supervisor
 Sammy J. Parsons Grounds Maintenance, Supervisor
 William Peace Maintenance Technician
 Tony L. Person Grounds Maintenance

Howard T. Rudd Night Custodian
Rosa Wade Housekeeper
Mildred B. Ward Housekeeper

Security

Samuel S. Pearson Security Supervisor (Day)
James F. Wilkins Security Supervisor (Nights & Weekends)