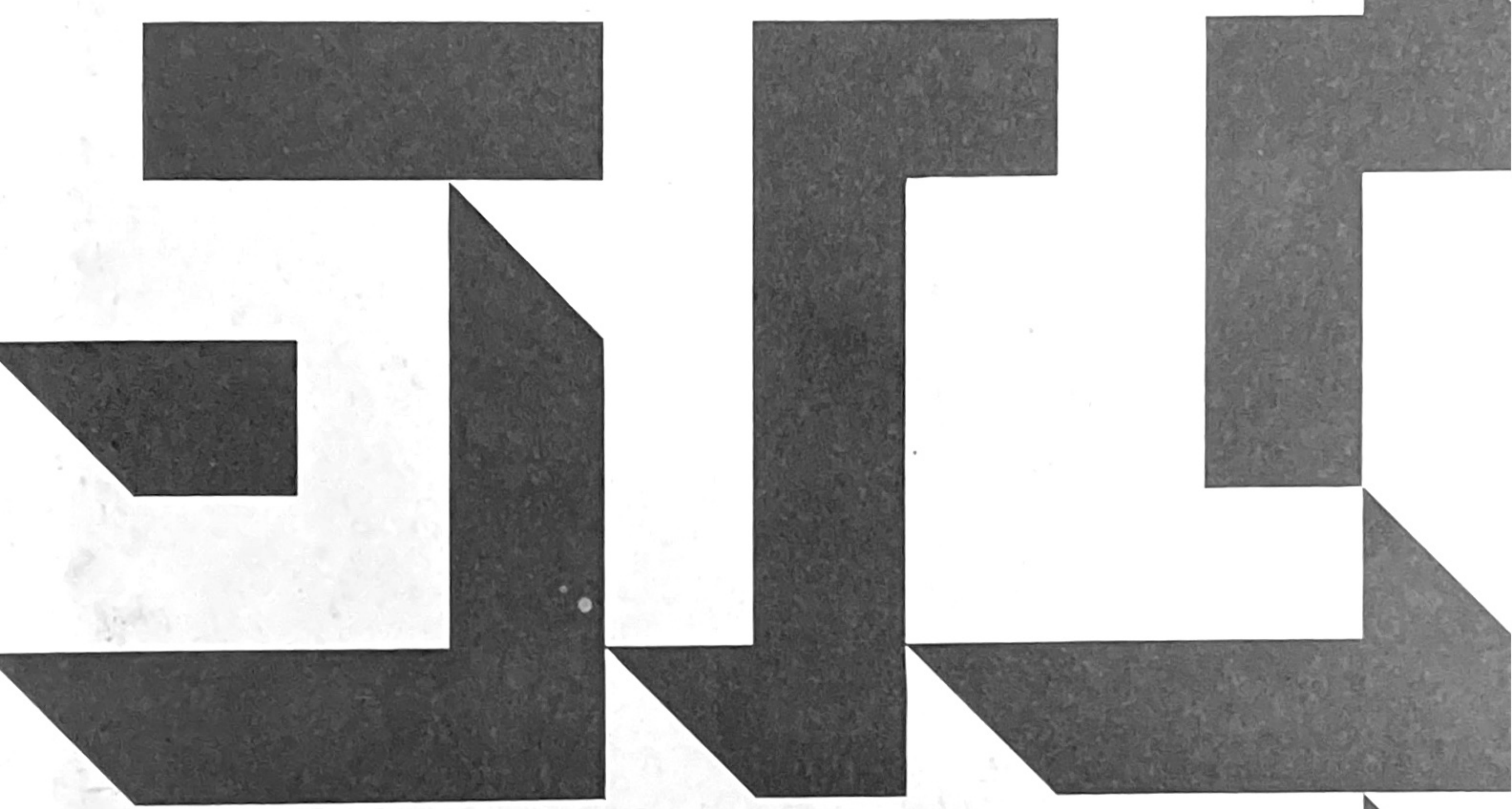


SOUTHWESTERN TECHNICAL INSTITUTE



'74-'75

CATALOG

Southwestern Technical Institute operates under the North Carolina Department of Community Colleges. The Institute is accredited by the Southern Association of Colleges and Schools. The Institute is also approved and recognized by the North Carolina State Board of Registration for Professional Engineers and Land Surveyors, North Carolina Board of Cosmetic Arts, Board of Nursing and Veterans Administration.

Southwestern Technical Institute issues this catalog to furnish prospective students and other interested persons with information about the institution and its programs. Announcements contained herein are subject to change without notice and may not be regarded in the nature of binding obligations on the Institute or the State.

SOUTHWESTERN TECHNICAL INSTITUTE

SYLVA, NORTH CAROLINA 28779

CATALOG 1974-1975

AN INSTITUTION
OF
THE NORTH CAROLINA DEPARTMENT
OF COMMUNITY COLLEGES

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THE INSTITUTE

ADMISSIONS

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THE INSTITUTE

Under the Community College Act passed in 1963 by the North Carolina General Assembly, a system of comprehensive community colleges, technical institutes, and industrial education centers was created to operate under the State Board of Education.

Southwestern Technical Institute was founded in 1964 as an area educational institution within the system of community colleges of North Carolina. Jackson, Swain, and Macon counties make up the primary service area of this institution.

From the time of its creation in 1964 until January 1, 1968, it was part of Asheville-Buncombe Technical Institute. On January 1, 1968, the school became an independent institution and was renamed Southwestern Technical Institute.

The first building, which houses the vocational curricula, was constructed in 1965, followed in 1970 by the construction of a building housing Commercial Specialties, Human Services, and General Education. A third facility with administrative offices, additional classrooms, gymnasium, and cafeteria was completed in the summer of 1974.

Situated on a beautiful hill in the midst of a twenty-three acre tract of land with spectacular scenery in all directions, the Institute is located on Webster Road two miles south of Sylva, five miles from Western Carolina University, and twenty miles from the Cherokee Indian Reservation and Great Smoky Mountains National Park. Franklin is twenty miles to the west. Cashiers-Highlands is thirty miles south, and the Blue Ridge Parkway is twelve miles away.

PHILOSOPHY

The philosophy of Southwestern Technical Institute's open door policy has been stated by Dr. Dallas Herring, Chairman of the State Board of Education:

The only valid philosophy for North Carolina is the philosophy of total education; a belief in the incomparable worth of all human beings, whose claims upon the State are equal before the law and equal before the bar of public opinion; whose talents (however great or however different from the traditional), the state needs and must develop to the fullest possible degree.

This is why the doors to the institutions in North Carolina's system of community colleges must never be closed to anyone of suitable age who can learn what they teach. We must take the people where they are and carry them as far as they can go within the assigned function of the system.

PURPOSE

The purpose of Southwestern Technical Institute is to provide convenient learning opportunities for people of the area by offering vocational, technical opportunities for people of the area by offering vocational, technical and developmental programs and general adult education courses to any individual beyond high school age. These courses and programs will better prepare individuals to join the labor market as new employees, qualify them for employment opportunities in new and existing industry, provide specific skills training, and encourage personal improvement, self-satisfaction, and an understanding of the responsibilities and privileges of citizenship. Specifically stated, the objectives are:

To provide educational opportunities for adults desiring to continue their education.

To provide inexpensive, nearby educational opportunities for high school graduates.

To provide vocational programs for individuals seeking employment in trades.

To provide two-year technical programs for individuals desiring employment in business and industry.

To provide programs of vocational education for employed adults needing training, re-training or wishing to gain personal benefit from the program.

To provide suitable courses for individuals desiring to enrich their lives and to continue personal growth.

To offer testing, guidance and educational counseling services to students and prospective students, as well as to any other person in the area who has need of such service.

ADMISSIONS

Southwestern Technical Institute follows an "open door" policy, and students are admitted without regard to race, religion, sex, or national origin. Admission requirements vary according to the level of training the applicant desires. The Associate Degree, Diploma, and Certificate Programs are defined on page 16. Students desiring enrichment work only are classified as Special Credit students.

All degree curricula programs require a high school diploma or the equivalent. Students with deficiencies in math or English will be referred to the Developmental Laboratories for math or English improvement prior to entry into the degree program. Admission requirements for pre-program students and curriculum students are identical.

Admission to the Practical Nurse Education program and the Law Enforcement Curriculum have more specific requirements. See page 62 for the Practical Nurse Education program requirements and page 60 for the Law Enforcement Curriculum requirements.

Diploma program admission requires that the applicant be eighteen years of age or have a high school diploma and have satisfactory admissions tests scores.

Special Credit students must be eighteen years of age or have a high school diploma.

A physical examination may be required.

Admission will be denied any prospective student who knowingly submits false information on any admissions forms.

ADMISSION PROCEDURE

ASSOCIATE DEGREE CURRICULA

Any applicant wishing to enroll in any Associate Degree Curriculum should:

1. Obtain an admission form from the Director of Student Services, Southwestern Technical Institute, P. O. Box 95, Sylva, N. C. 28779.
2. Submit the completed admission form to Director of Student Services.
3. Submit transcripts of all previous schools attended to Director of Student Services.
4. Visit Southwestern Tech's Student Services Office for placement testing. SAT scores may be submitted in lieu of admission testing.
5. Have an interview with a member of the Student Services Staff.
6. Send a \$5.00 tuition deposit after receiving notification of acceptance.

DIPLOMA

Any applicant wishing to enroll in a Diploma Curriculum should:

1. Obtain an admission form from the Director of Student Services, Southwestern Technical Institute, P. O. Box 95, Sylva, N. C. 28779.
2. Submit the completed admission form to Director of Student Services.
3. Submit transcripts of all previous schools attended to Student Services Office.
4. Visit Southwestern Tech's Student Services Office for placement testing.

5. Have an interview with a member of the Student Services Staff.
6. Send a \$5.00 tuition deposit after receiving notification of acceptance.

CERTIFICATE PROGRAM

Any applicant wishing to enroll in a Certificate Program should:

1. Obtain an admission form from the Director of Student Services, Southwestern Technical Institute, P. O. Box 95, Sylva, N. C. 28779.
2. Submit transcripts of all previous schools attended to Director of Student Services.
3. Submit the completed admissions form to Director of Student Services.
4. Visit Southwestern Tech's Student Services Office for placement testing.
5. Have an interview with a member of the Student Services Staff.
6. Send a \$5.00 tuition deposit after receiving notification of acceptance.

SPECIAL CREDIT PROGRAM

Any applicant wishing to enroll as a Special Credit student should submit a completed admissions form during registration.

ADMISSION PROCEDURES FOR SPECIAL STUDENTS

While most new students will be seeking enrollment in a curriculum and should follow the steps listed previously, the Institute recognizes that many adults in the community will wish to register for one or more courses as a student, but not a candidate for a degree or diploma. In order to encourage this type of interest, the Institute will allow a qualified person to be admitted to the Institute and enroll for courses without taking the pre-enrollment test battery provided the person does not wish to enter a degree or diploma curriculum.

TRANSFER STUDENTS

Applicants, for day or night classes, either full-time or part-time, who have attended other colleges, universities, or technical institutes are responsible for having a transcript from each institution submitted directly to the Admissions Office. If official high school records are necessary, the applicant will be notified. All freshmen and sophomore courses in which passing grades were received are customarily accepted if they are applicable to the program selected at this institute and if they were earned at an accredited college or university, at an institution within the North Carolina Community College System, or at an institution approved by the Dean of Instruction.

Transcripts are not required of applicants who audit courses. Transcripts are not required for Visiting Students provided they have the written approval of the institution in which they are regularly enrolled.

AUDITING

By special permission, an applicant may be admitted to certain courses as an auditor. Such students receive no credit for the course. Auditors will be expected to attend classes and participate in the same manner as credit students. Fees for auditing students will be identical to those charged to regular students.

FOREIGN STUDENTS

The Institute is authorized under Federal law to enroll non-immigrant alien students. Students enrolling under this classification will be treated as non-resident with respect to tuition and fees. An immigrant alien is subject to the same considerations as a citizen. Foreign students must have a sponsor living in the U. S.

READMISSION

Students with credit from STI who withdraw before completing the requirements for a diploma or degree may be readmitted by simple application and a conference with the counselor.

EXPENSES

TUITION PER QUARTER

Full-Time Student	\$32.00
Part-Time Student (Per quarter credit hour)	2.50
Extension Student (Per class)	2.00
ACTIVITY (Per quarter)	2.50
INSURANCE (Per year)	2.50

Graduation fees will be paid when the student registers for his last quarter of work prior to graduation.

ADDITIONAL FEES

In addition to the above fees, students enrolled in Cosmetology and Practical Nurse Education are required to pay an additional insurance fee and to purchase uniforms. Cosmetology students must purchase a cosmetology kit.

Activity fees for part-time students will be assessed on a pro rata basis. Because costs are so inexpensive, the Institute does not provide for installment payments of fees and charges.

NON-RESIDENT FEES

Southwestern Technical Institute will charge out-of-state tuition in accordance with General Statutes 116-143.1, 1971, as amended by the 1973 General Assembly.

REFUNDS

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

In order to comply with federal regulations in institutions not regionally accredited, the State Board authorized modifications of the tuition refund policy so that veterans or war orphans receiving benefits under U.S. Code, Title 38, Chapters 33 and 35, can be refunded the pro rata portion of the tuition fee not used up at the time of withdrawal of such students.

OBLIGATION TOWARD TUITION AND FEES

Tuition and fees are due and payable at the time of the student's registration. No student will be permitted to graduate or register for a new quarter if he has an unpaid balance due or an account from any previous quarter unless payment of such an outstanding balance has been guaranteed in writing by a financially responsible person or organization.

Any student experiencing special difficulties may make special arrangements with the business manager.

In the event a student completes registration and withdraws before paying the appropriate fees and tuition, the institution will make three attempts during the current year by letter and personal contact to collect these funds. If the institution is unsuccessful, the account will be turned over to the North Carolina Attorney General's office for disposition.

TEXTBOOKS

All curriculum students will be expected to purchase adopted textbooks in all courses. These textbooks will be sold at less than retail price to students. Every effort will be made to keep the quarterly price of all textbooks between \$15 and \$30.

Recommended textbooks are to be purchased at the beginning of the quarter in which they are to be used. Textbooks used in any one quarter must be purchased by the end of the second week of classes of that particular quarter.

FINANCIAL AID

Student financial assistance in the form of low interest loans, grants, scholarships, and part-time employment is available to students who apply and qualify for the various aid programs.

Generally aid is provided on a "needs" basis to persons who qualify. Inquiries about aid and requests for appropriate application forms should be directed to the Student Financial Aid Officer, Southwestern Technical Institute, P. O. Box 95, Sylva, N. C. 28779.

COLLEGE WORK-STUDY PROGRAM

The purpose of the College Work-Study Program is to expand part-time employment opportunities for students, particularly those from low-income families who are in need of the earnings from part-time employment in order to pursue a course of study at an institution of higher education. Federal grants are made to institutions of higher education to enable them to create job opportunities for their eligible students. The institution may arrange for the employment of its eligible students in work for the institution or work in the public interest for a public or private non-profit organization.

The Federal Government currently provides 80 percent of student earnings. Participating colleges and universities arrange for the other 20 percent. They are also responsible for selecting the students who receive jobs.

NATIONAL DEFENSE STUDENT LOANS

The National Defense Education Act of 1958 affirms that "we must increase our efforts to identify and educate more of the talent of our nation. This requires programs that will give assurance that no student of ability will be denied an opportunity for higher education because of financial need." In pursuance of that objective, Title II of the act provides for establishment at institutions of higher education of National Defense Student Loan Funds for the purpose of making long-term, low interest loans to qualified students in need of financial assistance to pursue a course of study on at least a half-time basis at such institutions. The program of study includes loan cancellation provisions designed to attract superior students to the teaching profession for service at all academic levels.

The Federal Government provides 90 percent of each student loan. Participating colleges and universities provide the other 10 percent. They are also responsible for determining which student will receive loans and for establishing the size of each loan.

COLLEGE FOUNDATION INCORPORATED LOAN FUND

Legal residents of North Carolina who are enrolled or have been accepted for enrollment in an eligible college, university, technical or vocational school in a full-time undergraduate program are eligible to apply. Applicants must meet certain academic requirements as related to their course of study and must provide proof of financial need. Students in good standing may reapply each year that additional funds are needed.

NORTH CAROLINA STATE BOARD OF EDUCATION
STUDENT LOAN FUND

Full-time students enrolled in a vocational or technical program in an institution under the North Carolina Department of Community Colleges may borrow a maximum of \$300 per year.

SUPPLEMENTAL EDUCATIONAL
OPPORTUNITY GRANTS

The Supplemental Educational Opportunity Grants Program was established by Title IV, Part A, of the Higher Education Act of 1965 and amended by the 1972 Amendments. SEOG is administered by the Office of Education of the U. S. Department of Health, Education and Welfare. The purpose of the program is to provide grants to students of exceptional financial need, who, for the lack of financial means of their own or of their families, would be unable to enter or to remain in institutions of high education participating in the program.

Participating Institutions are responsible for selecting the students to receive the SEOGs and establishing the amount they will need.

BASIC EDUCATIONAL
OPPORTUNITY GRANT PROGRAM

The Basic Educational Opportunity Grant Program is a new program of student financial aid which was authorized by Title IV, Part A of the Education Amendments of 1972. This program provides for grants of \$1400 less the expected family contribution for all eligible students to assist them in meeting educational costs.

The concept of this program is one of *entitlement*, "That every eligible student with demonstrated need is assured financial resources to continue his education beyond high school."

The Basic Grant program will potentially assist students from families up to an income level of approximately \$13,000.

LAW ENFORCEMENT EDUCATION PROGRAM

LEEP was established by Congress to provide for and encourage training, education, research and development for the purpose of improving law enforcement by increasing the educational level of its personnel. To this end, Congress saw fit to provide financial assistance to allow in-service law enforcement officers to continue their education at the college and university level.

NURSING SCHOLARSHIPS

The Health Careers Scholarship Program of the James G. K. McClure Educational and Development Fund is to aid financially deserving and academically promising residents of Western North Carolina to enter the Licensed Practical Nursing Program. Evidence of Christian character and the desire to be of service to one's fellowmen are considered of basic importance in the selection of the recipients.

GREENEBAUM FUND

The James G. K. McClure Educational and Development Fund provides scholarships, given by the family and friends of the late Edward De Zulueta Greenebaum, for residents of Jackson County. Awards are based upon scholarships, financial need and recommendations.

ALCOA FOUNDATION

Alcoa Foundation of Pittsburgh awards scholarships to eligible students in the service area of Nantahala Power and Light Co.: the counties of Macon, Jackson, Swain, Graham, and Cherokee. These scholarships are administered through the STI Financial Aid Office.

NORTH CAROLINA DIVISION OF REHABILITATION

The Institute is approved for the training and education of personnel who qualify under the provisions of the North Carolina Division of Vocational Rehabilitation, Department of Public Instruction.

ROTARY CLUB LOAN FUND

A limited amount of money is available to students enrolled in vocational programs in the form of emergency loans, sponsored by the Sylva Rotary Club.

FIRST UNION NATIONAL BANK

The Educational Checkloan is designed for those families who can afford higher education for their children but need to spread the cost over a number of years. A flexible program, it allows any qualified resident of North Carolina to borrow up to \$10,000 for four years of higher education.

ART SCHOLARSHIP

Southwestern Technical Institute offers four scholarships each year to the four top contestants in the annual Commercial Art contest sponsored by the school.

TOMMY LOVE MEMORIAL SCHOLARSHIP

This scholarship will pay tuition for one year at Southwestern Technical Institute for a deserving graduate of Sylva-Webster High School.

SOCIAL SECURITY ADMINISTRATION

Eligible persons may receive educational benefits from the Social Security Administration if the head of the household is over 62 and retired or disabled.

BUREAU OF INDIAN AFFAIRS

Educational assistance is provided to the Cherokee Indians through the Bureau of Indian Affairs, Cherokee, North Carolina.

SUZANNE M. DAVIS

Low Interest loans are available to Cherokee Indians through the Suzanne M. Davis Loan Fund administered through the Historical Association, Cherokee, North Carolina.

EMERGENCY LOAN FUND

A limited amount of money is available to certain qualified students in the form of emergency loans.

ACADEMIC REGULATIONS

DEGREE PROGRAM

Southwestern Technical Institute will confer an Associate of Applied Science degree in the name of the State Board of Education in all technical curricula. A state comprehensive examination may be required before graduation in any technical curriculum.

DIPLOMA PROGRAM

Southwestern Technical Institute will grant diplomas in the name of the Southwestern Technical Institute Board of Trustees upon successful completion of any vocational level curricula four quarters in length (or the part-time equivalency). A state comprehensive examination may be required before graduation in any vocational level curriculum.

CERTIFICATE PROGRAM

Certificates will be issued in the name of Southwestern Technical Institute to students who successfully complete curricula less than four full quarters in length.

GRADING SYSTEM

Grades will be issued the end of the term. Students enrolled in any curriculum will be graded by the following system:

- A 93-100 Excellent
- B 84-92 Above Average
- C 75-83 Passing or Average
- I Incomplete

INCOMPLETES

An "I", or Incomplete, indicates that a student has done work of a passing grade in a course but has not completed all required work. It is the student's responsibility to have this deficiency removed within the following quarter. When in the judgment of the instructor a student is not making a reasonable effort to remove the Incomplete and has not done so within the required period, the instructor may recommend to the Department Chairman that the student repeat the entire course.

ACADEMIC PROBATION — SUSPENSION

A student receiving two or more Incompletes in any quarter must consult with his adviser and, in the absence of extenuating circumstances, will be placed on academic probation for the following quarter. The adviser will develop with the student a program for the following quarter designed to remove the deficiencies. Copies of this program will be sent to the Registrar and the Department Chairman. A student who does not remove his probationary status during the quarter may be suspended by the Director of Occupational Education for one quarter. The student may appeal this decision to the Admissions Committee. When a student returns to Southwestern Technical Institute at the expiration of the suspension period, he will be placed under previous probationary requirements.

QUALITY POINTS

At the end of each quarter quality points are assigned in accordance with the following formula: The minimum quality point ratio for graduation is 2.00 or an average grade of C.

- A—4 quality points per credit hour
- B—3 quality points per credit hour
- C—2 quality points per credit hour
- I—no quality points

Quality point ratios are determined by dividing the total number of quality points by the number of hours completed.

DEAN'S LIST

1. Only full-time students are considered. (A full-time student is defined as a student enrolled in a curriculum program, carrying a minimum of 12 quarter hours.)
2. The student is to have a minimum 3.50 quality point average to qualify for the quarter under consideration.
3. Incompletes and withdrawals will automatically eliminate a student from this list for that particular quarter. Students receiving credit for a course by examination or transfer are not affected.

STUDENT REGULATIONS

ATTENDANCE REQUIREMENTS

All students are expected to be present and regular in attendance for all scheduled classes and open labs. Absences will be considered justified and excusable only in cases of emergencies, serious illness, or death in the immediate family.

Any work missed because of excused absences must be made up.

CHANGE OF SCHEDULE

Changes in class schedule after registration may be made only with the approval of the student's advisor and the registrar. The last day that courses may be dropped or added will be no later than the tenth class day after the beginning of each quarter.

WITHDRAWAL POLICY

If a student wishes to withdraw for any reason, he should first discuss it with his advisor; second, report his decision to the Student Services Office; third, obtain a clearance form from Student Services that will be signed by the subject instructor, the librarian, the business office, and the Director of Student Services; leave the completed withdrawal form with the registrar. No transcript will be issued for a student who leaves without completing the withdrawal procedure.

TRANSCRIPTS

All student records are held in confidence by the Institute. Placement credentials, transcripts, and other pertinent information will be made available only upon the request of the student. A statement of release must be signed by the student before a transcript or any other information can be sent to other colleges, employers, or other agencies. Request for information forms are available in the registrar's office.

STUDENT CONDUCT

Students of Southwestern Technical Institute will be expected to conduct themselves at all times as mature adults. Students who do not respect the rights and privileges and personal property of other students and who fail to demonstrate a high regard for school facilities and property will be subject to dismissal.

Violation of rules and regulations relating to drug abuse and use of alcoholic beverages may result in disciplinary measures or dismissal.

Possession of firearms or other weapons as defined in G. S. 14-284.1 while on campus is unlawful whether carried openly or concealed. Violations may result in dismissal and prosecution.

Students of the institute are subject to the operating policies and rules of the school, the local ordinances, the North Carolina General Statutes and the laws of the United States.

FACULTY ADVISOR

Each student will be assigned an advisor by the Department Head in his major field. The purpose of this program is to provide each student with personal assistance in orientation and with guidance as he progresses in his course of study.

CREDIT BY EXAMINATION

Advanced placement is offered to those students who because of their demonstrated abilities are qualified to accelerate their studies. To obtain advanced placement a student may take a proficiency examination in any subject when he believes he already has mastery of the course material. Permission for such an examination must be obtained from the appropriate Department Chairman with the Dean of Instruction concurring. The examination may be written, oral, performance, or all of these. Students failing such an examination may not request a second examination until evidence of further study in the subject concerned is presented. The decision of the examining instructor will be final.

A veteran student may apply for credit toward graduation for training received under any of the armed forces college training programs. Credit may also be granted for specialized and technical training done under the auspices of the armed forces and courses taken through USAFI.

COOPERATIVE EDUCATION

In keeping with its policy of offering new and enriching educational experiences to students, Southwestern Technical Institute has introduced Cooperative Education in some of its curricula and will extend it to others later. Cooperative Education, as the name implies, is a joint enterprise between the school and private industry. Within this program, students are employed for a specific period of off-campus work as a requirement of their course. This employment will be related as closely as possible to the student's course of study. Cooperative Education combines classroom teaching with practical experience on the job. Students interested in the Cooperative Education program should check with their counselor or instructor.

NIGHT CURRICULUM PROGRAMS

It is the intent of Southwestern Technical Institute to make all courses available to all who want them during both day and night. Therefore, we are making available curriculum level courses during the evening hours. One may enroll for classes during both the day and night. For additional information, contact the Evening Program Director.

GRADUATION REQUIREMENTS

The student will be held responsible for fulfilling all requirements for the degree or diploma for which he is registered. It is also the student's responsibility to apply officially to the Student Services Office for his degree or diploma at the beginning of the last quarter the student is enrolled.

The required fee for degree, diploma or certificate must accompany application for graduation.

Candidates for graduation are required to participate in graduation exercises if they wish to receive their degree or diploma.

SERVICES TO STUDENTS

Student Services is a distinct and vitally important aspect in the development, administration, operation, and future planning of Southwestern Technical Institute. Such services are provided primarily to serve the student effectively.

A definite program of service is offered to assist the student in selecting, entering, progressing within, and completing a program of study. In addition, the individual is provided numerous opportunities for personal development and social growth through a variety of planned activities.

TESTING

The Institute provides an extensive program of aptitude, achievement, and individual testing at the school.

COUNSELING

Southwestern Technical Institute provides a professional, competent counseling program. The purpose of this program is to assist students in solving academic, vocational, personal, and socio-economic problems. Students needing assistance should contact the Student Services Office.

HOUSING

Southwestern Technical Institute was established to serve students within the commuting distance of the campus. Thus, the Southwestern Technical Institute has no dormitory or housing facilities on campus. However, the Student Services Department maintains a listing of available apartments, rooms, or trailers for rent in addition to dormitory rooms at near-by Western Carolina University. Although it assumes no responsibility for housing, the Institute will assist out-of-town students in locating suitable living accommodations if it is requested through the Student Services Office.

ORIENTATION

Students enrolling at STI for the first time must participate in student orientation. This program is designed to acquaint students with the Institute's policies, environment, courses, philosophy, staff and student body. Assemblies, open discussions, lectures, and student handbooks help prepare the student for beginning studies at Southwestern Technical Institute.

PLACEMENT

Assistance in locating employment is available to all Southwestern Technical Institute students and graduates. Qualified students are referred to employers contacting the Institute, and the school provides facilities for employers desiring on-campus interviews.

VETERANS AFFAIRS

The Student Services Division maintains a full-time Coordinator of Veterans Affairs for purposes of counseling and helping veterans obtain their educational benefits, select a program of education, and helping the veteran in general

attending Southwestern Technical Institute. This also includes war orphans and dependents of disabled or deceased veterans that qualify for educational assistance under the G. I. Bill.

Any veteran with 181 or more days of continuous active duty after January 31, 1955 or who was discharged or released under conditions other than dishonorable can qualify for benefits. Length of entitlement is 1½ months for each month of active duty up to a maximum of 36 months.

The office of Veterans Affairs also coordinates the award of North Carolina Veterans Scholarships which may be given to qualified veterans or their dependents.

LIBRARY

The Library has a growing collection of over 10,000 books which are primarily scientific and technical. The reference collection contains encyclopedias, and many specialized dictionaries and handbooks. In addition to housing the book collection, the Library receives more than 300 magazines and periodicals and several newspapers.

The Library also provides other material such as pamphlets and clippings. Included in the collection are bound volumes and microfilm of approximately 84 periodicals. The Library also provides microfiche of several document titles.

Library services are directed by a professional librarian. The Library is open from 8:00 a.m. to 9:00 p.m. Monday through Thursday and from 8:00 a.m. to 5:00 p.m. on Friday. The Library is also open to persons in business, and industry, and the residents of the area.

STUDENT GOVERNMENT

Students at Southwestern Technical Institute have the opportunity to participate in Student Government through the Student Government Association.

Copies of the Student Government Constitution are available through the Student Personnel Office.

INTRAMURAL ACTIVITIES

An intramural program with wide variety and scope provides activities of interest to all students. Present activities include: archery, badminton, volleyball, bowling, table tennis, horseshoes, box hockey, chess, checkers, bridge and snow skiing. Additional activities will be added according to student interest and as facilities and equipment become available. The idea of activity clubs for students and faculty is being developed which features a snow skiing club.

INTERCOLLEGIATE ATHLETICS

The intercollegiate activities of Southwestern Technical Institute feature a men's basketball team with a cheerleader squad, golf and bowling teams.

STUDENT LOUNGES

For the convenience of students and faculty, each building provides a refreshment and lounge area equipped with a variety of vending machines.

DEPARTMENT OF CONTINUING EDUCATION EXTENSION SERVICES

OCCUPATIONAL EXTENSION

SPECIALTY PROGRAMS

ADULT BASIC EDUCATION

GENERAL EDUCATION

DEVELOPMENT TESTS

COMMUNITY SERVICE

PROGRAMS

CONTINUING EDUCATION

The Institute, through its Extension Office, offers to any adult, regardless of his educational background, an opportunity to continue learning in a wide variety of fields. Classes can be organized either on or off campus, whenever and wherever there is a need expressed by a sufficient number of interested persons in any community in the primary service area of Jackson, Macon and Swain counties.

Extension courses are specially designed courses, usually of short duration ranging from a few hours to one or more quarters, structured so that they provide educational opportunities *either to prepare* for entry into an occupation, to *upgrade* the occupational competence of those already employed in the occupation, or work toward self-improvement.

Extension classes do not earn academic credits which can be recognized in a diploma or degree program; however, a certificate is awarded upon successful completion. For some courses, C.E.U.'s (Continuing Education Units) will be awarded, one C.E.U. to be given for each ten contact hours of participation in an organized Continuing Education experience under responsible sponsorship, capable direction and qualified instruction.

OCCUPATIONAL EXTENSION

Through occupational extension, we offer a wide variety of courses for academic, technical, vocational training or self-improvement. Classes designed to provide academic, vocational and technical skills will require a \$2.00 registration fee. Classes of a recreational or hobby nature must be self-supporting. Any adult 18 years old or older may enroll.

Courses are available in the following areas:

ACADEMIC — Art, History, Languages, Religion, Economics, Politics, Social Science.

RECREATION (Extension) — Athletics, Games, Hobbies.

TECHNICAL — Chemistry, Civil Engineering, Biology, Physics, Electricity.

VOCATIONAL — Agriculture, Business, Hospitality, Health Occupations, Home Economics, Office, Trades and Industry, Automotive, Firemanship, Graphic Arts, Law Enforcement, Management Development, Masonry, Metalworking, Plastics, Personal Services, Plumbing, Seafood Occupations, Textile Production, Woodworking Occupations, New Industry Training.

SPECIALTY PROGRAMS

The Department of Community Colleges in cooperation with other state agencies offers a number of specialized training classes.

These classes are designed to meet the general or specific training or re-training needs of groups or private individuals or employees in businesses, industry, governmental agencies and other public institutions. Classes are initiated as the need arises.

Instructors for these classes are highly trained. Courses are structured and area consultants are available to assist at the local level. Participants can earn a number of certificates and awards upon successful completion of these programs.

LAW ENFORCEMENT

Introduction to Police Science — 160 hours

This course is designed to provide the newly-employed law enforcement officer with the basic job knowledge, skills and abilities to perform entry level police work. The material covers: Constitutional law, basic principles of North Carolina Criminal and Motor Vehicle Law, traffic accident investigation and reporting basic laws of arrest, search and seizure, evidence, general criminal investigation, court structure and procedure, report writing, testifying in court, patrol operations, techniques and methods of arrest, public and human relations, first aid, firearms and defensive tactics.

Upon successful completion of this course, the officer can be certified by the Criminal Justice Training and Standards Council as a law enforcement officer in the State of North Carolina.

Upon successful completion of this course, an officer may wish to pursue a full degree program. See description of Law Enforcement in curriculum section.

HOSPITALITY

The Department of Community Colleges offers Hospitality Training as one answer to North Carolina's need for more trained personnel in the area of food, lodging, recreation and travel. Some examples of classes are:

- Food Purchasing
- Food Preparation
- Housekeeping
- Hospital Human Relations, Services
- Hotel-Motel Management
- Menu Planning
- Modified Diets
- School Food Service
- Quantity Food Production
- Use and Care of Equipment
- Waiter-Waitress Training

MANAGEMENT DEVELOPMENT PROGRAM

The Management Development Program is designed to upgrade the supervisory and mid-management personnel in business and industry. Classes are scheduled in accordance with the needs of industry. Qualified instructors are provided without charge to the employee.

The courses listed below are available at Southwestern Technical Institute and may be credited toward the Diploma in Management Development Training awarded by the Department of Community Colleges for the completion of any combination of courses totaling 160 hours. Credit may be given for courses previously taken at S. T. I. or elsewhere.

Course No.	Course Title	Classroom Hours
MDP 1	Principles of Supervision	44-46
MDP 2	Job Relations Training	10
MDP 3	Science of Human Relations	18-20
MDP 3	Art of Motivating People	22
MDP 5	Economics in Business and Industry	22
MDP 6	Effective Communications	22
MDP 7	Effective Writing	15
MDP 8	Effective Speaking	15
MDP 9	Speed Reading	20

MDP 10	Work Measurement	22
MDP 11	Job Methods	10
MDP 12	Conference Leadership Training	10
MDP 13	Instructor Training	15
MDP 14	Creative Thinking	22
MDP 15	Industrial Safety and Accident Prevention	22
MDP 16	Industrial First Aid	10
MDP 17	The Supervisor in North Carolina	10
MDP 18	Job Analysis Training	12
MDP 19	Management Primer	44
MDP 20	Cost Accounting for Supervisors	14
MDP 21	Supervision in Hospitals	40

FIRE SERVICE TRAINING

A variety of courses are offered in cooperation with individual fire departments in the service area. Specific units of study are designed to increase the firefighter's technical knowledge and improve his skills in fire-ground operation. Classes may be offered in any order according to the needs of each fire department. Examples of Firemanship classes are:

Area Fire Schools	Introduction to Firefighting
Arson Detection	Ladder Practices
Civil Disorder	Officer Training
Compressed Gas Emergencies	Portable Fire Extinguishers
Fire Apparatus Practices	Protective Breathing Equipment
Fire Brigade Training	Rescue Practices
Firefighting Procedures	Rope Practices
Fire Stream Practices	Salvage and Overhaul Practices
Forcible Entry	School Bus Evacuation
Home Fire Safety	Ventilation
Hospital Fire Safety	Teacher Education
Hose Practices	Bombing and Bomb Threats

ADULT BASIC EDUCATION

Adult Basic Education is a federally funded program coordinated through the Department of Community Colleges. In the Southwestern Tech service area, two-thirds of the population over age 25 do not have a high school education. ABE classes are aimed at providing a beginning or continuing education for these people. Classes on three levels cover from beginning reading, writing and arithmetic to a more advanced study of English grammar and usage, mathematics and social sciences.

The materials and the instruction are designed to meet adults' interests. Special emphasis is given to developing "coping skills;" for example, reading and mathematics are presented through use of Consumer Education materials. The program lays the groundwork for many individuals to take the high school equivalency examination.

MOBILE CLASSROOM

The mobile classroom is a federally funded program designed to furnish geographically isolated individuals with basic education and skills in crafts, marketing, and other related topics.

GENERAL EDUCATION DEVELOPMENT TESTS

In July, 1969, Southwestern Technical Institute became an official General Educational Development Testing Center. These tests cover five broad areas:

1. English Expression
2. Literature
3. Mathematics
4. Social Studies
5. Natural Science

Persons receiving a total passing score of 225 points with no single test score below 35 are awarded a High School Equivalency Certificate by the North Carolina Department of Public Instruction. This certificate is generally accepted on the same basis as a high school diploma for employment, job promotion and higher education.

A person wishing to take the GED Tests should come to the institute for an initial interview and preliminary counseling. If it appears that the individual is not yet fully ready to take the tests, he can select one of three ways to complete his preparation: the Adult Basic Education program, the GED class or Developmental studies, any of which will help him acquire the skills necessary for success on the tests.

Application requirements: In order to take the GED tests, a person must:

1. Be at least 18 years of age.
2. Be a resident of North Carolina.
3. File an application which is available at the institute or from his county superintendent of schools.
4. Have a valid vocational, educational or other purpose in applying.

In the event that any single test score or the total score is unsatisfactory, a retest may be taken after six (6) months of further study.

Tests are generally given during the evening hours on the first Monday night of each month. Individuals will be scheduled and notified by letter after the Institute has received applications.

Special arrangements can be made for individuals who cannot come during evening hours.

COMMUNITY SERVICE PROGRAMS

The Continuing Education Department is always alert to possibilities of sponsoring public events for which no charge is made. Such programs may consist of art exhibits, dramatic presentations, poetry or other readings, lectures on a wide variety of subjects, or any other topic of special interest. With the completion this year of new facilities, the community services program will be expanded.

FISHERIES TRAINING

As the need arises trout production classes will be held. These classes are designed to help the present growers to make their operation more efficient as well as to give potential trout growers information they need to set up a profitable operation. Major topics included in the classes are site selection, management operation, design and layout, hatching, feeding, diseases and parasites, marketing, processing, recreation sales, waste disposal, and laws and regulations. Contact the Extension Office for more detailed information.

AMBULANCE ATTENDANT

Designed to develop understanding of and appreciation for the role of the ambulance attendant in the care and transportation of the sick and injured. Classroom discussions include principles related to administering emergency aid to victims in selected situations, safe transportation of the sick or injured and safe operation of the ambulance. Student experiences include supervised practice in applying splints, in using resuscitation techniques, in applying dressings, and in positioning and transporting victims with a variety of conditions.

NEW AND EXPANDING INDUSTRIES

"One of the basic objectives of Southwestern Technical Institute is to stimulate the creation of more challenging and rewarding jobs for the people of our area by providing a customized training service to new and expanding industries. Subject to only minimal limitations, this institution, in cooperation with the Industrial Services Division of the State Department of Community Colleges, will design and administer a special program for training the production manpower required by any new or expanding industry creating new job opportunities in North Carolina."

This program includes the following services:

1. Consultation in determining job description; defining areas of training; and in prescribing appropriate course outlines, training schedules, and materials.
2. Selecting and training of instructors. These instructors may be recruited from the company or from outside sources.
3. Payment of instructors' wages for the duration of the training program.
4. Provision of suitable space for a temporary training facility prior to the completion of the new plant, should such temporary space be required. This may be space with Southwestern Technical Institute or leased space in the community.
5. Assumption of installation costs of equipment in the temporary training facility.
6. Payment for one-half the cost of non-salvageable materials expended in the training program.

"The purpose of this service is to help a new or expanding industry meet its immediate manpower needs and to encourage each industry to develop a long-range training program of its own to satisfy its continuing replacement and retraining needs."

COMMERCIAL SPECIALTIES

BUSINESS

Accounting

Business Administration

Secretarial Science

COMMERCIAL ART AND ADVERTISING DESIGN

RADIO BROADCASTING

ACCOUNTING

Purpose

Accounting is a process of measuring and reporting various functions of business and governmental organizations. These measurements are in terms of dollars and material, labor, time, index numbers, and other valid units of measurement. Accounting gives meaning to these measurements, and is justly described as the "language of business."

The duties and responsibilities of an accountant vary somewhat in different firms. An accountant may record transactions, render periodic reports, maintain cost records, make special reports, complete tax returns, audit the books, and advise management in areas of financial affairs.

Job Description

The graduates of the Accounting Curriculum may qualify for various jobs in business and industry leading to any of the following accounting positions: accounting clerk, payroll clerk, accounting machine operator, auditor, and cost accountant. This training plus further experience should prepare them to become office managers or accounting supervisors, and to fill other responsible positions in a business firm.

Suggested Curriculum By Quarters

<i>First Quarter</i>			Class	Lab	Hours Credit
ENG	100	English I	3	2	4
MAT	110	Business Math	5	0	5
BUS	101	Introduction to Business	5	0	5
BUS	120	Accounting I	4	3	5
			<hr/>	<hr/>	<hr/>
			17	5	19
<i>Second Quarter</i>			Class	Lab	Hours Credit
ENG	101	English II	3	2	4
BUS	121	Accounting II	4	3	5
BUS	110	Office Machines	2	2	3
BUS	248	Economics I	5	0	5
			<hr/>	<hr/>	<hr/>
			14	7	17
<i>Third Quarter</i>			Class	Lab	Hours Credit
ENG	102	English III	3	2	4
BUS	122	Accounting III	4	3	5
BUS	249	Economics II	5	0	5
EDP	104	Introduction to Data Processing Systems	3	2	4
			<hr/>	<hr/>	<hr/>
			15	7	18
<i>Fourth Quarter</i>			Class	Lab	Hours Credit
ENG	204	English IV	3	0	3
SSC	201	Social Science	3	2	4
BUS	239	Marketing	5	0	5
BUS	124	Personal Finance	3	2	4
			<hr/>	<hr/>	<hr/>
			14	4	16

			Class	Lab	Hours Credit
<i>Fifth Quarter</i>					
ENG	206	English VII	3	2	4
BUS	222	Intermediate Accounting I	3	2	4
BUS	229	Income Taxes I	3	2	4
BUS	123	Business Finance	3	2	4
			<u>12</u>	<u>8</u>	<u>16</u>
 <i>Sixth Quarter</i>					
BUS	235	Business Management	3	2	4
BUS	247	Business Insurance	3	0	3
BUS	115	Business Law I	5	0	5
BUS	223	Intermediate Accounting II	3	2	4
BUS	231	Income Taxes II	3	2	4
			<u>17</u>	<u>6</u>	<u>20</u>
 <i>Seventh Quarter</i>					
BUS	224	Intermediate Accounting III	3	2	4
BUS	225	Cost Accounting	3	2	4
BUS	227	Accounting Systems	3	2	4
BUS	116	Business Law II	5	0	5
			<u>14</u>	<u>6</u>	<u>17</u>

BUSINESS ADMINISTRATION

(Industrial Management Option)

Purpose

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

This course is designed to develop the individual's abilities in the art of communicating with his fellow worker by providing him with training in business and industrial management, psychology, production methods, and the general and social education that broadens one's perspective. This training should provide one with the opportunity to enter into an industrial occupation and, with experience, assume the responsibilities that go with supervisory and mid-management positions in industry.

Job Description

The supervisor or foreman coordinates the activities of workers in one or more occupations. His duties may encompass the interpreting of schedules and estimating of man hour requirements for job completion, establishment or adjustment of work procedures, analyzes and resolves work problems, and initiates or suggests plans to motivate workers to achieve work goals.

Suggested Curriculum By Quarters

			Class	Lab	Hours Credit
<i>First Quarter</i>					
ENG	100	English I	3	2	4
MAT	110	Business Math	5	0	5
BUS	101	Introduction to Business	5	0	5
BUS	120	Accounting I	4	3	5
			—	—	—
			17	5	19
 <i>Second Quarter</i>					
ENG	101	English II	3	2	4
BUS	121	Accounting II	4	3	5
BUS	110	Office Machines	2	2	3
BUS	248	Economics I	5	0	5
			—	—	—
			14	7	17
 <i>Third Quarter</i>					
ENG	102	English III	3	2	4
BUS	235	Business Management	3	2	4
BUS	249	Economics II	5	0	5
EDP	104	Introduction to Data Processing Systems	3	2	4
			—	—	—
			14	6	17

			Class	Lab	Hours Credit
<i>Fourth Quarter</i>					
SSC	201	Social Science	3	2	4
ENG	204	English IV	3	0	3
BUS	261	Manufacturing Cycles	5	0	5
BUS	269	Industrial Safety	3	2	4
BUS	239	Marketing	5	0	5
			<u>19</u>	<u>4</u>	<u>21</u>

Fifth Quarter

ENG	103	English VI	3	0	3
BUS	115	Business Law	5	0	5
BUS	265	Work Measurement	3	2	4
BUS	272	Principles of Supervision	3	2	4
			<u>14</u>	<u>4</u>	<u>16</u>

Sixth Quarter

PSY	109	Seminar on Human Relations	3	0	3
BUS	247	Business Insurance	3	0	3
BUS	273	Personnel Management	3	2	4
BUS	267	Production Planning	3	3	4
BUS	278	Labor Economics	3	2	4
			<u>15</u>	<u>7</u>	<u>18</u>

Seventh Quarter

BUS	263	Quality Control	3	2	4
BUS	268	Plant Layout	3	2	4
BUS	266	Value Analysis	3	0	3
BUS	264	Job Analysis	3	2	4
BUS	274	Seminar on Management Problems	3	0	3
			<u>15</u>	<u>6</u>	<u>18</u>

BUSINESS ADMINISTRATION

(Marketing Option)

Purpose

In North Carolina the opportunities in business are increasing. With the increasing population and industrial development in this State, business has become more competitive and automated. Better opportunities in business will be filled by students with specialized education beyond the high school level. The Business Administration Curriculum is designed to prepare the student for employment in one of many occupations common to business. Training is aimed at preparing the student in many phases of administrative work that might be encountered in the average business.

The specific objectives of the Business Administration Curriculum are to develop the following competencies:

1. Understanding of the principles of organization and management in business operations.
2. Understanding our economy through study and analysis of the role of production and marketing.
3. Knowledge in specific elements of accounting, finance, and business law.
4. Understanding and skill in effective communication for business.
5. Knowledge of human relations as they apply to successful business operations in a rapidly expanding economy.

Job Description

The graduate of the Business Administration Curriculum may enter a variety of career opportunities from beginning sales person or office clerk to manager trainee. The duties and responsibilities of this graduate vary in different firms. These encompassments might include: making up and filing reports, tabulating and posting data in various books, sending out bills, checking calculations, adjusting complaints, operating various office machines, and assist managers in supervising. Positions are available in business such as advertising, banking, credit, finance, retailing, wholesaling, hotel, tourist and travel industry, insurance, transportation, and communications.

Suggested Curriculum By Quarters

				Class	Lab	Hours Credit
<i>First Quarter</i>						
ENG	100	English I		3	2	4
MAT	110	Business Math		5	0	5
BUS	101	Introduction to Business		5	0	5
BUS	120	Accounting I		4	3	5
				—	—	—
				17	5	19
 <i>Second Quarter</i>						
ENG	101	English II		3	2	4
BUS	121	Accounting II		4	3	5
BUS	110	Office Machines		2	2	3
BUS	248	Economics I		5	0	5
				—	—	—
				14	7	17

			Class	Lab	Hours Credit
<i>Third Quarter</i>					
ENG	102	English III	3	2	4
BUS	122	Accounting III	4	3	5
BUS	249	Economics II	5	0	5
EDP	104	Introduction to Data Processing Systems	3	2	4
			<u>15</u>	<u>7</u>	<u>18</u>
<i>Fourth Quarter</i>					
ENG	204	English IV	3	0	3
SSC	201	Social Science	3	2	4
BUS	239	Marketing	5	0	5
BUS	124	Personal Finance	3	2	4
			<u>14</u>	<u>4</u>	<u>16</u>
<i>Fifth Quarter</i>					
ENG	206	English VII	3	2	4
BUS	243	Advertising	3	2	4
BUS	229	Income Taxes I	3	2	4
BUS	123	Business Finance	3	2	4
			<u>12</u>	<u>8</u>	<u>16</u>
<i>Sixth Quarter</i>					
BUS	235	Business Management	3	2	4
BUS	247	Business Insurance	3	0	3
BUS	115	Business Law I	5	0	5
PSY	109	Seminar on Human Relations	3	2	4
			<u>14</u>	<u>4</u>	<u>16</u>
<i>Seventh Quarter</i>					
BUS	232	Sales Development	3	2	4
BUS	244	Retail Management	3	2	4
BUS	275	Seminar on Marketing Problems	3	0	3
BUS	116	Business Law II	5	0	5
			<u>14</u>	<u>4</u>	<u>16</u>

SECRETARIAL SCIENCE

(Shorthand Option)

Purpose

The demand for better qualified secretaries in our ever-expanding business, industry, government, and professional world is becoming more acute. The purpose of this curriculum is to outline a training program that will provide training in the accepted procedures required by the business, industrial and professional areas to enable persons to become proficient soon after employment in their particular field. Special training in secretarial subjects is supplemented by related courses in math, accounting, business law, and personality development.

Job Description

The student may take courses in shorthand or have the option of courses that give them a broader business background. This option gives the student a choice of concentrated study preparing her for employment as a stenographer and secretary or for a variety of secretarial positions where shorthand skills are not required.

Suggested Curriculum By Quarters

<i>First Quarter</i>			Class	Lab	Hours Credit
ENG	100	English I	3	2	4
MAT	110	Business Math	5	0	5
BUS	101	Introduction to Business	3	2	4
*BUS	102	Typewriting I (or elective)	2	3	3
*BUS	106	Shorthand I (or elective)	3	2	4
			<hr style="width: 100%;"/>	<hr style="width: 100%;"/>	<hr style="width: 100%;"/>
			16	9	20
<i>Second Quarter</i>					
ENG	101	English II	3	2	4
*BUS	103	Typewriting II (or elective)	2	3	3
BUS	107	Shorthand II (or elective)	3	2	4
BUS	115	Business Law I	5	0	5
BUS	248	Economics I	3	2	4
			<hr style="width: 100%;"/>	<hr style="width: 100%;"/>	<hr style="width: 100%;"/>
			16	9	20
<i>Third Quarter</i>					
ENG	102	English III	3	2	4
BUS	104	Typewriting III	2	3	3
BUS	108	Shorthand III (or elective)	3	2	4
BUS	110	Office Machines	2	2	3
BUS	112	Filing	3	0	3
			<hr style="width: 100%;"/>	<hr style="width: 100%;"/>	<hr style="width: 100%;"/>
			13	9	17
<i>Fourth Quarter</i>					
BUS	215	Office Applications	0	30	3
BUS	216	Orientation and Evaluation	3	0	3
BUS	217	Skill Performance and Production	3	0	3
BUS	218	Business Techniques	3	0	3
			<hr style="width: 100%;"/>	<hr style="width: 100%;"/>	<hr style="width: 100%;"/>
			9	30	12

			Class	Lab	Hours Credit
<i>Fifth Quarter</i>					
ENG	204	English IV	3	0	3
BUS	120	Accounting I	4	3	5
BUS	206	Dictation and Transcriptions I (or elective)	3	2	4
BUS	205	Advanced Typewriting	2	3	3
BUS	211	Office Machines and Machine Transcription	2	2	3
			<u>14</u>	<u>10</u>	<u>18</u>

Sixth Quarter

BUS	207	Dictation and Transcription II (or elective)	3	2	4
BUS	183	Terminology and Vocabulary (Technical, Legal, Medical)	3	0	3
SSC	201	Social Science	3	2	4
BUS	124	Personal Finance	3	2	4
BUS	121	Accounting II	4	3	5
			<u>16</u>	<u>9</u>	<u>20</u>

Seventh Quarter

ENG	205	English V for Secretaries	3	0	3
BUS	214	Secretarial Procedures	3	2	4
BUS	208	Dictation and Transcription III (or elective)	3	4	5
BUS	271	Office Management	3	2	4
BUS	104	Introduction to Data Processing Systems	3	2	4
			<u>15</u>	<u>10</u>	<u>20</u>

*A proficiency test required
or Psy 102 General Psychology
3-0-3

COMMERCIAL ART ADVERTISING DESIGN

Purpose

This curriculum will prepare a graduate with a sound, well-rounded background for technical and creative achievement throughout his professional life. Design and illustration for commerce is continually advancing its standards; therefore, the background offered the student must be well-developed to prepare him for performance on a contemporary professional level. Graduates of this program will have an adequate background in illustration, layout and lettering, design, and production.

Equipped with professional competence and the potential for continuing growth and improvement, graduates are qualified for employment in most fields of commercial art.

Job Description

The commercial artist or advertising designer creates and designs layouts and illustrations for printing, creates posters, signboards, billboards, and show cards. He may design and prepare charts, diagrams, sketches, and maps for publication and exhibition, perform responsible illustrative work for package design, photography, lettering, and art work for the printing processes. Opportunities for graduates of this program may be in advertising agencies, newspapers and magazines, television studios, industrial advertising departments and design studios, department stores, government agencies, or in printing and publishing houses.

Suggested Curriculum By Quarters

<i>First Quarter</i>	Class	Lab	Hours Credit
ENG 100 English I	3	2	4
CAT 100 Art Orientation	1	0	1
DFT 101 Technical Drafting I	0	6	2
CAT 101 Advertising Principles	3	0	3
CAT 102 Art and Design	2	6	4
CAT 121 Commercial Art and Advertising Design I	4	6	6
	<hr style="width: 100%; border: 0; border-top: 1px solid black; margin: 0;"/>	<hr style="width: 100%; border: 0; border-top: 1px solid black; margin: 0;"/>	<hr style="width: 100%; border: 0; border-top: 1px solid black; margin: 0;"/>
	13	20	20
 <i>Second Quarter</i>			
ENG 101 English II	3	2	4
DFT 102 Technical Drafting II	0	6	2
CAT 105 Life Study I	2	3	3
CAT 122 Commercial Art and Advertising Design II	4	6	6
	<hr style="width: 100%; border: 0; border-top: 1px solid black; margin: 0;"/>	<hr style="width: 100%; border: 0; border-top: 1px solid black; margin: 0;"/>	<hr style="width: 100%; border: 0; border-top: 1px solid black; margin: 0;"/>
	9	17	15
 <i>Third Quarter</i>			
ENG 102 English III	3	2	4
CAT 106 Life Study II	0	6	2
CAT 116 Photography I	2	6	4
CAT 123 Commercial Art and Advertising Design III	6	6	8
	<hr style="width: 100%; border: 0; border-top: 1px solid black; margin: 0;"/>	<hr style="width: 100%; border: 0; border-top: 1px solid black; margin: 0;"/>	<hr style="width: 100%; border: 0; border-top: 1px solid black; margin: 0;"/>
	11	20	18

			Class	Lab	Hours Credit
<i>Fourth Quarter (Summer)</i>					
CAT	227	Fashion Illustration	4	6	6
CAT	117	Photography II	2	6	4
CAT	205	Advertising Copywriting and Fitting	3	2	4
CAT	201	Art History	5	0	5
CAT	212	Industrial Art & Design	2	3	3
			<u>16</u>	<u>17</u>	<u>22</u>

Fifth Quarter

ENG	204	English IV	3	0	3
CAT	110	General Illustration	2	6	4
CAT	224	Commercial Art and Advertising Design IV	4	6	6
CAT	206	Project Seminar	2	3	3
BUS	243	Advertising	3	2	4
			<u>14</u>	<u>17</u>	<u>20</u>

Sixth Quarter

BUS	232	Sales Development	3	2	4
CAT	225	Commercial Art I	6	6	8
CAT	217	Silk Screen Techniques	2	6	4
CAT	231	Project Seminar	2	3	3
			<u>13</u>	<u>17</u>	<u>19</u>

Seventh Quarter

ECO	100	Introduction to Economics	3	2	4
CAT	226	Commercial Art II	6	6	8
CAT	235	Advertising Art Directions	5	0	5
CAT	232	Project Seminar	1	6	3
			<u>15</u>	<u>14</u>	<u>20</u>

134 Total Hours

RADIO BROADCASTING

Purpose

This curriculum is designed to prepare the student for vocations in radio broadcasting. The first year of study deals with electronics. The second half of the curriculum deals specifically with radio broadcasting techniques and prepares the student for all types of radio work, including announcing, news gathering and writing, interviewing, program direction, and advertising.

Job Description

The Broadcasting curriculum is designed to prepare students for employment in the radio broadcasting industry. The first four quarters provide the electronics background necessary to obtain the first class radio telephone license. The remaining three quarters provide the announcing, salesmanship and operating knowledge to produce a graduate capable of meeting the needs of the small station.

Suggested Curriculum By Quarters

<i>First Quarter</i>			Class	Lab	Hours Credit
ENG	100	English I	3	2	4
MAT	115	Electrical Math I	5	0	5
ELC	102	D. C. Fundamentals	5	7	8
DFT	107	Schematic Drawing I	1	2	2
			<hr style="width: 100%;"/>	<hr style="width: 100%;"/>	<hr style="width: 100%;"/>
			14	11	19
<i>Second Quarter</i>					
ENG	101	English II	3	2	4
MAT	116	Electrical Math II	5	0	5
ELC	104	A. C. Fundamentals	5	7	8
DFT	108	Schematic Drawing II	1	2	2
			<hr style="width: 100%;"/>	<hr style="width: 100%;"/>	<hr style="width: 100%;"/>
			14	11	19
<i>Third Quarter</i>					
ENG	102	English III	3	2	4
MAT	117	Electrical Math III	5	0	5
ELN	101	Electronics I	5	7	8
PHY	101	Physics I	3	2	4
			<hr style="width: 100%;"/>	<hr style="width: 100%;"/>	<hr style="width: 100%;"/>
			16	11	21
<i>Fourth Quarter</i>					
ELN	106	Entertainment Systems	5	10	10
ELN	108	Mechanical Circuit Layout	2	2	3
PSY	102	General Psychology	3	0	3
ELN	125	FCC Exam Preparation	5	0	5
			<hr style="width: 100%;"/>	<hr style="width: 100%;"/>	<hr style="width: 100%;"/>
			15	12	21

			Class	Lab	Hours Credit
<i>Fifth Quarter</i>					
ENG	204	English IV	3	0	3
RTV	101	Introduction to Broadcasting	5	0	5
RTV	102	Newswriting	3	2	4
BUS	102	Typewriting I	2	3	3
BUS	243	Advertising	3	2	4
			<hr/>	<hr/>	<hr/>
			16	7	19
 <i>Sixth Quarter</i>					
RTV	112	Creative Writing	3	0	3
RTV	103	Announcing and Mike Techniques	3	6	6
RTV	110	Broadcasting Operations	3	3	4
RTV	114	Production Techniques I	3	2	4
			<hr/>	<hr/>	<hr/>
			12	11	17
 <i>Seventh Quarter</i>					
RTV	205	Production Techniques II	3	2	4
RTV	207	Sales and Promotion	3	2	4
ECO	100	Applied Economics	3	2	4
RTV	216	Broadcasting Practicum	2	6	5
			<hr/>	<hr/>	<hr/>
			11	12	17

GENERAL EDUCATION

DEVELOPMENTAL STUDIES

ASSOCIATE DEGREE
PROGRAM FOR
VOCATIONAL
INSTRUCTORS

DEVELOPMENTAL STUDIES

Purpose

The Developmental Program is a series of courses designed for students who, at their present educational level, cannot enter regular curriculum courses or who have not completed their high school education. This program gives every person the opportunity of re-entering school and meeting requirements of the world of work and of further education. The courses are structured to meet individual needs, and placement of a student in a course of studies depends upon the person's level of achievement when he registers for the course. Emphasis is placed on reading, math, and English. The student may select other electives which he may need to meet his particular objective. The program also assists students who have a physical handicap or who have a personal situation that would put them at a disadvantage in getting the vocational training they want.

Objectives

1. To help students make such academic progress that he can make an acceptable score on the GED.
2. To encourage students to develop study skills, test taking proficiencies and to give him a general idea of what will be expected of him in the world of work.
3. To enable a student to assess his actual potential so that he can make wise vocational choices.
4. To provide individual instruction and tutoring for any student in the program who has specific problems not common to the whole class and such reinforcement for students who have already completed the program.
5. To provide enrichment courses in communication, mathematics, and reading for high school graduates who are planning to enter a university.

Programs of Study

PRE-TECHNICAL T-099

A program of studies based on the needs of particular students in areas of deficiencies. Structured to bring up these specific areas so that a student may succeed in a technical curriculum.

PRE-VOCATIONAL V-099

Basic courses structured to meet the needs of students preparing to enter a vocational curriculum.

HIGH SCHOOL EQUIVALENCY

A program of studies outlined for students who have not received a high school diploma. A student may enter the program at any time during a quarter. After he is tested, a sequence of courses is outlined so that a student may work toward a level of achievement which will enable him to make a passing score on the GED.

Admission

The Developmental Studies Program is open from 8:00 A.M. until 3:00 P.M. Monday through Friday and from 6:30 P.M. until 9:30 P.M. Monday through Thursday. A student may register for as many hours as his time allows. Veterans may receive benefits for full time or part-time work. A veteran who has not finished high school may receive benefits up to twelve months. This does not count against his regular 36 months. Wives of disabled veterans are qualified for the same benefits.

Any applicant wishing to enroll in Developmental Studies should follow the application procedures outlined on page 10 for certificate programs.

ASSOCIATE DEGREE PROGRAM FOR VOCATIONAL INSTRUCTORS

Purpose

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

This program is unique in its design and offers the opportunity to earn an Associate in Applied Science Degree allowing credit for previous training experience, and formal study in the student's area of expertise, supplemented by course work to broaden the student personally and develop professional skills in the techniques of teaching.

Program

Credit will be awarded to skilled craftsmen based on educational experience and work experience. Credit will be awarded in the following manner:

1. A. Twenty-four quarter hours' credit for full-time trade school, twelve months in one special skilled are certified by diploma or letter by trade school officials, maximum twenty-four quarter credit hours.

and/or

- B. One quarter hour credit per sixty hours of full-time trade instruction for programs of less than one year duration. Certified by diploma or letter by trade school officials, maximum eight credit hours.
2. One quarter hour credit per forty hours of special short course instruction - company sponsored school. Certified by diploma, certificate or letter by company school. Maximum five hours.
3. Five quarter hours' credit for each full year of employment in a teaching situation. Teaching must be the primary responsibility of employment. Maximum ten hours.
4. Two quarter hours' credit for each full year of employment in the specialty occupation qualified to teach. Maximum ten hours.

The maximum number of hours awarded for specialty skills toward an Associate in Applied Science Degree is 48 quarter hours.

A minimum of 56 quarter hours' credit must be earned through course work at Southwestern Technical Institute or another recognized college or technical institute program. In order to earn an Associate in Applied Science Degree at Southwestern Technical Institute, the general education requirements must be met either through transfer credit, challenge examination, or formal course work.

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

Following are minimum requirements for an Associate In Applied Science Degree for this curriculum. Anyone who needs additional hours may choose electives from any technical curriculum with the approval of the Dean of Instruction.

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

		<i>Min. Quarter Hours Required</i>
A. Specialty Skills		48
B. Personal Skills (Sciences, Humanities)		28
English	15	
Social Sciences	6	
Math	5	
Science	2	
C. Professional Skills (Vocational Educational)		28
TOTAL		104

COURSE REQUIREMENTS

English (The English requirements may be met by completion of 15 hours from the following courses.)

ENG 100	English I	3	2	4
ENG 101	English II	3	2	4
ENG 102	English III	3	2	4
ENG 204	English IV	3	0	3
ENG 103	English VI	3	0	3
ENG 206	English VII	3	0	3

Social Sciences (The Social Sciences requirements may be met by completion of 6 hours from the following courses.)

PSY 102	General Psychology	3	0	3
PSY 206	Applied Psychology	3	2	4
ECO 101	Survey of Economics	3	0	3
SOC 207	Sociology — Rural Society	3	0	3
SSC 201	Social Science	3	2	4
HIS 211	U. S. History I	3	0	3
HIS 212	U. S. History II	3	0	3
POL 103	National, State and Local Government	3	0	3

Mathematics (Mathematics requirements may be met by completion of 5 hours from the following courses.)

MAT 101	Technical Math	5	0	5
MAT 104	Statistics	5	0	5
MAT 110	Business Math	5	0	5

Science (Science requirements may be met by completion of a minimum of 2 hours from the following courses.)

PHY 100	General Physics	1	2	2
PHY 101	Physics I	3	2	4
PHY 102	Physics II	3	2	4
PHY 103	Physics III	3	2	4
BIO 101	General Biology	3	4	5
CHM 101	Chemistry I	3	4	5

Vocational Education (Vocational Education requirements may be met by completion of 28 hours from the following courses.)

EDU 110	Methods of Teaching Industrial Subjects	3	0	3
EDU 111	Use of Media in Instruction	3	0	3
EDU 112	Shop Organization and Planning I	2	2	3
EDU 113	Shop Organization and Planning II	2	0	3
EDU 114	Safety in the School Shop and Laboratory	3	0	3
EDU 115	Introduction to Industrial Education	3	0	3
EDU 116	History and Philosophy of Industrial Ed.	3	0	3
EDU 117	Program and Course Development	3	0	3
EDU 118	Principles of Cooperative Education	3	0	3
EDU 119	Motivational Strategies	3	0	3
EDU 123	Environmental Concepts in Education	1	2	2

HUMAN SERVICES

COSMETOLOGY

EARLY CHILDHOOD
SPECIALIST

ENVIRONMENTAL SCIENCE

FOOD SERVICE
MANAGEMENT

LAW ENFORCEMENT

PRACTICAL NURSE
EDUCATION

RECREATION TECHNOLOGY

COSMETOLOGY

Purpose

This curriculum is approved by the North Carolina State Board of Cosmetic Art Examiners. After successfully completing the requirements of this course, a student must apply to the State Board of Cosmetic Art Examiners for examination. Successful candidates will receive their North Carolina license in Cosmetology.

Job Description

The licensed Cosmetologist is in great demand throughout the United States. Many newly licensed Cosmetologists join the staffs of beauty salons while others open their own shops or form partnerships.

Suggested Curriculum By Quarters

<i>First Quarter</i>	Class	Lab	Hours Credit
Cos. 100—Scientific Study I	4	6	6
Cos. 1011—Mannequin Practice	1	19	7
	<hr style="width: 100%;"/>	<hr style="width: 100%;"/>	<hr style="width: 100%;"/>
	5	25	13
 <i>Second Quarter</i>			
Cos. 1002—Scientific Study II	5	0	5
Cos. 1022—Clinical Applications I	0	29	9
	<hr style="width: 100%;"/>	<hr style="width: 100%;"/>	<hr style="width: 100%;"/>
	5	29	14
 <i>Third Quarter</i>			
Cos. 1003—Scientific Study II;	5	0	5
Cos. 1033—Clinical Applications II	0	29	9
	<hr style="width: 100%;"/>	<hr style="width: 100%;"/>	<hr style="width: 100%;"/>
	5	29	14
 <i>Fourth Quarter</i>			
Cos. 1004—Scientific Study IV	5	0	5
Cos. 1044—Clinical Applications III	0	29	9
	<hr style="width: 100%;"/>	<hr style="width: 100%;"/>	<hr style="width: 100%;"/>
	5	29	14

TOTAL CONTACT HOURS 1452

EARLY CHILDHOOD SPECIALIST

Purpose

Early childhood specialists provide for infants and young children a program which will promote the optimal development of each child. The specialist must understand and be able to meet the physical and nutritional needs of pre-school children; to provide activities which stimulate intellectual, emotional, and social growth of children; guide children in the formation of acceptable habits and attitudes; and assist the children in learning to communicate effectively with others.

Job Description

The early childhood specialist may choose to work with exceptional children as an aide to the kindergarten teacher or to organize and operate a child care facility as a private enterprise.

Suggested Curriculum By Quarters

			Class	Lab	Hours Credit
<i>First Quarter</i>					
ENG	100	English I	3	2	4
PSY	104	The Dynamics of Human Behavior	3	2	4
SOC	104	The Family: A Cross-Cultural Survey	3	0	3
EDU	101	Child Growth and Development	3	0	3
SCI	101	General Science	3	4	5
			—	—	—
			15	8	19
<i>Second Quarter</i>					
ENG	101	English II	3	2	4
PSY	105	Human Growth and Development: Prenatal and Infant	3	0	3
SOC	105	Families in the American Culture	3	0	3
EDU	102	Programming for Young Children	3	6	5
NUT	102	Nutrition for Young Children	2	3	3
			—	—	—
			14	11	18
<i>Third Quarter</i>					
ENG	102	English III	3	2	4
PSY	106	Human Growth and Development: Early Childhood	3	0	3
SOC	106	The Family in the Community	3	0	3
EDU	103	Working with Young Children	3	9	6
HEA	101	Personal Hygiene and Health	2	0	2
			—	—	—
			14	11	18
<i>Fourth Quarter</i>					
ENG	204	English IV	3	0	3
EDU	208	Physical Activities for Children	3	0	3
EDU	201	Activities for Young Children	3	9	6
SOC	201	The Child and Community Services Elective	3	0	3
			—	—	—
			15	9	18

<i>Fifth Quarter</i>			Class	Lab	Hours Credit
ENG	217	Children's Literature	3	0	3
HIS	211	United States History I	3	0	3
EDU	202	Seminar—Practicum in Early Childhood	4	12	8
EDU	203	The Exceptional Child	3	0	3
			<hr/>	<hr/>	<hr/>
			13	12	17

Sixth Quarter

HIS	212	United States History II	3	0	3
EDU	204	Parent Education	3	0	3
EDU	205	Seminar—Practicum	2	15	7
EDU	207	Special Problems in Early Childhood	2	0	2
		Elective	3	0	3
			<hr/>	<hr/>	<hr/>
			13	15	18

ENVIRONMENTAL SCIENCE

Purpose

This curriculum provides the necessary background in environmental science oriented courses supplemented by basic courses in English, math, government and science. Emphasis is on environmental problems, the overall effect of these problems on our environment, and the proposed solutions. Because environmental problems are interrelated, a broad program of study better qualifies the student to grasp and solve environmental problems.

Job Description

The technician's training will qualify him for a wide range of duties such as inspections, surveys, investigations, and evaluations. Specific tasks would include water and air sampling and analysis, assisting professionals in performing environmental research, and collecting and evaluating environmental impact data. Employment opportunities exist with industry and many branches of our local state, and federal government.

Suggested Curriculum By Quarters

			Class	Field & Lab	Hours Credit
<i>First Quarter</i>					
ENG	100	English I	3	2	4
MAT	101	Technical Math I	5	0	5
BIO	101	General Biology	3	4	5
ENV	105	Physical Environment	3	2	4
ENV	100	Environmental Orientation	1	2	2
			<hr/>	<hr/>	<hr/>
			15	10	20
<i>Second Quarter</i>					
ENG	101	English II	3	2	4
CHM	101	Chemistry I	3	4	5
MAT	104	Statistics	5	0	5
ENV	120	Resource Management	3	4	5
			<hr/>	<hr/>	<hr/>
			14	10	19
<i>Third Quarter</i>					
ENG	102	English III	3	2	4
CHM	102	Chemistry II	3	4	5
ENV	132	Sampling Techniques & Presentation of Data	2	4	4
ENV	210	Ecology	3	2	4
			<hr/>	<hr/>	<hr/>
			11	12	17
<i>Fourth Quarter</i>					
ENV	201	Laboratory Applications	3	0	3
ENV	202	Data Studies	3	0	3
ENV	203	Use of Instruments	3	0	3
ENV	204	Field Studies	0	30	3
			<hr/>	<hr/>	<hr/>
			9	30	12

<i>Fifth Quarter</i>			Class	Field & Lab	Hours Credit
ENG	204	English IV	3	0	3
PHY	101	Physics I	3	2	4
ENV	220	Water Sampling, Analysis, Control	3	2	4
ENV	130	Environmental Microbiology	3	4	5
		Elective	3	0	3
			<hr/>	<hr/>	<hr/>
			15	8	19

Sixth Quarter

POL	101	Introduction to American Government	3	0	3
ENV	213	Air Sampling Analysis and Control	3	4	5
ENV	222	Regional Environmental Problems	2	4	4
ENV	223	Instrument Maintenance	2	6	5
			<hr/>	<hr/>	<hr/>
			10	14	17

Seventh Quarter

ENV	230	Environmental Quality Laws & Enforcement	3	2	4
ENV	232	Land Use Management	3	4	5
ENV	231	Environmental Project	1	12	5
		Elective	3	0	3
			<hr/>	<hr/>	<hr/>
			10	18	17

FOOD SERVICE MANAGEMENT

Purpose

The Food Service Management Curriculum is designed for training of students in the art and science of quantity food preparation, with particular emphasis on institutional food service. In addition to development of knowledge and skills in food preparation, the student must develop an understanding and/or appreciation of food and equipment purchasing, financial control, record keeping, basic nutrition and menu planning and supervision.

Job Description

A graduate of this curriculum should be qualified for entry into positions as assistant cook, short order cook, cook, chef's assistant, cook-manager, baker, assistant baker, and pastry cook. Employment for graduates of this program would be found at hospitals, nursing homes, child care centers, colleges, and university food services, school food services, industrial cafeterias, private clubs, airline food services, food processing manufacturers, food service contract companies, and commercial restaurants.

Suggested Curriculum By Quarters

<i>First Quarter</i>			Class	Lab	Hours Credit
ENG	100	English I	3	2	4
FSO	101	Orientation to Food Services	1	0	1
FSO	102	Food Preparation I	3	6	5
FSO	103	Equipment	3	0	3
FSO	104	Sanitation and Safety	3	0	3
MAT	100	Basic Math	4	0	4
			<hr style="width: 100%;"/>	<hr style="width: 100%;"/>	<hr style="width: 100%;"/>
			17	8	20
<i>Second Quarter</i>					
ENG	101	English II	3	2	4
FSO	105	Accounting-Purchasing-Records	3	0	3
FSO	106	Nutrition and Menu Planning I	3	0	3
FSO	112	Food Preparation II	2	9	5
FSO	107	Baking I	2	6	4
			<hr style="width: 100%;"/>	<hr style="width: 100%;"/>	<hr style="width: 100%;"/>
			13	17	19
<i>Third Quarter</i>					
ENG	102	English III	3	2	4
FSO	108	Personnel Management	3	0	3
FSO	109	Production Management	3	0	3
FSO	122	Food Preparation III	0	9	3
FSO	117	Baking II	2	6	4
			<hr style="width: 100%;"/>	<hr style="width: 100%;"/>	<hr style="width: 100%;"/>
			11	17	17

			Class	Lab	Hours Credit
<i>Fourth Quarter</i>					
FSO	110	Practical Food Preparation	0	30	3
FSO	113	Customer Relations	3	0	3
FSO	115	Peak Service Planning	3	0	3
FSO	116	Food Handling	3	0	3
			<u>9</u>	<u>30</u>	<u>12</u>
<i>Fifth Quarter</i>					
ENG	204	English IV	3	0	3
FSO	201	Equipment	3	0	3
FSO	203	Organization and Management	3	0	3
FSO	202	Food Preparation IV	3	6	4
FSO	204	Food Purchasing and Cost Control	3	0	3
			<u>15</u>	<u>6</u>	<u>17</u>
<i>Sixth Quarter</i>					
BUS	272	Principles of Supervision	3	2	4
PSY	206	Applied Psychology	3	2	4
FSO	205	Nutrition and Menu Planning II	3	0	3
FSO	206	Financial Management	3	0	3
FSO	212	Food Preparation V	0	6	3
			<u>12</u>	<u>10</u>	<u>17</u>
<i>Seventh Quarter</i>					
BUS	288	Organizing a Small Business	3	4	5
FSO	207	Food Merchandising	2	6	4
FSO	215	Legal Requirements for Food Handlers	3	0	3
FSO	214	Specialty Cooking	2	4	3
FSO	211	Seminar	3	0	3
			<u>13</u>	<u>14</u>	<u>18</u>

LAW ENFORCEMENT

Purpose

The Law Enforcement Curriculum is designed to prepare the student for entry into the field of police work and other allied occupations. Police science vocations have evolved from simple jobs, requiring minimal requirements to highly complex activities requiring great capacity for highly specialized knowledge and techniques.

Applicants to this curriculum must have a physical examination and must submit a reference from any of the following: Sheriff of County in which applicant resides; a Chief of Police; a state or federal law enforcement officer.

Job Description

Job opportunities are abundant on the federal, state, county, and municipal levels. Many industries now employ skilled technicians trained in protective techniques.

Suggested Curriculum By Quarters

			Class	Lab	Hours Credit
<i>First Quarter</i>					
ENG	100	English I	3	2	4
MAT	110	Business Math	5	0	5
PSC	101	Introduction to Law Enforcement	5	0	5
BUS	102	Typewriting	2	3	3
PSC	102	Science of Fingerprinting	3	3	4
			<hr/>	<hr/>	<hr/>
			18	8	21
 <i>Second Quarter</i>					
ENG	101	English II	3	2	4
PSC	111	Police Organization and Administration	3	0	3
PSC	115	Criminal Law I	5	0	5
PSC	110	Crime and Delinquency	5	0	5
PSC	112	Criminal Justice Communications	3	2	4
			<hr/>	<hr/>	<hr/>
			19	4	21
 <i>Third Quarter</i>					
ENG	102	English III	3	2	4
POL	103	National, State and Local Government	3	0	3
PSC	121	Criminal Evidence	5	0	5
PSC	124	Defensive Tactics	2	3	3
PSC	126	Criminal Investigation	5	0	5
			<hr/>	<hr/>	<hr/>
			18	5	20

Fourth Quarter

			Class	Lab	Hours Credit
ENG	204	English IV	3	0	3
PSY	102	General Psychology	5	0	5
PSC	201	Traffic Planning, Management and Control	4	2	5
PSC	204	Criminal Procedure	5	0	5
PSC	202	Traffic Accident Investigations and Reports	3	2	4
			<u>20</u>	<u>4</u>	<u>22</u>

Fifth Quarter

PSC	210	Emergency First Aid	2	3	3
SOC	102	Principles of Sociology	5	0	5
PSC	217	Police Chemistry	4	3	5
PSC	214	Criminal Law II	5	0	5
			<u>16</u>	<u>6</u>	<u>18</u>

Sixth Quarter

PSC	221	Police Techniques	2	3	3
PSC	223	Weapons and Firearms Training	2	3	3
PSC	225	Records and Reports	3	2	4
PSC	228	Seminar	7	2	8
			<u>14</u>	<u>10</u>	<u>18</u>

PRACTICAL NURSE EDUCATION

Purpose

The aim of the Practical Nursing Program is to give qualified persons the opportunity to prepare for participation in care of patients of all ages, in various states of dependency, and with a variety of illness conditions.

Students are selected on the basis of demonstrated aptitude for nursing as determined by pre-entrance tests, interviews with faculty members, high school records, character references, and reports of medical and dental examination.

Evaluation of student performance consists of tests on all phases of course content, evaluation of clinical performance, and evaluation of adjustments to the responsibilities of nursing. A passing score is required on all graded work, plus demonstrated progress in application of nursing skills to actual patient care.

Graduates of accredited programs of practical nurse education are eligible to take the licensing examination given by the North Carolina Board of Nursing. This examination is given twice each year, usually in April and September. A passing score entitles the individual to receive a license and to use a legal title, "Licensed Practical Nurse." The license must be renewed annually. The Licensed Practical Nurse can apply for license in other states on the basis of a satisfactory examination score without repeating the examination.

Job Description

The LPN is prepared to function in a variety of situations: hospitals of all types, nursing homes, clinics, doctors' and dentists' offices and, in some localities, public health facilities. In all situations the LPN functions under supervision of a registered nurse and/or licensed physician. This supervision may be minimal in situations where the patient's condition is stable and not complex, or it may consist of continuous direction in situations requiring the knowledge and skills of the registered nurse or physician. In the latter situation, the LPN may function in an assisting role in order to avoid assuming responsibility beyond that for which the one-year program can prepare the individual.

Suggested Curriculum By Quarters

	Class	Lab	Clinic	Contact Hours	Hours Credit
<i>First Quarter</i>					
Practical Nursing I	300	30	0	330	20
Anatomy and Physiology	46				
Fundamentals of Nursing	120				
Nutrition and Diet	44				
Introduction Drug Administration	35				
Growth and Development	33				
English 1103	22				
<i>Second Quarter</i>					
Practical Nursing II	231	0	154	385	20
Medical-Surgical Nursing I	71				
Maternity Nursing I	50				
Pediatric Nursing I	50				
Drugs and Administration	38				
English 1104	22				

<i>Third Quarter</i>	Class	Lab	Clinic	Contact Hours	Hours Credit
Practical Nursing III Medical-Surgical Nursing II	154	0	231	385	20
Maternity Nursing II	72				
Pediatric Nursing II	20				
Communicable Disease	20				
Drugs and Administration	22				
 <i>Fourth Quarter</i>					
Practical Nursing IV Medical-Surgical Nursing III	154	0	231	385	20
Mental Illness	124				
Vocational Adjustments	20				
Total	10				
	839	30	616	1485	80

RECREATION TECHNOLOGY

Purpose

Recreation Technology is designed to prepare students for staff skills and administrative responsibility in a wide variety of public and private recreational and group work facilities. Specific attention will be given to training in the areas of municipal recreation and outdoor recreation. Opportunity for specialization will be provided through the selection of electives, field work and special in-class projects which relate to settings or groups in which the student has the keenest interest and the most ability.

Applicants must meet all of the requirements for admission to the school. In addition to general school policies, admission requirements, test requirements and transfer credits, students are selected on the basis of demonstrated aptitude and moral character for recreation as determined by interest inventories, pre-entrance tests, high school transcript of grades and activities, interviews with faculty members, a physical examination report and character references.

Acceptance to the program does not carry with it candidacy for the Associate of Applied Science degree. To become a candidate, the student must after one quarter of study in recreation:

- remove any condition of admission to the school
- demonstrate ability to do work at the Associate degree level
- demonstrate leadership ability as determined by standard evaluation procedures
- with an advisor, project the program to completion indicating any remedial work necessary and/or areas of specialization

Throughout the program, there are additional expenses for supplies and incidentals.

Job Description

The recreation industry has become a significant factor in the American economy. Job opportunities are becoming available nearly everywhere that people gather to enjoy their leisure time—resorts; summer camps; scouting; YWCA's and YMCA's; city and county recreation centers; municipal, state and federal parks and playgrounds; industrial and hospital recreation programs—especially for professionally trained recreation leaders.

Suggested Curriculum By Quarters

<i>First Quarter</i>			Class	Lab	Hours Credit
ENG	100	English I	3	2	4
MAT	110	Business Math	5	0	5
*BUS	102	Typewriting	2	3	3
REC	110	Professional Orientation	3	2	4
REC	111	Arts-Crafts-Drama	2	4	4
			15	11	20
<i>Second Quarter</i>					
ENG	101	English II	3	2	4
SSC	201	Social Science	3	2	4
REC	120	Social Recreation Leadership	2	2	3
REC	121	Music-Dance	2	4	4
REC	125	Team Sports	2	4	4
			12	14	19

<i>Thlrd Quarter</i>			Class	Lab	Hours Credit
ENG	102	English III	3	2	4
REC	132	Camp Organization and Management	2	4	4
REC	134	First Aid and Safety	1	2	2
REC	135	Individual Lifetime Sports	2	4	4
		Elective	1	4	3
			<hr/>	<hr/>	<hr/>
			9	16	17

Fourth Quarter

REC	240	Field Studies	0	30	3
REC	247	Skill Performance	3	0	3
REC	248	Orientation and Evaluation	3	0	3
REC	249	Leadership Techniques	3	0	3
			<hr/>	<hr/>	<hr/>
			9	30	12

Fifth Quarter

ENG	204	English IV	3	0	3
BUS	101	Introduction to Business	5	0	5
REC	256	Conservation of Renewable Resources	2	3	3
REC	258	Aquatics	2	4	4
REC	265	Campground Management	2	4	4
		Elective(s)	0	0	0
			<hr/>	<hr/>	<hr/>
			14	11	19

Sixth Quarter

ENG	103	English VI	3	0	3
SSC	202	Social Science	3	2	4
REC	259	Recreation Administration	3	2	4
REC	266	Special Recreation	3	0	3
REC	268	Legal Principles & Practices in Recreation	3	2	4
		Elective(s)	0	4	2
			<hr/>	<hr/>	<hr/>
			15	10	20

Seventh Quarter

REC	273	Recreational Grounds Management	2	4	4
REC	277	State & Federal Lands Management	3	2	4
REC	278	Planning of Recreational Areas, Facilities and Equipment	2	4	4
REC	279	Seminar	3	2	4
		Elective(s)	0	4	2
			<hr/>	<hr/>	<hr/>
			10	16	18

<i>Electives</i>			Class	Lab	Hours Credit
REC	140	Elementary Swimming	0	2	1
REC	141	Intermediate Swimming	0	2	1
REC	142	Senior Life-Saving. Pre.: REC 141	0	2	1
REC	143	Water Safety Instructor. Pre.: REC 142	0	2	1
REC	144	Beginning Canoeing. Pre.: REC 141	1	2	2
REC	145	Intermediate Canoeing. Pre.: REC 141	1	2	2
REC	146	Canoe Camping. Pre.: REC 132, 145	0	4	2
REC	147	Sailing. Pre.: REC 141	0	2	1
REC	241	Intermediate Tennis. Pre.: REC 135	0	2	1
REC	242	Intermediate Hiking. Pre.: REC 132	0	3	1
REC	243	Mountaineering. Pre.: REC 132, 242	1	3	2
REC	244	Snow Skiing-Beginning	0	3	1
REC	118, 119, 128, 129, 138, 139, 158, 159, 168, 169, 178, 179	Field Work I-VI Consent of Advisor Intramurals I-VI	0	2	1
REC	160	Indoor Conditioning Activities	0	3	1

*A proficiency test required
or Psy 102 General Psychology

INDUSTRIAL- VOCATIONAL EDUCATION

AUTOMOTIVE MECHANICS
CARPENTRY
ELECTRONIC ENGINEERING
GENERAL MASONRY
MACHINIST
PLUMBING AND
PIPEFITTING
SURVEYING

AUTOMOTIVE MECHANICS

Purpose

This curriculum provides a training program for developing the basic knowledge and skills needed to inspect, diagnose, repair, or adjust automotive vehicles.

The courses are arranged in a sequence that gives the student the required technological and special skills as they are needed to coordinate with laboratory experiences. A high school diploma is required. Admission to the fifth and sixth quarter must be approved by the instructor. Emphasis is placed on the mechanical parts and operation of the various automobile units. Trouble shooting and servicing is also stressed.

Job Description

Auto Mechanic, Truck and Bus Mechanic, Shop Foreman, Maintenance Supervisor, Dealer, Service Manager, Sales Technician, Factory Representative, and Experimental Lab Worker are among those occupational opportunities awaiting graduates of the Automotive Mechanics Curriculum.

Suggested Curriculum By Quarters

<i>First Quarter</i>	Class	Lab	Hours Credit
PME 1101 Internal Combustion Engines	3	14	7
MAT 1101 Fundamentals of Mathematics	3	0	3
ENG 1101 English A	2	0	2
PHY 1101 Applied Science	3	2	4
ECO 1000 Applied Economics	3	0	3
	<hr style="width: 100%;"/>	<hr style="width: 100%;"/>	<hr style="width: 100%;"/>
	14	16	19

Second Quarter

PME 1102 Engine Electrical and Fuel Systems	5	14	9
PHY 1102 Applied Science	3	2	4
ENG 1102 English B	3	0	3
DFT 1101 Schematics and Diagrams: Power Mechanics	0	3	1
	<hr style="width: 100%;"/>	<hr style="width: 100%;"/>	<hr style="width: 100%;"/>
	11	19	17

Third Quarter

AUT 1123 Automotive Chassis and Suspension Systems	3	12	7
AUT 1101 Small Engine	3	3	4
PSY 1101 Human Relations	3	0	3
WLD 1101 Basic Welding	0	3	1
AUT 1121 Braking Systems	0	3	1
	<hr style="width: 100%;"/>	<hr style="width: 100%;"/>	<hr style="width: 100%;"/>
	9	21	16

		Class	Lab	Hours Credit	
<i>Fourth Quarter</i>					
AUT	1124	Automotive Power Train Systems	3	9	6
BUS	1103	Small Business Management	3	0	3
AUT	1125	Automotive Servicing	3	7	5
AHR	1101	Air Conditioning Systems	2	3	3
			<u>11</u>	<u>19</u>	<u>17</u>

Fifth Quarter

AUT	1201	Practical Shop I	0	27	9
AUT	1205	Automotive Seminar I	3	0	3
			<u>3</u>	<u>27</u>	<u>12</u>

Sixth Quarter

AUT	1202	Practical Shop II	0	27	9
AUT	1206	Automotive Seminar II	3	0	3
			<u>3</u>	<u>27</u>	<u>12</u>

CARPENTRY

Purpose

The curriculum in carpentry is designed to train the individual to enter the trade with a background in both shop skills and related information. He must have a knowledge of mathematics, blueprint reading, methods of construction and a thorough knowledge of building materials.

The modern carpenter will work on new construction, maintenance, and repair of many types of structures, both residential and commercial.

Job Description

Most carpenters are employed by contractors in the building construction fields. When specializing in a particular phase of carpentry, the job is designated according to the specialty such as layout carpenter, framing carpenter, concrete form carpenter, scaffolding carpenter, accoustical and insulating carpenter, and finish carpenter.

Suggested Curriculum By Quarters

<i>First Quarter</i>		Class	Lab	Hours Credit
MAT	1112 Mathematics: Building Trades	5	0	5
DFT	1110 Blueprint Reading: Building Trades	0	3	1
CAR	1101 Basic Carpentry	5	17	10
		<hr/>	<hr/>	<hr/>
		10	20	16
<i>Second Quarter</i>				
ENG	1106 Fundamentals of English	5	0	5
CAR	1113 Carpentry: Estimating	3	2	4
CAR	1103 Carpentry: Framing	5	15	10
		<hr/>	<hr/>	<hr/>
		13	17	19
<i>Third Quarter</i>				
BUS	1103 Small Business Management	3	0	3
CAR	1104 Carpentry: Finishing	5	16	10
CAR	1114 Building Codes & Specifications	3	3	4
		<hr/>	<hr/>	<hr/>
		11	19	17
<i>Fourth Quarter</i>				
CAR	1106 Millwork and Cabinet Making	5	15	10
CAR	1108 Building Safety	3	0	3
CAR	1109 Seminar: Special Techniques	2	5	4
		<hr/>	<hr/>	<hr/>
		10	20	17

ELECTRONICS ENGINEERING TECHNOLOGY

Purpose

The field of electronics has undergone tremendous growth and a complete revolution in both theory and practice during the last twenty-five years. Today's electronic technician must possess a solid foundation in the scientific theory of electronics as well as a high aptitude in applied and field skills. He is the individual most often required to build, install, maintain, and operate the sophisticated equipment and systems that are produced by scientists and engineers.

STI believes strongly in technical proficiency. At the same time, it is realized that the graduate is first a citizen in his chosen community and while involved with technical studies he is also required to participate in classes and activities designed to keep him active in civic affairs.

Job Description

In acquiring the Associate in Applied Science degree, the graduate is assured of a technical proficiency that opens literally thousands of doors for him in manufacturing, laboratory research, data gathering, and field engineering. These opportunities exist world-wide and the demand is growing daily, thus assuring the electronic technician a wide choice of types of work as well as geographic locations. The graduate is also assured of very attractive salaries that are considerably higher than most positions in industry requiring an A.A.S. degree.

Suggested Curriculum By Quarters

			Class	Lab	Hours Credit
<i>First Quarter</i>					
ENG	100	English I	3	2	4
MAT	115	Electrical Math I	5	0	5
ELC	102	D. C. Fundamentals	5	7	8
DFT	107	Schematic Drawing I	1	2	2
			<hr/>	<hr/>	<hr/>
			14	11	19
 <i>Second Quarter</i>					
ENG	101	English II	3	2	4
MAT	116	Electrical Math II	5	0	5
ELC	104	A. C. Fundamentals	5	7	8
DFT	108	Schematic Drawing II	1	2	2
			<hr/>	<hr/>	<hr/>
			14	11	19
 <i>Third Quarter</i>					
ENG	102	English III	3	2	4
MAT	117	Electrical Math III	5	0	5
ELN	101	Electronics I	5	7	8
PHY	101	Physics I	3	2	4
			<hr/>	<hr/>	<hr/>
			16	11	21

<i>Fourth Quarter</i>			Class	Lab	Hours Credit
ELN	106	Entertainment Systems	5	10	10
ELN	108	Mechanical Circuit Layout	2	2	3
PSY	102	General Psychology	3	0	3
		Elective	3	0	3
			<hr/>	<hr/>	<hr/>
			13	12	19

<i>Fifth Quarter</i>					
ENG	204	English IV	3	0	3
ELN	201	Electronics II	5	10	10
ELN	203	Pulse Circuits	3	0	3
PHY	102	Physics II	3	2	4
			<hr/>	<hr/>	<hr/>
			14	12	20

<i>Sixth Quarter</i>					
ELN	204	Electronics III	5	10	10
ELN	210	T.V. Systems Analysis	3	2	4
PHY	103	Physics III	3	2	4
			<hr/>	<hr/>	<hr/>
			11	14	18

<i>Seventh Quarter</i>					
ELN	207	Electronics IV	5	10	10
ELN	214	Electronic Instrumentation	0	3	1
ELN	216	Industrial Electronics	3	0	3
		Elective	3	2	4
			<hr/>	<hr/>	<hr/>
			11	15	18

<i>Electives</i>					
ELN	220	Antenna Design	3	0	3
ELN	121	International Morse Code	0	6	3
ELN	222	Special Project Building	0	5	2
ELN	225	Advanced Troubleshooting Procedures	3	2	4
ELN	125	FCC Exam Preparation	5	0	5

GENERAL MASONRY

Purpose

The masonry course offers students training in various aspects of the trowel trades and includes instruction in brick and block work. The curriculum includes related study in mathematic, blueprint reading, and estimating.

On final completion of the six months program, a certificate will be awarded the graduate.

Job Description

Opportunities for employment in various types of masonry construction are numerous. Demand for bricklayers, blocklayers, and tile setters is on the increase as the building industry expands.

Suggested Curriculum By Quarters

		Class	Lab	Hours Credit	
<i>First Quarter</i>					
MAS	1000	Masonry Shop	2	20	9
MAS	1001	Blueprint Reading and Mathematics	5	0	5
ECO	1000	Applied Economics	3	0	3
			<hr/>	<hr/>	<hr/>
			10	20	17
 <i>Second Quarter</i>					
MAS	1010	Masonry Shop	2	23	10
MAS	1002	Advanced Blueprint Reading and Mathematics	5	0	5
			<hr/>	<hr/>	<hr/>
			7	23	15
 <i>Electives</i>					
MAS	1004	Fireplace Construction	0	3	1

MACHINIST

Purpose

This curriculum was prepared to meet a definite need for training of machinists. Surveys recently completed in North Carolina show that many of the existing industries lack time and facilities for training enough machinists to meet present and planned needs. Expanding industries already located in our State and new industries under development invariably express the need for skilled craftsmen who have the background knowledge and potential to advance.

This guide is designed to give learners the opportunity to acquire basic skills and the related technical information necessary to gain employment and build a profitable career in the machine shop industry in the State. It is comprised of the joint views of committees responsible for its development.

Job Description

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

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

Suggested Curriculum By Quarters

<i>First Quarter</i>		Class	Lab	Hours Credit
MEC	1101 Machine Shop Theory and Practice I	3	12	7
MAT	1101 Fundamentals of Mathematics	5	0	5
DFT	1102 Blueprint Reading: Mechanical	0	3	1
ENG	1101 English A	2	0	2
PHY	1101 Applied Science	3	2	4
		—	—	—
		13	17	19
<i>Second Quarter</i>		Class	Lab	Hours Credit
MEC	1102 Machine Shop Theory and Practice II	3	12	7
MAT	1103 Geometry	3	0	3
DFT	1103 Blueprint Reading: Mechanical	0	3	1
PHY	1102 Applied Science	3	2	4
ENG	1102 English B	3	0	3
		—	—	—
		12	17	18

		Class	Lab	Hours Credit
<i>Third Quarter</i>				
MEC	1103 Machine Shop Theory and Practice III	3	12	7
MEC	1115 Treatment of Ferrous Metals	2	3	3
DFT	1108 Blueprint Reading: Mechanical	0	3	1
MAT	1104 Trigonometry	3	0	3
PSY	1101 Human Relations	3	0	3
		<hr/>	<hr/>	<hr/>
		11	18	17

Fourth Quarter

MEC	1104 Machine Shop Theory and Practice IV	3	12	7
MEC	1116 Treatment of Non-Ferrous Metals	2	3	3
WLD	1101 Basic Gas Welding	0	3	1
MAT	1123 Machinist Mathematics	3	0	3
BUS	1105 Industrial Organizations	3	0	3
		<hr/>	<hr/>	<hr/>
		11	18	17

PLUMBING AND PIPEFITTING

Purpose

The curriculum in plumbing and pipefitting is designed to give the student the knowledge and basic skills to perform effectively. Courses in plumbing as theoretical information. Other courses in communication skills, physics, human relations and business operations are provided to assist the individual in occupational growth.

Job Description

A substantial proportion of plumbers are self-employed or work for plumbing contractors doing repair, alteration, or modernization work. Some plumbers install and maintain pipe systems for government agencies and public utilities, and some work on the construction of ships and aircraft. Pipefitters, in particular, are employed as maintenance personnel in the petroleum, chemical, and food-processing industries.

Plumbers are employed by contractors in the building construction fields to install pipe systems which carry water, steam, air and other liquids or gases for sanitation, heating, industrial production and various other uses. They also alter and repair existing pipe systems and install plumbing fixtures, appliances, and heating refrigeration units.

Plumbing and pipefitting are sometimes considered to be a single trade. Journeymen in this field can specialize in either one. Water, gas, and waste disposal systems are installed by plumbers. Pipefitters install both high and low pressure pipes that carry hot water, steam, and other liquids as gases, especially those in industrial and commercial buildings and defense establishments, such as missile launching and testing sites.

Suggested Curriculum By Quarters

<i>First Quarter</i>				Class	Lab	Hours Credit
ENG	1101	English A		2	0	2
PHY	1101	Applied Science		3	2	4
DFT	1110	Blueprint Readings: Building Trades		0	3	1
MAT	1101	Fundamentals of Math		3	0	3
PLU	1110	Plumbing Pipework		5	12	9
				13	17	19
<i>Second Quarter</i>						
ENG	1102	English B		3	0	3
PHY	1102	Applied Science		3	2	4
DFT	1115	Blueprint Reading: Plumbing Trades		3	0	3
PLU	1111	Domestic Cold Water Systems		2	9	5
PLU	1113	Domestic Hot Water Systems		6	2	7
				17	13	22
<i>Third Quarter</i>						
PSY	1101	Human Relations		3	0	3
DFT	1116	Plumbing Drawings: Residential		6	0	6
PLU	1112	Installation of Plumbing Fixtures: Residential		0	9	6
PLU	1100	Soldering and Silver Soldering		3	9	6
				12	18	21

		Class	Lab	Hours Credit
<i>Fourth Quarter</i>				
		3	0	3
BUS	1103	2	3	3
PLU	1126	3	6	5
PLU	1114	3	7	5
WLD	1141	3	0	3
PLU	1118	—	—	—
		14	16	19
<i>Fifth Quarter</i>				
		3	0	3
ECO	1000	3	3	4
PLU	1105	3	6	5
DFT	1117	3	9	6
WLD	1104	—	—	—
		12	18	18
<i>Sixth Quarter</i>				
		3	0	3
MAT	1114	2	9	5
PLU	1101	3	3	4
DFT	1118	3	7	6
PLU	1125	—	—	—
		11	19	18
<i>Seventh Quarter</i>				
		2	6	4
PLU	1120	3	9	6
AHR	1116			
PLU	1123	3	7	5
		—	—	—
		8	22	15
<i>Eighth Quarter</i>				
		3	10	6
PLU	1121	3	0	3
ISC	1101	3	4	4
PLU	1131	3	4	4
PLU	1132	—	—	—
		12	18	17

SURVEYING

Purpose

This curriculum is designed to give the students knowledge of the fundamentals of surveying. The course covers the legal principles of boundary controls as well as practical surveying.

Plane, land, topographical, route, building, and road construction surveying are covered in the course. Mapping, drafting, blueprint reading and applied mathematics are included.

This curriculum is recognized by the North Carolina State Board of Registration for Professional Engineers and Land Surveyors. Successful completion of the program is accepted as one year's credit toward the statutory experience requirement for registration as a Land Surveyor.

Job Description

With the tremendous growth of road construction, real estate business and industry, employment, opportunities are found with state and federal agencies, private contractors, engineering firms, industries and private land surveyors. Classes meet in the evening—field work on Saturday.

Suggested Curriculum By Quarters

<i>First Quarter</i>				Class	Lab	Field	Hours Credit
CIV	101	Surveying I		1	3	4	3½
MAT	100	Basic Mathematics		4	0	0	4
				—	—	—	—
				5	3	4	7½
<i>Second Quarter</i>							
DFT	105	Surveying Drafting		2	2	0	3
MAT	101	Technical Mathematics I		5	0	0	5
ECO	101	Survey of Economics		3	0	0	3
				—	—	—	—
				10	2	0	11
<i>Third Quarter</i>							
CIV	102	Surveying II		1	3	4	3½
MAT	102	Technical Mathematics II		5	0	0	5
				—	—	—	—
				6	3	4	8½
<i>Fourth Quarter</i>							
CIV	103	Surveying III		1	3	4	3½
CIV	100	Boundary Control		4	0	0	4
				—	—	—	—
				5	3	4	7½

COURSE DESCRIPTIONS

AIR CONDITIONING AND REFRIGERATION (AHR)

AHR 1101—AIR CONDITIONING SYSTEMS

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. Prerequisite: PHY 1102.

AHR 1116—OIL BURNER INSTALLATION

Burner fundamentals, high pressure gun-type burners, pressure regulating valves, nozzles, fans and air control devices, low-pressure atomization burners, rotary burners, vaporization pot-type burners, thermostats, pressure burner controls, vaporizing burner controls. Service and maintenance.

AUTOMOTIVE (AUT)

AUT 1101—SMALL ENGINES

The purpose of this course is to teach the why and how of gasoline engine operations. A careful study of the theory and operating principles, plus actual practice in servicing and repairing engines will enable anyone to minimize engine troubles and to correct those troubles that do exist. The course will deal with small engines. Multicylinder engines will be included.

AUT 1121—BRAKING SYSTEMS

Braking principles are studied in relation to the coefficients of friction and heat, and the expansion of materials. The operating principles of hydraulic, pneumatic, combination, and vacuum brake systems are emphasized. Laboratory instruction is offered in the installation of brake lining shoes, shoe reconditioning, drum turning, assembling and adjusting of brake systems and servicing of auxiliary units.

AUT 1123—AUTOMOTIVE CHASSIS AND SUSPENSION SYSTEMS

Principles and functions of the components of automotive chassis. Practical job instruction in adjusting and repairing of suspension, and steering systems. Units to be studied will be shock absorbers, springs, steering systems, steering linkage, and front end and alignment. Prerequisite: PME 1102.

AUT 1124—AUTOMOTIVE POWER TRAIN SYSTEMS

Principles and functions of automotive power train systems, clutches, transmission gears, torque converters, drive shaft assemblies, rear axles and differentials. Identification of troubles, servicing, and repair. Prerequisites: PHY 1102, AUT 1123.

AUT 1125—AUTOMOTIVE SERVICING

Emphasis is on the shop procedures necessary in determining the nature of troubles developed in the various component systems of the automobile. Extensive use of testing equipment will be made on the actual problem situations. A close simulation to the actual automotive shop will be maintained and every close effort will be made to give the student a full range of testing and servicing experience. Prerequisites: AUT 1121, 1123, 1124.

AUT 1201—PRACTICAL SHOP I

A program that exposes the student to the unpredictable total car problems that occur on a day-to-day basis in a working shop. It is designed to provide the student with the opportunity to pull together and develop their skills in a working situation.

AUT 1202—PRACTICAL SHOP II

A continuation of AUT 1201

AUT 1205—AUTOMOTIVE SEMINAR I

Students meet with instructor to discuss problems and explore the deeper theoretical and practical concepts involved in advanced servicing.

AUT 1206—AUTOMOTIVE SEMINAR II

A continuation of AUT 1205.

BUSINESS ADMINISTRATION (BUS)

BUS 101—INTRODUCTION TO BUSINESS

A survey of the business world with particular attention devoted to the structure of the various types of business organizations, methods of financing, internal organization, and management.

BUS 102—TYPEWRITING I

Introduction to the touch typewriting system with emphasis on correct techniques, mastery of the keyboard, simple business correspondence, tabulation, and manuscripts.

BUS 103—TYPEWRITING II

Instruction 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. Prerequisite: BUS 102 or the equivalent. Speed requirement, 30 words per minute for five minutes.

BUS 104—TYPEWRITING III

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. Prerequisite: BUS 103 or the equivalent. Speed requirement, 40 words per minute for 5 minutes.

BUS 106—SHORTHAND I

A 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

Continued study of theory with greater emphasis on dictation and elementary transcription. Prerequisite: BUS 106 or equivalent.

BUS 108—SHORTHAND III

Theory and speed building. Introduction to office style dictation. Emphasis on development of speed in dictation and accuracy in transcription. Prerequisite: BUS 107.

BUS 110—OFFICE MACHINES

A general survey of the business and office machines. Students will receive training in the techniques, processes, operation and application of the ten-key adding machines, full keyboard adding machines, and calculator.

BUS 112—FILING

Fundamentals of indexing and filing, combining theory and practice by the use of miniature letters, filing boxes and guides. Alphabetic, Triple Check, Automatic, Geographic, Subject, Soundex and Dewey Decimal filing.

BUS 115—BUSINESS LAW I

A general course designed to acquaint the student with certain fundamentals and principles of business law, including contracts, negotiable instruments, and agencies.

BUS 116—BUSINESS LAW II

Includes the study of laws pertaining to bailments, sales, risk-bearing, partnership-corporation, mortgages, and property rights. Prerequisite: BUS 115.

BUS 120—ACCOUNTING I

Principles, techniques and tools of accounting, for understanding of the mechanics of accounting. Collecting, summarizing, analyzing and reporting information about service and mercantile enterprises, to include practical application of the principles learned. Prerequisite: MAT 110.

BUS 121—ACCOUNTING II

Partnership and corporation accounting including a study of payrolls, federal and state taxes. Emphasis is placed on recording, summarizing, and interpreting 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—ACCOUNTING III

Study of long term liabilities and investments, analysis of financial statements, cost, budgets and flow of funds. Prerequisite: BUS 121.

BUS 123—BUSINESS FINANCE

Financing of business units, as individuals, partnerships, corporations, and trusts. A detailed study is made of short-term and consumer financing.

BUS 124—PERSONAL FINANCE

A study of money management in personal and family affairs. The course includes business management and economics principles as they relate to personal finance, consumerism, family budgets, buying techniques, and saving and investment programs for individual and family use.

BUS 183—TERMINOLOGY AND VOCABULARY

Develops an understanding of the terminology and vocabulary appropriate to the course of study, as it is used in business, technical, and professional offices.

BUS 205—ADVANCED TYPEWRITING

Emphasis is placed on the development of individual production rates. The student learns the techniques needed in planning and in typing projects that closely approximate the work appropriate to the field of study. These projects include review of letter forms, methods of duplication, statistical tabulation, and the typing of reports, manuscripts, and legal documents. Prerequisite: BUS 104. Speed requirements, 50 words per minute.

BUS 206—DICTATION AND TRANSCRIPTION I

Develops the skill of taking dictation and of transcribing at the typewriter materials appropriate to the course of study, which includes a review of the theory and the dictation of familiar and unfamiliar material at varying rates of speed. Minimum dictation rate of 100 words per minute required for five full minutes. Prerequisite: BUS 108.

BUS 207—DICTATION AND TRANSCRIPTION II

Covering materials appropriate to the course of study, the student develops the accuracy, speed and vocabulary that will enable her to meet the stenographic requirements of business and professional offices. Minimum dictation rate of 110 words per minute. Prerequisite: BUS 206.

BUS 208—DICTATION AND TRANSCRIPTION III

Principally a speed building course, covering materials appropriate to the course of study, with emphasis on speed as well as accuracy. Minimum dictation rate of 120 words per minute. Prerequisite: BUS 207.

BUS 211—OFFICE MACHINES AND MACHINE TRANSCRIPTION

Instructions in the operation of the bookkeeping-accounting machines, continued duplicating equipment, and the dictation and transcribing machines. Practice in increasing speed and efficient utilization of office machines. Prerequisite: BUS 110.

BUS 214—SECRETARIAL PROCEDURES

Designed to acquaint the student with the responsibilities encountered by a secretary during the work day. These include the following: receptionist duties, handling the mail, telephone techniques, travel information, telegrams, office records, purchasing of supplies, office organization, and insurance claims.

BUS 215—OFFICE APPLICATIONS

During the fourth quarter, students are assigned to work in a business or professional office for a minimum of 30 hours per week. The objective is to provide actual work experience for secretarial students and an opportunity for the practical application of the skills and knowledge previously learned. Prerequisite: All course requirements of the first 3 quarters or approval of the department head.

BUS 216—ORIENTATION AND EVALUATION

On the first day of the quarter, the students will meet as a group with the supervisor for work experience orientation. The students will meet again with the supervisor, both as a group and individually, at the end of the quarter the final evaluation discussions. The employer will fill out progress reports and

rating sheets on each student to aid in this final evaluation. Prerequisite: All course requirements of the first 3 quarters or approval of the department head.

BUS 217—SKILL PERFORMANCE AND PRODUCTION

The objective is to further develop and give hands-on experience in skill and production areas. The supervisor will visit each student on the job to measure the student's performance in both areas. Prerequisite: All course requirements of the first 3 quarters or approval of the department head.

BUS 218—BUSINESS TECHNIQUES

The objectives are to further develop and give hands-on experiences in business techniques and to help the student improve and become aware of the importance of desirable personal traits. Business techniques, abilities and personal traits will be measured by the supervisor during on-the-job visits with the students. Prerequisite: All course requirements of the first 3 quarters or approval of the department head.

BUS 222—INTERMEDIATE ACCOUNTING I

Through treatment of the field of general accounting, providing the necessary foundation for specialized studies that follow. The course includes among other aspects, the balance sheet, income and retained earnings statements, fundamental processes of recording, cash and temporary investments, and analysis of working capital. Prerequisite: BUS 122.

BUS 223—INTERMEDIATE ACCOUNTING II

Additional study of intermediate accounting with emphasis on investments, plant and equipment, intangible assets and deferred charges, long-term liabilities, paid in capital, retained earnings, and special analytical processes. Prerequisite: BUS 222.

BUS 224—INTERMEDIATE ACCOUNTING III

Interpreting accounting data for managerial decisions. Budget preparations. Prerequisite: BUS 225.

BUS 225—COST ACCOUNTING

Nature and purposes of cost accounting; accounting for direct labor materials and factory overhead; job cost and standard cost principles and procedures; selling and distribution cost, budgets and executive use of cost figures. Prerequisite: BUS 122.

BUS 227—ACCOUNTING SYSTEMS

Design and development of an accounting system for a small business. Prerequisite: BUS 223.

BUS 229—INCOME TAXES I

Application of federal and state taxes to various businesses and business conditions. A study of the following taxes: income, payroll, intangible, capital gain, sales and use, excise, and inheritance.

BUS 231—INCOME TAX II

Continuation of BUS 229 with practical experience.

BUS 232—SALES DEVELOPMENT

A study of retail, wholesale and specialty selling. Emphasis is placed upon mastering and applying the fundamentals of selling. Preparation for and execution of sales demonstrations required.

BUS 235—BUSINESS MANAGEMENT

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

A general survey of the field of marketing, with a detailed study of the functions, policies, and institutions involved in such marketing process.

BUS 243—ADVERTISING

The role of advertising in a free economy and its place in the media of mass communications. A study of advertising appeals, product and market research, selection of media, means of testing effectiveness of advertising. Theory and practice of writing advertising copy or various media.

BUS 244—RETAIL MANAGEMENT

A study of the operations of a retail firm including: merchandising, buying, selling, advertising, and related functions such as financial management.

BUS 247—BUSINESS INSURANCE

A presentation of the basic principles of risk insurance and their application. A survey of the various types of insurance is included. Prerequisite: BUS 115.

BUS 248—ECONOMICS I

The 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 both in relation to the individual enterprise and to society at large.

BUS 249 ECONOMICS II

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: BUS 248.

BUS 261—MANUFACTURING CYCLES

Purchasing and distribution costs; consumption patterns, channels of distribution; marketing of consumer goods; shopping, specialty, agricultural and industrial goods; service marketing; functional middlemen; speculation and hedging; wholesaling shipping and warehousing; exporting and trade movements; standardization and grading; pricing government regulation of competition; sales promotional activities; merchandising practices.

BUS 263—QUALITY CONTROL

Principles and techniques of quality control and cost saving. Organization and procedure for efficient quality control. Functions, responsibilities, structure, costs, reports, records, personnel and vendor-customer relationships in quality control. Sampling inspections, process control and tests for significance.

BUS 264—JOB ANALYSIS

This study is based on product studies as well as personnel and wage program. The course utilizes the study of product design, value analysis, materials and processes as an intricate part of productive procedures.

BUS 265—WORK MEASUREMENT

Principles of work simplification including administration of job methods improvement, motion study fundamentals and time study techniques. Use of flow and process charts; multiple activity charts, operation charts, flow diagrams and methods evaluation.

BUS 266—VALUE ANALYSIS

The modern concept in the control of manufacturing production. This course will provide the students an opportunity to study a production system with the specific purpose of identifying unnecessary costs. The objective of the concepts and techniques of value analysis is to make possible a degree of effectiveness in identifying and removing unnecessary cost by the use of sound decisions through a common sense approach.

BUS 267—PRODUCTION PLANNING

Day-to-day plant direction, forecasting, product planning and control, scheduling, dispatching, routing, and inventory control. Case histories are discussed in the classroom, and courses of corrective action are developed. Drafting room layout for planning and control.

BUS 268—PLANT LAYOUT

A practical study of factory planning with emphasis on the most efficient arrangements of work areas to achieve lower manufacturing costs. Layouts for small and medium sized plants, layout fundamentals, selection of production equipment and materials handling equipment. Effective management of men, money and materials in a manufacturing operation.

BUS 269—INDUSTRIAL SAFETY

Problems of accidents and fire in industry. Management and supervisory responsibility for fire and accident prevention. Additional topics cover accident reports and the supervisor; good housekeeping and fire prevention; machine

guarding and personnel protective equipment; state industrial accident code and fire regulations; the first aid department and the line of supervisory responsibility; job instruction and safety committees; insurance carrier and the Insurance Rating Bureau; and advertising and promoting a good safety and fire prevention program. The Occupational Safety and Health Act of 1970 will also be covered.

BUS 271—OFFICE MANAGEMENT

Presents the fundamental principles of office management. Emphasis on the role of office management including its functions, office automation, planning, controlling, organizing and actuating office problems.

BUS 272—PRINCIPLES OF SUPERVISION

Introduces the basic responsibilities and duties of the supervisor and his relationship to superiors, subordinates, and the associates. Emphasis on securing effective work force and the role of the supervisor. Methods of supervision are stressed.

BUS 273—PERSONNEL MANAGEMENT

Principles of organization and management of personnel, procurement, placement, training, performance checking, supervision, remuneration, labor relations, fringe benefits and security.

BUS 274—SEMINAR ON MANAGEMENT PROBLEMS

Designed to permit each student to participate in discussions of management problems and solutions.

BUS 275—SEMINAR ON MARKETING PROBLEMS

Designed to permit each student to participate in discussions of marketing problems and solutions.

BUS 278—LABOR ECONOMICS

Current labor problems and theories; the labor market; the development of labor unions; wage theories and the development of effective labor and wage policies. Prerequisite: BUS 249.

BUS 288—ORGANIZING A SMALL BUSINESS

A study of the problems in the fields of organization, personnel, finance, sales outlets price policies, regulations by governments, and taxation. In a special project, the students will simulate the procedures of organizing a small business.

BUS 1103—SMALL BUSINESS MANAGEMENT

An introduction to the business world, problems of small business operation, basic business law, business forms and records, financial problems, orders and inventories, layout of equipment and offices, methods of improving business, and employer-employee relations.

BUS 1105—INDUSTRIAL ORGANIZATIONS

Methods, techniques, and practices of modern management in planning, organizing and controlling operations of a manufacturing concern. Introduction to the competitive system and the factors constituting product cost.

CARPENTRY (CAR)

CAR 1101—BASIC CARPENTRY

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

CAR 1103—CARPENTRY-FRAMING

A thorough introduction to the principles and practices of frame construction including sills, floor joist, subfloor, wall framing, ceilings, rafters bridging, sheathing partitions, and roof construction. Coordination with other skills will be stressed. Prerequisite: CAR 1101.

CAR 1104—CARPENTRY-FINISHING

Methods and techniques of interior and exterior finishing will be covered including baseboards, door and window trim, stairways, door and window hanging, hardware, exterior trim, built-ins; emphasis will be on quality work. Prerequisites: CAR 1113, CAR 1103

CAR 1106—MILLWORK AND CABINET MAKING

Cabinet making and millwork as performed by the general carpenter for building construction. Use of shop tools and equipment will be emphasized in learning methods of construction of millwork and cabinetry. Practical applications will include measuring, layout and construction of base and wall cabinets, built-ins, arches, stairs, and interior and exterior cornice and trim. Materials and finishes are also covered.

CAR 1108—BUILDING SAFETY

All aspects of personal safety and proper job procedures are examined including a careful analysis of the Occupational Safety and Health Act as it applies to the construction trades.

CAR 1109—SEMINAR: SPECIAL TECHNIQUES

A course designed to cover those general problems of construction not covered in the specific courses, including: coordination with other trades for smooth work flow and special problems encountered in light commercial construction.

CAR 1113—CARPENTRY-ESTIMATING

A practical course in job estimating from basic data and working drawings. Student will work with quantities and grades of materials and develop cash estimates. Prerequisites: MAT 1101, CAR 1101

CAR 1114—BUILDING CODES

A thorough study of the building code requirements of city, county, state and federal agencies, and their application. Prerequisites: CAR 1113, 1103.

COMMERCIAL ART (CAT)

CAT 100—ART ORIENTATION

Designed to aid the student in the understanding of the technical institute. Faculty and staff members explain the various functions of the institute. Exercises in developing study habits, writing and research techniques are completed by the students.

CAT 101—ADVERTISING PRINCIPLES

A comprehensive survey of the history and development of advertising including a discussion of its economic and social values. An introduction to advertising media and current publications in the field.

CAT 102—ART AND DESIGN

The plastic elements; Relationship of the Arts; Problems in Basic Design; Relationships of Materials and Techniques to form; Color Theory; Applied Problems.

CAT 105—LIFE STUDY

Basic drawing in charcoal from the live model with emphasis on proportions, bone structure, muscles and main body masses.

CAT 106—LIFE STUDY

A continuation and application of basic life study. Action and motion of figure, study of character, expression and the draped figure. Introducing various drawing techniques such as pen and ink, wash, pastels and paint. Prerequisite: CAT 105.

CAT 110—GENERAL ILLUSTRATION

Study of creative methods and rendering techniques used in the illustration field. Editorial illustration, advertising spots, cartooning, fashion and retail product. Black and white and color problems will be assigned, using various media and materials. Emphasis on good drawing and research.

CAT 116—PHOTOGRAPHY I

An introduction to the field of photography, photographic equipment and materials. A study of the fundamental techniques of the camera and its ex-

pressive possibilities in relation to the field of design and visual communications. Assigned camera projects, darkroom procedures and equipment.

CAT 117—PHOTOGRAPHY II

Advanced photographic techniques and materials. Participation in studio and laboratory procedures illustrating various applications and creative possibilities of photography. Applied problems using the 35mm, copy and twin lens reflex cameras.

CAT 121—COMMERCIAL ART AND ADVERTISING DESIGN I

Basic design fundamentals. Emphasis is on form, line, dimension and composition. The relation of nature and fine art to commercial art and design. Basic lettering form and style. Rough and finished lettering techniques.

CAT 122—COMMERCIAL ART AND ADVERTISING DESIGN II

Basic color fundamentals and principals. The color wheel. Introduction of color into basic design problems. Typography; background, faces, uses, terms and specifying. Typographic design, indication and layout for type-setter. Prerequisite: CAT 121.

CAT 123—COMMERCIAL ART AND ADVERTISING DESIGN III

Professional approach to advertising and editorial layout. The indicating of finished art concepts, visuals, and ideals. Pencil roughs, colored sketches and comprehensive layouts. Prerequisites: CAT 122, DFT 102.

CAT 201—ART HISTORY

An examining of ideas, philosophies common to all periods of Art History, and a comparison of periods in terms other than chronological development.

CAT 205—ADVERTISING COPYWRITING AND FITTING

A study of the techniques used in creating effective advertising copy for various types of media; purposes and duties of the copywriting and legal problems encountered in copywriting. Theory and practice will be given in writing copy for the various media including retail and fashion copy, mail order, direct mail, business, publications, radio and television.

CAT 206—PROJECT SEMINAR

Each student selects and pursues project work in the field of his choice. Maximum individual attention is available.

CAT 212—INDUSTRIAL ART AND DESIGN

A study of art and design for industry and business. Forms, charts and graphs, letterhead, trademarks and company publications. Use of the airbrush, photo retouching and airbrush art. Handling of annual reports. Prerequisite: CAT 123.

CAT 217—SILK SCREEN TECHNIQUES

Commercial approach to silk screen printing. Applied problems using paper, tusche and glue, lacquer, film, aquafilm, and photographic film methods. Problems in multicolor printing.

CAT 224—COMMERCIAL ART AND ADVERTISING DESIGN IV

A thorough background in production methods for various media. Study of printing and engraving processes. Color separation process. Assignments in art mechanicals, reproduction methods and printing paper qualities and selection. Trips to printing, engraving and paper plants. Prerequisite: CAT 123.

CAT 225—COMMERCIAL ART I

First phase of a course providing simulated professional working conditions. The student will utilize all previous instruction "job" assignments. Work will start the students individual portfolio of professional samples. There will be class critique and discussion of assignments and solutions.

CAT 226—COMMERCIAL ART II

Second phase of course providing simulated professional working conditions. Advanced "job" problems. Emphasis on self-expression and originality. The student will complete his professional portfolio. Prerequisite: CAT 225.

CAT 227—FASHION ILLUSTRATION

Drawing the fashion figure, and employing basic types of rendering used in fashion advertising.

CAT 231—PROJECT SEMINAR

Each student selects and pursues project work in the field of his choice. Maximum individual attention is available.

CAT 232—PROJECT SEMINAR

Individual attention is given each student in the areas of learning which need strengthening. Project development is stressed.

CAT 235—ADVERTISING ART DIRECTION

A study of the art director's profession. The creating and coordinating of effective advertising campaigns and editorial designs for both national and local markets. The practical consideration, procedures and job opportunities restrictions. Media selection, frequency of insertion, direct mail and response. The value of market research. Emphasis on dealing with professionals in related fields.

COSMETOLOGY (COS)

COS 1001—SCIENTIFIC STUDY I

An introduction to the field of cosmetology. Subjects covered include professional ethics, grooming, hygiene and personality development, sterilization, sanitation, first aid and bacteriology, cosmetology law, anatomy, chemistry, nails, hair, scalp and skin disorders.

SOC 1002—SCIENTIFIC STUDY II

Theory of skin, scalp, hair, nails and disorders, salesmanship, permanent waving, croquignole and chemical hair relaxing, hairdressing and wig styling, hair coloring.

COS 1003—SCIENTIFIC STUDY III

Theory of anatomy, manicuring, chemistry of cosmetics and facials, hair styling, massage scalp treatments, superfluous hair removal and grooming and hygiene.

COS 1004—SCIENTIFIC STUDY IV

Theory of skin, scalp, hair, nails and disorders, salesmanship, permanent wavestyling, beauty salon management, electricity, hair shaping, chemistry, sanitation and sterilization, cold waving.

COS 1011—MANNEQUIN PRACTICE

An introduction to the practice of fingerwaving, pin curling, rollers, marcelling and hair relaxing, shampooing and rinses, scalp treatment, hair shaping, permanent waving, hairdressing and combing, hair tinting, bleaching, frosting and streaking, wigs—care and styling.

COS 1022—CLINICAL APPLICATION I

An introduction to actual clinical practice covering bacteriology, pin curling, finger waving and rollers, permanent waving, hair styling and wigs, manicuring and pedicuring, skin and scalp disorders, coloring, shaping.

COS 1033—CLINICAL APPLICATION II

Shop practice in hair shaping, professional ethics, manicuring, cosmetics and facials, hairstyling, cold waving, hair coloring and scalp treatment.

COS 1044—CLINICAL APPLICATION III

Advanced shop techniques in hair coloring and lash and brow tinting, artistry in hairstyling and wigs, cold waving, hair shaping, sterilization, sanitation and chemistry.

DRAFTING (DFT)

DFT 101—TECHNICAL DRAFTING I

The field of drafting is introduced as the student begins study of drawing principles and practices for print reading and describing objects in the graphic language. Basic skills and techniques of drafting included are use of drafting equipment, lettering, freehand orthographic and pictorial sketching, geometric construction, orthographic instrument drawing of principal views, and standards and practices of dimensioning. The principles of isometric, oblique and perspective are introduced.

DFT 102—TECHNICAL DRAFTING II

The application of orthographic projection principles to the more complex drafting problems, primary and secondary auxiliary views, simple and successive revolutions, and sections and conventions will be studied. Most important is the introduction of the graphic analysis of space problems. Problems of practical design elements involving points, lines, planes, and a combination of these elements shall be studied. Dimensioning practices for "details" and working drawings approval by the American Standards Association will also be included. Introduction is given to intersections and developments of various types of geometric objects. Prerequisite: DFT 101.

DFT 105—SURVEYING DRAFTING

An introduction to drafting and the study of drafting practices. Instruction is given in the selection, use and care of instruments, single stroke lettering, applied geometry, freehand sketching consisting of orthographic and pictorial drawings. Orthographic projection, reading and instrument drawing of principal views, single auxiliary views (primary), and double oblique auxiliary views will be emphasized. Dimensioning and note practices will be studied with reference to the American Standards Association practices. Methods of reproducing drawings will be included at the appropriate time.

DFT 107—SCHEMATIC DRAWING I

Introduces the use of basic drafting tools, symbols and conventions to convey technical information. Functionally oriented diagrams emphasized.

DFT 108—SCHEMATIC DRAWING II

Continued study of functional presentations and introduces advanced techniques including airline, mechanical layout, pictorials, generation of systems and application of values and wave form information.

DFT 1101—SCHEMATICS AND DIAGRAMS: POWER MECHANICS

Interpretation and reading of schematics and diagrams. Development of ability to read and interpret blueprints, charts instruction and service manuals, and wiring diagrams. Information on the basic principles of lines, views, dimensioning procedures, and notes.

DFT 1102—BLUEPRINT READING: MECHANICAL

Interpretation and reading of blueprints. Information on the basic principles of the blueprint; lines, views, dimensioning procedures and notes.

DFT 1103—BLUEPRINT READING: MECHANICAL

Further practice in interpretation of blueprints as they are used in industry; study of prints supplied by industry; making plans of operations; introduction to drafting room procedures; sketching as a means of passing on ideas, information and processes.

DFT 1108—BLUEPRINT READING: MECHANICAL

Advanced blueprint reading and sketching as related to detail and assembly drawings used in machine shops. The interpretation of drawings of complex parts and mechanisms for features of fabrication, construction and assembly. Prerequisite: DFT 1103.

DFT 1110—BLUEPRINT READING: BUILDING TRADES

Principles of interpreting blueprints and specifications common to the building trades. Development of proficiency in making three view and pictorial sketches.

DFT 1115—BLUEPRINT READING: PLUMBING TRADES

Sketching diagrams and schematics, and interpretation of blueprints applicable to the plumbing trades. Emphasis will be on plumbing plans for domestic and commercial buildings. Piping symbols, schematics, diagrams and notes will be studied in detail. Applicable building and plumbing codes will be used for reference. Prerequisite: DFT 1110.

DFT 1116—PLUMBING DRAWINGS: RESIDENTIAL

A specialized course in drafting for residential plumbing and hydronic heating. Emphasis will be placed on reading of blueprints that are common to the trade; blueprints of mechanical components, assembly drawings, wiring diagrams and schematics, floor plans, plumbing and heating plans, including layout plans, and shop sketches. The student will make tracings of floor plans and layout plumbing systems. Prerequisites: DFT 1110, DFT 1115.

DFT 1117—PLUMBING DRAWINGS (COMMERCIAL)

A study of different types of business and drawing plans for the plumbing and heating for the different types of business such as Offices, Motels, Schools, etc. This will give the student a better understanding of the industry. Prerequisites: DFT 1116, DFT 1115.

DFT 1118—PLUMBING DRAWINGS (INDUSTRIAL)

The student will become familiar with industrial plans and specifications, different plumbing layouts, water treatment and chemical waste, different types of material used for this application. This will give the student a better understanding of the trade. Prerequisites: DFT 1110, DFT 1115, DFT 1116, DFT 1117.

ECONOMICS (ECO)

ECO 100—INTRODUCTION TO ECONOMICS

An introduction to economics including the study of forms of money, kinds of wages, uses of purchasing power, basic types of insurance, the effects of the business cycle, and the relationship of value to price based on the laws of supply and demand.

ECO 101—SURVEY OF ECONOMICS

A survey of economics as it relates to man and his efforts to make a living. Will include forms of money, kinds of wages, uses of purchasing power, basic types of insurance, the importance of the effects of the business cycle, and the relationship of value to price based on the laws of supply and demand.

ECO 1000—APPLIED ECONOMICS

Designed to help the student understand present-day economic problems. Topics include: production, consumption, exchange and distribution, money and credit, business fluctuations, labor and management relations, and challenges to our system of free enterprise.

EDUCATION (EDU)

EDU 101—CHILD GROWTH AND DEVELOPMENT

Study of early growth and development, with emphasis on the principles and techniques for promoting the physical and mental health of the young child.

EDU 102—PROGRAMMING FOR YOUNG CHILDREN

Study of principles and practices of early childhood education: the types of experiences, facilities, and media which will promote optimal development of each child. Guidelines for identifying, planning, organizing, and implementing appropriate programs for various levels of development are derived through group discussion and individual projects. Laboratory experience provides opportunities to participate in planning activities, in selecting equipment and materials, in defining the adult role, and in developing techniques for managing children in a group situation. Prerequisite: EDU 101.

EDU 103—WORKING WITH YOUNG CHILDREN

Case presentations, films, observations, and group discussions are utilized to study characteristic behaviors of each level of development and to derive guidelines for promoting desirable behaviors and for coping with undesirable behaviors. Laboratory experiences will provide opportunities to develop observation skills, effective techniques, and beginning skill in adapting activities to the needs of individual children. Through coordination with PSY 106, theories from behavioral science are identified as the foundation of techniques for working with young children. Prerequisite: EDU 102.

EDU 110—METHODS OF TEACHING INDUSTRIAL SUBJECTS

A study of effective methods and techniques of teaching industrial subjects. Emphasis is given to class organization; student-teacher planning; methods of teaching manipulative skills and related information; lesson planning; shop safety; and evaluation. Teaching problems will be studied and analyzed following directed observations in the public schools.

EDU 111—USE OF MEDIA IN INSTRUCTION

A basic course in the planning and production of slides, still pictures, mounting and preserving materials, graphics, transparencies, and audio recordings for instructional use. The design and application of these materials are related to current theories of instruction. Emphasis will be placed on developing audio-visual materials designed to achieve specific instructional objectives.

EDU 112—SHOP ORGANIZATION AND PLANNING I

A study of problems related to vocational shop layout, planning and management, supplies and equipment handling, textbooks, sources of materials.

EDU 113—SHOP ORGANIZATION AND PLANNING II

A continuation of EDU 112.

EDU 114—SAFETY IN THE SCHOOL SHOP AND LABORATORY

A course designed to cover the basic requirement necessary for a safe environment for the inexperienced student. A thorough study of the requirements of the Federal Occupational Safety and Health Act as it applies to school problems will be conducted.

EDU 115—INTRODUCTION TO INDUSTRIAL EDUCATION

The place of vocational education in a program of public education and the fundamental principles upon which this work is based.

EDU 116—HISTORY AND PHILOSOPHY OF INDUSTRIAL EDUCATION

Historical study of trade and technical education movement. Place, function, and changing concepts of industrial and technical education in American education. Economic, sociological and psychological aspects.

EDU 117—PROGRAM AND COURSE DEVELOPMENT

Methods of developing program and course content and structuring into a workable instructional system. Individualized instructional techniques will be covered. Each student will prepare a selected program in detail.

EDU 118—PRINCIPLES OF COOPERATIVE EDUCATION

A discussion of the principles and practices of cooperative education in use today. The advantages and problems of the technique as a facet of total education will be covered along with techniques of implementation in various programs.

EDU 119—MOTIVATIONAL STRATEGIES

An introduction to the understanding and motivation of vocational students. Proper use of records, tests in cooperation with available counseling services in evaluating student problems and potential. Stimulating learning through understanding and control of personal and environmental variables in the classroom.

EDU 123—ENVIRONMENTAL CONCEPTS IN EDUCATION

A workshop to introduce instructors to the significance of human ecology in their own discipline. Environmental teaching aids, curriculum materials and area resource personnel will be introduced. Methods of including environmental concern into regular subject matter will be covered.

EDU 201—ACTIVITIES FOR YOUNG CHILDREN

Individual and group exploration of activities and media for promoting optimal overall development of children, with special emphasis on music, art, science, and oral language development. Laboratory experiences provide opportunities to plan and implement a program which demonstrates the adaptability of specified activities and media to a variety of age levels. Prerequisite: EDU 103.

EDU 202—SEMINAR—PRACTICUM IN EARLY CHILDHOOD

Experience in a variety of child care settings to develop further skill in working with young children, in assisting with programming activities, and in adapting to the needs of individual children. Analysis of individual problems encountered in working with specific age groups. Prerequisite: EDU 201.

EDU 203—THE EXCEPTIONAL CHILD

Study of children with developmental variations requiring modification in activities. Consideration is given to recognition of problems, community resources, and appropriate activities for the child with exceptional deviations in personality or physical development. Prerequisites: EDU 201, SOC 201.

EDU 204—PARENT EDUCATION

Study of ways parents can be involved in the child development center, of the purposes and value of home visitation, and of techniques for reporting child progress to parents. The role of the early childhood specialist in aiding parents in guidance of the child's development is emphasized. Each student will develop a series of programs appropriate for presentation to the parents of preschool children. Prerequisites: SOC 106, PSY 202.

EDU 205—SEMINAR-PRACTICUM

Seminar on child development problems. Continued experience in a variety of child care facilities. Prerequisite: EDU 202.

EDU 207—SPECIAL PROBLEMS IN EARLY CHILDHOOD

Directed study of a specialized area of early childhood, appropriate to the individual career interests of students. Prerequisites: EDU 202, EDU 203.

EDU 208—PHYSICAL ACTIVITIES FOR CHILDREN

This course is designed to help the student gain an understanding and appreciation of the role that physical education plays in the development of the pre-school child. Selection of activities and organization will be stressed.

ELECTRICAL (ELC)

ELC 102—D. C. FUNDAMENTALS

Basic direct current circuits are introduced through elementary matter—particle theory, sources and general applications of D.C. Topics include: current, voltage, resistance, Ohm's law, Kirchoff's laws, series and parallel circuits, and magnetism. Proper use and care of D.C. Instruments introduced to permit early use of laboratory facilities. Fundamental concepts emphasized.

ELC 104—A.C. FUNDAMENTALS

Sinewave generation, alternators, inductors, transformers, resistance, capacitance, and impedance are studied as well as circuits involving series and parallel components, tuning, resonance, anti-resonance, filters, and networks. Basic A.C. test equipment is introduced. Laboratory application of principles emphasized.

ELECTRONICS (ELN)

ELN 101—ELECTRONICS I

Principles and application of vacuum tubes in tuned circuits, amplifiers and oscillators are explored. Precision electronic equipment used to test and evaluate student-built test, power, and amplifier circuits. Basic switches, relays, and electronic controls are covered. Application of principles emphasized.

ELN 106—ENTERTAINMENT SYSTEMS

Various hi-fi, stereo, record changer and television systems are covered. Diagnosis and trouble shooting emphasized.

ELN 108—MECHANICAL CIRCUIT LAYOUT

Space, weight, and component interaction problems involving layout and construction. Unit performance emphasized.

ELN 121—INTERNATIONAL MORSE CODE

Elective consisting of daily code practice offered for the student with an avocational interest in amateur radio or a vocational interest in shipboard communications.

ELN 125—FCC EXAM PREPARATION

Elective for the review of material normally given in the FCC First and Second Class examinations. Question and answer method of study used in conjunction with open discussions.

ELN 201—ELECTRONICS II

The ultra-modern and fascinating field of solid state electronics is fully covered. Topics include diodes, transistors, micro-electronics, use of special purpose SS devices and a glimpse at the future of SS. Laboratory application emphasized.