

Booklet

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About Durham Tech

This is No. 1 of 7 booklets which together comprise the 1978-1979 Durham Tech catalog. We've packaged information about our programs and services in this series of separate booklets instead of the traditional college catalog. As indicated in the table of contents inside, there's a booklet for each instructional department, plus this one about the Institute and student services. Several booklets should supply most of the information you'll need, and they may be picked up free of charge at our Lawson Street campus.



Durham Technical Institute
1978-1979

CLASSES BEGIN:

September 27, 1978
 January 8, 1979
 April 2, 1979
 July 10, 1979

How to get a catalog

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Durham Technical Institute complies with the Title IX Regulation of the Educational Amendments of 1972. The regulation requires that no person solely on the basis of sex be excluded for participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity. Durham Technical Institute is an open door admission, equal opportunity institution.

Durham Technical Institute

The origin of Durham Technical Institute is both interesting and involved. In the original sense the history of the Institute may be traced back to June 1948, when a program of Practical Nursing was established under the Vocational and Adult Education Department of the Durham City Schools. Numerous terminal adult education programs were developed in the years that followed. Such programs included Mechanical Drafting, Architectural Drafting, and Electronics Technology. Courses, which in most cases were operated at night, were conducted in the classrooms and laboratories at Durham High School and at Hillside High School. Admission requests to these programs and tuition rates were essentially the same then as they are today.

By 1957, when the North Carolina General Assembly authorized a small appropriation to establish a limited number of area schools to be known as Industrial Education Centers, Durham already had a vigorous program in adult education underway. Along with various adult education programs, many short courses were offered in elementary education for adults. Courses to upgrade the skills of workers in a variety of trades were also offered.

As a result of the Assembly's appropriation, a challenge went out to the various county school administrative units in the state to provide a separate educational facility that would provide for the educational needs of the whole area's population. A new comprehensive curriculum was to be devised for citizens in need of education and technical skills required to advance satisfactorily in the world of work.

Durham was among the first counties in the state to meet this challenge and in June, 1958, the residents of the county made \$500,000,000 available to purchase the site and to erect the initial building of the Institute. Durham Industrial Education Center officially opened its doors on September 5, 1961, with thirty-four full time students enrolled in the programs of Automotive, Mechanical, or Electronics Technology. The institution continued to operate as an industrial education center until February 4, 1965, when the State Board of Education officially designated that henceforth it be properly identified as a technical institute. On March 30, 1965, the Board of Trustees authorized that the name of the Institution be changed to Durham Technical Institute. The Institute is a charter member of the North Carolina Department of Community Colleges.



PHILOSOPHY

Realizing that the future of American democracy depends upon an educated and responsible citizenry, Durham Technical Institute conceives as its purpose the development of the individual toward the attainment of his maximum potential in life. Durham Technical Institute was established to make more readily available a higher educational opportunity distinct from traditional academic education as well as to inspire an active desire for continuing personal development. Financially and geographically, Durham Tech is available to all youth and adults who would not otherwise have this educational opportunity.

Durham Technical Institute is an instrument of service for the community as a whole. It takes advantage of its relationship to the community in order that students and faculty may use the community as their workshop for learning. Students at Durham Tech are given the opportunity to learn the art of living as well as the art of earning a living.

Durham Technical Institute strives to be highly flexible in its offerings so as to provide as many educational opportunities as possible for specialized training by means of the "open door placement" policy. More specifically, Durham Tech attempts to accept the individual where he is and strives to provide him with an opportunity to pursue an educational program toward the attainment of his career goal.

PURPOSE

Within the scope and meaning of the North Carolina General Statute 115a creating and supporting the Institute and the guidelines established by the North Carolina Department of Community Colleges, it is the purpose of this institution through its facilities and services, to offer educational opportunities meaningful to the needs of the individual and related to his future in the world of work. The Institute, being comprehensive in its purpose, endeavors to meet these objectives by providing:

- Post-secondary occupational education to develop skills and knowledge in its students for employment as qualified technicians and skilled craftspersons.
- A wide array of technical and vocational programs which are designed to improve and upgrade employed workers in their present job situations. Special attention is given to the training and educational needs of new and existing industry.
- Numerous programs and courses which afford adult citizens in our community opportunities to continue their education through the elementary and secondary level as well as courses for vocational interest and personal growth.

LOCATION

Located in the eastern section of the City of Durham, Durham Technical Institute sits on a nineteen acre campus at the edge of North Carolina's famed Research Triangle Park. Easy access to the Institute's Lawson Street location can be gained by taking the Briggs Street exit of the Durham East-West Expressway. The location of the Institute, within easy driving distance of Raleigh, Chapel Hill, and Downtown Durham, provides for the student numerous museums, libraries, parks, churches, and other cultural opportunities which supplement the campus environment.

ACCREDITATION AND MEMBERSHIPS

- American Association of Junior Colleges
- American Technical Education Association
- North Carolina Association of Colleges and Universities
- Southern Association of Colleges and Schools
- Southern Association of Junior Colleges
- North Carolina State Board of Education
- North Carolina State Board of Opticians
- North Carolina State Department of Community Colleges
- North Carolina Board of Nursing
- Council on Dental Education of the American Dental Association
- National Academy of Opticianry
- Joint Review Committee for Inhalation Therapy in Conjunction with the American Medical Association

ENROLLMENT

Durham Technical Institute, in keeping with the two-county area it serves, is ever expanding. The Institute operates both day and night classes; these being offered both on and off campus. The curriculum now contains twenty-nine major programs with twenty of these leading to an Associate in Applied Science Degree. Durham Tech's student body is composed of over 2,500 students with approximately 1,400 males and 1,200 females. Nearly 98 percent of the student body is from North Carolina.

CURRICULUM PROGRAMS

Curriculum offerings for Durham Technical Institute students consist of twenty-nine programs. Twenty programs are of two year duration while eight programs may be completed in a year of study. One program requires two quarters to complete.



PROGRAMS

- **Department of Allied Health Education and Practical Nurse Education**
 - Dental Laboratory Technology
 - Mental Health Associate
 - Operating Room Technician
 - Optical Laboratory Mechanic
 - Opticianry
 - Pharmacy Technician
 - Respiratory Therapy
- **Department of Business Education**
 - Accounting
 - Business Administration
 - Business Data Processing
 - General Office Technology
 - Industrial Management
 - Secretarial Science
- **Department of Industrial and Special Technologies**
 - Architectural Drafting
 - Automotive Mechanics
 - Electronics Engineering Technology
 - Electrical Installation and Maintenance
 - Historic Preservation Technology
 - Landscape Management Technology
 - Machinist
 - Science and Engineering Technology
- **General Education and Public Service**
 - Communications Technology
 - Early Childhood Associate
 - Fire Science
 - General Education
 - Library Assistant
 - Paralegal Technology
 - Police Science

RESIDENCE HALLS

Durham Technical Institute has no dormitories or other boarding facilities. The Institute is not responsible for the location or supervision of housing facilities. Students who live too far away to commute will need to secure their own living quarters in the Durham area. Students may wish to use classified newspaper advertisements and/or employ the services of a realtor in their search for satisfactory housing.

COUNSELING AND GUIDANCE

Effective counseling is an ongoing process that begins with the admissions process and continues throughout the student's enrollment. It is not confined to the narrow role of helping serious "problem" cases, although every effort is made to help students who have academic or personal problems; rather, it is directed toward helping all students develop their individual capabilities to the fullest extent. Durham Tech recognizes that the student can develop personal initiative and responsibility for planning his/her future only and the goals he or she has set.

Both men and women counselors are available for student counseling.

ORIENTATION

Orientation is a continuing process which begins at the time of the student's initial contact with the institution and continues until enrollment in class.

Pre-admissions information and counseling is available to enable a student to enter a study program which is appropriate to his or her interests and abilities. Group orientation sessions are available during initial enrollment to orient the student to the requirements, regulations, facilities, and personnel of the instructional program; the school; and to provide information concerning student activities.

FACULTY ADVISORS

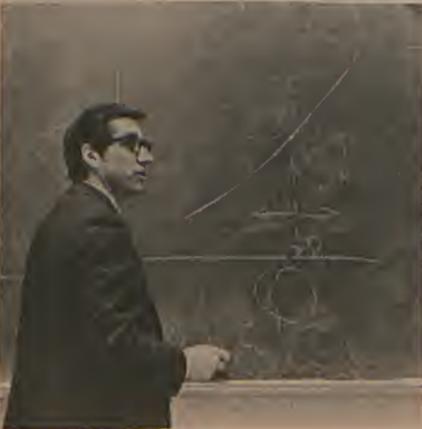
At the time of initial enrollment, each student is assigned a faculty advisor. The advisor assists the student in planning the program and in selecting appropriate courses. The advisor is available throughout the student's enrollment to offer advice and assistance.

Each student and the advisor have full responsibility for keeping account of his or her progress in the curriculum program. This includes being aware of the cumulative grade point average, course failures, repeats, and graduation requirements.

STUDENT GOVERNMENT

The Student Government Association was organized in the 1965-66 academic year. A new Student Government Association Constitution was ratified by student vote on March 29, 1972. The Student Government Association serves the following purposes:

- coordinating and regulating student activities
- providing procedural guides for creating new student organizations
- providing an opportunity for student participation in making policies concerning student affairs
- providing a framework with which students may work to improve the school
- serving as an agency to stimulate active civic responsibility, profitable use of leisure time and a spirit of fellowship among students, and
- developing, encouraging and assisting with the enforcement of definite campus regulations that affect the whole student body.



The Student Council is composed of elected representatives from each instructional department. Officers of the Student Council are elected by the student body at large in the spring quarter.

The Constitution of the Student Government Association is printed in the Student Handbook. Each student should be thoroughly familiar with the Constitution and the Student Handbook.

The organization and function of an effective Student Government Association is dependent entirely upon student initiative, interest, and leadership.

STUDENT REGULATIONS

A complete description of the regulations pertaining to student responsibilities and rights, traffic regulations, use of alcoholic beverages and drugs, and other areas of student life are contained in the Student Handbook. Regulations found in the Student Handbook and in other official statements are binding on all students. Applicants and students who have questions about student regulations are invited to contact the Student Services Office.

JUDICIARY COMMITTEE AND APPEALS PROCEDURE

The Judiciary Committee, composed of faculty and student members, is the official judicial committee appointed by the President to hear cases involving violation of the established standards of student conduct. If a student violates a student conduct regulation, he may be suspended until a fair and impartial hearing can be conducted by the Judiciary Committee. The Dean of Student Services will conduct an investigation of the violation, collect all available evidence, and a hearing request will be referred to the President who will authorize a Committee hearing. The Dean of Student Services will schedule an early date, time, and location for the hearing and will advise the student defendant in written communication of the charges, his procedural rights, and will provide proper notice of the judicial hearing date, time and location.

A student appearing before the committee has the right of assistance in his defense by an advisor of his choice. The student will be given the opportunity to testify and to present evidence and witnesses. He may hear and question adverse witnesses. The Committee will not consider statements against the defendant unless he has been advised of their content and who made them. All matters upon which a decision may be based must be introduced into evidence at the judicial hearing. Copies of the written decision will be forwarded to the President and the Dean of Student Services by the Committee Chairman. The President may accept or reject any decision of the Judiciary Committee. The Dean of Student Services will advise the defendant in writing of the committee's decision and the President's action. The student has the right to appeal the committee decision in writing to the Institute President. The ultimate appeal authority is the Institute Board of Trustees. The decision of the Board of Trustees is final.

STUDENT PUBLICATIONS

Students have the opportunity to participate in the publication of a campus newspaper and institute yearbook. The yearbook project offers an opportunity to obtain valuable experience in editing, art, layout,

photography, and business management. The newspaper provides opportunity for self expression and creativity through the functions of news gathering, writing, reporting, editing, layout, art, photography, and business management. These activities operate as divisions of the student government.

STUDENT CENTER

The Student Center, centrally located in the original building, is the primary social and refreshment center for students. The snack bar offers a variety of soft drinks, coffee, hot meals and sandwiches, as well as snacks. Tables and chairs are provided so that students may relax, socialize, and enjoy refreshments. A limited number of lockers are provided on a first-come, first served basis which may be used to store books and supplies. A student lounge and small refreshment area is also available in the new classroom building. The student lounges are open from 7:30 a.m. until 10:00 p.m. daily, Monday through Thursday, and 7:30 a.m. until 5:00 p.m. on Friday.

SPORTS AND RECREATION

Students may participate in an interscholastic athletic program with members of the Piedmont Athletic Conference (PAC), an athletic conference organized in 1969 and composed of technical institutes throughout piedmont North Carolina. Basketball, bowling, golf, and tennis are generally included in conference activities. Other informal and intramural recreational sports are softball and volleyball.

STUDENT ORGANIZATIONS

Students who are interested in organizing clubs, organizations, or fraternities should select temporary officers and obtain a faculty sponsor or advisor. Procedures for the formulation of new clubs and organizations are indicated in the Student Government Association Constitution. Membership in student organizations is open to all student regardless of race, color, sex, age, creed, or national origin.

Organizations:

Tau Eta Sigma—a dental laboratory technology fraternity promoting excellence in the dental laboratory technology occupation. Membership consists of charter, student, faculty, alumni, and honorary members of the dental laboratory technology profession.

Future Secretaries Association—The charter chapter of the Future Secretaries Association at Durham Technical Institute was established in the Fall of 1972. The FSA has as major objectives the following: to stimulate interest in the secretarial profession, to develop a better understanding of secretarial responsibilities, and to assist in providing the basics necessary for preparation of future office workers.

Circle K Club—the D.T.I. chapter was organized in 1977 and sponsored by the Durham Kiwanis Club. The objective means of intensified social action, service, new friendships, and social activities are some of the rewards of membership. Any student is eligible for membership.

Scholastic Opticians Association—an Optician organization. Objectives are to promote unity among professionally trained opticians, to obtain strength, mutual benefits, higher standards, greater professional recognition and to give greater service. Membership is open to all Optician students or alumni regardless of race, creed, age, color, or sex.



BOARD OF TRUSTEES

OFFICERS OF THE BOARD

Edward L. Phillips, Chairman
George W. Newton, Vice-Chairman

MEMBERS OF THE BOARD

Term expires June, 1979

Dr. Sherwood Githens, Appointed by the Durham County School Board
Sherrill R. High, Appointed by the Governor
Robert L. Lyon, Appointed by the Durham County Commissioners

Term expires June, 1981

Dr. William K. Griffin, Appointed by the Governor
George W. Newton, Appointed by the Durham County Commissioners
Mrs. Marie J. Spelgner, Appointed by the Durham City School Board

Term expires June, 1983

James I. Boiden, Appointed by the Durham County School Board
Edward W. Ramsey, Jr., Appointed by the Governor
Nathaniel B. White, Appointed by the Durham County Commissioners

Term expires June, 1985

Byron K. Hawkins, Appointed by the Governor
Dr. E. Towson Moore, Appointed by the Durham County Commissioners
Edward L. Phillips, Appointed by the Durham City School Board

GENERAL ADMINISTRATION AND STAFF

John M. Crumpton, President
Phail Wynn, Jr., Assistant to the President
A. Clifton Hood, Special Assistant to the President
Randall S. Cain, Director, Institutional Advancement
William A. Martin, Dean of Instruction
Kyle S. Jones, Director of Research and Planning
Edward L. Adams, Assistant to Dir. of Research and Planning
Bill L. Gunn, Dean of Continuing Education
Michael L. Bowen, Continuing Education Coordinator
Lowell A. Speight, Continuing Education Coordinator
T. E. Glass, Jr., Vice President for Institutional Services
L. A. Veasey, Business Manager
Watts Mangum, Accountant
E. Charles Hunt, Accountant
Eireda D. Childress, Purchasing Coordinator
Mary King, Equipment Coordinator
Bessie Marshall, Bookstore Manager
Melile C. Bevin, Senior Programmer
Gerald W. Jones, Programmer
Rhonda M. Mack, Junior Programmer
Calvin Gillie, CETA Coordinator
Bobby Pendergraft, Graphic Arts Coordinator
Barbara S. Ferrell, Director of Learning Resource Center
Brenda J. Nunn, Library Service Coordinator
Kay L. Bowman, Learning Laboratory Coordinator



Durham Technical Institute

1637 Lawson Street
Drawer 11307, (919) 596-9311
Durham, N.C. 27703

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Services to Students

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ADMISSIONS

Durham Technical Institute operates under the "open door" admissions policy as established by the North Carolina Department of Community Colleges. Admission to the Institute is open to virtually all persons eighteen years of age or older, or to those who are not enrolled in public school. Programs of study are offered in Adult Basic and Adult High School Education, non-credit preparatory and personal interest courses, Continuing Education courses, and curriculum programs in Occupational Education.

Curriculum programs are offered in the areas of Allied Health, Business, Nursing, Special Technologies, General Education, and Public Service. Curriculum programs are available to high school graduates or those who possess a high school equivalency education.

The admissions process includes the initial application, transcripts of all secondary and post-secondary work, placement tests, a counseling conference, and in certain instances a health examination. All applicants should be in reasonably good health with no physical or mental defects which would preclude successful completion of a proposed program of study.

Applicants are encouraged to complete the admissions process as soon as possible. High school students should apply early during their senior year. Persons may apply at any time; however, admission will depend upon the individual situation. All data should be on file at least one month prior to the beginning of the quarter in which the student plans to enroll.

Placement in various programs of instruction is selective and particular emphasis is placed on vocational guidance. Through counseling conferences, prior to admission, applicants may obtain assistance in establishing realistic goals. Educational achievement, employment experience, placement test results, and mental and physical health factors are used in determining an individual's potential for success in a given instruction program.

When an evaluation of an applicant's aptitudes, previous educational records, previous experiences, and interests reveals a lack of readiness to enroll in a specific curriculum, they may be advised to reevaluate their occupational and educational goals. When an applicant has achieved sufficient preparation through preparatory studies, they may be admitted into a specific curriculum.

The Institute reserves the right to refuse admission to an applicant if it appears that such action is in the best interest of the institute and/or the applicant.

Application forms and detailed information on instructional programs may be obtained by writing the Admissions Supervisor. The Admissions Office is open Monday through Friday from 8 a.m. to 5 p.m. throughout the year. Appointments may be made by calling 919/596-9311, or writing the Admissions Office, Drawer 11307, Durham, N.C. 27703.

Services to Students

Betsy Bell, Admissions Specialist, Nursing
Aaron M. Conn, Director of Special Services to Students
Thomas C. Gilchrist, Sr., Special Services Counselor
Roberta Havner, Assistant Registrar
Arthur Hood, Special Assistant to the President
Ann W. Jones, Testing Coordinator
Patricia Jones, Counselor
Jerry McDaniel, Special Services Counselor and Public
Information Officer
Joe Mullis, Admissions Supervisor and Financial Aid
Director
R. Edward Newnam, Counselor
Sim Pohill, Jr., Director of Veteran Affairs

SPECIFIC ADMISSION PROCEDURE

Application

Applicants should submit a properly completed application form to the Admissions Office for the quarter in which they desire to enroll. All admission requirements should be completed one month prior to anticipated enrollment. Early application is recommended to allow for adequate time for processing and to increase the opportunity for entry into programs of limited enrollment capacity.

Transcripts

Official transcripts are required from the high school and all post-secondary institutions attended. Applicants who have earned high school diploma equivalency certificates should write: State GED Administrator, Department of Community Colleges, Raleigh, North Carolina 27611, and request that a transcript certifying high school equivalency be forwarded to the Admissions Office. NOTE: Applicants for Practical Nurse Education must submit two (2) official transcripts or letters certifying high school equivalency. Individuals who do not have a high school diploma or equivalency education may complete a high school equivalency program at Durham Technical Institute. Inquiries concerning the Adult High School Education Program should be directed to the Learning Resource Center.

Placement Testing

Each applicant is required to take a series of placement examinations. Test results are used in helping the prospective students to assess their aptitude and achievement in relation to their interests and desires. This information provides an additional basis for placement of the individual in an appropriate curriculum program. In exceptional cases, where an applicant resides out of North Carolina, the individual may be permitted to take the placement tests (at their expense) at a nearby testing agency. Applicants must make their own arrangements for such testing. Applicants who are unable to keep an appointment should immediately notify the Admissions Office to arrange another appointment.

Counseling Conference

After initial admissions requirements and placement tests are completed, a counseling conference is available. The conference will involve a discussion and analysis of the applicant's proposed choice of curriculum in relation to educational preparation, test scores, health factors, work experience, interests, motivation, and career objectives. Applicants who are unable to keep a conference appointment should immediately notify the Admissions Office to arrange another appointment.

Acceptance

Each applicant is notified in writing of admittance to a program of study.

ADVISEMENT AND REGISTRATION

Advisement and Registration dates for each quarter are published in the school calendar. Specific schedules are issued by the Registrar's Office. Returning students may preregister for each quarter. Students are assisted in completing registration by their faculty advisors, essential information is inspected and collected by the Registrar's Office, and tuition and fees are paid to the Business Office.

Instructional programs offer an orientation to their program, and its objectives, regulations, personnel, and opportunities during first quarter enrollment.

Students who register after the designated registration date(s) will be charged a \$5.00 late registration fee. Late registration is not permitted after the date listed in the school calendar.

OUTLINE OF THE ADMISSION PROCEDURE

- 1 Obtain catalogue booklet and application.
- 2 Read catalogue booklet thoroughly.
- 3 Complete application and send to Institute.
- 4 Ask high school counselor to send Institute a copy of your transcript. If you have had any education after high school graduation, have transcript of such work sent to the Institute. Practical Nurse Education applicants need to send two transcripts.
- 5 Contact the Admissions Office at least one month before enrollment if you wish to transfer credit from an accredited institution of higher education.
- 6 Receive acknowledgement from Institute that your application has been received.
- 7 Letter from Institute scheduling placement testing.
- 8 Placement testing.
- 9 Counseling conference.
- 10 Acceptance to a program of study.

CURRICULUM ADMISSION REQUIREMENTS

Basic Admission Requirements

The basic admission requirement to any curriculum program is a high school diploma or equivalency education. Admission to certain curriculum programs with limited capacity is selective and/or competitive and early application is required to be considered for admission. Due to the specialized nature of certain technical programs additional requirements are necessary as follows:

Dental Laboratory Technology

Dental Laboratory Technology requires substantive aptitude in finger and hand dexterity. All applicants are given a wax carving test. Enrollment in Dental Laboratory Technology courses is not permitted without concurrent enrollment in required related and general education courses.

Electronics Technology

Applicants should have had high school physics with laboratory or equivalent prior to entry.

Police Science

Police Science applicants are required to have a complete physical examination. Applicants should meet the entry requirements or employment as a Police Officer. Contact the Police Science Program Coordinator or a law enforcement agency for such requirements.

Practical Nursing

Practical Nurse applicants are required to have a complete physical examination. In addition all nursing applicants are required to submit proof of a dental examination and a schedule of disease immunizations.

Respiratory Therapy

Respiratory Therapy applicants are required to have a complete examination. Admission requirements for Respiratory Therapy must be completed by March 15.

Mathematics Skills

All students entering Associate Degree or Diploma Programs at Durham Technical Institute need to have general mathematics skills. These skills are:

- Arithmetic operations with integers.
- Arithmetic operations with fractions (including mixed numbers and decimal numbers).
- Arithmetic operations with percents and percentage problems.
- Arithmetic operations with signed numbers.

It is essential that students entering ELECTRONICS ENGINEERING TECHNOLOGY have mathematics skills sufficient to cope with engineering technology courses. It is expected that students entering this curriculum have completed Algebra I in high school or equivalent courses. Applicants for this program will be tested to determine proficiencies in general math and basic algebra prior to entering the first math course, MAT 160. Deficiencies in math skills possibly can be made up as indicated below; however, the time for reviewing and acquiring mathematics skills is limited.

Students entering the OPTICIANRY, POLICE SCIENCE, RESPIRATORY THERAPY, and DENTAL LABORATORY TECHNOLOGY curriculums are expected to be proficient in general mathematics and will find skills in basic algebra very helpful. These students will normally register for MAT 140 or MAT 170 or MAT 130.

Students entering DATA PROCESSING are required to take MAT 121, which assumes general math skills and will cover basic algebra background, and may also be advised to take MAT 120 or 100.

Students entering Diploma Programs that include mathematics courses will have a review of arithmetic operations and introduction to algebra in the fall quarter.

Students who are deficient in mathematics skills, either because they have not had the proper courses or because they lack competence, must acquire these skills before beginning the fall quarter to maintain normal progress in their curriculum.

It is possible to acquire needed mathematics skills at Durham Technical Institute by enrolling in a preparatory mathematics course offered during the summer quarter or by enrolling in the Learning Resource Center at the institute.

Students who enter the fall quarter and are still deficient in mathematics skills will be required to acquire these skills before entry into required mathematics courses can be allowed.

EVENING CURRICULUM AND SPECIAL STUDENT ADMISSION

Admission requirements for full-time evening applicants is identical to the requirements for day applicants unless otherwise specified. Part-time evening curriculum and special student applicants are not required to complete the standard admission procedures and requirements. However, when a special student completes 12 credit hours and desires to pursue a degree or diploma curriculum program. All standard admission requirements must be completed in order to be officially admitted to such a program. These requirements include high school completion, application for admissions, secondary and post-secondary school transcripts, placement tests, and any supplementary curriculum admission requirements.

TRANSFERS

Transfer students are welcomed at Durham Technical Institute. Procedures for transferring to the Institute are similar to those for freshmen. Any student in good standing at a fully accredited institution of higher education is eligible for acceptance.

Grades of "C" or better are accepted along with course work in which credit (on a credit/no credit basis) or pass (in a pass/fail system) has been received. Grades of "D" may be accepted in some cases upon departmental approval. If requested, course work from other institutions will be reviewed by the Admissions Office.

SPECIAL STUDENTS

Special Students are those who are enrolled for course credit but who do not plan to pursue a Diploma or Associate Degree.

A Special Student may pursue course work up to a maximum of 12 credit hours. Upon application for a curriculum program to earn an Associate Degree or Diploma, all institutional and departmental admission requirements must be completed.

PROVISIONAL STATUS

Any curriculum student who has not submitted the required transcripts is identified as a provisional student. Those students so identified must complete all admission requirements before the end of the first quarter of enrollment.

COURSE AUDIT

Students who desire to audit a course(s) must secure approval from their faculty advisor. Those persons interested in auditing a course(s) who are not enrolled at the Institute must contact the Registrar. Auditors receive no credit and are not required to attend classes or take examinations. The fee for auditing is identical to the regular cost of the course.

FOREIGN STUDENTS

Durham Technical 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 and cannot be classified as a resident.

An immigrant alien is subject to the same considerations as a citizen and may establish North Carolina residence in the same manner as any other non-resident.

All foreign applicants must submit evidence of adequate financial resources to support them throughout their educational program. Durham Technical Institute cannot provide financial aid for foreign students.

All foreign applicants must also present evidence of adequate proficiency in the English language as well as sufficient aptitude and previous educational preparation to succeed in a specific educational program.

ADVANCED STANDING

Durham Technical Institute permits admission with advanced standing for transfer students from member institutions of the North Carolina Department of Community Colleges. Credit will be approved for all required courses which the student satisfactorily completed at the member institution.

Durham Technical Institute will accept satisfactorily completed courses for transfer credit from accredited institutions of higher education. The content of such courses must closely parallel those for which credit is sought at the Institute. An official transcript of the student's previous post-secondary work must be submitted well in advance of the proposed date of enrollment.

The Admissions Office must initiate and approve all transfer credits and each application for advanced standing will be evaluated according to the individual situation.

It is the responsibility of each transfer student to contact the Admissions Office at least one month prior to enrollment to determine the amount and type of approved transfer credit.

CREDIT BY EXAMINATION

Advanced standing may be approved by examination. This examination will be administered by the program coordinator concerned. This examination may be based on high achievement in secondary schools, private commercial schools, military service, or work experiences. Applicants seeking advanced standing through "Credit by Examination" should contact the Admissions Office for initiation of action.

To receive grade points for a course, a student must register for a course and be examined by the departmental program concerned. Upon successfully completing the examination, the examination grade will be recorded on the student's permanent record in the normal manner.

Prior to registration a course may be waived through evaluation of the student's experiences and/or written examination by the program concerned. Grade points will not be accumulated for a waived course. No registration fee will be required for students who are allowed to waive a course or courses.

ACADEMIC PROGRAM

DEGREE PROGRAMS

Durham Technical Institute offers an Associate In Applied Science Degree in those two-year technical curriculums approved by the North Carolina State Board of Education and the Department of Community Colleges. Associate degree programs vary from six to eight quarters in length with normal academic progress.

DIPLOMA PROGRAMS

Durham Technical Institute will grant diplomas when a student successfully completes any of the occupational trade level curricula. These programs can be completed in four quarters (12 months) with normal academic progress.

CERTIFICATES

Any student enrolled in a curriculum of less than 12 months duration will receive a certificate certifying completion and attendance. Students enrolled in a non-credit course through the Continuing Education Division will receive a certificate of completion.

RESIDENCE REQUIREMENTS

Students transferring from other technical institutes, community colleges, colleges, or universities must complete at least one-fourth of the total quarter hours required in residence, to be eligible to receive a degree or diploma from Durham Technical Institute.

GRADING SYSTEM

Grade reports showing students progress are issued at the end of each quarter. Each course a student completes successfully earns both quarter hour credits and quality points.

Letter grades given and their equivalents in quality points are:

A	Superior	4 grade points per quarter hour
B	Above Average	3 grade points per quarter hour
C	Average	2 grade points per quarter hour
D	Below Average	1 grade point per quarter hour
F	Failure	0 grade points per quarter hour

Other report abbreviations and their meanings are:

I The grade of incomplete is a temporary grade given at the discretion of the instructor indicating that certain academic requirements have not been completed.

Upon receiving the grade of incomplete, the student will be responsible for scheduling an appointment with the faculty member to determine the terms and conditions for removal of the incomplete.

Students in residence have one quarter to remove a grade of incomplete. If the grade of incomplete is not removed by the end of that quarter, then the incomplete automatically becomes an F.

For students not in residence, the grade of incomplete must be removed by the end of the first quarter in which the student is once again in residence. For the purpose of this policy, "in residence" shall be enrollment in one or more course(s) for credit. Students may not reregister for or audit a course for which they have a grade of incomplete.

W "Withdraw". Official permission to withdraw from a course within the first two weeks of the quarter. No grade point penalty is incurred.

WP "Withdraw Passing". Official permission to withdraw from a course within the first two weeks of the quarter. No grade point penalty is incurred.

"Withdraw Passing". Official permission to withdraw from a course with a passing grade within the third through the eighth week of the quarter. No grade point penalty is incurred.

WF "Withdraw Failing". Official permission to withdraw from a course with a failing grade within the third through the eighth week of the quarter. Failure penalty is incurred in the same manner as for the grade of "F". Withdrawal from courses is not permitted from the ninth week until the end of the quarter. An official withdrawal during this time period will receive a "WF". Failure penalty incurred in the same manner as for the grade of "F".

AU "Audit". Enrollment as a non-credit student. Academic credit may be withheld when a student has not cleared obligations with the Business Office or Learning Resources Center.

CHANGES OF SCHEDULE

A student must first confer with his faculty advisor about schedule changes. The student must then obtain a drop-add form from the Registrar's Office. With the approval of the faculty advisor and the Registrar, a student may drop or add courses within limits. The adding of courses will not be permitted after the first five days of classes in a six weeks summer term.

Courses dropped prior to the end of the first two weeks of a regular quarter or the first two weeks during the summer term will receive a grade of "W". Courses officially dropped within the third through the eighth week will receive a grade of "WP" or "WF" depending upon whether the student is passing or failing.

Withdrawal from courses is not permitted from the ninth week until the end of the quarter. An official withdrawal during this time period will receive a grade of "WF".

Class schedules will not be rearranged to permit early dismissal nor will social activities be scheduled during class hours.

COURSE LOAD

Students enrolled for 12 or more quarter hours are identified as full-time students. A student may enroll for up to 20 quarter hours depending upon their capability as evaluated by the faculty advisor. No student will be permitted to enroll for more than 20 quarter hours. Students who encounter serious academic difficulty are advised to attempt only a part-time course load. Students who work on a job in excess of 3 hours per school day are strongly advised to enroll for less than a full-time course load. Students carrying less than a full-time load should not expect to graduate within the normal timeframe.

COURSE REPEAT

When a course failure is repeated, the first attempt will be omitted from the computation of the cumulative grade point average and only the second grade, whether "F" or higher, will count. If a course is repeated a third time, both the second and third grades will be used in the computation. All "F's" remain on the permanent record.

FAILURE REGULATION

Students who fail any required course in their major curriculum must repeat the course until a passing grade is attained to be eligible to graduate with the Associate Degree or the diploma.

REQUIREMENTS FOR GRADUATION

An overall gradepoint average of 2.0 (C) is required to graduate. All outstanding obligations to the Business Office and the Library must be cleared to be eligible for graduation.

Each student must apply to the Registrar's Office for his degree or diploma at the beginning of the quarter preceding the completion of his program. All candidates for graduation must pay a \$5.00 graduation fee to cover the cost of the diploma and cover. Graduation fees must be paid at registration for the quarter in which a student expects to complete program requirements. No refunds are possible after diplomas and covers have been ordered.

WITHDRAWAL REGULATIONS

Any student who wishes to withdraw from the Institute must officially withdraw through the Registrar's Office.

Any student who plans to withdraw should first discuss his plans with his/her faculty advisor and counselor. The student must then contact the Registrar's Office where an official withdrawal form can be obtained. The form must be signed by the student's advisor and instructors and then returned to the Registrar's Office for approval and signature. Finally, the student must present his/her complete withdrawal form to the Business Office for signature.

Students who officially withdraw prior to the end of the first two full weeks of a quarter will receive a grade of "W". Students who officially withdraw after the first two weeks of a quarter will receive grades of "WP" or "WF" depending upon whether the student is passing or failing.

Students who withdraw unofficially will receive a failing grade for all courses. If the student withdraws for a period of two complete quarters or longer, he/she must apply for readmission to the Admissions Office. Readmission will be considered on an individual basis.

READMISSION

Any student who withdraws from the Institute for as long as two complete quarters or a student who changes curriculums at any time must apply to the Admissions Office for readmission. Readmission conditions will depend upon the individual circumstances, but generally a student is eligible to return at such time as an appropriate course schedule can be arranged.

Former students will not be readmitted until they have met all former and current expense obligations to any program or activity under the administrative jurisdiction of the Institute.

Any student who is financially indebted to the Institute by failure to completely meet any outstanding debt such as the following: tuition, bookstore, library, activity, uniform, graduation, promissory note, equipment or supplies debt, or any required payment to the Institute will not be eligible for readmission nor acquire any transcript until such indebtedness is completely cleared. Any indebtedness to this institution will make one ineligible to enter any other institution of the Community College System of North Carolina.

TRANSCRIPTS

Official transcripts of scholastic records pertaining to attendance at Durham Technical Institute are issued upon student request. One transcript is furnished free of charge. Additional copies are issued for one dollar (\$1.00) each. Payment is to be made with the request and the request is to be directed to the Office of Records and Registration.

ADDRESS OR NAME CHANGE

The Office of Records and Registration should be notified immediately in case of an address or telephone number change. Female students should notify the office of any name change upon marriage.

TRANSFER OF CREDIT

A & T State University

Graduates in Business Education and in Electronics Engineering Technology may enroll in A & T State University with full credit, with the exception that in the School of Business and Economics, no credit will be given for courses offered in the junior and senior years at A&T. Admission is negotiated on an individual basis.

Appalachian State University

Business and Engineering Technology graduates may transfer to the Bachelor of Technology Degree Program at Appalachian State University. This program is designed primarily to train vocational and technical instructors for technical institutes or community colleges and technicians with a broad educational background for industry and business.

Atlantic Christian College

Graduates holding the General Education Degree are eligible to transfer as juniors to earn a Bachelor's Degree in Liberal Arts.

Campbell College

Business Administration, Police Science, General Education, and Allied Health graduates are eligible to transfer to Campbell College. Business Administration graduates may pursue the Bachelor of Business Administration Degree. Police Science graduates may earn the Bachelor of Special Studies Degree in Police Science. Allied Health graduates of Opticianry, Respiratory Therapy, and Dental Laboratory Technology may earn the Bachelor of Health Science Degree.

East Carolina University

Engineering Technology graduates may transfer to East Carolina University to earn a Bachelor of Science Degree in Technical Teacher Education. The degree may be earned within two or three academic years depending upon the graduate's technical and non-technical credits.

Police Science graduates may apply for the Bachelor of Science Degree Program in Correctional Services. Admission to the program is granted on an individual basis.

Elon College

Any Associate Degree graduate may transfer all credits to the Bachelor of Arts in Applied Arts or Bachelor of Science in Applied Science at Elon College. Transfer students must complete the general education and elective requirements to fulfill the total hours required for graduation. The program of study will be tailored to the students major at Durham Technical Institute.

Fayetteville State University

Associate In Applied Science Degree graduates may transfer as juniors to Fayetteville State University and earn a Bachelor's Degree in several programs of study.

Gulfford College

Graduates in Accounting and Police Science may pursue the Bachelor of Applied Science Degrees in Accounting or the Administration of Justice at Gulfford College. Each transfer candidate is evaluated individually.

Mars Hill College

Graduates of Dental Laboratory Technology, Respiratory Therapy, and Opticianry may enter the Bachelor of

Science Degree Program in Allied Health at Mars Hill College.

Methodist College

Any Associate Degree graduate may transfer to the Bachelor of Applied Science Degree Program at Methodist College. The Durham Technical Institute Program serves as the academic major, and the liberal arts core and a minor will be earned at Methodist College.

North Carolina Central University

Any Associate Degree graduate may transfer as a junior to North Carolina Central University to pursue a Bachelor of Science Degree in Post-Secondary Teacher Education. Graduates of Electronics Engineering Technology may transfer to the Bachelor of Science Degree program in Physics.

North Carolina Wesleyan College

Graduates of several Associate Degree programs are eligible to earn a Bachelor of Science in Technology Degree at North Carolina Wesleyan College. The approved programs are Accounting, Business Administration, Business Data Processing, Electronics Engineering Technology, General Office Technology, Secretarial Science, and General Education.

Police Science graduates may transfer to the Bachelor of Science in Police Science Degree program.

Old Dominion University

Graduates of Electronics Engineering Technology may enter the Bachelor of Science Degree Program in Engineering Technology at Old Dominion University.

St. Augustine's College

Associate Degree graduates may enter St. Augustine's College to earn a Bachelor's Degree in a variety of curriculum programs.

UNC-Charlotte

Electronics Engineering Technology graduates who meet the other admission requirements may enter the University of North Carolina at Charlotte as a junior in Computer-Electronics Technology or Mechanical Technology. After satisfactory completion of the prescribed two-year curriculum, the student will receive a Bachelor of Engineering Technology Degree.

Police Science graduates are eligible to enter the Bachelor of Science Degree Program in Law Enforcement and Administration at the University of North Carolina at Charlotte.

Winston-Salem State University

Graduates holding the General Education Degree are eligible to transfer as juniors to earn a Bachelor's Degree in Liberal Arts.

EXPENSES AND FINANCIAL AID

Durham Technical Institute is a non-profit institution. Tuition, fees, and other general charges paid by the student cover less than one-tenth of the Institute's instructional and operational expenses.

As a member of the North Carolina Community College System, the state provides funds for administrative and instructional equipment, supplies, materials, salaries, travel costs, clerical expenses, library books, and a portion of other costs. There are certain federal acts providing funds or matching funds to qualified institutions and such funds are procured as supplemental to the total State allocations.

The local board of county commissioners provide funds from Durham County's general tax levies to acquire land, erect buildings, and to maintain and operate the buildings and sites. These funds amount to approximately ten percent of the total institutional budget.

RESIDENT STATUS FOR TUITION PAYMENT

To qualify for in-state tuition a legal resident must have maintained his domicile in North Carolina for at least the 12 months immediately prior to his classification as a resident for tuition purposes. In order to be eligible for such classification, the individual must establish that his or her presence in the state during such twelve-month period was for purposes of maintaining a bona fide domicile rather than for purposes of mere temporary residence incident to enrollment in an institution of higher education; further, (1) if the parents (or court-appointed legal guardian) of the individual seeking resident classification are (s) bona fide domiciliaries of this state, this fact shall be prima facie evidence of domiciliary status of the individual applicant and (2) if such parents or guardian are not bona fide domiciliaries of this state, this fact shall be prima facie evidence of non-domiciliary status of the individual.

No person shall lose his in-state resident status by serving in the armed forces outside of the State of North Carolina.

A person who, by virtue of bona fide legal residence in North Carolina for the requisite 12 months, has been classified as a resident for tuition purposes but who, while enrolled in a State institution of higher education in North Carolina, loses North Carolina legal residence, shall continue to enjoy the in-state tuition rate for a statutory grace period. This grace period shall be measured from the date on which the culminating circumstances arose that caused loss of legal residence and shall continue for 12 months; provided that if the 12-month period ends during a semester or academic term in which such a former resident is enrolled at a State institution of higher education, such grace period shall extend, in addition, to the end of that semester or academic term.

Any spouse of a North Carolina resident shall be entitled to in-state tuition rates at the beginning of the next succeeding academic period.

Any person who by virtue of marriage to a North Carolina resident thereby acquires, by operation of law, a bona fide legal residence in North Carolina shall be eligible for in-state tuition rates at a time calculated in one of the following ways which earlier confers such eligibility: (1) if the original North Carolina resident spouse had maintained such legal residence for a period of at least 12 months immediately prior to the marriage, the

newly resident spouse shall first be eligible for the in-state rate at the next succeeding semester, term, or quarter following the date of marriage;

- (2) If the original North Carolina resident spouse had not maintained such legal residence for a period of at least 12 months immediately prior to the marriage, the newly resident spouse shall first be eligible for the in-state rate at the next succeeding semester, quarter, or term following expiration of 12 months of legal residence by the original resident spouse.

Responsibility and Rights of Students: Your current residential classification, for purpose of applicable tuition rates, is required to be changed if, since original establishment of your current classification, your state of legal residence has changed.

- (1) If you currently are classified as a non-resident for tuition purposes, it is your right to petition for a change in classification to that of resident if you claim that you are now, and, for at least the twelve-month period immediately preceding the date of such petition, have been a legal resident of the State of North Carolina. If it is determined that in fact you have been a legal resident for the required twelve-month period, the effective date change in applicable tuition rates shall be the next semester, quarter, or term following the date of change in facts which required the change in classification.
- (2) If you currently are classified as a resident for tuition purposes, it is your obligation to petition for a change in classification to that of a non-resident if you have reasonable basis for believing that change in facts requires such a change in classification. Failure to fulfill this obligation may result in appropriate disciplinary action including, but not necessarily limited to, cancellation of enrollment. If it is determined that in fact you have become a non-resident, the effective date of change in applicable tuition rates shall be the next semester, quarter, or term following the date of change in facts which required the change in classification.

Copies of the applicable North Carolina law and institutional regulations which govern such classification determinations are available in the Library for inspection upon request. You are responsible for being familiar with the contents of these two sources of regulation. Any student is responsible for supplying all information requested by the Institution in connection with the classification process. Failure to comply with all requests for information prescribed by the Institution shall be attended by the following consequences:

- (1) In the context of an initial classification inquiry affecting a prospective enrollee, the student shall be classified a non-resident for tuition purposes;
- (2) In the context of a reclassification petition initiated by the student to acquire a change from non-resident to resident status, the student shall continue to be classified a non-resident for tuition purposes;
- (3) In the context of a reclassification inquiry anticipating a change from resident to non-resident status for tuition purposes, the student may be subjected to disciplinary action, including, but not limited to cancellation of registration and enrollment or dismissal.

Knowing falsification of any response made to any institutional request for information may subject the

individual to disciplinary action, including dismissal from the institution, at the option of the institution.

Any student who believes that he is eligible for reclassification of residence should consult his divisional counselor in the Student Services Division for a determination.

TUITION AND FEES

All tuition and fees are due and payable to the Business Office on the official day(s) of registration. Partial payments or credits are not accepted unless previous arrangements have been made and approved by the Business Manager. Students are to initiate such needs with the Student Services Division prior to any attempt to register.

There is no required payment nor any tuition deposit necessary prior to the official day(s) of registration. However, students desiring to pay in advance may do so providing arrangements are made with both the Student Services and Business Offices.

No part of a check made payable to the Institute will be given to a student except at the written request of the one who makes the remittance. The written request must be mailed directly to the Business Manager.

TUITION FEE BASIS

All tuition and fee charges are approved by the North Carolina State Board of Education. Tuition charges are for credit hours enrolled. Credit hours are comprised as follows: one class hour equals one credit hour; two laboratory hours equals one credit hour; three shop hours equal one credit hour. The \$3.25/16.50 per credit hour tuition rate applies to all regularly enrolled students including those assigned to organized developmental classes which prepare students to enter curriculum classes.

RESIDENT TUITION

All vocational, technical and audit students enrolled for twelve or more credit hours are charged a maximum tuition fee for \$39.00 per quarter. Resident students enrolled for eleven or less credit hours per quarter are charged a part-time student rate of \$3.25 per credit hour enrolled per quarter.

NON-RESIDENT TUITION

Tuition fees for any student whose legal residence is outside North Carolina are approximately five times the resident rate. Students living with relatives in this state whose parent or guardian does not reside in North Carolina will pay tuition fees at the non-resident rate. Full-time non-resident students enrolled for twelve or more credit hours will be charged a maximum of \$198.00 per quarter. Tuition fees for non-resident students enrolled for eleven or less credit hours are \$16.50 per credit hour enrolled per quarter. Audit and special students who are non-residents will be charged at the same rate as the non-resident curriculum student.

ACTIVITY FEE

The State Board of Education provides that a fee up to \$28.00 per academic year per student (\$7.00 per four quarters or \$9.00 per three quarters) may be established as a local student activity fee. The Student Government Association of Durham Technical Institute and the Board of Trustees have approved a \$1.00 activity fee per quarter for curriculum students. The activity fee is required of all curriculum students enrolled for nine (9) or more credit hours in any fall, winter, spring or summer quarter. This fee is used for the purpose of providing athletic and intramural activities equipment and supplies as well as publications and/or activities. The Student Government Association shall so determine. The amount of the activity fee is subject to change by SGA and approval by the Board.

TYPICAL FALL QUARTER EXPENSES

	N.C. Resident	Non-resident
Tuition	\$39.00	\$198.00
Activity Fee	1.00	1.00
Insurance (Opt.)	3.50	3.50
Books & Supplies	60.00	60.00
Estimate		
Parking Fee	2.00	2.00
Total	\$105.50	\$264.50

TYPICAL SPRING QUARTER EXPENSES

	N.C. Resident	Non-resident
Tuition	\$39.00	\$198.00
Activity Fee	1.00	1.00
Books & Supplies	60.00	60.00
Estimate		
Graduation	5.00	5.00
Parking Fee	2.00	2.00
Total	\$107.00	\$266.00

Students in the curriculum or programs listed below will have additional estimated expenses as indicated:

Practical Nursing—\$20.00 (Uniform Deposit), 1st Quarter.

Dental Laboratory Technology—\$160.00 (Instructional Kits), 1st Quarter; \$185.00 (Gold), 2nd Quarter; \$185.00 (Gold), 5th Quarter. Prices subject to change.

Auto Mechanics—\$150.00 (Tools), 2nd Quarter; Uniform \$25.00.

Respiratory Therapy—\$25.00 (Uniforms); \$18.00 (Stethoscope)

Drafting—\$25.00 (Instructional Kit), 1st Quarter

Opticianry—\$60.00 (Instructional Kit), 5th Quarter

PARKING FEE

There is a \$2.00 parking fee charge for a proper parking permit sticker for any vehicle which is parked on the Institute campus. The permit (\$2.00 fee) is for a maximum of one quarter and the stickers are dated as to the period such are valid. The permits should be purchased upon paying all other tuition and fees during registration. However, they can be acquired from the Business Office during normal hours of operation. There is no refund nor are the permits transferrable from one vehicle to another.

Everyone who intends to drive and park on campus should become familiar with the traffic and parking regulations. The regulations are available during registration periods and from the Student Services Division. The sticker must be in date and properly displayed. It is a permit to park in a student designated space should one be available. It is not a demand that a space will be provided. However, seldom is there not a student parking space available. Vehicles on campus without a valid permit sticker properly displayed will be subject to a parking violation fine and/or towed off campus.

LATE REGISTRATION FEE

Registration schedules are set for specific days and certain definite procedures are required.

A student has not completed registration until all of the required steps are taken. It is the student's responsibility to seek and then to follow the necessary procedures. Payment of tuition and fees is a required step in the procedure.

Any student who fails to complete registration for all classes and to make the required payment of expenses and fees on the prescribed registration day(s) according to the official school calendar will be charged a late registration fee of \$5.00. This applies to all students with no exceptions—day, evening, full-time, part-time, special, and audit enrollees.

Those with anticipated financial difficulties should contact the Student Services Division, in person, well in advance of the registration deadline. Only the Business Office will approve any special arrangements, payments and credits concerning any late payments. The Business Manager will approve or disapprove any request for exemption of the late registration fee.

GRADUATION FEE

A Graduation Fee of \$5.00 will be due and payable to the Business Office when a curriculum student applies for a degree or diploma. This fee covers the cost of the diploma, and any other graduation expense for which the Institute or the state is eligible to pay. The fee is usually payable at registration during the Spring Quarter. The fee is required prior to graduation but students should know that they are eligible to graduate before paying. It is not refundable. Those graduates who wish to have degrees or diplomas mailed must pay an additional \$2.50 mailing fee.

REFUND POLICY

Tuition refund for students shall not be made unless the student is, in the judgment of the Institution, compelled to withdraw for unavoidable reasons. In such cases, two-thirds (2/3) of the student's tuition may be refunded if the student withdraws within ten (10) calendar days after the first day of classes as published in the school calendar. 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 due to no fault of the student.

There is no refund on such yearly payments as activity fee, insurance premium fee, graduation fee for diploma once it is ordered, and special fees such as for late registration.

In all refund cases, the student must initiate a withdrawal through the Student Services Division. The Business Office will make the allowable refund only after written request is received from the Student Services Division.

BOOKS AND SUPPLIES

Most of the student's necessary textbooks, supplies, instruments, and materials may be acquired for the institute's student supply store. The student supply store is operated on a cash basis and there is no refund on books and supplies. The total cost for books and supplies varies with each program; however, most students should anticipate spending approximately \$60.00 per quarter for necessary texts and materials. Students should meet each class at least once before attempting to purchase texts and materials. Programs in Allied Health, Nursing, Drafting, and Automotives require special items and/or instructional kits which may vary from quarter to quarter.

NURSING UNIFORM DEPOSIT

Nursing students enrolling for their first quarter (or re-enrolling) are required to make a \$25.00 uniform deposit. This deposit is payable, along with the other required fees and tuition, to the Business Office during the day(s) of registration.

The uniform deposit entitles each Nursing student the use of four (4) sets of uniforms. Nursing caps are not included, but can be acquired from the Institute's student supply store.

Should the student complete the requirements for graduation and return all uniforms in satisfactory condition, the uniform deposit will be paid to the State to cover the required cost of taking the State Nursing Board Examination. In this case there is no refund. However, the deposit is refundable to those who leave school and are not eligible to take the State Examinations and who return all uniforms in satisfactory condition.

INSURANCE

A student may become covered for expenses incurred for accidents associated with school activities for \$3.50 per year. This group insurance coverage is for the entire school year. It is highly recommended that students take advantage of this coverage, especially students in Automotives, Dental, Electronics, Opticianry, Respiratory Therapy, and those taking laboratory work in Chemistry, Physics, and Machine Shop. The insurance charge is optional. Payment may be made upon registering for Fall Quarter. It is not refundable.

Neither the Institute nor the State of North Carolina carries insurance to cover any student for accidents otherwise.

The \$3.50 fee is for policy coverage commencing in September and terminating in August of each year. Policy coverage is available at registration time of any quarter; however, the coverage is only through August of each year. Any student who engages in any intramural sports activity, organized basketball, work study program, or as a cheerleader is encouraged to take advantage of this accident insurance coverage.

SCHOLARSHIPS

American Fund for Dental Education—these scholarships range from \$500 to \$650 per year and are awarded to students in Dental Laboratory Technology. First and second year students are eligible to apply. Scholarship selections are made by the scholarship Award Committee of the American Fund of Dental Education. Applications may be obtained from the Director of Financial Aid or by writing to the American Fund for Dental Education, 211 East Chicago Avenue, Chicago, Illinois, 60611. Deadline for filing is July 1. Annual awards are announced in August.

National Licensed Practical Nurse Education Foundation—a limited number of \$250 scholarships are awarded by this organization. Applicants should apply to the Director of Financial Aid.

National Association for Practical Nurse Education and Service—applicants interested in this scholarship should contact the Director of Practical Nurse Education at the Institute.

North Carolina Society of Accountants—awards \$250 a year scholarships to North Carolina residents who desire to enter the public practice of accounting upon completion of their education. Applications may be obtained from the North Carolina Society of Accountants Scholarship Foundation, Box 10387, Raleigh, North Carolina, 27605. Applications must be completed by April 15th to be eligible for a scholarship for the following academic year.

Women in Construction—sponsors two annual scholarships for Architectural Drafting students who are residents of Durham County. Interested applicants should contact the Director of Financial Aid.

Evening Opticist Club of Durham—provides a scholarship for an Auto Mechanics student who is a resident of Durham County. Interested applicants should contact the Director of Financial Aid.

City of Durham—sponsors a scholarship program for members of the Durham Police Department who are selected to enroll in Police Science. Prospective applicants may obtain information at the City of Durham Personnel Office.

National Academy of Opticianry—sponsors a \$500 scholarship available to Opticianry students. Further information may be obtained from the Director of Financial Aid.

Ladies Auxiliary Guild of Prescription Opticians—offers scholarships for Opticianry students. Further information may be obtained from the Director of Financial Aid as to the status of this award.

S. Galeski Opticianry Scholarship Fund—sponsors a \$500 scholarship available to Opticianry students. Interested applicants should contact the Director of Financial Aid.

Altrusa Club—periodically offers scholarships. Contact the Director of Financial Aid for more information.

Pilot Club—periodically offers scholarships. Contact the Director of Financial Aid for more information.

North Carolina Department of Veterans Affairs—sponsors scholarships for children of certain disabled or deceased veterans. Apply to the agency at Box 2187, Raleigh, North Carolina, 27602.

LOANS

Long-term loans are generally awarded upon the basis of need or scholarship. Information may be obtained from the Director of Financial Aid.

Durham Technical Institute Loan Fund—small loans for tuition only at the time of registration are available from an institutional loan fund made possible by donations from local business and industry. The maximum loan may not exceed the cost of tuition and fees. No interest is charged. Apply to the Director of Financial Aid.

PROGRAMS AND GRANTS

Law Enforcement Education Program—provides financial aid to individuals enrolled or accepted for enrollment in law enforcement degree programs. Students and in-service law enforcement officers who are enrolled or accepted for enrollment in Police Science Technology are eligible to apply to the Director of Financial Aid for assistance under the Law Enforcement Education program. Grants for tuition and fees are available only to students who are officers of publicly-funded law enforcement agencies enrolled in or accepted for enrollment on a full-time or part-time basis and who agree to remain in service of the law enforcement agency employing them for a two year period following completion of their educational program.

Basic Educational Opportunity Grant—This program is a Federal Aid program designed to provide financial assistance to those who need it to attend post-high school educational institutions. The amount of each grant is based on the family contribution and two other factors (1) the amount of funds actually available for the Program, and (2) the cost of your education, since the grant cannot exceed one-half that cost. The amount of the grant would decrease as the family contribution increases. Applicants who meet the following requirements may be eligible for a grant: (1) you plan to enroll for the first time in a post-high school program at an eligible college, university, vocational or technical school; (2) you will be attending school on a full-time basis; and (3) you are a United States citizen or are in the United States for other than a temporary purpose and intend to become a resident. Individuals who have attended a post-high school educational institution at any time before April 1, 1973 are ineligible. Applications may be obtained from your high school counselor, your local Post Office, or from the Director of Financial Aid.

Work-Study Program—a limited number of eligible full-time students may be employed up to a maximum average of 15 hours per week by the Institute under the Work-Study Program. Work-Study students may be employed up to a maximum of 40 hours per week during the summer if they are not enrolled during such period and plan to resume full-time studies the following quarter. Interested students should apply to the Director of Financial Aid.

Social Security Benefits—Some students may qualify for financial assistance through their parents Social Security benefits. Those seeking such aid should first contact their local Social Security office.

Veterans Education Benefits—Durham Technical Institute is approved by the Veterans Administration for Educational Assistance Benefits or enrollment in all curriculum programs.

Veterans who plan to attend under any of the veteran's training laws, and dependents of deceased or disabled veterans who expect to enroll under the War Orphans Educational Assistance Act should contact their Veterans Service Office in advance of registration.

The veteran should obtain an application for Educational Benefits from the local Veterans Service Office. The student should deliver the completed application, Form DD214, and a certification of Change in Dependency Status to the Office of the Veterans Coordinator. These documents will then be forwarded along with an Enrollment Certificate to the Veterans Administration Regional Office. All completed applications should be in the Office of the Veterans Coordinator at least 30 days prior to anticipated enrollment.

The Veterans Administration requires a minimum of 12 quarter hours in Associate Degree programs for full-time benefits. The following minimum contact hours are required for full-time benefits in one-year Diploma Programs: Architectural Drafting—25 hours, Auto Mechanics, and Practical Nurse Education—30 hours. When in any quarter the total weekly contact hours for which a one-year Diploma student is registered are fewer than the minimum government requirements, a student may enroll on request for additional instructional hours deemed by the institution to be consistent with the study program and appropriate for the student to make up the required minimum contact hours. Monthly certification of attendance is also required of one-year Diploma students.

Vocational Rehabilitation Assistance—Certain handicapped students are eligible for aid administered through the Division of Vocational Rehabilitation, N.C. Department of Public Instruction. Those who seek such aid should make application to the local Division of Vocational Rehabilitation.

Comprehensive Employment and Training Act (CETA)—unemployed, under-employed, or disadvantaged individuals may qualify for assistance in selected occupational education programs eligible for assistance under CETA legislation. Inquiries should be directed to the appropriate CETA office.

Duke University Medical Center—provides an educational advancement program for their employees who may enroll in institute programs. Inquiries should be directed to the Paths for Employee Programs (PEP) office located in the Bell Building adjacent to Duke Medical Center.

Other previous financial assistance grant sources include: Home Savings and Loan Association, Young Women's Club of Youngsville, Inter-Church Council for Social Service, Gulf Oil Corporation, N.C. Chapter of Soil Conservation, the Armenian General Benevolent Union, N.C. Commission for the Blind, and the National Secretaries Association.

production of milk is thoroughly discussed. Butter and cheese making are studied according to the latest and most improved methods. Text: *Milk and Its Products.—Wing.*

WINTER TERM—

COURSE VI.—BACTERIOLOGY. Three credits. Required courses II Horticulture and I Chemistry.

Lectures are given on the nature of bacteria, their relation to other plants, supplemented by laboratory work.

FALL TERM— PROF. —

COURSE VII.—AGRICULTURAL BACTERIOLOGY. Five credits. Required course VI Agriculture.

The relation of bacteria to the soil and the manure heap, to the ripening of cream and cheese, to various diseases, &c., is thoroughly discussed. Text: *Agricultural Bacteriology.—Conn.*

WINTER TERM—

COURSE VIII.—ENTOMOLOGY. Three credits. Required courses II Horticulture and VI English.

The subject is taught by means of lectures and the student is required to read up on topics assigned him by the instructor. The most common insects and insecticides are studied.

SPRING TERM—

COURSE IX.—FORAGE CROPS. Three credits. Required course VI English.

Lectures are given on the adaptability of the various crops that can be successfully and profitably grown in North Carolina to special soils, methods and seeding; preparation of seed bed and pasturing are also discussed. Collateral reading required.

SPRING TERM—

COURSE X.—PLANT DISEASES. Three credits. Required course VII Agriculture.

Lectures and laboratory work. Common diseases, such as the

cereal nests and insects; diseases of cotton, tobacco and fruit trees are studied with the aid of the compound microscope.

WINTER TERM—

COURSE XI.—FEEDING. Five credits. Required courses III Agriculture and V and VI Chemistry.

The laws of nutrition and the composition of animal bodies are briefly discussed. The composition and digestibility, market and food value of the various food stuffs are discussed. Nutritive ratios and the practical application of same in compounding ratios for the various farm animals are carefully considered. Collateral reading required. Text: Feeds and Feeding.—*Henry*.

WINTER TERM—

COURSE XII.—AGRICULTURAL PHYSICS. Five credits. Required courses III Physics and V Chemistry and I Mechanics.

The power of soils to retain moisture, effect of deep and shallow cultivation, methods of constructing farm buildings, ventilation, road making, draft of wagons and plows, &c., are fully discussed. Text: Agricultural Physics.—*King*.

SPRING TERM—

COURSE XIII.—VETERINARY SCIENCE. Three credits. Required course XI Agriculture.

The common diseases of farm animals are briefly discussed, together with remedies for same. Some practice work in caring for sick animals is also provided the student. Text:

SPRING TERM—MR. ROBINSON.

COURSE XIV.—METEOROLOGY. Two credits. Required course XII Agriculture.

Movements of the atmosphere, character of winds, cyclones, tornadoes, thunderstorms, and weather forecasting are discussed.

C. Courses in Horticulture.

SPRING TERM—

COURSE I.—BOTANY. Two credits. Open to all.

The various parts of plants are studied. Lectures will be given twice per week.

CLASSES BEGIN:

September 27, 1978
 January 8, 1979
 April 2, 1979
 July 10, 1979

How to get a catalog

Catalog booklets may be picked up free of charge at the Durham Tech campus. All mail requests should be addressed to Durham Technical Institute, 1637 Lawson Street, P.O. Drawer 11307, Durham, N.C. 27703, (919) 596-9311. So that we may properly assist you, please specify which booklets are desired.

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The provisions of these publications are not to be regarded as an irrevocable contract between the student and Durham Technical Institute. The Institute reserves the right to make changes in the regulations, courses, fees, and other matters of policy and procedure as and when deemed necessary. The Institute further reserves the right, at any time, to request the student to withdraw when it considers such action to be in the best interest of the Institute.

This catalog is published for informational purposes and every effort is made to insure accuracy at the time of printing. However, the provisions in this catalog are not to be regarded as an irrevocable contract between the student and the Institute. Durham Technical Institute reserves the right to change any provision or requirement at any time. Students are advised to study the Schedule of Classes available at registration and periodically check with counselors or Student Records for information not available when this catalog was published.

Durham Technical Institute complies with the Title IX Regulation of the Educational Amendments of 1972. The regulation requires that no person solely on the basis of sex be excluded for participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity. Durham Technical Institute is an open door admission, equal opportunity institution.

Allied Health Education

Allied Health
Department Head:
Frank Ervin

Practical Nurse Education
Program Chairperson
Leona A. Crockett

Faculty:

Fred Castrovinci
Gary Clayton
M. Yates Coates
Frank Ervin
Joe Foster
Don Kritsch
Jeanne Landry
M. E. Langley
Catherine Leathers
Howard Lurker
J. McCallister, Adjunct
Barbara Mertz
Fred Noble
Ed Outlaw
John Robbins, Adjunct
William Rodgers
Emily Seigel, Adjunct
Bruce Steinbach, Adjunct
Terri Vince

Nursing Faculty

Louise J. Gooch
Angeline W. Battle
Carolyn Brown
Betty L. Edgerton
Constance M. Fauhis
Linda Fogleman
Barbara H. Hayes
Ranova S. Pendergraft
Jean Salmon
Sharon U. Sawyer
Joan C. Sikes

Contents:

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Mental Health Associate
Operating Room Technician
Optical Laboratory Mechanics
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DENTAL LABORATORY TECHNOLOGY

Two-Year Associate Degree Program

The Dental Laboratory Technology curriculum prepares a person to enter the dental health field trained in the art and science of fabricating artificial dental restorations for the dental profession.

The objectives of this program are to prepare the student for employment as either a general laboratory technician or as a specialist in removable prosthetics (complete and partial dentures) or in fixed prosthetics (crowns and bridges).

Dental technology courses include classroom study and laboratory time for manipulative application.

Candidates for Durham Tech's dental technology program should have a high degree of manual dexterity, good color perception, and enjoy detailed work.

FIRST QUARTER		Lec	Lab	Cred
1SCI 150	Physical Science for Dental Technicians	5	2	6
DEN 101	Dental Anatomy	2	10	7
DEN 104	Dental Materials	2	6	5
DEN 106	Complete Denture Techniques ¹	1	6	4

SECOND QUARTER		Lec	Lab	Cred
1ENG 101	Communication Skills I	3	0	3
DEN 102	Oral Anatomy and Physiology	2	0	2
DEN 107	Complete Denture Techniques	1	8	5
DEN 111	Dental Metallurgy	3	0	3
DEN 113	Cast Inlay and Crown Techniques	2	12	8

THIRD QUARTER		Lec	Lab	Cred
1ENG 102	Communication Skills II	3	0	3
1MAT 110	Business Math	5	0	5
DEN 108	Partial Denture Techniques	2	10	7
DEN 115	Crown and Bridges Techniques	1	8	5

FOURTH QUARTER		Lec	Lab	Cred
1ENG 103	Communication Skills III	3	0	3
DEN 109	Partial Denture Techniques	1	12	7
DEN 116	Crown and Bridge Techniques	1	12	7

FIFTH QUARTER		Lec	Lab	Cred
	Elective	3	0	3
DEN 201	Adv. Compl. Denture Techniques	2	10	7
DEN 204	Partial Denture Techniques	1	6	4
DEN 207	Ceramic Techniques	1	6	4

SIXTH QUARTER		Lec	Lab	Cred
	Elective	3	0	3
DEN 205	Adv. Part. Denture Techniques	1	12	7
DEN 211	Ceramic Techniques	2	10	7
DEN 213	Dental Laboratory Practice	1	6	4

SEVENTH QUARTER		Lec	Lab	Cred
1ENG 203	Interpersonal Communications	3	0	3
DEN 209	Jurisprudence and Ethics Seminar	3	0	3
DEN 212	Adv. Ceramics Techniques	2	12	8
DEN 214	Adv. Dental Lab Practice	1	6	4
Minimum total credit hours required for graduation:		137		

¹Dental Laboratory Technology Electives: ECO 108, HUM 100, POL 190, PSY 100, SOC 100, SSC 190, SSC 192. See General Education course descriptions.

1-Refer to General Education Booklet

COURSE DESCRIPTION

Lec Lab Cred

	Lec Lab Cred	
DEN 101 Dental Anatomy	2 10 7	
Prerequisite: None		
A detailed study of the anatomical landmarks and contours of each individual tooth. Laboratory exercises include scale drawings of each tooth from the central incisor through the second molar on one side of the upper and lower arches. These fourteen teeth are carved from wax blocks with special emphasis placed on reproducing natural tooth anatomy.		
DEN 102 Oral Anatomy and Physiology	2 0 2	
Prerequisite: None		
A study of the anatomy and physiology of the head, oral cavity, dentition, and supporting structures including an in-depth study of the temporomandibular joint, occlusion and malocclusion. The course will also expose the student to the morphological, functional, and esthetic relationship between the teeth and support dentition.		
DEN 104 Dental Materials	2 6 5	
Prerequisite: None		
A study of the composition, properties, and uses of nonmetallic dental materials such as gypsum products, impression materials, plastics, waxes and duplicating materials. The laboratory exercises are designed to illustrate the properties and uses of materials studied and the results of proper and improper manipulation.		
DEN 106 Complete Denture Techniques	1 6 4	
Prerequisite: None		
An introduction to the basic techniques for complete denture construction. Laboratory phase includes construction of baseplates and occlusion rims from various materials, mounting complete denture casts on an adjustable articulator, and completing a maxillary trial set up and wax-up using anatomic teeth.		
DEN 107 Complete Denture Techniques	1 8 5	
Prerequisites: DEN 101, DEN 104, DEN 106, SCI 150		
A continuing study of the fabrication of complete dentures. Laboratory work includes construction of complete maxillary and mandibular dentures using various posterior tooth forms on an adjustable articulator; and various procedures for relining and rebasing complete dentures.		
DEN 108 Partial Denture Techniques	2 10 7	
Prerequisites: DEN 101, DEN 102, DEN 104, DEN 111		
A study of the basic techniques used in fabrication of cast removable partial denture frameworks. Laboratory phases include fundamentals of survey and design, constructing refractory casts, forming the wax pattern, investing and casting the frameworks utilizing chrome-nickel alloy.		
DEN 109 Partial Denture Techniques	1 12 7	
Prerequisite: DEN 108		
A study of the various types of removable appliances that include wrought clasps, combination cast and wrought metal frameworks, and orthodontic/pedodontic appliances.		
DEN 111 Dental Metallurgy	3 0 3	
Prerequisites: DEN 104, SCI 150		
A study of precolous metals, alloys and chrome alloys; and their application to dental procedures, including the physical and mechanical properties, crystalline structure, investments, methods of casting, soldering, heat treatment, metallurgy testing and specific brands of alloys used in dentistry.		
DEN 113 Cast Inlay and Crown Techniques	2 12 8	
Prerequisites: DEN 101, DEN 104, SCI 150		
A study of the techniques for fabricating cast gold restorations and an introduction to terminology and techniques specific to inlays and crowns. In the laboratory, casts and dies are prepared from impressions. Waxing, carving, investing, casting, and polishing of simple and complex inlays, full crowns and three-quarter crowns are performed.		
DEN 115 Crown and Bridge Techniques	1 8 5	
Prerequisites: DEN 113, DEN 111		
A study of techniques for construction of acrylic jacket crowns, acrylic veneer crowns, fixed bridges of various designs constructed of all gold and the combination of a gold framework of acrylic veneer using the plastic build-up veneering material.		
DEN 116 Crown and Bridge Techniques	1 12 7	
Prerequisite: DEN 115		
A continuing study of the physical properties of veneering materials including techniques for construction of fixed bridges in the anterior and posterior regions utilizing flatback railings and Tru-Pontics.		
DEN 201 Adv. Complete Denture Techniques	2 10 7	
Prerequisite: DEN 107		
A study of complete denture techniques that include utilization of the facebow transfer and central bearing devices. Included in the course are the principles and procedures for immediate denture construction and refitting of complete dentures.		
DEN 204 Partial Denture Techniques	1 6 4	
Prerequisite: DEN 109		
A continuing study of partial denture techniques that include construction of all metal and removable partial dentures using tube teeth and flatback facings. Tooth selection, set-up, flasking, processing, and finishing and polishing are included.		
DEN 205 Adv. Partial Denture Techniques	1 12 7	
Prerequisite: DEN 204		
A study of advanced techniques in removable partial denture design. Laboratory exercises include the use of precision attachments, and advanced clasping techniques.		
DEN 207 Ceramic Techniques	1 6 4	
Prerequisite: DEN 116		
A study of the physical properties and manipulation of porcelain. Introduction of porcelain to metal technique; casting, finishing, and firing of porcelain to metal framework.		

MENTAL HEALTH ASSOCIATE

Two-Year Associate Degree Program

DEN 209 Jurisprudence and Ethics Seminar 3 0 3
Prerequisites: DEN 201, and/or DEN 205, and/or DEN 211

A study of the legal and ethical aspects of dental laboratory practice, dentist-laboratory relationship, and business aspects of operating and managing a dental laboratory. Guest speakers are invited.

DEN 211 Ceramic Techniques 2 10 7
Prerequisite: Den 207

A study of the physical properties and manipulation of porcelain for porcelain jacket crowns. Laboratory phase includes the preparation of dies, adaptation of platinum matrix, firing, glazing, and personalization.

DEN 212 Advanced Ceramic Techniques 2 12 8
Prerequisite: DEN 211

The study of advanced techniques for bonding porcelain to precious metal and various methods of personalizing porcelain used in bridge construction.

DEN 213 Dental Laboratory Practice 1 6 4
Prerequisites: DEN 210, DEN 204, DEN 207

This course is designed to allow the student to put into actual practice the various techniques and procedures for fabricating removable and fixed dental appliances from impressions and prescriptions supplied by various legal sources. The dentist-laboratory technician relationship is fostered.

DEN 214 Advanced Dental Lab Practice 1 6 4
Prerequisite: DEN 213

This course is a continuation of practice in fabrication of appliances from casts and prescriptions supplied by various legal sources with continued emphasis on ethical dentist-laboratory relations.

The Mental Health Associate Program is designed to provide full-time employees in mental health settings with the knowledge, skill, and understanding that will enable them to optimally function in the role of mental health worker. The program seeks to provide training for middle-level mental health workers in a 106-hour curriculum consisting of courses in arts and sciences, specialized courses in mental health work, and supervised clinical training.

Course work provides a foundation of knowledge from mental health, sociology, psychology, and group dynamics. Laboratory and clinical experiences provide opportunities to develop human relations skills, to gain an overview of mental health services provided by various types of facilities, and to develop understanding of the role of mental health associates within the framework of a team approach to comprehensive mental health services. The program is designed to facilitate the education of full-time employees; hence, the curriculum is pursued only by students on a part-time basis.

FIRST QUARTER

	Lec	Lab	Cred
1ENG 101 Communication Skills I	3	0	3
MHA 112 Group Process I	3	0	3
1PSY 101 General Psychology	5	0	5
1SOC 100 Principles of Sociology	5	0	5

SECOND QUARTER

1ENG 102 Communication Skills II	3	0	3
1PSY 180 Adolescent Psychology	3	0	3
1SOC 180 Social Problems	5	0	5
MHA 113 Group Process II	3	0	3

THIRD QUARTER

1ENG 103 Communication Skills III	3	0	3
PSY 181 Growth and Development	5	0	3
1SSC 290 Marriage and Family	3	0	3
MHA 100 Mental Health Orientation	4	0	4

FOURTH QUARTER

1ENG 203 Communication Skills IV	3	0	3
1PSY 182 Behavior Disorders	5	0	5
MHA 111 Introduction to Mental Health	4	0	4
MHA 112P Practicum I	0	6	2

FIFTH QUARTER

1PSY 283 Psychology and Physiology of Aging	3	0	3
MHA 113P Practicum II	0	6	2
MHA 114 Social Agency Interviewing	4	3	5
MHA 220 Aggression	2	0	2

SIXTH QUARTER

MHA 210P Practicum III	0	6	2
MHA 215 Mental Health Seminar	3	0	3
MHA 220 The Role of Activities in Therapy and Habilitation	3	0	3
Elective	5	0	5

SEVENTH QUARTER

MHA 211P Practicum IV	0	6	2
MHA 219 Human Sexuality	3	0	3
Elective	5	0	5
Elective	3	0	3

EIGHTH QUARTER

MHA 215P Selected Clinical Experience	0	18	6
* Elective	5	0	5

Minimum total credit hours required for graduation: 106

*Electives, totaling 14 hours, to be selected from the following areas: BUS, PSY, SOC.

1-Refer to General Education Booklet

MHA 113P Practicum II	0	6	2
Prerequisite: SOC 103 and PSY 211, co-requisite MHA 113.			

The student will spend six hours per week in a clinical laboratory for specific social problems such as alcoholism, drug addiction, and childhood personality disorders under the supervision of a qualified faculty member. Emphasis will be placed on the application of theoretical concepts and principles from related course content and development of patient care plans.

MHA 114 Social Agency Interviewing	4	3	5
Prerequisite: MHA 11 or permission of Program Coordinator.			

Study purpose, structure, focus and techniques employed in effective interviewing. Laboratory experiences provide opportunities for observation, practice, recording, and summarizing personal histories under faculty supervision.

MHA 210 Aggression	2	0	2
Prerequisite: None: MHA 111, PSY 102, PSY 181, and/or PSY 182 desirable.			

An introduction to interpersonal and intergroup conflict. Application of theoretical and experimental learning toward better understanding and management of aggression. Particular emphasis will be placed upon the experiences of aggression in the work situation.

MHA 210P Practicum III	0	6	2
Prerequisite (or co-requisite): MHA 210.			

A study of the application of occupational and recreational techniques and skills. Each student will spend six hours per week learning new skills, teaching activities to patients and developing programs of activities in a therapeutic setting under the supervision of a qualified faculty member.

MHA 211P Practicum IV	0	6	2
Prerequisite: MHA 211.			

The student will be assigned for six hours per week in a faculty-supervised clinical laboratory for admissions, diagnosis, and preliminary treatment procedures, or other areas of special, individual interest.

MHA 215 Mental Health Seminar	3	0	3
Prerequisite: MHA 211, or permission of Program Coordinator.			

An in-depth review of current issues and trends within the field of mental health. The student is expected to demonstrate in a mature fashion the knowledge and experience of previous study, training group conferences, and oral reports.

MHA 215P Selected Clinical Experiences	0	18	6
Prerequisite: On approval of advisor.			

Students are provided with clinical experiences designed to develop insight and expertise in selected areas of human services. Clinical experiences must be approved by the program coordinator.

MHA 219 Human Sexuality	3	0	3
Prerequisite: On approval of advisor.			

A study of human sexuality in contemporary society. Physiological and emotional aspects of sexuality, and examination of one's own feelings and attitudes towards sexuality will be surveyed leading to a greater understanding of the problems of the handicapped.

COURSE DESCRIPTION

	Lec	Lab	Cred
BIO 102M Anatomy and Physiology	4	0	4
Prerequisite: None			

A study of the structure and normal functions of the human body and its related systems with emphasis upon the inter-related functions of various parts and systematic processes in the development of basic physiological principles.

MHA 100 Mental Health Orientation	4	0	4
Prerequisite: None			

Orientation to the policies, procedures, and practices commonly accepted in mental health institutions; and introduction to the basic patient care in meeting the needs of patients during observation, ambulation, and mild mentally ill stages. Included will be clinical lab and/or ward experiences.

MHA 111 Introduction to Mental Health	4	0	4
Prerequisite: MHA 100			

An overview of the history, current concepts and trends in mental health. Emphasis is given to the current comprehensive community approach to mental health and to the various disciplines within the field of mental health.

MHA 112 Group Processes I	3	0	3
Prerequisite: MHA 100 or permission of Program Coordinator.			

An introduction to the interpersonal concepts and problems of communications in interpersonal transactions. Exploration of one's attitudes and feelings as related to the interactions of the individual in an unstructured group experience.

MHA 112P Practicum	0	6	2
Prerequisite: (or co-requisite): MHA 112			

The student will spend six hours per week in clinical laboratory experiences under the supervision of a qualified instructor. Emphasis will be placed on the application of concepts and principles from related course content.

MHA 113 Group Processes II	3	0	3
Prerequisite: (or co-requisite): MHA 112			

A continued study of interpersonal relationships in small group interaction. Self-awareness and awareness of others by being involved in a group experience. Introduction of structural group exercises designed to focus on various aspects of content and process of behavior.

Lec Lab Cred

MHA 220 The Role of Activities in Therapy and Habilitation 3 0 3

Prerequisite: MHA 111 or permission of Program Coordinator.

Overview of the types of activities utilized as therapeutic techniques, with particular emphasis on the purpose of each, ways of creating and holding interests in the ability and the role of the associate in assisting patients to participate.

PSY 226 Using Tests to Understand Child Development 5 0 5

Prerequisite: PSY 102.
Survey of psychometric tests related to development; proper use of tests and their interpretations; signs and screening methods for developmental disabilities; reasons for referral; methods of developmental assessment.

PSY 250M Behavior Modification 5 0 5

Prerequisite: PSY 102.
Designed to provide direct treatment staff with a working knowledge of learning principles and the application of these principles to the behavioral problems presented by institutionalized patients. The material will be presented in a lecture-discussion format supplemented by films. Each class member will be required to analyze how he or she might employ the learning principles discussed in class in his or her work with patients.

PSY 250R Behavior Modification 5 0 5

Prerequisite: PSY 102.
Introduction to the principles of behavior modification, definition and measurement of behavior, principles of reward, punishment, token economies. Orientation is toward relevance of these principles for the training and management of retardates.

PSY 253 Mental Retardation 5 0 5

Prerequisite: None.
Theories of Retarded Development; concepts of mental deficiency, developmental disability, learning disability, etiology-neurological, metabolic, genetic, cultural-familial, treatments in area of current problems and issues.

PSY 254 Mental Retardation 5 0 5

Prerequisite: PSY 253
A continued study of mental retardation; evaluation and treatment; institutional, community, state, and federal resources for rehabilitation.

PSY 281 The Exceptional Child 5 0 5

Prerequisite: PSY 102
A survey course with special emphasis on the mentally retarded and emotionally disturbed child. Social, educational and psychological needs of the exceptional child are studied.

PSY 284 The Addictive Personality 5 0 5

Prerequisite: PSY 102.
A survey of environmental and physical factors that differentiate the addict. Stress is given the theories of cause and treatment.

SOC 180 Social Problems 5 0 5

Prerequisite: SOC 102.
A study of the nature and extent of major social problems of contemporary society, with emphasis given to such problems as family disorganization, crime and delinquency, minority groups, industrialization, and urbanization.

OPERATING ROOM TECHNOLOGY

One-Year Diploma Program

On completion of Operating Room Technology the student should know the use of Instruments used in the operating room and have a basic knowledge of the operative procedure. The student will be capable of preparing patients for surgery (surgical prep) and transporting patients from the wards to the operating rooms, as well as being able to understand the patients' psychological state. The technician assists the nurse in cleaning, stocking and preparing the operating room; sets up instrument kits, sutures, and special supplies for each particular case. The technician operates all types of sterilizers with complete understanding of the positive phase of this work. With an understanding of body mechanics and the dangers of nerve injuries, the technician helps position the patient on the operating table. The technician is also able to operate lights, such as on machines, diagnostic equipment and electro-surgical units safely. The technician has a basic knowledge of anesthetic agents and related hazards, thus carries out all preventive measures against explosives.

The operating room technician assists the circulating nurse with all duties related to patient care. The operating room technician works directly under the supervision of a registered nurse at all times.

FIRST QUARTER

	Lec	Lab	Cred
ORT 1101 Principles of O.R. Technique I	5	0	5
BIO 1102 Anatomy and Physiology	5	0	5
BIO 1103 Microbiology	3	0	3
ORT 1082 Medical Communication Skills	4	0	4

SECOND QUARTER

ORT 1102 Principles of O.R. Technique II	5	0	5
ORT 1103 Nursing Procedures	2	2	3
2NUR 1110 Pharmacology	3	1	4
ORT 1104 Safe Patient Care	2	2	3
ORT 1105 Surgical Procedures I	5	3	7

THIRD QUARTER

ORT 1106 Surgical Procedures II	0	6	3
ORT 1107 Clinical Practice I (20 hours)	0	0	7

FOURTH QUARTER

ORT 1108 Clinical Practice II (30 hours)	0	0	10
Minimum total credit hours required for graduation:	58		

2- Refer to Practical Nurse Course Descriptions.

**OPTICAL LABORATORY MECHANIC
One-Year Diploma Program**

The Optical Laboratory Mechanic Program is designed to train the student to fabricate eyewear from a doctor's prescription. The Optical Laboratory Mechanic assembles lenses and frames and places the eyewear in standard alignment, which is then ready for the dispenser to deliver to the consumer.

The Optical Lab Mechanic will be employable by retail dispensing stores, hospital eye clinics, and by eye doctors desiring to do their own eyewear fabrication and dispensing.

The potential student should have a background in mathematics and should enjoy working with small tools.

Applicants from the Federal Correctional Institution in Butner, N.C. will be given priority. Non-institutional applicants will be accepted as space permits.

FIRST QUARTER

	Lec	Lab	Cred
OPT 1001 Introduction to Optics	3	0	3
OPT 1002 Spectacle Fabrication	0	3	1
PHY 1045 Physics of Light	3	0	3
MAT 1045 Technical Math	5	0	5

SECOND QUARTER

OPT 1003 Lens Design	3	0	3
OPT 1011 Mechanical Optics	0	6	2
OPT 1022 Equipment Repair/Maintenance	2	2	3
PHY 1046 Geometric Optics	3	0	3

THIRD QUARTER

OPT 1004 Lens Design	3	0	3
OPT 1012 Mechanical Optics	0	6	2
OPT 1031 Optical Dispensing	4	2	5

FOURTH QUARTER

OPT 1013 Mechanical Optics	0	4	1
OPT 1032 Optical Dispensing	4	2	5
OPT 1042 Anatomy and Physiology of the Eye	5	0	5

Minimum total credit hours required for graduation: 44

1 Refer to General Education Booklet

COURSE DESCRIPTION

OPT 1001 Introduction to Optics

Prerequisite: None

The history of Ophthalmic glass and hard resin lens material, the evolution of spectacle lenses and the development of Ophthalmic Optics.

OPT 1002 Spectacle Fabrication

Co-requisite: OPT 1001

Frame measurements, frame types, decentration, the layout, cutting and edging of glass and hard resin lenses, lens toughening, mounting, alignment and inspection of eyewear.

OPT 1003 Lens Design

Prerequisite: OPT 1002

The Dioptric systems of Optics, spherical and cylindrical surface, lens type, base curves, corrected curves, and their effects on lenses.

OPT 1004 Lens Design

Prerequisite: OPT 1003

A continuation of OPT 1003, including prisms, multifocal lenses and the Optical effects of lenses and prisms.

OPT 1011 Mechanical Optics

Prerequisite: OPT 1002

Practical application of spectacle fabrication, including layout work, cutting and edging of lenses.

OPT 1012

Prerequisite: OPT 1011

Continuation of OPT 1011, including fabrication and finishing of multifocal eye wear.

OPT 1013 Mechanical Optics

Prerequisite: OPT 1012

Continuation of OPT 1012, including special lenses, resultant prisms, and low vision aids.

OPT 1022 Equipment, Repair and Maintenance

Prerequisite: None

A study of the available and necessary equipment, how to maintain and make elementary repairs and adjustments to lens markers, blockers, edgers and others.

OPT 1031 Optical Dispensing

Prerequisite: None

History of frames, facial measurements, interpupillary distances and frame measurement for finishing eyewear.

OPT 1032 Optical Dispensing

Prerequisite: OPT 1031

Continuation of OPT 1031, including principles of standard alignment, truing of frame and mountings, adjustment of eyewear and repairing frames.

OPT 1042 Anatomy and Physiology of the Eye

Prerequisite: None

A basic Introduction to the structure of the eye and how it functions in relation to vision care.

PHY 1045 Physics of Light

Prerequisite: None

The theory of light, electromagnetic spectrum, propagation of light, illumination and other fundamental properties of light.

PHY 1046 Geometric Optics

Prerequisite: PHY 1040

Theoretical application of light to Ophthalmic Optics, involving reflection and refraction of mirrors, prisms, and lenses.

Lec Lab Cred

3 0 3

0 6 2

0 6 2

0 4 1

2 2 3

4 2 5

4 2 5

5 0 5

3 0 3

3 0 3

Lec Lab Cred

3 0 3

0 3 1

3 0 3

OPTICIANARY
Two-Year Associate Degree Program

Lec Lab Cred

Opticianary is the art of applying the science of optics to the making and fitting of lenses and devices to aid in providing comfortable and efficient vision. The science of optics is a branch of physics which is concerned with the study of light; the nature and properties of light, the role of light in vision, and with the geometry of reflection and refraction of light by lenses. The job of an optician or ophthalmic dispenser is to measure, adapt and fit eye glasses or contact lenses to the human face as well as aiding or correcting visual (which pertains to the eye) peculiarities. The optician is a specialist in the science of ophthalmic optics and applies knowledge, both technical and mechanical, to the production of lenses according to prescriptions written by the ophthalmologist or optometrist. The optician is a member of the "eye health team" and deals directly with the patient who is in need of professional services.

After graduation from this two-year program, many employment opportunities are open. In North Carolina, graduates are eligible to take the North Carolina Opticians Examination and become licensed opticians. In those states not at present requiring a license, a graduate may immediately open his/her own business if he/she so desires. Also, without having a license, the graduate is qualified to perform as a branch manager of a wholesale laboratory, or an optical goods salesman. All of these opportunities are open to the graduate and each carries a good financial return.

FIFTH QUARTER

1ENG 203 Interpersonal Skills IV	3	0	3
OPT 204 Theoretical Optics	2	0	2
OPT 214 Mechanical Optics	0	6	2
OPT 231 Ophthalmic Dispensing	4	6	6
OPT 241 Ocular Anatomy	2	0	2

SIXTH QUARTER

OPT 205 Theoretical Optics	2	0	2
OPT 215 Mechanical Optics	0	6	2
OPT 232 Ophthalmic Dispensing	4	6	6
OPT 242 Physiology of Eye	2	0	2
Elective	3	0	3

SEVENTH QUARTER

OPT 206 Theoretical Optics	2	0	2
OPT 216 Mechanical Optics	0	6	2
OPT 233 Ophthalmic Dispensing	4	6	6
OPT 261 Contact Lenses	3	0	3
OPT 273 Seminar	1	0	1

Minimum total hours required to graduate Total 111

- 1-Refer to General Education Booklet
- 2- Refer to Business Education Booklet

COURSE DESCRIPTION

FIRST QUARTER

	Lec	Lab	Cred
1ENG 101 Communication Skills I	3	0	3
1MAT 140 Technical Math I for Opticians	5	0	5
OPT 101 Theoretical Optics	4	0	4
OPT 111 Mechanical Optics	0	6	2
2BUS 235 Business Management	3	0	3

SECOND QUARTER

1ENG 102 Communication Skills II	3	0	3
1PHY 140 Physics	3	2	4
1MAT 141 Technical Math II for Opticians	5	0	5
OPT 102 Theoretical Optics	4	0	4
OPT 112 Mechanical Optics	0	6	2

THIRD QUARTER

1ENG 103 Communication Skills III	3	0	3
1CHEM 140 Chemistry	4	3	5
PHY 141 Geometric Optics I	3	4	5
OPT 103 Theoretical Optics	2	0	2
OPT 113 Mechanical Optics	0	6	2

FOURTH QUARTER

OPT 104 Theoretical Optics	2	0	2
OPT 114 Mechanical Optics	0	6	2
PHY 142 Geometric Optics II	3	4	5
OPT 199 Plastic Lenses	1	2	2
Elective	3	0	3

OPT 101 Theoretical Optics

4 0 4

Prerequisite: None

Basic concepts of manufacturing modern ophthalmic spherical lenses and prisms will be studied with an introduction to light refraction, the metric system, and the dioptric system. Emphasis is placed on focal lengths and deviation of light by fundamental ophthalmic equations and computations. Circle relationships, the history and development of glass and the requirements of ophthalmic glass are studied.

OPT 102 Theoretical Optics

4 0 4

Prerequisites: OPT 101, OPT 111

Computation and specification for cylindrical lenses for astigmatism will be studied in theory. Ophthalmic formulas and trigonometric relationships will be employed in the calculation of cylinder powered lenses. Toric transposition, corrected spherical curves, and focal powers involving thick lenses will also be studied.

OPT 103 Theoretical Optics

2 0 2

Prerequisites: OPT 102, OPT 112

The history of bifocals from Ben Franklin to modern ophthalmic reading segments and trifocals for the presbyopic patient will be stressed. Different types, sizes and settings of multifocal lenses for the patient are included. Study of accommodation for near and intermediate distances will introduce the student to physiology of the eye.

OPT 104 Theoretical Optics

2 0 2

Prerequisites: OPT 103, OPT 113

Spherical, prismatic and cylindrical lenses are reviewed and ophthalmic theory is continued.

	Lec	Lab	Cred		Lec	Lab	Cred
OPT 111 Mechanical Optics			0 6 2				
Prerequisite: None							
The student will apply the introductory optical theory for wholesale production of spherical and prismatic lenses. Laboratory Instruction will include techniques of lens marking, blocking, using abrasive compounds, grinding, polishing, and inspecting lens surfaces and refractive powers. The student will learn the use of hand splanidie machines, automatic polishing machines, diamond lap automatic lens curve generating machines, and the lensometer/certometer. Emphasis is placed on the care of grinding tools, machinery, and on accuracy.							
OPT 112 Mechanical Optics			0 6 2				
Prerequisite: OPT 111							
Laboratory beginning with surfacing of cylindrical lenses, plus curves, trueing of both spherical and cylindrical laps, and continuation of spherical and prismatic lens surfacing will be studied.							
OPT 113 Mechanical Optics			0 6 2				
Prerequisite: OPT 112							
Calculations and surfacing procedures for bifocals, trifocals, and spherical lenses for high refractive errors, including the cataract, are performed in the ophthalmic laboratory.							
OPT 114 Mechanical Optics			0 6 2				
Prerequisite: OPT 113							
Laboratory emphasis is placed on accuracy and speed for laboratory surfacing operations. The student is introduced to finishing operations such as hand edging and beveling.							
OPT 119 Plastic Lenses			1 2 2				
Prerequisite: None							
History of the plastic lenses introduced. Theory and guide to plastic lenses with the application of lap selection, tints and dyes.							
OPT 204 Theoretical Optics			2 0 2				
Prerequisite: OPT 104							
Instruction in this course will cover prisms, different types of prisms, definitions, use of Prentice's Rule and thickness computation. Decentration to avoid or create prism, image jump, object displacement and vertical imbalance of single vision and bifocal lenses will be extensively discussed with an in depth application of Prentice's Rule. Toric and flat transposition, crossed cylinders and the optical cross will be covered.							
OPT 205 Theoretical Optics			2 0 2				
Prerequisites: OPT 204, OPT 214							
A continuation of OPT 204 with the addition of cylinder powers in oblique meridians, applications of the many available multifocal lenses, both glass and plastic, lens aberrations and corrected curves.							
OPT 206 Theoretical Optics			0 6 2				
Prerequisites: OPT 205, OPT 215							
Spectral transmission and absorption characteristics of modern ophthalmic glass and plastic will be discussed and their applications reviewed. Repeated emphasis on proper use of base curve selections and the various availability lens charts, with a complete review of all formulas and their applications.							
OPT 214 Mechanical Optics			0 6 2				
Prerequisite: OPT 114							
A continuation of basic finishing operations which include checking, marking, cutting, edging, and leveling of lenses, and insertion of lenses into Zylonite frames. Applications of Prentice's Rule in figuring decentiation to create or avoid prism, compound prisms and bifocal surfacing and finishing. Instrument and machine maintenance.							
OPT 215 Mechanical Optics			0 6 2				
Prerequisite: OPT 214							
Layout and finishing of multifocal lenses, lens insertion into all available styles, zylonite, metal and combination frames. Basic instruction in mounting lenses on rimless and semi-rimless mounting, heat-treating procedures, and instrument and machine maintenance.							
OPT 216 Mechanical Optics			0 6 2				
Prerequisite: OPT 206							
Intensified work in all phases of finishing operations, including automatic leveling with special emphasis on rimless and semi-rimless work. Safety lenses and heat-treating procedures are studied.							
OPT 231 Ophthalmic Dispensing			5 4 7				
Prerequisite: Completion of First Year							
Introduction, history, and evolution of the present day professional optician. Topics included are: development of spectacles, measuring devices, dispensing procedures, the use of lenses, neutralizing instruments, prescription interpretation and analysis, determination of facial and spectacle measurements and requirements, methods and use of devices in determining pupillary distances, and the criteria of comfortable and optically well-fitted glasses. Practice fitting and dispensing the plastic-type spectacles is included.							
OPT 232 Ophthalmic Dispensing			4 6 6				
Prerequisite: OPT 231							
Clinical practice and individual instruction in fitting, adjusting, and general dispensing of spectacles. The use of all ophthalmic pliers and the related dispensing devices required in fitting each specific style of eyewear, single vision, multifocal, prism and anisometropic prescription analysis. Professional ethics of opticianry and office procedures are studied.							
OPT 233 Ophthalmic Dispensing			4 6 6				
Prerequisite: OPT 232							
A continuation of instruction and clinical practice in dispensing all types of spectacles. Analysis of complex and unusual prescriptions and the dispensing procedures in these cases. Instruction in fitting special types of spectacles including: cataract, telescopic, bi-centric, monocular, microscopic, vocational, avocational, sports, safety, stenopiac, ptosis crutch, subnormal vision and others. Frame analysis for the patient's needs, dependent upon intended use and present day vogue, vertex, distance measurements and prescription compensation. Office management and credit sales with field trips to several ophthalmic product manufacturing plants are also included.							

	Lec	Lab	Cred
OPT 241 Anatomy of the Eye	2	0	2
Prerequisite: None			
A detailed study of the composition of the eye and its associated structures such as orbit lids, lacrimal apparatus, and muscles.			
OPT 242 Physiology of the Eye	2	0	2
Prerequisite: OPT 241			
A detailed study of the function of the eye and its associated structures. Also included is a study of accommodation and presbyopia, refractive errors and their correlation, binocular vision, eye muscle imbalance, and common eye diseases.			
OPT 261 Contact Lenses	3	0	3
Prerequisite: None			
History, development and manufacture of contact lenses, anatomical data of the eye with emphasis on the cornea, study of appropriate application of contact lenses when they are indicated and contraindicated to the instruments used followed by the theory of contact lenses and optics of contact lenses.			
OPT 273 Seminar	1	0	1
Prerequisite: None			
Ethics of the profession; job opportunities; State Board Examinations of the various states; variations in state laws; review of first-year technical courses in preparation for North Carolina State Board Examination are covered in this course.			

PHARMACY TECHNICIAN

Six Month Certificate Program

The Pharmacy Technician is an allied health specialist employed within a pharmacy to perform a variety of technical duties related to preparing and dispensing drugs in accordance with standard procedures and laws under the supervision of a registered pharmacist. In hospitals, Pharmacy Technicians transcribe physician's medication orders, fill orders to be checked by pharmacists, and deliver them. The Pharmacy Technician must also be capable of preparing admixtures of intravenous solutions, maintaining control drug distribution, pricing and ordering drugs, and preparing bulk formulations. Additional duties require the replenishing of pharmaceutical supplies and medications on patient care units, filling prescriptions, and maintaining patient profile records. The first of its kind in the community college systems of the southeastern United States, Durham Tech's Pharmacy Technician Program has been designed to answer the increased need for technical, supportive personnel to carry out the routine functions in the dispensing of drugs to hospital inpatients and ambulatory patients.

FIRST QUARTER

	Lec	Lab	Cred
PHM 1100 Pharmacology I	3	0	3
MAT 1030 Pharm. Mathematics	5	0	5
CHM 1030 General Chemistry for Pharm. Techs.	4	2	5
PHM 1101 Hospital Pharmacy I	3	0	3
PHM 1101P Pharmacy Practicum I	0	4	2

SECOND QUARTER

PHM 1103 Pharmacology II	2	0	2
BIO 1030 Pathophysiology	3	2	4
BUS 1100 Typing	2	2	3
PHM 1102 General Hospital Pharmacy II	2	0	2
PHM 1102P Pharmacy Practicum II	0	16	5

Minimum total credit hours required for graduation: 34

1-Refer to General Education Booklet

COURSE DESCRIPTION

	Lec	Lab	Cred
BUS 1100 Typewriting	2	2	3
Prerequisite: None			
Introduction to the touch typewriting system with emphasis on correct techniques, master of the keyboard, simple business correspondence, tabulation, manuscripts, and pharmacy forms and labels.			
PHM 1100 Pharmacology I	3	0	3
Prerequisite: None			
An introductory study of drug products, how drugs prevent or interfere with disease processes, this course includes the most commonly encountered drugs in each therapeutic category. The objective of the course is to acquaint students with the generic and trade names of commonly used drugs, their actions, general uses, and important contraindications in the treatment of disease states.			

PRACTICAL NURSE EDUCATION
One-Year Diploma Program
PHM 1101 General Hospital Pharmacy I

3 0 3

Prerequisite: None

A study of the technical procedures for the safe and accurate preparation and dispensing of drugs, this course includes the procuring, compounding, packaging, and labeling of drugs and the theory and practice behind dispensing of these drugs to hospital inpatients and ambulatory patients. The objective of this course is to prepare students to perform these activities under the supervision of a pharmacist. The sequence of topics studied is coordinated with practical experiences in the Hospital Pharmacy Practicum (PHM 1101P).

PHM 1101P Hospital Pharmacy Practicum I

0 4 2

Prerequisite: None Co-requisite: PHM 1101

A laboratory designed to introduce the student to the hospital and hospital pharmacy environment. This course includes practical experience in pharmacy packaging, labeling and filling activities. Orientation and tours are conducted for the students at several institutions in the Raleigh-Durham-Chapel Hill area.

PHM 1102 General Hospital Pharmacology II

2 0 2

Prerequisites: PHM 1101, PHM 1101-P, CHM 1030, ENG 1030, MAT 1030;

Co-requisite: PHM 1102-P

A continuation of PHM 1101 Hospital Pharmacy I, this course completes the study of the technical procedures involving the preparation and dispensing of drugs. As with PHM 1101, the instruction includes further study of the procuring, compounding, packaging, and labeling of drugs and the theory and practice behind the dispensing of these drugs to hospital inpatients and ambulatory patients. The objective of the course is to prepare students to perform these activities under the supervision of a pharmacist. The sequence of topics that are studied is coordinated with practical experience in the Hospital Pharmacy Practicum (PHM 1102P).

PHM 1102P Hospital Pharmacy Practicum II

0 16 5

Prerequisites: CHM 1100, ENG 100, MAT 1100, PHM 1101, PHM 1101-P

Co-requisite: PHM 1103

A laboratory designed to give the student on-the-job training in a variety of actual hospital pharmacy settings, this course includes practical experiences in procuring, compounding, packaging and labeling drugs and in dispensing drugs to patients under the supervision of pharmacists. Exposure to several hospital pharmacies in the Raleigh-Durham-Chapel Hill area provides the student experiences in several drug dispensing systems.

PHM 1103 Pharmacology II

2 0 2

Prerequisite: CHM 1030; Co-requisite: BIO 1030

A continuation of PHM 1100, this course completes the introductory study of drug products, how drugs prevent or interfere with disease processes, including the most commonly encountered drugs in each therapeutic category. The course follows the sequence of study of the different organ systems and disease processes (i.e. BIO 1030). The objective of the course is to acquaint students with the generic and trade names of the most commonly used drugs and to give students an appreciation for the use and relative importance of the drugs in treating different disease states.

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

Throughout the one-year program the student is expected to continuously acquire knowledge and understanding related to nursing and the biological and social sciences and to develop skills related to nursing practice, communications, inter-personal relations, and use of good judgment. Evaluation of student performance consists of tests on all phases of course content, evaluation of clinical performance, and evaluation of adjustment 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 examinations 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 the legal title "Licensed Practical Nurse." The license must be renewed annually. The Licensed Practical Nurse can apply for licensure in other states on the basis of a satisfactory examination score, without repeating the examination.

FIRST QUARTER

	Lec	Lab	Cred
NUR 1101 Fundamentals of Nursing	9	4	11
NUR 1102 Body Structure and Function	8	0	8
NUR 1103 Nutrition and Diet Therapy	4	0	4
NUR 1110 Pharmacology I	3	1	4

SECOND QUARTER

NUR 1104 Medical & Surgical Nursing I	5	3	6
NUR 1107 Maternal & Child Health I	4	3	5
NUR 1111 Pharmacology II	3	0	3
*NUR 1109 Clinical Experience (Medical & Surgical Nursing)	0	0	4

THIRD QUARTER

NUR 1105 Medical & Surgical Nursing II	9	0	9
NUR 1108 Maternal & Child Health II	6	0	6
*NUR 1114 Clinical Experience (Medical Nursing, Surgical Nursing, Obstetrics, Pediatrics)	0	0	5

FOURTH QUARTER

NUR 1106 Medical & Surgical Nursing III	7	0	7
NUR 1112 Vocational Relationships & Adjustments to Nursing	7	0	7
*NUR 1114 Clinical Experience (Medical Nursing, Surgical Nursing, Obstetrics, Pediatrics)	0	0	5

Minimum total credit hours required for graduation: 82

Students who do not make a satisfactory score on Mathematics and Reading will be required to complete Reading Improvement (ENG 1101N) and Math Skills for Nurses (MAT 1101N) with a passing score before entering the Nursing Curriculum.

*Clinical experiences are spread over the third and fourth quarters. Each student is scheduled for two rotations per quarter.

** Nursing Arts Lab

COURSE DESCRIPTION

Lec Lab Cred

NUR 1101 Fundamentals of Nursing	9 4 11		
Prerequisite: None			
This course provides a sequence of planned learning experiences designed to develop the basic knowledge, understanding and skills of nursing care. It is also directed toward aiding the development of skills in human relationships; imparting knowledge of the importance of recognizing physical hazards in the environment of the individual; learning to observe, identify, report, and record significant information accurately and objectively. The health team, trends in nursing and the legal responsibilities of a nurse are incorporated into this course. Laboratory experiences will be provided at Hillhaven Convalescent Center and in the Nursing Arts Lab on campus.			
NUR 1102 Body Structure and Function	8 0 8		
Prerequisite: None			
In this course basic concepts of human structure and functions are stressed. The nursing student will be exposed to fundamental pathological conditions associated with each body system.			
NUR 1103 Nutrition and Diet Therapy	4 0 4		
Prerequisite: None			
This course provides practical knowledge of good nutrition and some knowledge of diet therapy as well as background and accurate information on basic nutrition and the nutritional needs of the body. Modification of the diet to meet nutritional needs in special situations is emphasized.			
NUR 1104 Medical and Surgical Nursing	5 3 8		
Prerequisites: NUR 1101, NUR 1102, NUR 1103, NUR 1110.			
This course focuses on the scientific principles underlying nursing care of patients with medical and surgical conditions. Emphasis is placed on the application of knowledge and development of nursing skills. Learning activities for all units are patient-centered and correlate theory and practice. Community resources, diet therapy, concepts of mental health and pharmacology are integrated throughout the course.			
NUR 1105 Medical and Surgical Nursing II	9 0 9		
Prerequisites: NUR 1104, NUR 1110, NUR 1111			
A continuation of Medical-Surgical Nursing I with continued expansion of previously acquired knowledge and principles in the study and care of the adult patient. The role of the nurse is focused on caring for patients with problems associated with body disturbances which interfere with proper nutrition, proper elimination and maintenance of fluid and electrolyte balance.			
NUR 1108 Medical and Surgical Nursing	7 0 7		
Prerequisite: NUR 1105			
This course places emphasis on advanced nursing skills essential to meeting physical, psychological and social needs of patients with major medical and surgical problems. Study of the related nutrition, pharmacology, psychology, and legal aspects and treatments are integrated throughout the course.			
NUR 1107 Maternal and Child Health		4 3 5	
Prerequisites: NUR 1101, NUR 1102, NUR 1103, NUR 1110			
This course is designed to help the student understand the needs of the mother through a normal maternity cycle. The child's basic care needs are explored from birth through adolescence. Common pathological conditions of the child are discussed as they affect basic nursing care.			
NUR 1108 Maternal and Child Health II		6 0 6	
Prerequisites: NUR 1107, NUR 1110, NUR 1111			
A continuing development of principles of maternal and child nursing with emphasis on health teaching, evaluation and comprehensive nursing care. The complications and pathological conditions of maternity, infancy, childhood and adolescence are considered.			
NUR 1109 Clinical Experience [Medical and Surgical Nursing]		0 0 4	
Prerequisites: NUR 1101, NUR 1102, NUR 1103, NUR 1110			
Medical Nursing: Clinical application is designed to introduce the student to individualized nursing care of medical patients. It presents a physiological analysis of the cause of disease and explores common behavioral responses to illness.			
Surgical Nursing: The surgical-nursing segment provides clinical application of knowledge and skills learned in the classroom by giving direct pre-operative and post-operative care in the hospital.			
NUR 1110 Pharmacology I		3 1 4	
Prerequisite: MAT 100 or satisfactory placement test grade on Mathematics.			
This course is designed to provide basic and current information on drugs and their administration. Emphasis is placed on sources of drug information, site of drug action, factors that affect the action of medications, types of medications and the routes of their administration. Mathematics related to pharmacology is also included in this course.			
NUR 1111 Pharmacology		3 0 3	
Prerequisite: NUR 1110			
Further study of drugs used in the diagnosis, cure or prevention of diseases. The objective of this course is to enable the nurse to become aware of the therapeutic use, action, effects, precautions, and contraindications of drugs in order to give nursing care. Emphasis is placed on nursing implications related to drug therapy.			
NUR 1112 Vocational Relationships and Adjustments to Nursing		7 0 7	
Prerequisites: NUR 1101, NUR 1104, NUR 1105, NUR 1108, NUR 1111			
This course includes current trends in nursing, legal and ethical responsibilities and nursing care of patients with complex problems in all areas. This course is based on knowledge accrued from previous nursing courses, and includes complete problems in planning, implementing and evaluating nursing care for a group of patients. Disaster emergency nursing as well as a review of Medical-Surgical Nursing, Maternal-Child Health Nursing and Pharmacology will be included.			

NUR 1114 Clinical Experience
 [Medical Nursing, Surgical Nursing,
 Obstetrics, Pediatrics]
 Prerequisites: NUR 1104, NUR 1107, NUR 1109,
 NUR 1111

Medical Nursing: This unit is designed to build upon principles of previous courses and to provide opportunities for determining needs of patients during the acute and chronic phases of illness. Planned experiences are provided in medical units of the hospital. Team nursing is supplemented by student participation in independent study, problem solving sessions, student presentation and selected patient care assignments.

Surgical Nursing: This unit provides opportunities for increased knowledge and understanding of nursing care required when caring for the surgical patient. The emphasis is on total patient care and nursing skills needed when caring for the pre-operative as well as the post-operative patient. Presentation of nursing care plans and problem solving sessions are also included.

Obstetrical Nursing: This unit covers the complete maternity cycle and growth and development of the newborn. Emphasis is placed on nursing needs of patients during pregnancy, labor and delivery, puerperium and nursing needs of the newborn. Instruction is augmented by clinical conferences and supervised clinical practice.

Pediatric Nursing: This unit is designed to assist the nursing student to attain knowledge and concepts of the child in health and disease. Varying situations in the hospital are offered in the care of children. Special emphasis is placed on family centered care and the individual needs of children.

RESPIRATORY THERAPY

Two-Year Associate Degree Program

The aim of this two-year program is to provide respiratory therapists who are expert in the therapeutic uses of aids to the breathing process such as medical gases, oxygen administering apparatus, humidity and aerosol devices, positive pressure ventilation, mechanical airways, and cardiopulmonary resuscitation. Due to the increasing incidence of respiratory diseases and the increasingly complex modalities used in the treatment and diagnosis of these diseases the field of respiratory therapy is one of the fastest growing allied health specialties in the United States.

As therapeutic and diagnostic procedures are applied to outpatients and inpatients, to elderly and infants, to the chronically ill as well as acutely ill, the respiratory therapist is an asset to both the hospital and the physician.

Clinical experience is provided for the student at North Carolina Memorial Hospital and Durham County General Hospital. Upon satisfactory completion of the required curriculum, the student will be eligible to sit for the national registry examination given by the National Board for Respiratory Therapy.

FIRST QUARTER

	Lec	Lab	Cred
BIO 130 General Biology	3	2	4
*MAT 131 Math II for RT	5	0	5
*ENG 101 Communication Skills I	3	0	3
RTH 101 RT Theory and Procedures	3	2	4
*SOC 100 Sociology	3	0	3

SECOND QUARTER

PHY 130 Physics I for RT	3	2	4
CHM 130 Chemistry for RT	5	2	6
BIO 131 Anatomy and Physiology	4	2	5
RTH 102 RT Theory and Procedures	6	2	7
*ENG 102 Communication Skills II	3	0	3

THIRD QUARTER

BIO 230 Microbiology	4	2	5
BIO 132 Cardiopulmonary Anatomy and Physiology	3	0	3
PHY 131 Physics II for RT	3	2	4
MED 130 Pharmacology	3	0	3
*ENG 103 Communication Skills II	3	0	3
RTH 103 RT Theory and Procedures	6	2	7

FOURTH QUARTER

MED 231 Pathology	4	0	4
PSY 101 Psychology	3	0	3
ENG 203 Interpersonal Communications	3	0	3
MED 131 Acid/Base Electrolytes & Blood Gas Interpretation	3	0	3
RTH 201 RT Theory and Procedures	3	2	4

FIFTH QUARTER

RTH 251 Assessment and Treatment of C/P Abnormalities	4	0	4
RTH 202 RT Theory and Procedures	3	2	4
RTH 202/P Clinical Practice	0	0	24

SIXTH QUARTER

	Lec	Lab	Cred
RTH 203 RT Theory and Procedures	3	2	4
RTH 203/P Clinical Practice	0	0	32

SEVENTH QUARTER

	Lec	Lab	Cred
RTH 204 RT Theory and Procedures: Pulmonary Functions	3	2	4
RTH 204/P Clinical Practice	0	0	32

EIGHTH QUARTER

	Lec	Lab	Cred
RTH 220 Dept. Design and Supervisory Management	3	0	3
RTH 205 Eighth Quarter Rotations	0	0	32

Minimum total credit hours required for graduation: 165

* Students who are weak in science or mathematics are advised to take Introductory Chemistry, Biology and Physics (CHM 030, BIO 030, PHY 031) and/or MAT 130, Mathematics, prior to the beginning of the freshman year.

1-Refer to General Education Booklet

** May be substituted with any Humanities, Social or Political Science Elective with the approval of the program coordinator.

Note: Curriculum revisions occur frequently to update and enhance the program.

COURSE DESCRIPTION

	Lec	Lab	Cred
BIO 130 General Biology	3	2	4
Prerequisite: None			
An introduction to cellular biology with special emphasis on the ultrastructure of cell anatomy, the molecular aspects of cell physiology, and introduction vertebrate dissection. Designed for students continuing their studies in anatomy and physiology.			
BIO 131 Anatomy-Physiology	4	2	5
Prerequisite: BIO 130			
A study of the functional and structural components of the human body, their relationships and integrations as organ systems, with emphasis on the homeostatic physiology of the nervous, cardiopulmonary, and excretory systems and studies of fluid-electrolyte and acid-base regulation.			
BIO 132 Cardiopulmonary Anatomy-Physiology	3	0	3
Prerequisite: BIO 131			
A detailed study of the structural and functional integration of the respiratory system in conjunction with the circulatory system. Factors involved in respiration mechanics of respiration, ventilation, pulmonary circulation, tissue metabolism, oxygen transport, and carbon dioxide elimination will be included.			
BIO 230 Microbiology	4	2	5
Prerequisites: BIO 130, BIO 131			
An introduction to clinical microbiology. Primary emphasis is upon bacterial, viral, and fungal agents of respiratory disease. Coverage also includes disease transmission, nosocomial infection, microbial control, and immunology of hypersensitivity and body defenses.			
CHM 130 Chemistry			
Prerequisite: MAT 121 or equivalent			
Study of the physical and chemical properties of substances; Chemical changes, elements, compounds, gases, chemical combinations, weights and measurements, theory of metals, acids, bases, salts, solvents, solutions and emulsions. Introduction to organic chemistry with emphasis being placed on biochemical systems found in vertebrates. Introduction to acid-base balance, buffer systems, study of carbohydrates, electrolytes, and electrolytes as they apply to vertebrate physiology.			
MED 130 Pharmacology	3	0	3
Prerequisite: BIO 131			
A comprehensive study of those drugs and medications commonly found in respiratory therapy or in cardiopulmonary diseases. Emphasis includes the pharmacodynamics of drug action, correct drug usage, and administration.			
MED 131 Acid-Base, Blood Gas and Electrolyte Physiology	3	0	3
Prerequisites: CHM 130, BIO 131, BIO 132			
This lecture-discussion is designed to meet the specialized needs of Respiratory Therapy students for advanced training in acid-base regulation; fluid-electrolyte balance; blood gas values and their clinical interpretation; and the clinical measurement of arterial pH, oxygen, and carbon dioxide.			
MED 231 Pathology	4	0	4
Prerequisites: BIO 132, BIO 230			
This course provides a comprehensive study of the etiology and pathogenesis of respiratory and cardiovascular diseases. Additional focus includes clinical manifestations, diagnosis, and complications.			
PHY 131 Physics I for Respiratory Therapy	3	2	4
Prerequisite: MAT 121			
A fundamental course covering the physical principles of matter, liquids, gases, and their laws will be studied as they relate to physiologic mechanisms. Laws: Thermodynamics and bioenergetics.			
PHY 131 Physics II for Respiratory Therapy	3	2	4
Prerequisite: PHY 130			
Basic theories of electricity, types of electricity, methods of production, transmission and application of electrical principles which affect maintenance and development of respiratory apparatus, and bioelectricity and electrical safety in hospitals.			
RTH 101 RT Theory and Procedures	3	2	4
Prerequisite: None			
An introduction to hospital course covers ethics, professionalism, professional organizations, and the history of Respiratory Therapy. Also, physical properties, piping, storage, safety standards, flow and pressure regulation of medical gases will be covered. Basic anatomy and physiology of the respiratory system including oxygen transport by the blood will also be covered. Additionally, medical terminology and basic medical pharmaceutical mathematics will be presented.			

RTH 102 RT Theory and Procedures

6 2 7

Prerequisite: RTH 101

Properties and production of therapeutic vapors and aerosols, physical examination of the chest, clinical signs and symptoms indicating or contraindicating oxygen and/or aerosol therapy, techniques and procedures applied in the administration of oxygen and aerosol therapy will be covered. Laboratory sessions involve the complete examination and demonstration of equipment utilized in the application of the therapeutic procedures and techniques covered. Basic First Aid will be included as a module during this course.

RTH 103 RT Therapy Theory and Procedures

6 2 7

Prerequisites: RTH 102, BIO 131, PHY 130

An Introduction to the indications, contraindications, physiology, mechanics of mechanical ventilation and airway maintenance as related to IPPB. Laboratory sessions will require students to disassemble various positive pressure breathing devices and accessories to assure student exposure to mechanical functions of each device. In addition cardiopulmonary resuscitation will be studied as to theory, procedure, and technique.

RTH 201 RT Theory and Procedures

3 2 4

Prerequisites: RTH 103, BIO 132, BIO 230, MED 250, PHY 131

An Introduction to ventilators and monitoring devices, procedures and techniques, indications and contraindications as specifically related to prolonged assisted and controlled mechanical ventilation. Laboratory sessions require students to disassemble and reassemble ventilators and monitoring devices to assure student exposure to specific classifications, functions, and problems unique to each device.

RTH 202 RT Theory and Procedures

3 2 4

Prerequisites: RTH 201, MED 250, MED 131, MED 130, BIO 132, PHY 131

A continuation of theory and procedures related to mechanical ventilation with emphasis on interpretation and application of blood gas values, physiological monitoring and weaning procedures and techniques.

RTH 202P Respiratory Therapy

0 24 12

Clinical Practice

Prerequisites: RTH 201, MED 131, MED 250, PHY 131, BIO 132, BIO 230

Co-requisite: RTH 202

This course is the initial clinical rotation of the program. At this time all skills learned in the classroom and dry lab during RTH 101, 102, 103, 201 will be practiced at the clinical affiliates. All respiratory modalities of oxygen, humidity, and aerosol therapy will be practiced intensively. Incentive spirometry, equipment maintenance and cleaning, chart research, patient reporting, blood gas analysis, and physiological monitoring will also be included. Rotations will be scheduled to afford the lowest possible student/instructor ratios, and will be accomplished on day, evening and night shifts. These goals and schedules will be continued in the remaining clinical courses.

RTH 203 Theory and Procedures: Pediatrics

3 2 4

Prerequisites: RTH 202, RTH 202/P

This course has been designed as a full didactic module on Pediatric Respiratory Therapy. It will include an intensive study of pediatric anatomy and physiology with referenced comparison to the adult, pediatric pathology and pathophysiology, and detailed application of pediatric respiratory therapy and clinical management.

RHT 203/P Clinical Practice

0 32 16

Prerequisites: RTH 202, RTH 202/P

Clinical rotations in specialty areas to include surgical, medical and pediatric intensive care units will be included. Arterial punctures, cardiopulmonary rehabilitation, and cardiopulmonary resuscitation will be practiced. Mechanical ventilation set-up, monitoring, and maintenance will be included also.

RTH 204 RT Theory and Procedures:

3 2 4

Pulmonary Function Testing and Interpretation

Prerequisites: RTH 203, RTH 203/P

During this quarter, the student will be exposed to an intensified module in Pulmonary Function Testing and Interpretation. This area will be covered to include spirometry to computerized testing procedure. All modern testing procedures will be discussed and many of the practical pulmonary function interpretations will be intensively discussed.

RTH 204/P Respiratory Theory Clinical Practice

0 16 8

Prerequisites: RTH 203, RTH 203/P

A course requiring the student to demonstrate overall proficiency at every level of clinically-applied respiratory therapy, including pulmonary function testing and interpretation. In addition, the student must exhibit proficiency in the realm of interpersonal relationships, decision-making, and independence necessary to prove clinical competence.

RTH 205 Eighth Quarter Rotations

0 32 16

Prerequisite: Successful completion of all RTH and support courses or permission of the program coordinator.

NOTE: All prerequisite requirements are firm for the two-year curriculum students. However, in the case of a special or three-year student, prerequisite waivers can be obtained only by permission of the program coordinator.

During this course the students will function essentially as student therapists while rotating through all clinical affiliates and will perform under the supervision of clinical instructors who will continuously evaluate their progress. This course will provide a transitional period between academic and actual working conditions.

RTH 220 Departmental Design and Supervisory Management

3 0 3

Prerequisite: RTH 203, RTH 203/P

Course introduces students to management and supervisory principles. Emphasis will be placed on departmental management, personnel supervision, and an introduction to hospital administration, as well as intensive modules on departmental design under many circumstances and conditions.

**RTH 251 Assessment and Treatment of
Cardiopulmonary Abnormalities**

Lec Lab Cred
4 0 4

Prerequisites: RTH 202, MED 130, MED 131, MED 250
BIO 132

This course is composed of a series of instructor lectures concentrating on abnormalities of the respiratory system that the respiratory therapist will encounter frequently. This will comprise all aspects of respiratory therapy; initial assessment of the patient and re-evaluation of the course of the disease. The primary objective is to enable the student to anticipate, understand, and treat patients with abnormalities of their cardiorespiratory systems.

SCI 030 Unified Science

Lec Lab Cred
10 16 30

Prerequisite: None

An introductory course designed for students with little or no background in the sciences: biology, chemistry, and physics. Emphasis is placed more on understanding how rather than why, and in helping the student to associate general scientific principles with the respective discipline.

Notes



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1637 Lawson Street
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4

Department of
Business Education

Accounting
Business Administration
Business Data Processing
General Office Technology
Industrial Management
Secretarial Science

Durham Technical Institute
1978-1979

CLASSES BEGIN:

September 27, 1978
 January 8, 1979
 April 2, 1979
 July 10, 1979

How to get a catalog

Catalog booklets may be picked up free of charge at the Durham Tech campus. All mail requests should be addressed to Durham Technical Institute, 1637 Lawson Street, P.O. Drawer 11307, Durham, N.C. 27703, (919) 596-9311. So that we may properly assist you, please specify which booklets are desired.

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Lynne W. West
Jerome R. Worsley

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Accounting
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ACCOUNTING

Two-Year Associate Degree Program

The curriculum is designed to offer students the accounting theories and skills necessary for entry into the accounting profession.

The specific objectives of the Accounting Curriculum are to develop competencies of understanding the fundamental principles of accounting, understanding the principles of organization and management in business operations, and the interpretation and analysis of financial data for management's use in decision making.

DAY CURRICULUM

FIRST QUARTER

	Lec	Lab	Cred
BUS 101 Introduction to Business	5	0	5
BUS 120 Accounting I	5	2	6
ECO 102 Economics I	3	0	3
1ENG 101 Communication Skills I	3	0	3
BUS 125 Math of Finance	5	0	5

SECOND QUARTER

BUS 121 Accounting II	5	2	6
ECO 104 Economics II	3	0	3
1ENG 102 Communication Skills II	3	0	3
*** General Education Elective	3	0	3

THIRD QUARTER

BUS 115 Business Law	3	0	3
BUS 122 Accounting III	5	2	6
ENG 103 Communication Skills III	3	0	3
BUS 127 Tax I	3	2	4
*** General Education Elective	3	0	3

FOURTH QUARTER

BDP 101 Intro. to Data Processing	5	0	5
BUS 116 Business Law	3	0	3
BUS 225 Cost Accounting	3	2	4
BUS 228 Tax II	3	2	4
1ENG 203 Interpersonal Communications	3	0	3

FIFTH QUARTER

BUS 222 Intermediate Accounting	5	2	6
BUS 226 Managerial Accounting	5	2	6
BUS 216 Business Communication	3	0	3
BUS 221 Statistics	5	0	5

SIXTH QUARTER

BUS 223 Intermediate Accounting	5	2	6
BUS 227 Accounting Theory	3	2	4
BUS 269 Auditing	3	2	4
** Technical Elective	3	0	3

Minimum total credit hours required for graduation: 112

NOTE: Those students who do not pass the Mathematics pretest section of the Admissions Test will be required to take Mathematics 120 as a prerequisite to BUS 125 Mathematics of Finance.

1-See General Education Booklet

** Technical Elective must be arranged and approved by Accounting Faculty Advisor.

*** Defined as a course with the following prefix: GEO, HUM, POL, PSY, SOC, SSC. See General Education Course Descriptions.

EVENING CURRICULUM

FIRST QUARTER

	Lec	Lab	Cred
BUS 101 Introduction to Business	5	0	5
ENG 101 Communication Skills I	3	0	3
BUS 125 Math of Finance	5	0	5

SECOND QUARTER

BUS 120 Accounting I	5	2	6
1ENG 102 Communication Skills II	3	0	3
*** General Education Elective	3	0	3

THIRD QUARTER

BUS 115 Business Law	3	0	3
BUS 121 Accounting II	5	2	6
ECO 102 Economics I	3	0	3

FOURTH QUARTER

BUS 122 Accounting III	5	2	6
ECO 104 Economics II	3	0	3
1ENG 103 Communication Skills III	3	0	3

FIFTH QUARTER

BUS 116 Business Law	3	0	3
BUS 225 Cost Accounting	3	2	4
BUS 221 Statistics	5	0	5

SIXTH QUARTER

BUS 222 Intermediate Accounting	5	2	6
1ENG 203 Interpersonal Communications	3	0	3
*** General Education Elective	3	0	3

SEVENTH QUARTER

BDP 101 Intro. to Data Processing	5	0	5
BUS 223 Intermediate Accounting	5	2	6
BUS 216 Business Communications	3	0	3

EIGHTH QUARTER

BUS 226 Managerial Accounting	5	2	6
BUS 127 Tax I	3	2	4
** Technical Elective	3	0	3

NINTH QUARTER

BUS 227 Accounting Theory	3	2	4
BUS 228 Tax II	3	2	4
BUS 269 Auditing	3	2	4

Minimum total credit hours required for graduation: 112

BUSINESS ADMINISTRATION
Two-Year Associate Degree Program

EVENING CURRICULUM

This two-year curriculum is designed to prepare students for employment in occupations common to business. Instruction is aimed at preparing the student in many phases of administrative work that will be encountered in the average business. Specific objectives are to develop the following competencies; understanding of the principles of organization and management in business operations; understanding our economy through the study and analysis of the role of production and marketing; knowledge in specific elements of accounting, finance, and business law; understanding and skill in effective communication for business; knowledge on human relations as they apply to successful business operations in a rapidly expanding economy.

DAY CURRICULUM

	Lec	Lab	Cred
FIRST QUARTER			
BUS 101 Introduction to Business	5	0	5
BUS 110 Office Machines	3	2	4
ECO 102 Economics I	3	0	3
1ENG 101 Communication Skills I	3	0	3
*MAT 110 Business Math	5	0	5
SECOND QUARTER			
BUS 120 Accounting I	5	2	6
BUS 243 Advertising	5	0	5
ECO 104 Economics II	3	0	3
1ENG 102 Communication Skills II	3	0	3
THIRD QUARTER			
BUS 115 Business Law I	3	0	3
BUS 121 Accounting II	5	2	6
BUS 232 Sales	3	0	3
+BUS 274 Labor Relations	3	0	3
1ENG 103 Communication Skills III	3	0	3
FOURTH QUARTER			
BUS 116 Business Law II	3	0	3
BUS 123 Business Finance	3	0	3
+BUS 247 Business Insurance	3	0	3
BDP 101 Intro to Data Processing	5	0	5
1ENG 203 Interpersonal Communications	3	0	3
FIFTH QUARTER			
BUS 124 Personal Finance	3	0	3
+BUS 223 Personnel Management	3	0	3
BUS 235 Business Management	3	0	3
BUS 216 Business Communication	3	0	3
General Education Elective	3	0	3
SIXTH QUARTER			
+BUS 210 Investments	3	0	3
BUS 229 Taxes	3	2	4
BUS 271 Office Management	3	0	3
BUS 272 Principles of Supervision	3	0	3
General Education Elective	3	0	3

Minimum total credit hours required for graduation: 103

	Lec	Lab	Cred
FIRST QUARTER			
BUS 101 Introduction to Business	5	0	5
*MAT 110 Business Math	5	0	5
1ENG 101 Communication Skills I	3	0	3
SECOND QUARTER			
BUS 243 Advertising	5	0	5
1ENG 102 Communication Skills II	3	0	3
BUS 110 Office Machines	3	2	4
THIRD QUARTER			
BUS 115 Business Law I	3	0	3
BUS 120 Accounting I	5	2	6
ECO 102 Economics I	3	0	3
FOURTH QUARTER			
BUS 121 Accounting II	5	2	6
ECO 104 Economics II	3	0	3
1ENG 103 Communication Skills III	3	0	3
FIFTH QUARTER			
BUS 123 Business Finance	3	0	3
+BUS 274 Labor Relations	3	0	3
1ENG 203 Interpersonal Communications	3	0	3
General Education Elective	3	0	3
SIXTH QUARTER			
BUS 116 Business Law II	3	0	3
BUS 124 Personal Finance	3	0	3
+BUS 247 Business Insurance	3	0	3
BUS 272 Principles of Supervision	3	0	3
SEVENTH QUARTER			
+BUS 210 Investments	3	0	3
+BUS 223 Personnel Management	3	0	3
BUS 235 Business Management	3	0	3
BUS 216 Business Communication	3	0	3
EIGHTH QUARTER			
BUS 229 Taxes	3	2	4
BUS 232 Sales	3	0	3
BDP 101 Introduction to Data Processing	5	0	5
NINTH QUARTER			
BUS 271 Office Management	3	0	3
General Education Elective	3	0	3

Minimum total credit hours required for graduation: 103

1-Refer to General Education Booklet

+ Any Business course in Accounting, Business Data Processing, General Office Technology, or Secretarial Science may be substituted for the course marked above. The following courses may be substituted for the courses marked above: BUS 102 Typing, BUS 239 Marketing, BUS 245 Retailing and BUS 273 Real Estate.

* Those students who do not pass the Mathematics Pretest section of the Admissions Test will be required to take MAT 100 Basic Mathematics, as a pre-requisite for MAT 110 Business Math.

* General Education Elective defined as courses from General Education offerings with the following prefix: GEO, HUM, POL, PSY, SOC, SSC. See General Education Course Descriptions.

BUSINESS DATA PROCESSING
Two-Year Associate Degree Program

This curriculum is designed to give the student an understanding of the principles of business operation, experience with techniques and handling business data, functional competence in the application of data processing systems, and experience in computer programming of business records and accounts, inventory, sales, and income and expenditures essential to business and management decisions.

Emphasis is upon business data processing and use of machines in solving business problems.

DAY CURRICULUM

	Lec	Lab	Cred
FIRST QUARTER			
BPD 101 Introduction to Data Processing	5	0	5
BDP 102 Logic and Decision Making	2	2	3
1ENG 101 Communication Skills I	3	0	3
*MAT 100 Basic Mathematics	5	0	5
+ Humanity Elective	3	0	3
SECOND QUARTER			
BDP 111 COBOL I	3	2	4
ECO 102 Economics I	3	0	3
1ENG 102 Communication Skills II	3	0	3
*MAT 120 Introduction to Algebra	5	0	5
THIRD QUARTER			
BDP 112 COBOL II	3	2	4
*ENG 103 Communication Skills III	3	0	3
*MAT 121 Algebra	5	0	5
BUS 120 Accounting I	5	2	6
FOURTH QUARTER			
BDP 121 Basic RPG	3	2	4
\$BUS Elective	3	0	3
1ENG 203 Interpersonal Communications	3	0	3
BDP 171 Computer Systems I	2	2	3
BUS 121 Accounting II	5	2	6
FIFTH QUARTER			
BDP 231 Assembler Language I	4	2	5
BDP 222 Advanced RPG	3	2	4
BUS 221 Statistics	5	0	5
\$BUS Elective	3	0	3
SIXTH QUARTER			
BDP 272 Computer Systems II	2	2	3
BDP 281 Systems and Procedures	4	0	4
*BDP Elective	3	2	4
\$BUS Elective	4	0	4
SEVENTH QUARTER			
BDP 290 Data Processing Project	1	8	5
*BDP Elective	3	2	4
*BDP Elective	3	2	4

Minimum total credit hours required for graduation: 116

EVENING CURRICULUM

	Lec	Lab	Cred
FIRST QUARTER			
BDP 101 Introduction to Data Processing	5	0	5
BDP 102 Logic and Decision Making	2	2	3
1ENG 101 Communication Skills I	3	0	3
*MAT 100 Basic Mathematics	5	0	5
SECOND QUARTER			
BDP 111 COBOL I	3	2	4
*MAT 120 Introduction to Algebra	5	0	5
ECO 102 Economics I	3	0	3
+ Humanity Elective	3	0	3
THIRD QUARTER			
BDP 112 COBOL II	3	2	4
1MAT 121 Algebra	5	0	5
\$BUS 120 Accounting I	5	2	6
FOURTH QUARTER			
BDP 121 Basic RPG	3	2	4
BUS 121 Accounting II	5	2	6
ENG 102 Communication Skills II	3	0	3
FIFTH QUARTER			
BDP 171 Computer Systems I	2	2	3
BDP 222 Advanced RPG	3	2	4
BUS 221 Statistics	5	0	5
1ENG 103 Communication Skills III	3	0	3
SIXTH QUARTER			
BDP 231 Assembler Language I	4	2	5
*BDP Elective	3	2	4
1ENG 203 Interpersonal Communications	3	0	3
BUS Elective	3	0	3
SEVENTH QUARTER			
BDP 272 Computer Systems II	2	2	3
BDP 281 Systems and Procedures	4	0	4
*BDP Elective	3	2	4
\$BUS Elective	3	0	3
EIGHTH QUARTER			
BDP 290 Data Processing Project	1	8	5
\$BUS Elective	3	0	3
*BDP Elective	3	2	4

Minimum total credit hours required for graduation: 116

1-Refer to General Education Booklet

NOTE:

*A student may receive credit for MAT 100 and/or MAT 120 based on his/her scores on the Mathematics Admissions Test.

+ Any Humanities course - Sociology, Psychology, Social Science, etc. may be taken.

\$Ten credit hours of Business electives are required. The student may select any courses offered by the Business department, including BDP 103 Keypunch I and BDP 104 Keypunch II, provided the student has the necessary prerequisites. It is recommended that the student consider additional accounting courses as Business electives.

*Any Data Processing courses other than the required courses may be selected by the students except BDP 103 Keypunch I and BDP 104 Keypunch II. A minimum of 12 credit hours is required for graduation.

OFFICE TECHNOLOGY PROGRAMS

Two-year Associate Degree Programs

Office Technology Programs are designed to present two options for the secretary: the General Office Technology program will lead to an Associate Degree for the machine transcription secretary; the Secretarial Science curriculum will lead to an Associate Degree for the secretary interested in manual shorthand.

The General Office Technology curriculum offers a clerical program coupled with basic business courses designed to develop a variety of necessary skills for employment in the business world. Specialized course work in skills areas is supplemented by related courses in mathematics, accounting, business law, and personal improvement.

The Secretarial Science curriculum provides training in the accepted procedures required by business, industrial, medical, legal and professional areas, and enables persons to become proficient soon after employment in their particular fields.

The curriculum is designed to offer students the necessary secretarial skills in typing, dictation, transcription, and terminology for employment in business, medical, legal and technical areas. The special training in secretarial subjects is supplemented by related courses in mathematics, accounting, business law, and personal development.

GENERAL OFFICE TECHNOLOGY

DAY CURRICULUM

FIRST QUARTER

	Lec	Lab	Cred
BUS 102 Typewriting I	3	2	4
¹ PSY 112 Personal Development	3	0	3
¹ MAT 110 Business Math	5	0	5
¹ ENG 101 Communication Skills I	3	0	3
BUS 101 Introduction to Business	5	0	5

SECOND QUARTER

BUS 103 Typewriting II	3	2	4
BUS 183 Terminology and Vocabulary	3	0	3
BUS 115 Business Law I	3	0	3
BUS 120 Accounting I	5	2	6
¹ ENG 102 Communication Skills II	3	0	3

THIRD QUARTER

BUS 104 Typewriting III	3	2	4
BUS 121 Accounting	5	2	6
ENG 103 Communication Skills III	3	0	3
BUS 110 Office Machines	3	2	4
BUS 112 Records Management	3	2	4

FOURTH QUARTER

BUS 205 Typewriting IV	3	2	4
BDP 101 Intro. to Data Processing	5	0	5
MED 299 Medical Terminology	3	0	3
¹ ENG 203 Interpersonal Communications	3	0	3
ECO 102 Economics	3	0	3

FIFTH QUARTER

BUS 213 Office Procedures	3	2	4
BUS 229 Taxes	3	2	4
BUS 214 ABC Shorthand I	3	2	4
BUS 212 Machine Transcription	3	2	4
BUS 216 Business Communications	3	0	3

SIXTH QUARTER

BUS 209 Typewriting V	3	2	4
BUS 271 Office Management	3	0	3
BUS 215 Office Application	1	15	6
BUS 217 ABC Shorthand II	3	2	4

Minimum total credit hours required for graduation: 111

EVENING CURRICULUM

FIRST QUARTER

	Lec	Lab	Cred
BUS 101 Introduction to Business	5	0	5
BUS 102 Typewriting I	3	2	4
¹ ENG 101 Communication Skills II	3	0	3
MAT 110 Business Math	5	0	5

SECOND QUARTER

BUS 103 Typewriting II	3	2	4
BUS 120 Accounting I	5	2	6
¹ ENG 102 Communication Skills III	3	0	3
BUS 112 Records Management	3	0	3

THIRD QUARTER

BUS 104 Typewriting III	3	2	4
BUS 110 Office Machines	3	2	4
ENG 103 Communication Skills III Elective	3	0	3

FOURTH QUARTER

BDP 101 Intro. to Data Processing	5	0	5
BUS 229 Taxes	3	2	4
¹ ENG 203 Interpersonal Communications	3	0	3
¹ MED 229 Medical Terminology	3	0	3

FIFTH QUARTER

BUS 115 Business Law	3	0	3
BUS 205 Typewriting IV	3	2	4
BUS 216 Business Communications	3	0	3
BUS 214 ABC Shorthand I	3	2	4

SIXTH QUARTER

BUS 212 Machine Transcription	3	2	4
BUS 213 Office Procedures	3	2	4
BUS 271 Office Management	3	0	3
ECO 102 Economics	3	0	3

SEVENTH QUARTER

BUS 183 Terminology and Vocabulary	3	0	3
BUS 209 Typewriting V	3	2	4
BUS 217 ABC Shorthand II	3	2	4
BUS 215 Office Application	1	15	6
¹ PSY 112 Personal Development	3	0	3

Minimum total credit hours required for graduation: 111

¹-Refer to General Education Booklet

* Defined as a course with the following prefixes: GEO, HUM, POL, PSY, SOC, SSC. See General Education Course Descriptions.

SECRETARIAL SCIENCE

EVENING CURRICULUM

DAY CURRICULUM

	Lec	Lab	Cred
FIRST QUARTER			
BUS 102 Typewriting I	3	2	4
¹ PSY 112 Personal Development	3	0	3
¹ MAT 110 Business Math	5	0	5
¹ ENG 101 Communication Skills I	3	0	3
BUS 106 Shorthand I	3	2	4
SECOND QUARTER			
BUS 103 Typewriting II	3	2	4
BUS 183 Terminology & Vocabulary	3	0	3
BUS 107 Shorthand II	3	2	4
BUS 120 Accounting I	5	2	6
¹ ENG 102 Communication Skills II	3	0	3
THIRD QUARTER			
BUS 104 Typewriting III	3	2	4
BUS 101 Introduction to Business	5	0	5
¹ ENG 103 Communication Skills III	3	0	3
BUS 108 Shorthand III	3	2	4
BUS 112 Records Management	3	2	4
FOURTH QUARTER			
BUS 205 Typewriting IV	3	2	4
BUS 206 Shorthand IV	3	2	4
MED 299 Medical Terminology	3	0	3
¹ ENG 203 Interpersonal Communications	3	0	3
ECO 102 Economics	3	0	3
FIFTH QUARTER			
BUS 213 Office Procedures	3	2	4
BDP 101 Introduction to Data Processing	5	0	5
BUS 115 Business Law	3	0	3
BUS 207 Shorthand V	3	2	4
BUS 216 Business Communications	3	0	3
SIXTH QUARTER			
BUS 209 Typewriting V	3	2	4
BUS 271 Office Management	3	0	3
BUS 215 Office Application	1	15	6
* Elective	3	0	3

Minimum total hours required for graduation: 111

	Lec	Lab	Cred
FIRST QUARTER			
BUS 106 Shorthand I	3	2	4
BUS 102 Typewriting I	3	2	4
¹ ENG 101 Communication Skills I	3	0	3
¹ MAT 110 Business Math	5	0	5
SECOND QUARTER			
BUS 103 Typewriting II	3	2	4
BUS 101 Introduction to Business	5	0	5
¹ ENG 102 Communication Skills II	3	0	3
BUS 107 Shorthand II	3	2	4
THIRD QUARTER			
BUS 104 Typewriting III	3	2	4
BUS 108 Shorthand III	3	2	4
¹ ENG 103 Communication Skills III	3	0	3
BUS 120 Accounting	5	2	6
FOURTH QUARTER			
BDP 101 Introduction to Data Processing	5	0	5
BUS 206 Shorthand IV	3	2	4
¹ ENG 203 Interpersonal Communications	3	0	3
MED 299 Medical Terminology	3	0	3
FIFTH QUARTER			
BUS 112 Records Management	3	2	4
BUS 205 Typewriting IV	3	2	4
BUS 216 Business Communications	3	0	3
BUS 207 Shorthand V	3	2	4
SIXTH QUARTER			
BUS 115 Business Law	3	0	3
BUS 213 Office Procedures	3	2	4
BUS 271 Office Management	3	0	3
BUS 209 Typewriting V	3	2	4
SEVENTH QUARTER			
BUS 183 Terminology & Vocabulary	3	0	3
ECO 102 Economics	3	0	3
* Elective	3	0	3
BUS 215 Office Application	1	15	6
¹ PSY 112 Personal Development	3	0	3

Minimum total hours required for graduation: 111

*Defined as a course with the following prefixes: GEO, HUM, POL, PSY, SOC, SSC, See General Education Booklet for Course Descriptions.

1-Refer to General Education Booklet

INDUSTRIAL MANAGEMENT
Two-year Associate Degree Program

EVENING CURRICULUM

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

This program is designed to develop the individual's abilities by providing training in modern business 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 management positions in industry.

The industrial supervisor coordinates the activities of workers in one or more occupations. Duties may encompass the interpreting of company policies, involvement in planning of production schedules and estimating of man hour requirements for job completion, establishment or adjustment of work procedures, analyzing and resolving work problems, and initiation of plans to motivate workers to achieve work goals and to ultimately achieve cost control and capital planning.

	Lec	Lab	Cred
FIRST QUARTER			
¹ ENG 101 Communication Skills	3	0	3
¹ MAT 110 Business Math	5	0	5
LIB 110 Library Science	3	0	3
ISC 114 Graphics and Presentation	0	2	1
SECOND QUARTER			
¹ ENG 102 Communication Skills	3	0	3
¹ MAT 120 Introduction to Algebra	5	0	5
ISC 120 Principles of Industrial Management	3	0	3
² DFT 102 Technical Drawing	1	4	3
THIRD QUARTER			
ENG 103 Communication Skills	3	0	3
MAT 121 Algebra	5	0	5
BUS 235 Business Management	3	0	3
ISC 130 Industrial Safety	3	0	3
FOURTH QUARTER			
BUS 221 Statistics	5	0	5
BUS 233 Personnel Management	3	0	3
ISC 132 Job Analysis and Evaluation	3	2	4
FIFTH QUARTER			
BUS 120 Accounting I	5	2	6
ISC 214 Work Measurement	5	2	6
SIXTH QUARTER			
¹ ENG 203 Interpersonal Communications	3	0	3
¹ PSY 100 Introduction to General Psychology	3	0	3
BUS 274 Labor Relations	3	0	3
ISC 226 Production Planning and Control	3	2	4
SEVENTH QUARTER			
ISC 203 Time and Motion Study	5	2	6
BUS 272 Principles of Supervision	3	0	3
ISC 234 Value Analysis	3	0	3
EIGHTH QUARTER			
ISC 231 Manufacturing Processes	3	2	4
BUS 229 Taxes	3	2	4
ISC 232 Quality Control	3	2	4
NINTH QUARTER			
ISC 236 Plant Layout and Materials Handling Elective	3	2	4
	3	0	3

Minimum total credit hours required for graduation: 108

*Electives may be selected from General Education offerings. See General Education Booklet.

1-Refer to General Education Booklet

2-Refer to Industrial Education Booklet for Course Descriptions.

COURSE DESCRIPTION

Lec Lab Cred

BDP 101 Introduction to Data Processing Systems 5 0 5				BDP 213 COBOL III			3 2 4
Prerequisite: None				Prerequisite: BDP 112			
Fundamental concepts and operational principles of data processing systems, as an aid in developing a basic knowledge of computers, prerequisite to the detailed study of particular computer problems.				The student will study file processing as it pertains to indexed-sequential and random file organizations, sub-programming techniques, the sort verb, and special debugging features. The student will write several programs utilizing these techniques as they relate to normal business operations.			
BDP 102 Logic and Decision Making	2	2	3	BDP 222 Advanced RPG			3 2 4
Prerequisite: None				Prerequisite: BDP 121			
An introductory course in programming logic. The study of the resolution of problems into flowcharts and various standard business formats. A study of abstract and real decision making as applied in programming.				A continuation of the study of RPG programming with emphasis on the use of tables, sequential and indexed sequential files.			
BDP 103 Keypunch I			3 2 4	BDP 231 Assembler Language Programming I	4	2	5
Prerequisite: None				Prerequisite: BDP 111			
This course deals with the basic operation of data entry machines, utilizing the 029 keypunch for instruction and speed building. Topics covered include control of the machine, familiarization of keyboard, preparation and the use of drum cards and related machine functions. The student should be able to punch a minimum of 8,000 strokes per hour at the completion of the course.				The initial course in basic assembler language programming for the IBM 370 system. Study includes rules, specifications for standard and decimal instructions in an operations system environment. Student will solve elementary arithmetic, input-output, and business problems by writing several programs in the language.			
BDP 104 Keypunch II			3 2 4	BDP 232 Assembler Language Programming II	4	2	5
Prerequisite: BDP 103				Prerequisite: BDP 231			
This course continues to utilize the concepts gained in BDP 103 in data entry techniques. The student should be able to punch a minimum of 12,000 strokes per hour at the completion of the course.				An application course in assembler language. The student will write several programs dealing with standard business program operations.			
BDP III COBOL I			3 2 4	BDP 241 PL/1 Programming Language			3 2 4
Prerequisites: BDP 101, BDP 102, Mat 120				Prerequisite: BDP 111			
The introductory course in Common Business Oriented Language (COBOL). Material covered will include the structure, rules and procedure syntax for the language using the American National Standard version compiler. Laboratory work will include exercises in developing program logic and the writing of structured COBOL programs to solve arithmetic and common business operation problems.				An introductory course in PL/1 programming. Laboratory exercises will include writing programs to solve arithmetic and/or business problems.			
BDP 112 COBOL II			3 2 4	BDP 251 FORTRAN IV Programming			3 2 4
Prerequisite: BDP 111				Prerequisite: BDP 111			
An advanced course in COBOL with emphasis on more sophisticated programming techniques. Material will cover one, two, and three level tables and sequential file usage on disk or tape. The student will write several programs utilizing these techniques and devices.				A study of the FORTRAN IV compiler language. Study and laboratory exercises will include solving mathematical or business problems.			
BDP 121 Basic RPG			3 2 4	BDP 260 Computer Language I			3 2 4
Prerequisite: BDP 111				Prerequisite: BDP 111			
A study of basic RPG programming with study and laboratory exercises devoted to developing program logic within the RPG framework. Students will write programs commonly used in support of business operations.				A study of the basic rules and requirements of several computer languages. The course will include a discussion of general, good programming techniques used in any language. The languages studied will be selected by the instructor.			
BDP 171 Computer Systems I			2 2 3	BDP 261 Computer Language Survey II			3 2 4
Prerequisite: BDP 112				Prerequisite: BDP 260			
A status of computer systems and the concept of file devices, file organization, job control language and program libraries.				A continuation of the languages and techniques studied in BDP 260.			
				BDP 272 Computer Systems II			2 2 3
				Prerequisite: BDP 171			
				An application of the concepts gained in BDP 171 in the field of management of information.			
				BDP 281 Systems and Procedures			4 0 4
				Prerequisite: BDP 171			
				A course in systems analysis covering its scope, types of investigation, file design, documentation, controls and security, hardware and software considerations.			

BDP 282 Applied Business Systems	3 2 4	BUS 110 Office Machines	3 2 4
Prerequisite: BDP 281		Prerequisite: None.	
A follow-up course to BDP 281 in which the student will apply principles previously established and develop a small business computer system; i.e., a payroll system, general ledger system, or inventory system.		A general survey of business and office machines. Students will receive training in techniques, processes, operation and application of the ten-key adding machines, full keyboard adding machines, and calculator.	
BDP 290 Data Processing Project	1 8 5	BUS 112 Records Management	3 2 4
Prerequisite: Last quarter standing and instructor's permission.		Prerequisite: None	
Individual project assignments to be completed by the student. The results of the project will show agility with skills acquired in previous course work. Assignment will be designed by the student with approval from the instructor.		Fundamentals of indexing and filing, combining theory and practice by the use of miniature letters, filing boxes and guides. Alphabetic, Geographic, Subject and Numeric filing are covered.	
BDP 291 Special Topics In Data Processing	arranged	BUS 115 Business Law I	3 0 3
Prerequisite: Instructor's Permission		Prerequisite: None	
An independent study with assistance from the instructor in any area of business data processing of interest to the student.		An introductory course of the field of law. The course exposes the student to social forces affecting our laws, our court system, bailments and an in-depth analysis of the law of contracts.	
BUS 101 Introduction to Business	5 0 5	BUS 116 Business Law II	3 0 3
Prerequisite: None		Prerequisite: BUS 115	
A survey of the business world with particular attention devoted to the structure of the various types of business organization, methods of financing, internal organization and management.		This second course in business law covers warranties, consumer protection, commercial paper, security devices and property law.	
BUS 102 Typewriting I	3 2 4	BUS 120 Accounting I	5 2 6
Prerequisite: None		Prerequisite: MAT 110	
Introduction to the touch typewriting system with emphasis on correct techniques, mastery of the keyboard, simple business correspondence, and tabulation.		Principles, techniques and tools of accounting for understanding the mechanics of accounting. Collecting, summarizing, analyzing and reporting information about service and mercantile enterprise, to include practical application of the principles learned.	
BUS 103 Typewriting II	3 2 4	BUS 121 Accounting II	5 2 6
Prerequisite: BUS 102 or the equivalent. Speed requirement, 30 words a minute for 2 minutes.		Prerequisite: BUS 120	
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.		A study of partnership and corporation accounting including a study of payrolls, federal and state taxes. Emphasis is placed on the recording, summarizing and interpreting of data for management control rather than on bookkeeping skills. Accounting services are shown as they contribute to the recognition and solution of management problems.	
BUS 104 Typewriting III	3 2 4	BUS 122 Accounting III	5 2 6
Prerequisite: BUS 103 or the equivalent. Speed requirement, 40 words a minute for 5 minutes.		Prerequisite: BUS 121	
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, manuscripts, correspondence and business forms.		As a third course in accounting principles, emphasis is placed on the corporate form of business and the related complex accounting procedures that are required for reporting corporate organization, operating results and financial position. The fundamentals of this course will prepare accounting majors for more intense work in advanced accounting courses.	
BUS 106 Shorthand I	3 2 4	BUS 123 Business Finance	3 0 3
Prerequisite: None		Prerequisite: None	
A beginning course in the theory and practice of reading and writing shorthand. Emphasis is on phonetics penmanship, word families, brief forms and phrases.		Includes a study of the financing of business units, as individuals, partnerships, corporations, and trusts. A detail study is made of short-term, long-term and consumer financing.	
BUS 107 Shorthand II	3 2 4	BUS 124 Personal Finance	3 0 3
Prerequisite: BUS 106		Prerequisite: None	
Continued study of theory with greater emphasis on dictation and elementary transcription.		A study of personal and family financial problems. Emphasis will center on family budgeting, savings, real estate, stock market and other investment avenues.	
BUS 108 Shorthand III	3 2 4		
Prerequisite: BUS 107			
Theory and speed building, introduction to office style dictation. Emphasis on development of speed in dictation and accuracy in transcription.			

BUS 125 Mathematics of Finance	5 0 5	technical, or professional office for 15 hours a week. The objective is to provide acutal work experience for students and an opportunity for the practical application of the skills and knowledge previously learned.
Prerequisite: MAT 120 or equivalent.		
This course stresses the fundamentals of math as applied to business operations. It starts with the treatment of simple discount; develops gradually and logically through the topics of compound interest, annuities with their many applications, bonds, depreciation; and other topics related to finance in a business environment.		
BUS 127 Taxes I	3 2 4	
Prerequisite: BUS 121.		
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 183 Terminology and Vocabulary	3 0 3	
Prerequisite: None.		
Technical terminology and vocabulary as it is used in business offices is introduced in this course.		
BUS 205 Typewriting IV	3 2 4	
Prerequisite: BUS 104. Speed requirement, 50 words a minute for 5 minutes.		
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, statistical tabulation, and the typing of reports, manuscripts and legal documents.		
BUS 209 Typewriting V	3 2 4	
Prerequisite: BUS 205. Speed requirement, 55 words a minute for 5 minutes.		
A course designed to bridge the gap between classroom and office for the typist. Emphasizes speed building on straight copy and increased skill in production, utilizing material closely related to the actual office situation.		
BUS 210 Investment Analysis	3 0 3	
Prerequisite: None.		
A basic study of the securities market with emphasis on stocks, bonds, mutual funds, and investment management.		
BUS 212 Machine Transcription	3 2 4	
Prerequisites: BUS 205, ENG 203.		
A study and practice course in the use of transcribing machines in business dictation. Proficiency in word usage, correct grammar, and letter styles will be emphasized.		
BUS 213 Office Procedures	3 2 4	
Prerequisites: BUS 205, ENG 203		
Designed to acquaint the student with the responsibilities encountered by a general office worker 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 214 ABC Shorthand I	3 2 4	
Prerequisite: None, BUS 104 recommended.		
A course designed to prepare the student to take shorthand at a speed of 60 words a minute. Material used will enable the business student to handle general office dictation of a minor nature.		
BUS 215 Office Application	1 15 6	
Prerequisites: BUS 110, BUS 205, BUS 212, BUS 213		
In this course students are assigned to work in a business,		
BUS 216 Business Communications	3 0 3	
Prerequisite: ENG 203.		
Develops skills and techniques needed in writing business communications. The course puts special emphasis on sales letters.		
BUS 217 ABC Shorthand II	3 2 4	
Prerequisite: BUS 214.		
The student will be able to take dictation at 80 words a minute upon completion of this course.		
BUS 221 Statistics	5 0 5	
Prerequisite: MAT 104 or MAT 121.		
A study of the theory and application of statistics. Experience is given in the association and use of statistical techniques in the prediction and estimation of the outcome of experiments related to practical problems in business data processing. Practical experience is gained in the utilization of computers in the statistical solution of problems.		
BUS 222 Intermediate Accounting	5 2 6	
Prerequisite: BUS 122.		
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 surplus statements, fundamental processes of recording, cash and temporary investments, and analysis of working capital.		
BUS 223 Intermediate Accounting	5 2 6	
Prerequisite: BUS 222.		
Additional study of intermediate accounting with emphasis on investments, plants and equipment, intangible assets and deferred charges, long-term liabilities, paid-in capital, retained earnings, and special analytical processes.		
BUS 225 Cost Accounting	3 2 4	
Prerequisite: BUS 122.		
Nature and purpose of cost accounting; accounting for direct labor, materials, and factory burden; job cost, and standard cost principles and procedures; selling and distribution cost; budgets and executive use of cost figures are studied.		
BUS 226 Managerial Accounting	5 2 6	
Prerequisite: BUS 223.		
A study of financial statements, the interpretation of financial data, and an explanation of how accounting data are used in planning and controlling business activities.		
BUS 227 Accounting Theory	3 2 4	
Prerequisite: BUS 122		
Accounting Theory is designed to provide a frame of reference in the theory of income, in asset valuation, in the history of accounting thought, and as a general survey in the field of financial accounting. It is also designed to enable the student through the processes of inductive and deductive reasoning to obtain a better understanding of the many controversial topics in the area of accounting theory and to evaluate critically these abstract points of view.		

BUS 228 Tax II 3 2 4
 Prerequisite: BUS 122
 Corporate and Partnership Tax Procedure is designed to prepare students to review business operations for federal and state tax effects on income. To perform this review, business, professional and corporate tax laws are studied and exercises are completed in preparation of the various tax forms for business returns.

BUS 229 Taxes 3 2 4
 Prerequisite: BUS 121
 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 232 Sales 3 0 3
 Prerequisite: None
 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 233 Personnel Management 3 0 3
 Prerequisite: None
 This course covers the planning, organizing, directing and controlling of the procurement, development, compensation, integration, and maintenance of people from the perspective of the personnel department of a medium to large size corporation. It is divided into three parts: introduction, personnel management functions, and personnel operative functions.

BUS 235 Business Management 3 0 3
 Prerequisite: None
 Principles of business management including an overview of the major functions of management such as: planning, staffing, controlling, directing, financing, and the study of the procedure when going into business.

BUS 239 Marketing 5 0 5
 Prerequisite: None
 A general survey of the field of marketing, with a detailed study of functions, policies, and institutions involved in the marketing process.

BUS 243 Advertising 5 0 5
 Prerequisite: None
 The role of advertising in a free economy and its place in the media of mass communications. A study of advertising appeals; product and market research; selection of media; means of testing effectiveness of advertising. Theory and practice of writing advertising copy for various media.

BUS 245 Retailing 3 0 3
 Prerequisite: None
 The study of the historical background of retailing. The course includes the study of franchising, store location and layout, store organization, the buying function, handling of merchandise, displaying merchandise and retail salesmanship.

BUS 247 Business Insurance 3 0 3
 Prerequisite: None
 The study of the different types of insurance protection from the consumer's viewpoint. The coverages include insurance on both individuals and companies. The course introduces the student to the different types of insurance companies and their marketing systems. The study of

different types of insurance, such as liability, property, vehicles, life and health insurance plans, are also covered in the course.

BUS 269 Auditing 3 2 4
 Prerequisite: BUS 122

Principles of conducting audits and investigations including detailed procedures for: collecting financial and operating procedure data; preparation of indexed working papers, summarizing data for comparative financial statements and issuance of final audit reports.

BUS 271 Office Management 3 0 3
 Prerequisite: None

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 3 0 3
 Prerequisite: None

This course covers the fundamentals of supervision with particular emphasis on first-level supervision. It is structured to assure attention to acquisition of knowledge, skill, and attitude essential for effective supervision.

BUS 273 Fundamentals of Real Estate 5 0 5
 Prerequisite: None

This course covers the basic fundamentals of real estate. Topics to be covered include brokerage, agreement of sales, deeds, financing, mortgages, judgements, valuation and appraisal, and lease laws. Upon satisfactory completion of this course, students are eligible to take the Real Estate Broker's Examination.

BUS 274 Labor Relations 3 0 3
 Prerequisite: None

An introduction to the history of the labor movement in the United States. A close look will be taken at major legislation affecting workers and the collective bargaining process.

ECO 102 Economics I 3 0 3
 Prerequisite: None

This course covers basic economic concepts, basic conditions for the market system, and the micro principles of demand, supply and price. It is the first of two economic courses.

ECO 104 Economics II 3 0 3
 Prerequisite: ECO 102

This course covers basic macro concepts: money, spending, and the macro-equilibrium; and inflation, unemployment and economic stabilization.

ISC 114 Graphics and Presentation 0 2 1
 Prerequisite: None

Fundamentals of graphics and their construction. The presentation of production, personnel, engineering and other data in a variety of pleasing forms such as graphics, charts, diagrams, etc.

ISC 120 Principles of Industrial Management 3 0 3
 Prerequisite: None

A survey course designed to introduce various principles and practices associated with the field of Industrial Engineering. Topics include work measurement, project planning techniques, plant layout and scheduling concepts.

	Lec	Lab	Cred		Lec	Lab	Cred
ISC 130 Industrial Safety	3	0	3	ISC 232 Quality Control	3	2	4
Prerequisite: None				Prerequisite: MAT 121			
Provides the student with an understanding of industrial safety and accident prevention programs and resulting costs and an insight into causes of accidents and injuries. Legal aspects of safety and OSHA regulations are reviewed.				Principles and techniques of quality control. Sampling procedures, process control and tests for significance including test methods, reports, responsibility. A model quality assurance program is developed.			
ISC 132 Job Analysis and Evaluation	3	2	4	ISC 234 Value Analysis	3	0	3
Prerequisite: None				Prerequisite: MAT 110			
Introduction and application of techniques to perform job evaluation and relate to wage and salary scales. Includes job descriptions, attributes, pay grades and performance evaluation.				A systematic approach which provides a positive course of action to remove unwanted and unnecessary factors from our environment.			
ISC 203 Time and Motion Study	5	2	6	ISC 236 Plant Layout and Materials Handling	3	2	4
Prerequisite: None				Prerequisite: ISC 214			
Principles of motion economy, tools for motion study, time study methods and practice; standard data and formula construction; use of methods-time measurements as a substitute for time studies.				A practical study of factory planning with emphasis on the most efficient arrangements of work areas to achieve lower manufacturing costs combined with the best methods to move materials. Includes manpower and materials management. Laboratory work is accomplished on drawing boards with actual case studies.			
ISC 214 Work Measurement	5	2	6	LIB 104 Library Science and AVT	3	0	3
Prerequisite: MAT 121				Prerequisite: None			
A practical study of time study and MTM methods to determine work standards. The complete method of standards development is learned; laboratory is conducted both in the classroom and at plant sites developing job descriptions, elements and standards. Presented from the manager's viewpoint.				A introductory course in use of reference materials and library research; instruction in fundamentals of audio-visual aides equipment.			
ISC 226 Production Planning and Control	3	2	4	MED 299 Medical Terminology	3	0	3
Prerequisite: MAT 121				Prerequisite: None			
Analytic methods for production and inventory control emphasizing forecasting techniques, inventory and network models, sequencing and scheduling techniques, and line balancing.				Medical terminology as it occurs in the study of the body's many anatomical systems is the main concern of this course. Stress is placed on medical terms, their use, spelling, English translation and pronunciation. In the process of learning these medical terms, a knowledge of the structure of each anatomical system and some of the more common diseases is acquired.			
ISC 231 Manufacturing Processes	3	2	4	PSY 112 Personal Development	3	0	3
Prerequisites: MAT 121, ISC 114				Prerequisite: None			
A comprehensive survey of the fundamentals of manufacturing processes which include essential knowledge of material structures and how physical properties may be changed.				Guides the student toward seeing the importance of his own development. The physical, intellectual, social, and emotional aspects of personality development are studied, and the student begins a program of exercises geared for self-improvement.			

Notes:



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Special Technologies**

Architectural Drafting
Automotive Mechanics
Electronics Engineering Technology
Historic Preservation Technology
Landscape Management Technology
Machinist
Science and Engineering Technology

Durham Technical Institute
1978-1979

CLASSES BEGIN:

September 27, 1978
 January 8, 1979
 April 2, 1979
 July 10, 1979

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 New & Expanding Industry Training
 Senior Citizen Services
 Retired Senior Volunteer Program

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Industrial Education and Special Technologies

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Contents:
Architectural Drafting
Automotive Mechanics
Electronics Engineering Technology
Electrical Installation and Maintenance
Historic Preservation Technology
Landscape Management Technology
Machinist
Science and Engineering Technology

ARCHITECTURAL DRAFTING One-Year Diploma Program

Architecture is concerned with shaping man's environment. The curriculum at Durham Technical Institute is designed to prepare students to enter this rapidly expanding and exciting field of work. The student is exposed in the first quarter to the universal language of the draftsman, paying particular attention to mastering basic skills. The second, third, and fourth quarters contain specialized related courses designed to equip the student with skills necessary to enter the field of architectural drafting.

Each course is designed so that it builds upon the preceding course in a way that the student is constantly being challenged. The Architectural Drafting curriculum emphasizes individualized instruction so that each student can work at his/her own pace. The curriculum is also interwoven with courses in science, in mathematics and English so that the student is better able to communicate and solve problems in tomorrow's technology.

		Lec	Lab	Cred
FIRST QUARTER				
	DFT 1101 Drafting	3	12	7
1	MAT 1050 Mathematics for Draftspersons	3	0	3
1	ENG 1050 Communication Skills I	2	0	2
1	PHY 1050 Physics for Architectural Drafting	3	2	4
SECOND QUARTER				
	DFT 1102 Architectural Drafting I	3	12	7
	DFT 1105 Descriptive Mathematics	3	3	4
	DFT 1104 Architectural Materials	3	6	5
THIRD QUARTER				
	DFT 1103 Architectural Drafting II	3	12	7
	DFT 1106 Structural Drafting	2	6	4
1	ENG 1051 Communication Skills II	3	0	3
FOURTH QUARTER				
	DFT 1107 Architectural Drafting III	3	12	7
	DFT 1108 Independent Project	1	6	3
	DFT 1109 Surveying for Architectural Draftspersons	3	5	5

Minimum total credit hours to graduate: 61

1- Refer to General Education Booklet

COURSE DESCRIPTION

		Lec	Lab	Cred
DFT 1101	Drafting	3	12	7
Prerequisite: None				
An introduction to drafting and the study of drafting principles. Selection, use and care of instruments, single-stroke lettering, freehand sketching consisting of orthographic and pictorial drawings. Orthographic projection, reading and instrument drawing of dimensioning and note practices. Methods of reproducing drawings.				
DFT 1102	Architectural Drafting I	3	12	7
Prerequisite: DFT 1101, or Instructor's permission.				
Drafting of residence plans, elevations, and wall sections, schedules, electrical, plumbing, heating and air conditioning.				

DFT 1103 Architectural Drafting II

Prerequisite: DFT 1102

Introduction to commercial construction. Design of a small office building or manufacturing plant, including drawings of footings, foundation walls, structural framework, floorplans, elevations, wall sections and schedules.

DFT 1104 Architectural Materials

Prerequisite: None

Study of basic constructional materials as used in architectural structures. The economic values, limitations, budget and codes. Field trips to construction sites. Building code requirements. Reading and interpretation of working drawings by engineers. Standards of materials.

DFT 1105 Descriptive Mathematics

Prerequisites: MAT 1050, DFT 1101

An Introduction to the graphic solutions to problems. Basic descriptive geometry, straight lines, auxiliary views, oblique views, curved lines, and true shape. This course will also deal with parallel and radical line development. A discussion of the basic principles of topographical mapping will also be included.

DFT 1106 Structural Drafting

Prerequisites: DFT 1102, DFT 1104

An introduction to the preparation of design and working drawings for buildings, bridges, tanks, towers and other structures. The student will have the opportunity to apply knowledge of construction materials to a given project. Emphasis will be placed on structural details and fastening devices.

DFT 1107 Architectural Drafting III

Prerequisites: DFT 1103, DFT 1102

Continuation of project begun in DFT 1133 including design of electrical, plumbing, heating and air conditioning systems for the structure.

DFT 1108 Independent Project

Prerequisites: DFT 1103, DFT 1106

Continuation of the project begun in DFT 1106.

DFT 1109 Surveying for Arch. Draftspersons

Prerequisites: MAT 1050, DFT 1105

An introduction to the basic principles of surveying. Solving problems with right triangles, using tables, and interpolating of oblique triangles using the laws of sine and cosines, graphs and trigonometric functions. A maximum amount of time will be spent on the application of material covered in class and in the field. Basic surveying instrumentation and study of topography together with field trips will also be studied.

Lec Lab Cred

3 12 7

AUTOMOTIVE MECHANICS

One-Year Diploma Program

The Automotive Mechanics Curriculum is a one-year vocational program designed to prepare men and women to enter the automotive service industry. Students will acquire a working knowledge and practical experiences in the various aspects of automotive servicing. Graduates may be employed by new car dealers, independent garages, parts distributors or dealers, and other automotive service agencies. The Automotive Mechanics program will provide students with a broad range of skills from which they may choose to specialize.

FIRST QUARTER

	Lec	Lab	Cred
1 MAT 1070 Math. for Automotive Mechanics	3	0	3
1 ENG 1070 Communication Skills	5	0	5
AUT 1113 Automotive Engine Fundamentals and Systems Service	2	6	4
AUT 1104 Auto. Charging and Starting Systems	2	6	4
AUT 1118 Diagrams, Schematics and Specifications	2	0	2

SECOND QUARTER

1 PHY 1070 Physics for Auto. Mechanics	2	2	3
AUT 1116 Auto. Electrical Systems and Access.	2	6	4
AUT 1103 Carburetor, Fuel and Exhaust Sys.	2	6	4
AUT 1107 Tune-Up and Emission Control	2	6	4

THIRD QUARTER

AUT 1117 Auto. Engine Service and Repair	2	6	4
AUT 1106 Chassis, Steering and Suspension	2	6	4
AUT 1102 Brakes and Tires	2	6	4

FOURTH QUARTER

AUT 1105 Air Conditioning	2	6	4
AUT 1110 Power Trains (Manual Trans.)	2	6	4
AUT 1112 Automatic Transmissions	2	6	4
AUT 1109 Systems Trouble Shooting	2	6	4

Minimum total credit hours to graduate: 61

1-Refer to General Education Booklet

COURSE DESCRIPTION**AUT 1102 Brakes and Tires**

Prerequisite: None

This course is designed to enable students to learn about automotive braking systems employed on both automobiles and light trucks. Emphasis in this course will be placed on brake operation, servicing and repairing of drum and disc brakes. The second part of this course will emphasize the construction, servicing and balancing of wheels and tires.

AUT 1103 Carburetor, Fuel and Exhaust Systems

Prerequisite: None

This is a study of fuel and exhaust system failures and how to correct these problems. To successfully complete this course, each student must diagnose and repair failures on carburetors, fuel pumps and gasoline tanks. Through additional performance tests, each student must remove and replace selected parts of an automobile's system.

Lec Lab Cred

2 6 4

Lec Lab Cred

AUT 1104 Auto. Charging and Starting Systems 2 6 4

Prerequisite: None

This course will introduce and explain how these two automotive systems function. Using test equipment, each student must diagnose and repair problems in components such as starters, batteries, wiring, alternators and regulators.

AUT 1105 Air Conditioning 2 6 4

Prerequisite: None

A general introduction to the principles of refrigeration. A study of the assembly components and connections necessary in the unit as applied to automobiles and light trucks. The method of operation, control, and handling of refrigerants, as well as safety precautions, are studied. Laboratory activities include component installation and service of the air conditioning system.

AUT 1106 Chassis, Steering and Suspension 2 6 4

Prerequisite: None

The study of the principles and functions of the components of an automotive chassis. Practical job instruction in adjusting and repairing of suspension and steering systems. Units to be studied will include shock absorbers, springs, steering systems, steering linkage and front end alignment.

AUT 1107 Tune-Up and Emission Control 2 6 4

Prerequisite: None

This course is a study of automotive ignition and emission control systems. Emphasis is placed on diagnosing with modern test equipment malfunctions in these units. To successfully complete this course, each student must perform the following task correctly: complete major end tune-up, diagnose and repair ignition malfunctions, test and adjust emission control systems.

AUT 1109 Systems Trouble Shooting and Service 2 6 4

Prerequisite: A minimum of one of the following: AUT 1104, AUT 1103, AUT 1107, AUT 1106, AUT 1102, AUT 1113, AUT 1116, AUT 1118, and AUT 1117.

This course permits students to select areas of study that will make them more proficient in specialized phases of automotive repairs. Approved areas include brakes, fuel systems, electrical testing, front wheel alignment, tune-up and emission controls, and others by prior arrangement.

AUT 1110 Power Trains [Manual Transmissions] 2 6 4

Prerequisite: None

A study of manual and/or standard transmission, clutch systems, drive lines, and differentials. The student will learn to diagnose problems and to overhaul all types of standard transmission differentials. Also, the student will service clutch systems and drive shafts.

AUT 1112 Automatic Transmissions 2 6 4

Prerequisite: None

A study of operation, service, and repair of automatic transmission systems. Emphasis will be placed on the theory behind the operation of automatic transmissions. Practical shop application will be given to the study of torque converters, hydraulic control systems, and complex planetary gearing. All popular makes of transmissions will be studied.

AUT 1113 Engine Fundamentals and Systems Service 2 6 4

This course is a study of the theory and principles of the four-stroke cycle engine operation; and servicing of the various engine systems and components.

Lec Lab Cred

AUT 1117 Auto. Engine Service and Repair 2 6 4

Prerequisite: None

This course is designed to enable students to examine all aspects of the internal combustion engine in order that they may develop the knowledge and skills necessary for gainful employment or to improve present job knowledge and skills. This course will focus on engine operation, testing, measuring, trouble-shooting and disassembly and assembly procedures.

AUT 1118 Diagrams, Schematics and Specifications 2 0 2

Prerequisite: None

Interpretation and reading of automotive service manuals. Development of the ability to read and interpret charts, graphs, specifications, wiring diagrams, instructions and service manuals.

AUT 1116 Electrical Systems and Accessories 2 6 4

Prerequisite: None

This course is a study of various body electrical systems and accessories. Namely, the lighting systems, turn signals, emergency flashers, seat interlocking systems, etc.

ELECTRICAL INSTALLATION AND MAINTENANCE

One-Year Diploma Program

FIRST QUARTER

	Lec	Lab	Cred
ELC 1101 Introduction to Electricity	4	6	7
DFT 1060 Electrical Drafting	1	5	3
MEC 1101 Tools and Measurements	0	6	2
1 ENG 1060 Communication Skills I for Electrical Maintenance and Servicing	2	0	2

1 MAT 1060 Math I for Electrical Installation and Maintenance	5	0	5
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SECOND QUARTER

ELC 1102 Introduction to Electronics	4	6	7
ELC 1107 Wiring and National Electric Code	2	6	4
1 ENG 1061 Communication Skills II	3	0	3
1 MAT 1061 Mathematics II for Electrical Installation and Maintenance	5	0	5

THIRD QUARTER

	Lec	Lab	Cred
ELC 1103 Electronic Circuits	2	6	5
ELC 1104 Electrical Machines and Controls	3	6	6
DFT 1061 Blueprint Reading	1	3	2
1 MAT 1062 Applied Math for Electricians	3	0	3
1 PHY 1060 Physics for Electrical Installation and Maintenance	3	3	4

FOURTH QUARTER

ELC 1105 Service and Repair	2	12	6
ELC 1106 Industrial Electronics	2	6	5
ELC 1108 Commercial Wiring and Distribution	2	6	4

Minimum total credit hours for graduation: 73

1-Refer to General Education Booklet

* Manipulative Laboratory

COURSE DESCRIPTION		Lec	Lab	Cred		Lec	Lab	Cred	
ELC 1101 Introduction to Electricity		4	6	7					
Prerequisite: None									
Elementary principles of electricity, including basic electric units, Ohm's Law, Kirchoff's Law, basic electrical measuring instruments, Inductance, capacitance, and basic electrical circuits.									
ELC 1102 Introduction to Electronics		4	6	7					
Prerequisite: ELC 1101 or equivalent									
An Introduction and overview of the field of electronics. Development and history of the field and an Introduction to the use and operations of various electronic circuits. Students who passed ELN 100 cannot receive additional credit for this course.									
ELC 1103 Electronic Circuits		2	6	5					
Prerequisite: ELC 1102 or equivalent									
A study of electronic circuits as related to repair or control of electrical apparatus. This includes amplifiers, silicon control rectifiers, etc.									
ELC 1104 Electrical Machines and Controls		3	6	6					
Prerequisites: ELC 1102 or ELC 102									
Principles and characteristics of direct and alternating current machines. Operational characteristics of transformers and motors, various types of single phase and three phase motors and direct current machines. Motor starting and speed control; switching; open and closed service systems.									
ELC 1105 Service and Repair Electrical Equipment		2	12	6					
Prerequisites: ELC 1102 and 1104 or equivalent									
Service and repair of major or minor appliances, motors, machines, etc. Fifteen hours of work a week at an authorized electrical dealer or contractor can be accepted as credit for the laboratory.									
ELC 1106 Industrial Electronics		2	6	5					
Prerequisite: ELC 1103 or equivalent									
Installation and repair of wiring, motor hook-ups and repair of same. Fifteen hours of work a week at an authorized electrical contractor or in an industrial plant maintenance crew can be accepted as credit for the laboratory.									
ELC 1107 Wiring and National Electric Code		2	6	4					
Prerequisite: ELC 1101									
A study of the principles and practices of the installation of electrical wiring and related hardware in industrial, commercial and residential buildings as governed by the National Electric Code and local building wiring codes.									
ELC 1108 Commercial Wiring and Distribution		2	6	4					
Prerequisite: ELC 1107									
Layout, planning, and installation of wiring systems in commercial and industrial buildings. Emphasis on blueprint reading, electrical symbols, and the National Electrical Code. Application of fundamentals to conduct preparation, wiring, and installation of complete electrical systems.									
DFT 1060 Electrical Drafting							1	5	3
Prerequisite: None									
A course in electrical drawing and design for power systems and industrial control systems, including basic overview of drafting, symbols, highway and baseline diagrams and motor control diagrams. Residential, industrial and commercial lighting and power diagrams, residential wiring diagrams and related information. Graphing and pictorial diagrams also are included.									
DFT 1050 Blueprint Reading							1	3	2
Prerequisite: DFT 1201 or equivalent									
Interpretation of wiring diagrams circuit prints, and schematics pertaining to the electrical trades.									
MEC 1101E Tools and Measurements							0	6	2
Prerequisite: None									
An introductory course designed to acquaint the student with basic hand tools, safety procedures and machine processes of modern industry. It will include a study of measuring instruments, characteristics of metals and cutting tools.									
ELECTRONICS ENGINEERING TECHNOLOGY									
Two-Year Associate Degree Program									
The Electronics Engineering program provides a basic background in practical applications of electronics and in electronics related theory. Courses are designed to present content in an order that will provide the student with progressive levels of job related skills and knowledge. The curriculum is designed so that completion at various skill levels should prepare an individual to work as a service technician, an assistant to engineers, or as a liaison between the engineer and the skilled craftsperson.									
A unique feature of this program over the traditional Electronics Program is the additional course offerings in Microprocessor Technology, a data processing course designed for electronic applications, and an option in the eighth quarter of choosing one of three technical electives for further skill development.									
FIRST QUARTER									
									Lec Lab Cred
1	ENG 101	Communication Skills							3 0 3
1	MAT 160	Technical Math for Electronics							5 0 5
	ELC 101	Introduction to Electricity							4 6 7
	DFT 101	Engineering Drawing							1 4 3
SECOND QUARTER									
1	ENG 102	Communication Skills							3 0 3
1	MAT 161	Technical Math for Electronics							5 0 5
	ELC 102	Fundamentals of Electricity							4 6 7
	ELN 100	Introduction to Electronics							2 3 3
THIRD QUARTER									
1	MAT 162	Technical Math for Electronics							5 0 5
	MEC 101	Machine Processes							0 6 3
	ELN 105	Introduction to Active Devices							4 6 7

	Lec	Lab	Cred		Lec	Lab	Cred
FOURTH QUARTER							
1 ENG 103	Communication Skills	3	0	3	ELN 100	Introduction to Electronics	2 3 3
ELC 104	Systems Servicing	2	9	5	Prerequisite: ELC 101		
ELN 205	Application of Active Devices I	4	4	6	An Introduction and overview of the field of electronics, development and history of the field; and introduction to various electronic circuits, their use and operation.		
EDP 120	FORTRAN IV for Electronics Applications	3	2	4	ELN 105	Introduction to Active Devices	4 6 7
FIFTH QUARTER							
1 ENG 203	Interpersonal Communications	3	0	3	Prerequisite: ELC 102, ELN 100		
ELN 218	Application of Active Devices II	4	4	6	A study in depth of the electrical characteristics of vacuum tubes and transistors. Basic parameters and applications of each type device to the three configurations of a three-terminal, two-port system will be included.		
*	Elective	3	0	3	ELN 205	Application of Active Devices I	4 4 7
SIXTH QUARTER							
ELN 220	Electronics Systems I	4	4	6	Prerequisite: ELN 105		
ELN 216	Pulse and Wave Shaping Circuits	4	6	7	Practical applications of vacuum tubes and transistors to basic audio amplifiers, radio frequency amplifiers, detectors, modulators, and oscillators.		
1 PHY 260	Physics I for Electronics	4	2	5	ELN 216	Pulse and Wave Shaping Circuits	4 6 6
SEVENTH QUARTER							
DFT 201	Electronics Drafting	1	3	2	Prerequisite: ELN 205		
ELN 240	Digital Electronics	4	6	7	Broadband amplifiers, magnetic amplifiers, multivibrators, wave-shaping techniques, chopper amplifiers, clipper and clamper circuits are subjects of study.		
1 PHY 261	Physics II for Electronics	4	2	5	ELN 218	Application of Active Devices II	4 4 6
*	Elective	3	0	3	Prerequisite: ELN 205		
EIGHTH QUARTER							
ELN 270	Microprocessor Fundamentals	3	4	5	Study of pulse circuits, wave shaping and transient analyzers and active devices. Differentiating circuits, integrated circuits, electronic logic circuits, and introduction to digital techniques.		
ELC 201	Construction of Electronic Devices	1	6	3	ELN 220	Electronic Systems I	4 4 6
*	Technical Elective	3	6	5	Prerequisite: ELN 216, ELN 218		
Minimum total credit hours to graduate: 130							

1-Refer to General Education Booklet

* Eleven hours electives required. Electives must be approved by the program coordinator. Technical electives suggested are ELN 245, ELN 250, MAT 201.

COURSE DESCRIPTION

	Lec	Lab	Cred
ELC 101 Introduction to Electricity	4	6	7
Prerequisite: None			
Elementary principles of electricity including basic electric units, Ohm's Law, Kirchhoff's Law, network theorems, magnetic, basic electrical measuring instruments, inductance, sine-wave analysis, and non-resonant resistive, inductive and capacitive networks.			
ELC 102 Fundamentals of Electricity	4	6	7
Prerequisites: ELC 101, MAT 100E			
Series and parallel resonant-circuit analysis, resonant and non-resonant transformer analysis, basic diode power supply analysis, Introduction to non-linear resistive control devices, and Introduction to electro-mechanical devices.			
ELC 104 Systems Servicing	2	9	5
Prerequisites: ELM 101, ELN 105, or permission of the Instructor.			
An Introduction to servicing of Electromechanical and Electronic Systems. Topics to include operation, servicing, preventive maintenance and safety dealing with typical systems.			
ELC 201 Construction of Electronic Devices	1	6	3
Prerequisites: ELN 216, ELN 218			
Construction of small subassemblies and minor appliance. Included will be the procedures for constructing and testing electronic devices.			
ELN 100 Introduction to Electronics	2	3	3
Prerequisite: ELC 101			
An Introduction and overview of the field of electronics, development and history of the field; and introduction to various electronic circuits, their use and operation.			
ELN 105 Introduction to Active Devices	4	6	7
Prerequisite: ELC 102, ELN 100			
A study in depth of the electrical characteristics of vacuum tubes and transistors. Basic parameters and applications of each type device to the three configurations of a three-terminal, two-port system will be included.			
ELN 205 Application of Active Devices I	4	4	7
Prerequisite: ELN 105			
Practical applications of vacuum tubes and transistors to basic audio amplifiers, radio frequency amplifiers, detectors, modulators, and oscillators.			
ELN 216 Pulse and Wave Shaping Circuits	4	6	6
Prerequisite: ELN 205			
Broadband amplifiers, magnetic amplifiers, multivibrators, wave-shaping techniques, chopper amplifiers, clipper and clamper circuits are subjects of study.			
ELN 218 Application of Active Devices II	4	4	6
Prerequisite: ELN 205			
Study of pulse circuits, wave shaping and transient analyzers and active devices. Differentiating circuits, integrated circuits, electronic logic circuits, and introduction to digital techniques.			
ELN 220 Electronic Systems I	4	4	6
Prerequisite: ELN 216, ELN 218			
A block diagram course Investigating numerous electronic systems. Modules or blocks of various circuits already studied are arranged in various manners to produce complex electronic systems. AM, FM, and Single Sideband transmitters and receivers, multiplexing, TV transmitters and receivers, pulse-modulated systems, computers, telemetry, navigational systems, sonar and radar will be considered.			
ELN 240 Digital Electronics	4	6	7
Prerequisite: ELN 216			
An exploration into the methodology of counting and computing. Various computer techniques will be investigated, including non-sinusoidal waveforms, binary, and decade counters, industrial counters, readout devices, logic circuits, arithmetic circuits, storage devices, input-output devices, computer control, analog and digital converters.			
ELN 245 Electronic Design Project	3	6	5
Prerequisite: ELN 220			
Students are required to design and construct a project approved by the Instructor. Includes selection of project, design, construction, and testing of completed project. Projects may include AM or FM transmitters or receivers, amplifiers, test equipment, control devices, simple counters, lasers, masers, etc.			
ELN 250 Electronic Systems II	3	6	6
Prerequisite: ELN 220			
A continuation of ELN 220. A study of advanced circuits and systems such as simple side band, UHF techniques, waveguides, antennas, transmission lines, and radio frequency propagation.			

ELN 270 Computer and Microprocessor Fundamentals 3 4 5

Prerequisite: ELN 219

An in-depth study of computing principles. Subjects covered include analog and digital computers, memory devices, input-output devices, analog to digital converters, and digital to analog converters. Laboratory work using integrated circuits as computer building blocks will reinforce classroom material.

DFT 101 Engineering Drawing 1 4 3

Prerequisite: None

The field of Engineering Drawing is introduced as the student begins a study of drawing principles and practices for print reading and describing objects in the graphic language of engineering. Basic skills and techniques of drawing include: use of drafting equipment, lettering, freehand orthographic and pictorial sketching, geometric construction, orthographic instrument drawing of principle views, standards and practices of dimensioning.

DFT 201 Electronic Drafting 1 3 2

Prerequisite: DFT 101 or equivalent

Constructing and interpreting electrical drawings, diagrams and schematics; system drawings and construction of charts, etc.

EDP 120 FORTRAN IV for Electronics Applications 3 2 4

Prerequisites: Electronic Major, ELN 105, MAT 102-E, or permission of the instructor.

An introductory course in data processing and computer programming using the FORTRAN IV language. Study and lab exercises will be directed toward solving problems normally encountered in electronic lab technology.

MEC 101 Machine Processes I 0 6 3

Prerequisite: None

An introductory course designed to acquaint the student with basic hand tools, safety procedures and machine processes of our modern industry. It will include a study of measuring instruments, characteristics of metals and cutting tools. The student will become familiar with the lathe by performing selected operations such as turning, facing, threading, drilling, boring and reaming.

Lec Lab Cred

HISTORIC PRESERVATION TECHNOLOGY
Nine-month Diploma Program

The purpose of this nationally unique program is to provide historic preservation technicians proper aesthetic appreciation and technical skills necessary to conduct restoration activities. The curriculum is heavily oriented toward the learning and application of skills and combines intensive lecture and laboratory work with a three month practicum. Students will gain skill and knowledge in such topics as preservation laws, grantsmanship, historic preservation resources, reading and recording of historic sites, assessment of building materials, determination of destructive forces, developing alternative strategies for techniques of preservation, reproduction of brick and stone masonry, framing and fine finishing, repair and reproduction of metal hardware to include the making of nails by hand, historical development of plaster work, plaster reproduction activities, the historical development of paints, including marbelizing and woodgraining, and how to analyze paint in order to restore a site to its original color.

FIRST QUARTER

	Lec	Lab	Cred
HRP 1101 Introduction to Historic Preservation	4	0	4
HRP 1102 Reading and Recording of Historic Sites	5	0	5
HRP 1102P Reading and Recording Practicum	0	3	1
HRP 1103 Introduction to Historic Preservation Technology	0	5	5
* Technical Elective	3	0	3
* Humanities Elective	3	0	3

SECOND QUARTER

HRP 1104 Building Technology—Brick and Stone Masonry	1	2	2
HRP 1105 Building Technology—Carpentry	1	2	2
HRP 1106 Building Technology—Nail Chronology and Metal Hardware	1	2	2
HRP 1107 Building Technology—Plaster Work	1	2	2
HRP 1108 Building Technology—Paint Techniques	1	2	2
* Technical Elective	3	0	3
* Humanities Elective	3	0	3

THIRD QUARTER

HRP 1109 Field Experience Project	0	20	7
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Minimum total credit hours required to graduate: 44

*Electives may be chosen from technical and/or humanities areas and must be approved by the program coordinator.

COURSE DESCRIPTION

	Lec	Lab	Cred
HRP 1101 Introduction to Historic Preservation	4	0	4
An introductory look at the philosophy of historic preservation past and present; preservation laws on the national level, in North Carolina and other model states; print and non-print and people resources; preservation movements in the U.S.; planning and strategy support through forms of dollars and people; grantsmanship.			

HRP 1102 Reading and Recording of
Historical Sites 5 0 5

A study of architectural styles. Student will develop sensitivity for archaeological and landscape features of a site through a combination of slides and visits. Student will be exposed to basic recording techniques such as building measuring, sketching and photography.

HRP 1102P Reading and Recording Practicum 0 3 1
Hands-on experience in which students, as a group project, will take a certain geographic area and actually read and record the site through the use of inventory techniques.

HRP 1103 Introduction to Historic Preservation 5 0 5
Technology

A problem solving course using a lab-lecture approach. Students will learn to assess building materials and site, determine the destructive forces, and develop alternative strategies for techniques of preservation to be employed.

HRP 1104 Building Technology—Brick and
Stone Masonry 1 2 2

The historical development of brick and stone masonry and their practical application using an observation and actual reproduction approach.

HRP 1105 Building Technology—Carpentry 1 2 2

The historical development of carpentry (framing and fine finish) and its practical application using an observation and actual reproduction approach.

HRP 1106 Building Technology—Nail
Chronology and Metal Hardware 1 2 2

A historical development of nails and the making of nails by hand. Also a study of metal hardware in the building trades and the repair and reproduction of this hardware.

HRP 1107 Building Technology—Plaster Work 1 2 2

The historical development of plaster work and the practical application using an observation and actual reproduction approach.

HRP 1108 Building Technology—Painting 1 2 2

The historical development of paints including marbelizing and woodgraining. Students, through an observation and actual reproduction approach, will learn to analyze paints and be able to restore site to its original color.

HRP 1109 Field Experience Project 0 20 7

An actual hands-on preservation project that draws on the total learning process. A beginning to completion process.

LANDSCAPE MANAGEMENT TECHNOLOGY Two-Year Associate Degree Program

Within the past few years, there has been an increasing emphasis on the use of plant materials to enhance the beauty of commercial concerns, public institutions, and individual residences. This increased emphasis has created a demand for competent individuals trained in the concepts and procedures of landscape management.

Durham Tech offers a broad-based landscape management program. This program emphasizes practical hands-on experience combined with laboratory-related activities so that the graduate is well skilled in all areas of landscape management.

FIRST QUARTER

	Lec	Lab	Cred
1 ENG 101 Communication Skills	3	0	3
1 PSY 101 Introduction to Psychology	3	0	3
BIO 120 Applied Botany	4	4	6
LMT 101 Introduction to Landscape Management	4	3	6

SECOND QUARTER

1 ENG 102 Communication Skills	3	0	3
LMT 102 Soils and Fertilizers	4	2	5
LMT 103 Plant Growing Facilities	3	2	4
LMT 104 Tree Growth and Development	3	2	4
2 BUS 223 Personnel Management	3	0	3

THIRD QUARTER

1 ENG 103 Communication Skills	3	0	3
LMT 105 Ornamental Plant Identification	2	2	3
LMT 106 Tree Identification	2	2	3
LMT 107 Insect and Disease Control In Plants	3	2	4
LMT 108 Insect and Disease Control In Trees	3	2	4

FOURTH QUARTER

1 ENG 203 Interpersonal Communications	3	0	3
LMT 109 Turf Maintenance	2	2	3
LMT 110 Tree Surgery and Removal	2	3	4
LMT 111 Principles and Techniques of Propagation	2	3	4
* Elective (Social Science)	3	0	3

FIFTH QUARTER

LMT 112 Licensure	3	0	3
1 MAT 110 Business Mathematics	5	0	5
LMT 113 Intro. to Landscape Gardening and Planning	2	2	3
2 BUS 101 Introduction to Business	5	0	5

SIXTH QUARTER

AUT 100 Small/Large Engine Maintenance	2	4	3
LMT 114 Property Law and Basic Surveying	3	2	4
LMT 115 Landscape Construction	5	3	7
2 BUS 274 Labor Relations	3	0	3

SEVENTH QUARTER

LMT 116 Seminar	2	0	2
LMT 117 Practicum	0	30	10

Minimum total credit hours for graduation: 116

- 1- Refer to General Education Booklet
2- Refer to Business Education Booklet

COURSE DESCRIPTION

Lec Lab Cred

Lec Lab Cred
3 0 3

- LMT 101 Introduction to Landscape Management** 4 3 6
Orientation to procedures, practices, and terminology of landscape gardening and tree planting. Practical exercises will be designed to familiarize the student with the basic procedures.
- LMT 102 Soils and Fertilizers** 4 2 5
Prerequisite: LMT 101
A study of the physical properties of soils and fertilizers and the importance of each to the growth and function of plants.
- LMT 103 Plant Growing Facilities** 3 2 4
Prerequisite: LMT 101
Basic principles and problems involved in the operation and maintenance of growing facilities for plants.
- LMT 104 Tree Growth and Development** 3 2 4
Prerequisite: LMT 101
The science and art of growing trees for many purposes including ornamental, erosion control, wood production, windbreaks, watershed, and wildlife production. Control of undesirable species will also be covered.
- LMT 105 Plant Identification** 2 2 3
Prerequisite: LMT 101
The collection and identification of assigned groups of selected.
- LMT 106 Tree Identification** 2 2 3
Prerequisite: LMT 104
A study of tree identification by various methods, and recommended uses of each species.
- LMT 107 Insect and Disease Control In Plants** 3 2 4
Prerequisite: LMT 105
A study of diseases and insects that attack ornamental plants, and the control of such.
- LMT 108 Insect and Disease Control In Trees** 3 2 4
Prerequisite: LMT 104
A study of the insects and diseases commonly encountered on trees, and methods and treatments effective in their control. The use of cultural techniques as well as biological and chemical controls will be included.
- LMT 109 Turf Maintenance** 2 2 3
Prerequisite: LMT 102
Principles and practices in the adaption and maintenance of turf for residential and industrial lawns. A detailed study of soils, seeding, fertilizer, mowing heights and disease control.
- LMT 110 Tree Surgery and Removal** 2 3 4
Prerequisite: LMT 108
The techniques and mechanics of tree topping, limbing, pruning, felling, and removal will be taught, including the selection, use and maintenance of necessary equipment. Major stress will be placed on safety. Students will receive practical experience and instruction in the use of such necessary equipment as chain saws, pruning and trimming devices, climbing equipment, brush clippers, boom trucks, and other related machinery.
- LMT 111 Principles and Techniques of Propagation** 2 3 4
Prerequisite: LMT 102, LMT 109
A study of reproduction techniques through seeds, cuttings, grasses, budding, etc. Covers the areas of trees, shrubs, and ground covers.
- LMT 112 Licensure**
Prerequisite: LMT 107, LMT 108
A detailed study of the rules and regulations dealing with the application of pesticides. Upon completion, the student will be prepared to sit for the Licensed Applicator examination of the State of North Carolina.
- LMT 113 Intro. to Landscape Gardening and Planting** 2 2 3
Prerequisites: LMT 103 and LMT 111
The student will learn to draw areas to scale, proper placement of plants and trees, and the development of an aesthetic appreciation for the art of landscape gardening.
- LMT 114 Property Law and Basic Surveying** 3 2 4
Prerequisites: LMT 104, LMT 105 and LMT 106
The study of federal, state, county and municipal laws and regulations affecting the ownership and management of public, corporate, and private lands, especially pertaining to the growth and maintenance of trees and ornamental plants. The mechanics and legalities of property line location, including fundamental surveying techniques will be studied.
- LMT 115 Landscape Construction** 5 3 7
Prerequisite: None
This course is designed to teach the student how to plan the total landscape environment. Emphasis will be placed on the construction of and proper placement of masonry walls, rock walls, pools, etc., blending them in with appropriate plant materials.
- LMT 116 Seminar** 2 0 2
Prerequisite: Completion of all preceding LMT courses
A course designed to keep students informed as to new products and techniques in the field, and provide an opportunity for an interchange of ideas between instructors, students, and visiting instructors.
- LMT 117 Practicum** 0 30 10
Prerequisite: Completion of all preceding LMT courses.
On the job experience that draws on previously learned materials. Application oriented.
- AUT 100 Small/Large Engine Maintenance** 2 4 3
Prerequisite: None
This course covers the basics of 2 and 4 cycle engines, air cooled small and medium-sized engines (4-40 H.P. range) and water cooled larger engines (40-200 H.P. range). Preventive maintenance will be stressed, (recognition and prevention of engine failures by scheduled maintenance and repairs). Lubricants, fuel and safety measures associated with these and other aspects of engine operation will also be covered.
- BIO 120 Applied Botany** 4 4 6
Prerequisite: None
A foundation course in general botany designed to develop a basic understanding of plant life. Integrated in a lecture/laboratory setting will be a study of the cell, its function and association to roots, stems, leaves, reproductive structures. Life cycles and taxonomy included.

MACHINIST
One-Year Diploma Program

Led Lab Cred
1 9 4

The objective of the Machinist program is to develop competent machine tool operators and entry level set-up persons in this field. Graduates will be able to operate basic machine tools and make their own simple set-ups.

FIRST QUARTER

	Lec	Lab	Cred
MEC 1201 Machine Shop I	1	12	5
MAT 1080 Mathematics I for Machinists	5	0	5
DFT 1080 Mechanical Drafting	1	6	4

SECOND QUARTER

MEC 1202 Machine Shop II	1	9	4
MEC 1113 Materials	3	6	5
MAT 1081 Mathematics II for Machinists	5	0	5

THIRD QUARTER

MEC 1203 Machine Shop III	3	15	8
MEC 1114 Manufacturing Processes	3	0	3
ENG 1080 Communication Skills for Machinists	3	0	3

FOURTH QUARTER

PHY 1080 Physics for Machinists	3	2	4
MEC 1204 Machine Shop IV	1	12	5
MEC 1400 Fundamentals of Numerical Control	1	2	2
MEC 1103 Shop Mathematics	3	0	3

Minimum total credit hours for graduation: 56

1- Refer to General Education Booklet

MEC 1202 Machine Shop II

Prerequisite: MEC 1201 or equivalent
Operations on lathe, drilling, milling and grinding machines. Safety in the operational shop is stressed.

MEC 1203 Machine Shop III

Prerequisite: MEC 1202 or equivalent
Use of machine tools in the manufacturing of tools. Principles of planning set-ups and quality assurance, gauge parts, tolerances, and mass production of components. Twenty hours a week of work in a well equipped machine shop can be accepted as credit for the laboratory.

MEC 1204 Machine Shop IV

Prerequisite: MEC 1203
Continuation of MEC 1203 students will work on independent projects. Twenty hours of work a week in a well equipped machine shop can be accepted as credit for the course.

MEC 1400 Fundamentals of Numerical Control

Prerequisite: None
A survey course covering the fundamental concepts of Numerical Control. Basic introduction to the types of math, drafting and parts programming skills needed in N/C machine operations. Includes the history, descriptions, capabilities, and applications of N/C machine tools to such metal cutting operations as drilling, milling, boring, tapping and turning.

DFT 1080 Mechanical Drafting

Prerequisite: None
The basic principles of various projections, prints, sketches, diagrams, lines, views, dimensions, scales and notes. Interpretation of blueprints is stressed.

MAT 1080 Mathematics I for Machinists

Prerequisite: None
The course begins with a thorough review of the four basic arithmetic operations with integers, common fractions, and decimal numbers. The study of percent, and an introduction to geometry with emphasis on the use of formulas, right triangles and the Pythagorean theorem complete the course.

MAT 1081 Mathematics II for Machinists

Prerequisite: MAT 1080
The major topics covered in this course are algebraic definitions and operations, exponents, formulas, linear equations, and ratios and proportion. Fundamentals of geometry and right triangle trigonometry are also studied.

PHY 1080 Physics for Machinists

Prerequisite: None
An introduction to physical principles and their application in the machine industry. Topics include measurements; properties of solids, liquids, and gases; basic electrical principles; heat, heat transfer, specific heat and the relation of working of materials; principles of force, friction, resistance, work, energy, power and torque; electrical motors, and power transfer.

COURSE DESCRIPTION

MEC 1103 Shop Mathematics

Prerequisite: MAT 1081 or equivalent
Mathematics applied in the machine trade. Principles of trigonometry and use of trigonometric tables, calculation of angles, pitch, threads, gears, cutting speeds and feeds, and the use of shop mathematics tables.

MEC 1113 Materials

Prerequisite: None
Discussion of ferrous, nonferrous and organic materials used in industry. Composition and characteristics of ferroalloys, aluminum, copper, lead, and nickel alloys. Discussion of man-made and other organic materials, their use in machining characteristics.

MEC 1114 Manufacturing Processes

Prerequisite: None
A review of modern manufacturing processes, their advantages and limitations. Visits to appropriate plants augment instructions.

MEC 1201 Machine Shop I

Prerequisite: None
An introductory course designed to acquaint the student with measuring instruments, basic hand tools, safety procedures and machine processes of our modern industry. It will include a study of hand power tools, characteristics of machines and cutting tools. The student will become familiar with basic machine tools by performing selected operations.

SCIENCE AND ENGINEERING TECHNOLOGY
Two-Year Associate Degree Program

Durham Tech's Science and Engineering Technology Program is designed to prepare versatile technicians. Graduates of this program will be able to acquire skills very quickly in a wide range of different jobs, especially those involving modern electronic instrumentation. Durham Tech graduates will have familiarity with instruments and apparatus used for measurement, detection, or testing control in research, development, or engineering applications. Science and Engineering Technicians will know the basic concepts, definitions, and principles of physics, chemistry and biology and how these relate to real devices or systems in technology.

Durham Tech graduates will be familiar with the properties of a variety of different materials used in research, manufacturing, or engineering applications. Durham Tech graduates will be able to read and interpret mechanical and electrical drawings and will be able to prepare rough, but correctly detailed drawings or sketches.

Science and Engineering Technicians are particularly suited to the many positions which overlap the traditional fields of science and engineering. Science and Engineering Technicians are trained by physicists, chemists, electrical engineers and mechanical engineers working together to achieve the necessary interdisciplinary approach.

EVENING CURRICULUM ONLY

	Lec	Lab	Cred
FIRST QUARTER			
PHY 165 Physics I	3	2	4
¹ MAT 160 Technical Math I	5	0	5
¹ ENG 106 Composition	3	0	3
ELN 165 Calculator and Computer Techniques	2	2	3
SECOND QUARTER			
² MEC 101 Machine Processes	0	6	3
PHY 166 Physics II	3	2	4
¹ MAT 161 Technical Math II	5	0	5
THIRD QUARTER			
¹ ENG 107 Composition	3	0	3
MEC 165 Engineering Materials	3	2	4
¹ Social Science Elective	3	0	3
BIO 165 Molecular and Cellular Biology	3	2	4
FOURTH QUARTER			
¹ MAT 162 Technical Math III	5	0	5
ELN 166 Electronic Components and Basic Circuits	2	4	4
¹ ENG 108 Composition	3	0	3
MEC 114 Manufacturing Processes	3	0	3
FIFTH QUARTER			
CHM 165 Chemical and Physical Properties I	3	2	4
BIO 166 Human Anatomy-Physiology	4	2	5
¹ ENG 207 Career Communications	3	0	3

	Lec	Lab	Cred
SIXTH QUARTER			
ELN 167 Transducers and Electronic Instrumentation	2	4	4
CHM 265 Chemical and Physical Properties II	3	2	4
** Technical Elective	3	2	4
SEVENTH QUARTER			
ELN 265 Analog and Digital Electronics	3	4	5
CHM 266 Chemical Sampling and Analysis	3	2	4
* Social Science Elective	3	0	3
EIGHTH QUARTER			
DFT 265 Introduction to Drafting	0	9	4
ELN 266 Electronic Instrumentation	3	4	5
NINTH QUARTER			
** Technical Electives			12
*** SET 265 Practicum I	0	8	3
*** SET 266 Practicum II	0	20	6

Minimum total credit hours to graduate: 122

* Social Science electives may be chosen from SSC 190, SSC 191, SSC 192, SOC 100, SOC 165, PSY 100, PSY 112.

** Technical Electives may be chosen from MAT 260, ELC 201, ELN 245, ELN 267, EDP 120, DFT 266, BIO 265, CHM 267, PHY 265.

*** Students may satisfy this requirement by previous or concurrent work experience with approval by the program coordinator.

- 1-Refer to General Education Booklet
- 2-Refer to Electronics Course Descriptions.

COURSE DESCRIPTION

	Lec	Lab	Cred
BIO 165 Molecular and Cellular Biology	3	2	4
Prerequisite: None			
A comprehensive review of cytology, the primary objective of this course is to provide study of the molecular and ultrastructural anatomy and physiology of the cell. Included will be coverage of the chemical components of the cell, enzyme theory, membrane theories, molecular structure of cellular organelles, molecular cytogenetics, and the biochemical aspects of cell secretion and mechanical activity.			
BIO 166 Human Anatomy-Physiology	4	2	5
Prerequisite: BIO 165			
This course is designed to provide the student in SET a general and comprehensive study of the anatomical components and structures of the human body, detailed knowledge as to their respective functions and control mechanisms, and a general overview as to their relationships and integrations in tissue and organ systems. Emphasis is placed on the physiology of the nervous, cardiovascular, pulmonary, and excretory systems and their inter-relation towards the maintenance of homeostasis.			

BIO 265 Pharmacology

4 0 4

Prerequisite: None

A comprehensive overview of basic pharmacological concepts. The first seven weeks are spent covering pharmacodynamics, including basic drug mechanisms, receptor theory, kinetics of absorption and distribution, biotransformation, excretion and toxicity. The remaining four weeks will be spent in a general review of the major drug groupings.

CHM 165 Chemical and Physical Properties I

3 2 4

Prerequisite: None

Introduction to general laboratory equipment. Laboratory safety will be introduced by demonstrating protective equipment. The metric system as related to chemistry will be reviewed with an emphasis on volumetric terminology. The proper utilization of a notebook and reference sources will be introduced. A descriptive level approach will be used to discuss the atom. Enough nuclear chemistry will be included to present a discussion on radiation hazards. The periodic table will be developed so that the technician can use it to predict properties or similarities between different materials. The formation of ions with resulting molecules and compounds will be presented. The mole concept will be developed and used in some specific gas law problems. A few systematic rules on inorganic nomenclature will be presented as well as the more common naming systems. The physical properties of inorganic chemicals will be taught in the laboratory sessions with emphasis on industrial type substances. The predominant system of organic nomenclature will be presented as well as the more common naming systems. The physical properties of inorganic chemicals will be discussed as well as the more common naming systems. Specifically, saturated and unsaturated hydrocarbons, aromatics, alcohols, ethers, amines, aldehydes, ketones, esters, and carboxylic acids will be studied. Very few organic reactions will be studied; however, some polymerization experiments will be performed to demonstrate "plastics" and "adhesives" but only at a descriptive level.

CHM 265 Chemical and Physical Properties II

3 2 4

Prerequisite: CHM 165

Several general chemistry equations will be memorized which represent the majority of "every-day" reactions. The student will be taught to recognize the reaction type and predict the products and necessary conditions or precautions. Various expressions of chemical concentrations will be introduced to include: parts per million, mass/volume, per cent, molarity, molality, and mole fraction. Topics such as specific gravity, density, pH, etc. will also be included. The effects of temperature and pressure on solubility will be studied. The student will be tested on the ability to prepare assigned concentrations. Fundamental concepts in both voltaic and electrolytic cells will be presented which will include batteries, fuel cells and electrolysis. The balancing of more complicated and redox type equations will be covered. Some practical applications of Faraday's Law will be included with electroplating and electrochemical machining. A brief discussion of coulometric and conductometric techniques will be presented. The ideal gas laws will be developed and applied to practical problems.

CHM 266 Chemical Sampling and Analysis

3 2 4

Prerequisite: CHM 265

Techniques in gravimetric analysis such as taking representative samples and the actual preparation of precipitates will be presented. Volumetric analysis is included in this section to develop an appreciation for the equipment and techniques required in performing this common analytical procedure. A survey of separation techniques will be presented. Ion exchange chromatography will be discussed as found in water softeners. Industrial gas chromatographic applications will be presented to make the technician aware of the potential utilization of various chromatographic systems both in analytical chemistry and industrial processing applications. Distillation and extraction techniques will be presented. The Beer-Lambert Law with its applications to qualitative and quantitative chemistry determinations will be developed. The utilization of both ultraviolet and infrared radiation will be included with the visible light application with a brief exposure to visible light, UV and IR spectrophotometers.

CHM 267 Organic Chemistry

3 2 4

Prerequisite: CHM 266

This course on organic chemistry would include the following topics: hydrocarbons—their structure, nomenclature, preparation and reactions; stereochemistry; alcohols and phenols; ether and epoxides; carboxylic acids, carboxylic acid derivatives and dicarboxylic acids; aldehydes and ketones, organic nitrogen compounds; identification of structure by classical and modern techniques; organic chemistry of living systems.

DFT 265 Introduction to Drafting

0 9 4

Prerequisite: None

An Introduction to drafting and the study of drafting practice. Selection, use and care of instruments, single-stroke lettering, freehand sketching consisting of orthographic and pictorial drawings. Orthographic projection, reading and instrument drawing of dimensioning and note practices. Methods of reproducing drawings.

DFT 266 Engineering Drafting

0 9 4

Prerequisite: DFT 265

A second course in drafting including electrical and electronic circuits, machine drawings, welding and piping drawings and tubular dimensioning.

EDP 120 FORTRAN IV for Electronic Applications

3 2 4

Prerequisite: None

An introductory course in data processing and computer programming using the FORTRAN IV language. Study and lab exercises will be directed toward solving problems normally encountered in engineering technology.

ELN 165 Calculator and Computer Techniques

2 2 3

Prerequisite: None

This course is designed to familiarize the student with calculator theory and use. A study of basic principles and use from four function through programmable calculators is included. Also there is an Introduction to computer use, batch processing, the interactive terminal, and BASIC programming language.

	Lec	Lab	Cred		Lec	Lab	Cred
ELN 166 Electronic Components and Basic Circuits	2	4	4	PHY 165 Physics I			
Prerequisite: None				Prerequisite: None			3 2 4
This course introduces the student to the principles of electronics and of the components used in modern electronic instrumentation. In this laboratory centered course, the student becomes familiar with the input-output characteristics of a circuit or component through the use of basic test instruments.				This course introduces the student to the physical properties of mechanical, gaseous and fluid systems, and to physical laws which govern their behavior. It includes the basic concepts of mass, weight, force and static equilibrium along with their measurement; principles of motion, both translational and rotational, energy and momentum and their conservation. Temperature and heat are introduced followed by the thermal properties of matter. Other properties of liquids and gases are treated, including pressure, the gas law and hydraulics.			
ELN 167 Transducers for Electronic Instrumentation	2	4	4	PHY 166 Physics II			3 2 4
Prerequisite: ELN 166				Prerequisite: PHY 165			
This course introduces the student to the principles of transducers of temperature, light, sound, force, and displacement. After studying a group of components and/or circuits a building-block approach is used in which the student assembles an instrument or other electronic device.				This course introduces the student to the physical properties of electrical and magnetic systems, and to the physical laws which govern their behavior. It includes direct current electricity and the magnetic force. This is followed by electromagnetism and a brief discussion of AC circuits and devices. Selected topics in modern physics including quantum phenomena such as laser and photo-electric effect, semi-conductors, radioactivity and nuclear reactors are included.			
ELN 265 Analog and Digital Electronics	3	4	5	PHY 265 Physics III			3 2 4
Prerequisite: ELN 167				Prerequisite: PHY 166			
This course introduces the student to the principles of reactive circuits, and the characteristics of active linear circuit devices. In addition, the study of digital circuit concepts prepares students to handle digital processing and control systems. Laboratory exercises are designed to provide the student with practical applications of electronic circuit operation and trouble shooting.				This course introduces the student to physical properties of sound, wave motion and optical systems. It includes properties of waves, producing and detecting sound, measuring sound radiation, electromagnetic waves, geometric and physical optics.			
ELN 266 Electronic Instrumentation	3	4	5	SET 265 Practicum I			0 8 3
Prerequisite: None				Prerequisite: None			
This course will provide the student with a working knowledge of complete instrument systems. It is an integration of skills and theory obtained in the prerequisite electronic courses into practical applications of instrumentation devices and circuits.				The first quarter of practical experience for the student will consist of carefully prepared "field trips" to representative industrial plants and research labs in the area. The students and the agency personnel will be prepared ahead of time so that the approximately eight hour visit will be most instructive to the student. A follow-up session at the school will assure the student maximum benefit from the visit. Five or six agencies will be visited during the quarter.			
ELN 267 Computer and Micro Processors	3	4	5	SET 266 Practicum II			0 20 6
Prerequisite: None				Prerequisite: SET 265			
An in-depth study of computing principles. Subjects covered include analog and digital computers, memory devices, input-output devices, analog to digital converters, and digital to analog converters. Special emphasis will be given to microprocessor systems. Laboratory work using integrated circuits as computer building blocks will reinforce classroom material.				This part of the practical experience involves 20 hours a week on-the-job training. The student will make a written report for each different job assignment relating to the practicum. The program coordinator will make periodic visits to interview the job supervisor.			
MEC 114 Manufacturing Processes	3	0	3				
Prerequisite: None							
A review of modern manufacturing processes, their advantages and limitations. Visits to appropriate plants augment instruction.							
MEC 165 Engineering Materials	3	2	4				
Prerequisite: None							
Discussion of ferrous, non-ferrous and organic materials used for industry. Composition and characteristics of ferroalloys, aluminum, copper, lead, and nickel alloys. Discussion of man made and other organic materials, their use and machining characteristics.							



Durham Technical Institute

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6

**General Education
and
Public Service**

Durham Technical Institute
1978-1979

CLASSES BEGIN:

September 27, 1978
 January 8, 1979
 April 2, 1979
 July 10, 1979

How to get a catalog

Catalog booklets may be picked up free of charge at the Durham Tech campus. All mail requests should be addressed to Durham Technical Institute, 1637 Lawson Street, P.O. Drawer 11307, Durham, N.C. 27703, (919) 596-9311. So that we may properly assist you, please specify which booklets are desired.

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The provisions of these publications are not to be regarded as an irrevocable contract between the student and Durham Technical Institute. The Institute reserves the right to make changes in the regulations, courses, fees, and other matters of policy and procedure as and when deemed necessary. The Institute further reserves the right, at any time, to request the student to withdraw when it considers such action to be in the best interest of the Institute.

This catalog is published for informational purposes and every effort is made to insure accuracy at the time of printing. However, the provisions in this catalog are not to be regarded as an irrevocable contract between the student and the Institute. Durham Technical Institute reserves the right to change any provision or requirement at any time. Students are advised to study the Schedule of Classes available at registration and periodically check with counselors or Student Records for information not available when this catalog was published.

Durham Technical Institute complies with the Title IX Regulation of the Educational Amendments of 1972. The regulation requires that no person solely on the basis of sex be excluded for participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity. Durham Technical Institute is an open door admission, equal opportunity institution.

General Education and Public Service

GENERAL EDUCATION FACULTY Department Chairman William Sewell

Faculty
Nancy Avery
Eugene Bray
John Christopher
Barbara Cryer
James Frazier
Iris Hall
Amelia Harrison
Don Kritsch
Susan Mace
Vickie Newsome
Shelia O'Briant
Denise Ward
John Zunes

PUBLIC SERVICE FACULTY

Communications Technology
John Johnson / Coordinator
Augusta Crawford
Robert Gunter
Jimmy Roberts

Early Childhood Associate
Deborah Kelinsky / Coordinator
Sylvia Prescott
Catherine Tapp

Fire Science
Joe Wade / Coordinator
Carol Dickey

Library Assistant
Barbara Ferrell / Coordinator
Barbara Nunn

Paralegal Technology
Carol Dickey / Coordinator

Police Science
Joe Wade / Coordinator
Carol Dickey

GENERAL EDUCATION Two-year Associate Degree Program

The General Education Department serves three purposes: (1) to provide instruction in English, the social sciences, mathematics, and the physical sciences for all technical and vocational curricula; (2) to provide a two-year program of study in English and literature, fine arts, social sciences, mathematics, and the physical sciences for the student pursuing the Associate in General Education Degree (GEAD); and (3) to provide general education courses for the students desiring to study for personal enrichment and intellectual growth, but without pursuing the degree.

Upon completion of the required 102 quarter hours, the student will be awarded the Associate in General Education Degree, which may be considered as terminal or which may enable the student to transfer as a junior to designated senior institutions with which Durham Technical Institute is affiliated. Currently these institutions are North Carolina Central University, Elon College, Campbell College, Winston-Salem State University, Atlantic Christian College, and North Carolina Wesleyan.

A student may also enroll as a special student and take up to a maximum of twelve quarter hours credit in any of the general education courses. After that time, if the student wishes to pursue the degree, he or she must apply for admission as a regular student.

DAY CURRICULUM

	Lec	Lab	Cred
FIRST QUARTER			
ENG 106 Composition I	3	0	3
HIS 101 Western Civilization I	3	0	3
MUS 101 Music Appreciation	3	0	3
PHI 101 Introduction to Philosophy	3	0	3
MAT 101 Introduction to College Mathematics	5	0	5
SECOND QUARTER			
ENG 107 Composition II	3	0	3
HIS 102 Western Civilization II	3	0	3
BIO 101 General Biology I	3	2	4
MAT 102 Algebra	5	0	5
ART 101 Art Appreciation	3	0	3
THIRD QUARTER			
ENG 108 Composition III	3	0	3
HIS 103 Western Civilization III	3	0	3
BIO 102 General Biology II	3	2	4
ENG 204 Introduction to Public Speaking	3	0	3
PSY 102 Principles of Psychology	3	0	3
FOURTH QUARTER			
ENG 201 World Literature I	3	0	3
HIS 201 American History I	3	0	3
ECO 102 Principles	3	0	3
** Electives (2)	6	0	6
FIFTH QUARTER			
ENG 202 World Literature II	3	0	3
HIS 202 American History II	3	0	3
ENG 205 American Literature I	3	0	3
SOC 102 Studies in Sociology	3	0	3
** Electives (2)	6	0	6

SIXTH QUARTER			Lec	Lab	Cred
ENG 206	American Literature II		3	0	3
HIS 203	American History III		3	0	3
POL 101	Political Science		3	0	3
**	Electives (3)		9	0	9
Minimum Total Hours Required for Graduation:					102

*Students making an unsatisfactory score on the English placement test will take English 100 as a prerequisite for English 106. Students making an unsatisfactory score on the mathematics placement test will take Math 100 and/or Math 120 as a prerequisite for Math 101.

**Electives BUS 101, BUS 102, BUS 124, BUS 210, CHEM 130, ECO 104, ENG 190, ENG 293, GEO 101, GEOG 101, MAT 110, PHY 140, PSY 111, SSC 291, VIS 101.

EIGHTH QUARTER			Lec	Lab	Cred
HIS 203	American History III		3	0	3
MUS 101	Music Appreciation		3	0	3
**	Electives (2)		6	0	6

Minimum Total Hours Required for Graduation: 102

*Students making an unsatisfactory score on the English placement test will take English 100 as a prerequisite for English 106. Students making an unsatisfactory score on the mathematics placement test will take Math 100 and/or Math 120 as a prerequisite for Math 101.

**Electives BUS 101, BUS 102, BUS 124, BUS 210, CHEM 130, ECO 104, ENG 190, ENG 293, GEO 101, GEOG 101, MAT 110, PHY 140, PSY 111, SSC 291, VIS 101.

EVENING CURRICULUM

FIRST QUARTER			Lec	Lab	Cred
ENG 106	Composition I		3	0	3
HIS 101	Western Civilization I		3	0	3
PHI 101	Introduction to Philosophy		3	0	3
MAT 101	Introduction to College Mathematics		5	0	5

SECOND QUARTER			Lec	Lab	Cred
ENG 107	Composition II		3	0	3
HIS 102	Western Civilization II		3	0	3
ART 101	Art Appreciation		3	0	3
MAT 102	Algebra		5	0	5

THIRD QUARTER			Lec	Lab	Cred
ENG 108	Composition III		3	0	3
HIS 103	Western Civilization III		3	0	3
ENG 204	Introduction to Public Speaking		3	0	3
PSY 102	Principles of Psychology		3	0	3

FOURTH QUARTER			Lec	Lab	Cred
ENG 201	World Literature I		3	0	3
BIO 101	General Biology I		3	2	4
ECO 202	Economics I		3	0	3
**	Elective (1)		3	0	3

FIFTH QUARTER			Lec	Lab	Cred
ENG 202	World Literature II		3	0	3
BIO 102	General Biology II		3	2	4
SOC 102	Studies in Sociology		3	0	3
**	Elective (1)		3	0	3

SIXTH QUARTER			Lec	Lab	Cred
ENG 205	American Literature I		3	0	3
HIS 201	American History I		3	0	3
POL 101	Political Science		3	0	3
**	Elective (1)		3	0	3

SEVENTH QUARTER			Lec	Lab	Cred
ENG 206	American Literature II		3	0	3
HIS 202	American History II		3	0	3
**	Electives (2)		6	0	6

ENGLISH, LITERATURE, HUMANITIES

ART 101 Art Appreciation			Lec	Lab	Cred
Prerequisite: None			3	0	3

A course designed to provide the student with an appreciation of art. Areas covered include what constitutes a work of art; the roles of subject, meaning, content, style, medium, and technique in art; and the relationship between art and man in a cultural environment.

ENG 100 Basic English			Lec	Lab	Cred
Prerequisite: None			5	0	5

A course designed to provide remedial instruction for students deficient in reading, vocabulary, and study skills.

ENG 101 Communication Skills I			Lec	Lab	Cred
Prerequisite: None			3	0	3

A basic writing course for all curriculum students, covering the grammar, mechanics, style, organization and language of clear writing. Also a work of literature is used as an introduction to the process of critical thinking and writing of longer assignments. Dictionary and vocabulary skills will be used emphasized as an ancillary to productive writing.

ENG 102 Communication Skills II			Lec	Lab	Cred
Prerequisite: ENG 101			3	0	3

A composition course covering both logical processes in thinking and writing and the methods of exposition. There is a two-fold emphasis: the development of a clear and effective writing style and the ability to adapt alternative approaches and techniques to a given problem through writing. Also further attention will be given to vocabulary development and critical analysis based upon an outstanding work of literature.

ENG 103 Communication Skills II			Lec	Lab	Cred
Prerequisite: ENG 102			3	0	3

The object of this course is to continue working towards a mastery of written communication. In this course the instructor will cover various writing problems as posed by the student's curriculum, including technical reports, resumes, police reports, and research papers. Overall, the course's purpose is to improve, refine, and polish the student's writing skills. A work of literature may be assigned for additional study.

	Lec	Lab	Cred		Lec	Lab	Cred
ENG 104 Children's Literature			3 0 3				
Prerequisite: ENG 101 or Permission of the Program Coordinator				ENG 204 Introduction to Public Speaking			3 0 3
A survey of children's literature and how to utilize it in preparing the child for reading. Special attention will be given to skills in reading readiness.				Prerequisite: None			
				An introductory course focusing on the preparation and delivery of both formal and informal group process, intrapersonal and interpersonal communications, and parliamentary procedure.			
ENG 106 Composition I			3 0 3	ENG 205 American Literature I			3 0 3
Prerequisite: None				Prerequisites: ENG 201 and ENG 202			
A study of sentence structure, usage, mechanics, paragraphing, and the most common forms of rhetoric. Regular theme writing is a central focus of rhetoric, covering the several forms of composition. A study of professionally written essays will be studied, along with a work of literature, for critical analysis.				A critical survey of selected masterpieces of American literature from its beginning to the Civil War.			
ENG 107 Composition II			3 0 3	ENG 206 American Literature II			3 0 3
Prerequisite: ENG 106				Prerequisite: ENG 204			
A continuation of ENG 106 and an introduction to the fundamentals of literary criticism, encouraging the students to examine works of literature for the purpose of critical examination and writing.				A critical survey of selected masterpieces of American literature from the Civil War to the present.			
ENG 108 Composition III			3 0 3	ENG 290 Reading Advancement			3 0 3
Prerequisite: ENG 107				Prerequisites: ENG 100, ENG 101, ENG 102			
In addition to further readings and critical writings on literature, the course includes the writing of critical and informal essays, editorials, narrative sketches, book reviews, and the research paper.				A course dealing with specialized problems in reading. The course focuses on the areas of vocabulary, comprehension and speed.			
ENG 190 History of the Drama			3 0 3	ENG 293 Advanced Composition			3 0 3
Prerequisite: None				Prerequisite: ENG 102			
A course designed to provide a brief survey of the world of drama in its historical setting, accenting its purpose and its changes with the needs and desires of the audience. The course includes the reading of representative plays from different periods and a consideration of theory behind improvisational theatre and some exercises in improvising.				A course designed to train the student in the effective writing of critical and informal essays, editorials, and reports of various kinds.			
ENG 191 Introduction to Literature			3 0 3	ENG 207 Career Communications			3 0 3
Prerequisite: None				Prerequisite: ENG 108			
An introductory course in the study of fiction and poetry for the beginning student of literature. The course is pedagogically designed to provide the student with a greater understanding and appreciation of selected works of literature. Open to non-General Education majors only.				This course deals with those particular types of writing which are pertinent to the student's curriculum including technical report writing and written summaries of experimental data. In addition to these specialized forms of written communication, the course includes a unit which prepares the student to apply for a job; resume preparation and interview techniques are covered.			
ENG 201 World Literature I			3 0 3	ENG 1011 Communication Skills II			3 0 3
Prerequisites: ENG 106, ENG 107, ENG 108				Prerequisite: ENG 1010			
A critical survey of selected world masterpieces from the ancient Hebrew and Greek literature through the Renaissance period. The course includes the writing of short critical papers.				A basic writing course covering the grammar, mechanics, style, and organization of clear and concise writing. The student is trained to apply these principles in a unified, coherent context and to the composition of different types of paragraphs.			
ENG 202 World Literature II			3 0 3	ENG 1012 Communication Skills III			3 0 3
Prerequisite: ENG 201				Prerequisite: ENG 1011			
A critical survey of selected world masterpieces from 1650 to the present, reflecting the major literary trends of neoclassicism, romanticism, realism, naturalism, and existentialism.				This course emphasizes the paragraph while accenting more sophisticated aspects of grammatical principles and organization. The student progresses toward a total composition by studying the logic and form involved in clear writing.			
ENG 203 Interpersonal Communications			3 0 3	ENG 1013 Communication Skills IV			3 0 3
Prerequisites: ENG 101, ENG 102, ENG 103				Prerequisite: ENG 1012			
A course dealing with particular types of communication necessary for a successful career. The topics covered are determined by the student's curriculum and may range from studies in interpersonal relationships to effective methods of career writing.				This course deals with those particular types of writing which are pertinent to the student's curriculum. Also the course contains a unit on effective job preparation, including resumes, application procedures, and interviewing strategy.			
				ENG 1020 Communication Skills for Computer Operations			3 0 3
				Prerequisite: None			
				A basic writing course, designed for computer operations students, covering the grammar, mechanics, style, organization, and language of clear writing. The student is trained to apply standard English in a unified, coherent and effective manner.			

	Lec	Lab	Cred
ENG 1030 Medical Terminology for the Pharmacy Technician	3	0	3
Prerequisite: None			
An introduction to medical and pharmaceutical terminology. Emphasis is placed on basic communication skills; i.e., speaking, listening, and writing as it applies to this specific course of study.			
ENG 1040 Communication Skills for Nurses	5	0	5
Prerequisite: None			
A course designed to provide remedial instruction for students deficient in reading, vocabulary, and study skills. Attention will also be given to a review of grammar and basic writing principles.			
ENG 1050 Communication Skills for Drafting I	2	0	2
ENG 1060 Communication Skills for Electrical Installation and Maintenance	2	0	2
ENG 1070 Communication Skills for Automotive Mechanics	2	0	2
ENG 1080 Communication Skills for Machinists I	2	0	2
Prerequisite: None			
In these courses, the student begins a guidance procedure to define his interests, aptitudes, and goals. The accent will be on the effective use of written and spoken communications.			
ENG 1051, 1061, 1071, 1081 Communication Skills	3	0	3
Prerequisite: ENG 1050			
A continuation of the first course, stressing methods of coping with communication problems that are inherent in the "world of work" and especially with the communication problems that may develop in the particular field of work for which the student is preparing.			
ENG 1002 Medical Communication Skills	4	0	4
Prerequisite: None			
Emphasis on reading and writing skills within the hospital environment. Effective methods of study, use of the library and reference books; identification of the various types of reading materials and reading methods; medical terminology, including prefixes, suffixes, and roots; reading and completing forms peculiar to the position on the hospital staff.			
ENG 1010 Communication Skills I	3	0	3
Prerequisite: None			
Required of all entering students, a foundation course which is taught for full credit toward graduation. Through this course, the student is thoroughly acquainted with philosophy, purpose, services, and academic policies of Durham Technical Institute. This course begins a guidance procedure through which students define their interest, aptitudes, goals, and the procedure for their goal attainment. Writing and speaking are accentuated in problem-solving activities. Training in grammar and vocabulary is central to the course.			
HUM 100 Visual Literacy	3	0	3
Prerequisite: None			
Deals with nonverbal aspects of communication. The student explores as much of that which can be considered visual language as possible. Rather than trying to suggest one set solution for the interpretation and control of visual language, this course strives to expose the student to a variety of methods of composition and design, hoping to enable the student to expand this method of human interaction.			

	Lec	Lab	Cred
HUM 110 Introduction to Western Culture	4	0	4
Prerequisite: None			
Designed to acquaint the student with a number of key aspects of his cultural tradition. While Americans come from varied ethnic backgrounds, the culture of northwestern Europe dominates our society. Elements as basic as American thought patterns and mores are inherited, not invented, and this course deals with their origin and development.			
MUS 101 Music Appreciation	3	0	3
Prerequisite: None			
A course designed to provide the student with a knowledge, understanding, and appreciation of music in Western culture. Emphasis is given to the historical development of music since 1600, pertinent criticism, forms, listening, and the relationship of music to a general cultural development.			

MATHEMATICS

	Lec	Lab	Cred
MAT 100 Basic Mathematics	5	0	5
Prerequisite: None			
A remedial course in basic mathematics designed for the student needing review or remediation. The course includes an extensive review of arithmetic, including operations with whole numbers, fractions, and decimals with emphasis on computing with percents.			
MAT 101 Introduction to College Mathematics	5	0	5
Prerequisite: MAT 100 or equivalent			
An introductory course designed to give students a feel for contemporary mathematics and an appreciation of the uses of mathematics. Areas of study include number systems, calculating devices, consumer mathematics, number sequences, geometry of shapes and measurement, probability, and statistics.			
MAT 102 College Algebra	5	0	5
Prerequisite: MAT 101			
A course in the basics of algebra, including linear equations, graphs, fractional equations, radical expressions, and quadratic equations.			
MAT 110 Business Mathematics	5	0	5
Prerequisite: MAT 100 or equivalent			
A course designed to develop skills in problem solving enabling the student to easily handle any mathematical assignments in other business courses and in work situations. The major areas of study will be in mathematics of merchandising, mathematics of finance, and mathematics of accounting procedures.			
MAT 120 Introduction to Algebra	5	0	5
Prerequisite: MAT 100 or equivalent			
A course introducing the student to the fundamentals of algebra. Emphasis will be placed on basic definitions, and axioms, operations with signed numbers, factoring solutions of linear equations, and operations with polynomials.			
MAT 121 Algebra	5	0	5
Prerequisite: MAT 120 or equivalent			
An intensive beginning algebra course. Topics studied in depth will be integers and their properties, rational numbers, algebraic fractions, linear equations, polynomials, systems of equations, radical expressions, and quadratic equations.			

	Lec	Lab	Cred		Lec	Lab	Cred	
MAT 130 Technical Mathematics I for Respiratory Therapy	5	0	5		MAT 162 Technical Mathematics III for Electronics	5	0	5
Prerequisite: None					Prerequisite: MAT 161			
Algebraic topics are studied to prepare the student to apply these math skills in beginning science and respiratory therapy courses. The rational numbers and their properties, fundamental algebraic operations, solutions of linear equations, rectangular coordinate system, polynomials of several variables, rearrangement of formulas, and algebraic fractions are studied.					An in-depth study of exponential and logarithmic equations with their respective graphs, anti-logarithms, natural logarithms, number bases and introduction to Boolean Algebra, and analytic geometry (rectangular and polar coordinate systems). Function properties, limits, and the basic concepts of calculus are studied.			
MAT 131 Technical Mathematics II for Respiratory Therapy	5	0	5		MAT 170 Technical Mathematics for Police Science	5	0	5
Prerequisite: MAT 130 or equivalent					Prerequisite: None			
The mathematical topics included in this course are those needed for application problems in science and respiratory therapy courses. The topics include basic trigonometry, ratio, proportion and variation problems, evaluation and rearrangement of formulas, exponents and logarithms, linear equations, and the rectangular coordinate system with linear and nonlinear graphs.					This course is designed to review and refine skills in arithmetic, practical geometry, and to introduce fundamental algebraic operations, culminating in the solution of linear and quadratic equations.			
MAT 140 Technical Mathematics I for Opticians	5	0	5		MAT 260 Introduction to Calculus	5	0	5
Prerequisite: None					Prerequisites: MAT 161, MAT 162 or equivalent			
This course begins with a review of basic algebraic concepts and continues with arithmetic operations with algebraic expressions, solutions of linear equations, and evaluation of formulas. Emphasis is placed on solving application problems, the use of denominate numbers, and algebraic manipulation of formulas. Scientific notation and proportions are also included.					This course covers function theory, concept of limits, differential and integral calculus, practical applications of the 2nd and 3rd derivatives and the definite integral, calculus as applied to trigonometry, logarithms and exponential functions, and the basic theorems and laws of the Boolean Algebra system.			
MAT 141 Technical Mathematics II for Opticians	5	0	5		MAT 1030 Mathematics for Pharmacy Technology	5	0	5
Prerequisite: MAT 140					Prerequisite: None			
This course is a continuation of MAT 140. It begins with the geometry of regular figures and emphasis on the circle. The rectangular coordinate system, graphs of linear equations, linear systems and their solutions are studied. Quadratic equations, trigonometric definitions, solutions of right triangles, general angles, oblique triangles, and sine functions are the remaining topics.					The course begins with the basic operations with integers, common fractions, decimal fractions, percentage, ratio and proportions, followed by basic algebraic operations, equations, and exponents. Metrology, metric system (mainly weight and volume), apothecary and avoirdupois systems, unit conversions and equivalences are studied. Applications are made of the above topics specific numerical problems, ratio and proportion problems, percentage solutions, and reducing and enlarging formulas and dosages.			
MAT 160 Technical Mathematics I for Electronics	5	0	5		MAT 1040 Mathematics for Nurses	3	0	3
Prerequisite: Entrance in Electronics Curriculum or permission of Instructor					Prerequisite: None			
This course is a review of basic algebraic operations; including signed numbers, laws of exponents, solution of linear equations and linear systems, rectangular coordinate system, factorization of binomials and trinomials, scientific notation, evaluation of formulas, ratio and proportion, and exponential functions. Stress is placed on the solution of practical problems in electricity. The course introduces basic trigonometry.					This course is primarily designed to prepare the students to solve drug and solutions problems. Topics studied include operations with whole numbers, fractions, and decimals, percentage, ratio and proportion, and conversion with in and between the metric and apothecaries' systems of measurement.			
MAT 161 Technical Mathematics II for Electronics	5	0	5		MAT 1045 Technical Math for Opt. Lab Mechanics	5	0	5
Prerequisite: MAT 160					Prerequisite: None			
This course covers advanced algebraic and trigonometric topics which include quadratic equations, fractional exponents and radicals, rational and irrational numbers, complex numbers and their application to electrical circuits, trigonometric functions for angles over 90 degrees, interpolation of tables, law of sines and cosines. Emphasis is placed on the graphs of trigonometric functions especially the sine and cosine functions. Vector algebra is covered extensively, including graphic representation of j-operators in both exponential and polar forms.					This course develops fundamental algebra, basic geometry, and that trigonometry essential to concepts and problems in Ophthalmic Optics.			
					MAT 1050 Mathematics for Draftspersons	3	0	3
					Prerequisite: None			
					Basic arithmetic operations with integers, common fractions, decimal fractions, and percentage problems and the initial topics of this course. Basic plane and solid geometry including perimeter, area, and volume of common geometric figures are also studied.			

MAT 1060 Mathematics I for Electrical Installation and Maintenance Lec Lab Cred
5 0 5

Prerequisite: None

The course begins with a thorough review of the four basic arithmetic operations with integers, common fractions, and decimal numbers. The study of percent, and an introduction to geometry with emphasis on the use of formulas, right triangles, and the pythagorean theorem complete the course.

MAT 1061 Mathematics II for Electrical Installation and Maintenance 5 0 5

Prerequisite: MAT 1060

Topics included in this course are algebraic definitions, scientific notation, denominate numbers metric units, use of formulas, fundamentals of geometry, rectangular coordinate system and basic trigonometry.

MAT 1062 Mathematics II for Electrical Maintenance and Servicing 5 0 5

Prerequisite: MAT 1061

This course emphasizes the solving of practical mathematical problems in electrical maintenance. Also included are calculations of electrical quantities in specific problems, and calculations of material and labor associated with jobs. The National Electrical Code is used extensively in practical problems.

MAT 1070 Mathematics for Automotive Mechanics 3 0 3

Prerequisite: None

This course emphasizes the four basic arithmetic operations with integers, common fractions, and decimal numbers. Percentage, ratio and proportion, plane and solid figures used in industry, measurement, formulas, and graphs are other topics covered.

MAT 1110 Business Mathematics 5 0 5

Prerequisite: None

A course designed to raise the student's level of mathematical proficiency and to develop skills in problem solving so that the student may easily handle any mathematical assignments in other courses and in a work situation. The major areas of study will be in mathematics of merchandising, mathematics of finance, and mathematics of accounting procedures.

PHYSICAL SCIENCES

BIO 101 General Biology I 3 2 4

Prerequisite: None

An introduction course in biology including the following topics: man and his place in the biological world and human physiology, with special emphasis on the cellular aspects of structure and function and the dissection of vertebrates.

BIO 102 General Biology II 3 2 4

Prerequisite: BIO 101

A continuation of BIO 101, designed to cover a general survey of the plant and animal phyla, a brief summary of animal physiology, and a detailed study of the biosphere, ecosystems, bioenergetics, and animal behavior.

BIO 130 General Biology

Prerequisite: None

An introduction to cellular biology with special emphasis on the ultrastructure of cell anatomy, the molecular aspects of cell physiology, and introduction vertebrate dissection. Designed for students continuing their studies in anatomy and physiology.

BIO 131 Anatomy-Physiology 4 2 5

Prerequisite: BIO 130

A study of the functional and structural components of the human body, their relationships and integrations as organ systems, with emphasis on the homeostatic physiology of the nervous, cardiopulmonary, and excretory systems and studies of fluid-electrolyte and acid-base regulation.

BIO 132 Cardiopulmonary Anatomy-Physiology 3 0 3

Prerequisite: BIO 131

A detailed study of the structural and functional integration of the respiratory system with the circulatory system. Factors involved in respiration mechanics of respiration, ventilation, pulmonary circulation, tissue metabolism, oxygen transport, and carbon dioxide elimination will be included.

BIO 165 Molecular & Cellular Biology 3 2 4

Prerequisite: None

A comprehensive review of cytology. The primary objective of this course is to provide study of the molecular and ultrastructural anatomy and physiology of the cell. Included will be coverage of the chemical components of the cell, enzyme theory, membrane theories, molecular structures of cellular organelles, molecular cytogenetics, and the biochemical aspects of cell secretion and mechanical activity.

BIO 166 Human Anatomy-Physiology 4 2 5

Prerequisite: BIO 165

This course is designed to provide the student in SET a general and comprehensive study of the anatomical components and structures of the human body, detailed knowledge as to their respective functions and control mechanisms, and a general overview as to their relationships and integrations in tissue and organ systems. Emphasis is placed on the physiology of the nervous, cardiovascular, pulmonary, and excretory systems and their interrelation towards the maintenance of homeostasis.

BIO 230 Microbiology 4 2 5

Prerequisites: BIO 130, BIO 131

An introduction to clinical microbiology. Primary emphasis is upon bacterial, viral, and fungal agents of respiratory disease. Coverage also includes disease transmission, nosocomial infection, microbial control, and immunology of hypersensitivity and body defenses.

BIO 265 Pharmacology 4 0 4

Prerequisites: BIO 166, CHM 165

A comprehensive overview of basic pharmacological concepts. The first seven weeks are spent covering pharmacodynamics, including basic drug mechanisms, receptor theory, kinetics of absorption and distribution, biotransformation, excretion, and toxicity. The remaining four weeks will be spent in a general review of major drug groupings.

BIO 1030 Pathophysiology 3 2 4

Prerequisites: CHM 1030, ENG 1030

This course involves a comprehensive study of human physiology with specific emphasis upon the disruption of

normal physiology by various disease processes. Included is a general study of anatomy and physiology with introductions into the causes of disease, inflammation processes, resistance, transmission, and abnormal cellular structure and function. Each organ system will be handled individually with time spent in covering the common diseases and abnormalities associated with each system.

BIO 1102 Anatomy and Physiology 5 0 5

Prerequisite: None

A thorough study of the general plan of the body and the nine systems: nervous, endocrine, skeletal, muscular, circulatory, digestive, respiratory, urinary, male and female reproductive systems. Designed for understanding of how the body controls its functions, how the body stands erect and moves, how the body distributes food and oxygen and removes waste, and how the body provides for reproduction.

BIO 1103 Microbiology 3 0 3

Prerequisite: None

Microorganisms as they relate to the operating room and the patient's recovery from surgery. Proper disinfection of the operating room and conduct of septic case technique. Exposure to the uses and functions of the microscope and the sterilizer.

CHM 030 Introductory Chemistry 3 2 4

Prerequisite: None

An introductory course designed for students with little or no background in chemistry. Topics covered will include the metric system, atomic structure, naming compounds, writing formulas, balancing equations, the gas laws and acid and bases. This course is not to be considered a part of the formal curriculum but a means of improving weaker students prior to the beginning of the freshman year. Students receive a grade of pass or fail.

CHM 130 Chemistry 4 2 5

Prerequisite: MAT 121

Study of the physical and chemical properties of substances: chemical changes, elements, compounds, gases, chemical combinations, weights and measurements, theory of metals, acids, bases, salts, solvents, solutions and emulsions. Introduction to organic chemistry with emphasis being placed on biochemical systems found in vertebrates. Introduction to acid-base balance, buffer systems, study of carbohydrates, electrolytes, and electrolytes as they apply to vertebrate physiology.

CHM 140 General Chemistry for Opticianry 4 2 5

Prerequisites: MAT 121 or MAT 140 or equivalent

An introductory chemistry course involving chemical terminology, atomic structure properties of elements and compounds, and the function of the periodic table. Special consideration will be given properties of compounds involving glass (silicon dioxide), metals, dyes, cements, plastics, polishing agents and protective lens coating.

CHM 165 Chemical & Physical Properties III 3 2 4

Prerequisite: MAT 170 or equivalent

This course covers laboratory safety, naming compounds, writing formulas, structure of the atom, mole concept, bonding, periodic table, nuclear chemistry, acids, bases, pH, liquids, and solutions and concentrations.

CHM 170 General Chemistry for Police Science 5 0 5

Prerequisite: MAT 170 or equivalent

Study of physical and chemical properties of substances; elements, compounds, gases, weights and measurements, theory of metals, acids, bases, salts, solvents, solutions,

and emulsions. In addition, there will be an emphasis on investigative chemistry involving alcohols, poisons, heavy metals, proteins, drugs and their presence and use in society.

CHM 265 Chemical & Physical PropertiesII 3 2 4

Prerequisite: CHM 165

This course is a continuation of CHM 165. Topics covered will include titration & neutralization of acids and bases, oxidation-reduction, electrochemistry, gas laws, and organic chemistry.

CHM 266 Chemical Sampling & Analysis 3 2 4

Prerequisite: CHM 265

This course is a continuation of CHM 265. Topics covered will include spectrophotometry, separation technique, gravimetric and volumetric analysis.

CHM 267 Organic Chemistry 3 2 4

Prerequisite: CHM 266

This course on organic chemistry would include the following topics: Hydrocarbons—their structure, nomenclature, preparation and reaction; stereo-chemistry; alcohols and phenols; ether and epoxides; aldehydes and ketones; organic nitrogen compounds; identification of structure by classical and modern techniques; organic chemistry of molecules; and organic chemistry of living systems.

CHM 1030 General Chemistry for Pharmacy 4 2 5

Technicians

Prerequisite: None

A study of introductory inorganic and organic chemistry with emphasis on the stoichiometric relationships and theories suitable for the practical application in pharmacy technology. Included is a general study of chemical measurement techniques, fundamental chemical concepts, structure and classification of the elements, chemical and formula compounds, bonding, reactions and equations, molecular and equivalent weights solutions and concentration theory, ionization and acid-base chemistry, and hydrocarbon and biochemical compounds and formulas.

GEO 101 Physical Geology 3 0 3

Prerequisite: None

A study of the earth; the most common minerals, rocks, and earth processes; and topographic map interpretation.

MED 130 Pharmacology 3 0 3

Prerequisite: BIO 131

A comprehensive study of those drugs and medications commonly found in respiratory therapy or in cardiopulmonary diseases. Emphasis includes the pharmacodynamics of drug action, correct drug usage, and administration.

MED 131 Acid-Base, Blood Gas & Electrolyte Physiology 3 0 3

Prerequisite: CHM 130, BIO 131, BIO 132

This lecture-discussion is designed to meet the specialized needs of Respiratory Therapy students for advanced training in acid-base regulation; fluid-electrolyte balance; blood gas values and their clinical interpretation; and the clinical measurement of arterial pH, oxygen, and carbon dioxide.

MED 231 Pathology 4 0 4

Prerequisites: BIO 132, BIO 230

This course—provides a comprehensive study of the etiology and pathogenesis of respiratory and cardiovascular diseases. Additional focus includes clinical manifestations, diagnosis, and complications.

PHY 030 Introductory Physics Lec Lab Cred
3 2 4
 Prerequisite: None
 An introductory course designed for students with little or no background in physics. Topics covered will include mechanics, fluids, heat and electricity. This course is not to be considered a part of the formal curriculum but a means of improving weaker students prior to the beginning of the freshman year. Students receive a grade of pass or fail.

PHY 130 Physics I for Respiratory Therapy 3 2 4
 Prerequisite: MAT 121
 A fundamental course covering the physical principles of matter. Liquids, gases, and their laws will be studied as they relate to physiologic mechanisms. Laws: Thermodynamics and bioenergetics.

PHY 131 Physics II for Respiratory Therapy 3 2 4
 Prerequisite: PHY 130
 Basic theories of electricity, types of electricity, methods of production, transmission and application of electrical principles which affect maintenance and development of respiratory apparatus, and bioelectricity and electrical safety in hospitals.

PHY 140 Physics for Opticianry 3 2 4
 Prerequisite: None
 General physics for opticianry students to prepare them for courses in Geometric Optics. Includes discussion of units and measurements, motion, force and momentum, gravitational and electrical force, energy and work, oscillations and waves.

PHY 141 Geometric Optics I 3 4 5
 Prerequisite: PHY 140
 A basic study of the nature and theory of light. Instruction will include but will not be limited to the following: luminous sources and propagation of light, concepts of rays, pencils, and beams, Huygens construction of a wavefront, principles of photometry, reflection at plane and spherical mirror surfaces, also refraction at plane surfaces and refraction of a single ray through a prism, minimum deviation, effects and measurements of grazing incident and emergent rays. Demonstration and discussion of Young's interference experiments to be performed by students to correlate theory.

PHY 142 Geometric Optics II 3 4 5
 Prerequisite: PHY 141
 A continuation of Geometric Optics I. Topics to be covered but not limited to the following: refraction through thin lenses, refraction power, object-image relationship, lens gauge constant, refractions through thick lenses, power of cylinder lenses, effects of spherocylindrical lens combinations, optical instruments, defects of lenses, lens coating and polarization of light, optical system of the eye, magnification of optical systems, and retinal magnification. Selected experiments are to be performed by the students to correlate theory.

PHY 165 Physics I 3 2 4
 Prerequisite: None
 This course introduces the student to the physical properties of mechanical, gaseous and fluid systems, and to the physical laws which govern their behavior. It includes the basic concepts of mass, weight, force and static equilibrium along with their measurement; principles of motion, both translational and rotational, energy and momentum and their conservation. Temperature and heat are introduced followed by the thermal properties of matter. Other properties of liquids and gases are treated, including pressure, the gas law and hydraulics.

PHY 166 Physics II 3 2 4
 Prerequisite: PHY 165
 This course introduces the student to the physical properties of electrical and magnetic systems, and to the physical laws which govern their behavior. It includes direct current electricity and the magnetic force. This is followed by electromagnetism and a brief discussion of AC circuits and devices. Selected topics in modern physics including the quantum phenomena such as the laser and photo-electric effect, semi-conductors, radioactivity and nuclear reactors are included.

PHY 167 Physics III 3 2 4
 Prerequisite: PHY 166
 This course introduces the student to physical properties of sound, wave motion and optical systems. It includes properties of waves, producing and detecting sound, measuring sound radiation, electromagnetic waves, geometric and physical optics.

PHY 170 Physics of Fire Science 3 2 4
 Prerequisite: None
 An introduction to physical principles and their application to fire science. Topics include mechanics, energy and work, fluid flow and hydraulics, heat, electrical devices.

PHY 190 Descriptive Astronomy 3 0 3
 Prerequisite: None
 An elementary course in descriptive astronomy, including a study of the solar system, stars, galaxies and the universe as a whole on a nonmathematical basis. Also included is a study of instruments and techniques of astronomers. Outdoor viewing and field trips to the Morehead Planetarium will be a part of the course.

PHY 260 Physics I for Electronics 4 2 5
 Prerequisite: None
 An introduction to physical principles and their application in industry. Topics in the course include measurements, properties of solids, liquids, and gases.

PHY 261 Physics II for Electronics 4 2 5
 Prerequisite: PHY 260
 Topics covered include heat and thermometry; principles of force, motion, work, energy and power; strength of materials; radiation; and solid states.

PHY 1045 Physics of Light 3 0 3
 Prerequisite: None
 A study of the theory of light, electromagnetic spectrum, propagation of light, illumination and other fundamental properties of light.

PHY 1046 Geometric Optics 3 0 3
 Prerequisite: PHY 1045
 A study of the theoretical application of light to Ophthalmic Optics, involving reflection and refraction of mirrors, prisms, and lenses.

PHY 1050 Physics for Architectural Drafting 3 2 4
 Prerequisite: None
 A course in applied physical principles. Topics include measurement, properties of materials, heat and thermometry, basic electricity and circuits, force, energy, work and power.

PHY 1060 Physics for Electrical Installation and Maintenance 3 2 4
 Prerequisite: None
 An introduction to physical principles and their industrial

applications. Properties of solids, liquids and gases; heat; force motion, work, energy and power.

PHY 1070 Physics for Automotive Mechanics 2 2 3
Prerequisite: None

An introduction to physical laws and principles found in the design engineering and performance of an automobile. To meet the requirements of this course, each student will perform ordered experiments to demonstrate selected laws of nature. Labs will utilize automotive parts, equipment, and facilities.

SCI 150 Physical Science for Dental Technicians 5 2 6
Prerequisite: None

A study of the basic physical and chemical principles encountered in work with dental materials. Included are introductory inorganic and organic chemistry with special emphasis on the metallic elements and those compounds with physical properties advantageous to dental work. Physical principles include those which cause stress, strain, distortion, or potential stability or instability in dental materials.

SOCIAL SCIENCES

ECO 202 Principles of Economics I 3 0 3

Prerequisite: None

A study of the fundamental principles of economics, including 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. A term paper is required.

ECO 204 Principles of Economics II 3 0 3
Prerequisite: ECO 202

Greater depth in the 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. A term project is required.

GEOG 101 Geography 3 0 3
Prerequisite: None

An introductory study of geography, including an examination of the geographic characteristics of selected countries and the relationships of natural environments, cultural backgrounds, economic conditions, and world problems.

GEOG 110 Physical Geography 4 0 4
Prerequisite: None

A study of the major geographical regions of the world, emphasizing the human response to climates, natural resources, industrialization, and the physical aspects of the environment.

GEOG 190 Political Geography 4 0 4
Prerequisite: None

A study of the political systems of the major geographical regions of the world.

HIS 101 Western Civilization I 3 0 3
Prerequisite: None

A survey of western civilization from its pre-Greek origins to 1660.

HIS 102 Western Civilization II 3 0 3
Prerequisite: HIS 101

A continuation of western civilization from 1660 to 1850.

HIS 103 Western Civilization III Lec Lab Cred
3 0 3

Prerequisite: HIS 102

A continuation of western civilization from 1850 to the present.

HIS 201 American History I 3 0 3

Prerequisites: HIS 101, 102, and 103

A survey of American history from the discovery of America to the Civil War

HIS 202 American History II 3 0 3

Prerequisite: HIS 201

A continuation of American history from the Civil War through World War I.

HIS 203 American History III 3 0 3

Prerequisite: HIS 202

A continuation of American history from the close of World War I to the present.

PHI 101 Introduction to Philosophy 3 0 3

Prerequisite: None

An introduction to philosophy through the study of different philosophical problems and positions that arise in the ever-changing yet constant areas of life. The student is stimulated to develop the capacity for philosophical thinking.

POL 101 Political Science 3 0 3

Prerequisite: None

A study of the legislative, judicial, and executive branches of the national government, with emphasis on the changing interpretation of the Constitution.

POL 111 State and Local Government for Library 5 0 5
Technology

Prerequisite: None

A study of the organization of state and local governments, the relationship between state and federal powers, and the functions and duties of the branches. The student deals with problems of administration, revenues, and appropriations. Special attention is given to North Carolina government.

POL 170 National Government 5 0 5

Prerequisite: None

A study of the historical development and current structure of the American government. Topics covered include English and colonial background, the Articles of Confederation, the federal Constitution, the federal union, states rights, federal powers, and political parties.

POL 171 State and Local Government for Police Science 3 0 3

Prerequisite: None

A study of the organization of state and local governments, the relationships between state and federal powers, and the functions and duties of the branches. The student deals with problems of administration, legal procedures, law enforcement, power, taxation, revenues, and appropriations. Special attention is given to North Carolina government.

POL 190 U.S. Government 3 0 3

Prerequisite: None

A study of the organization and functioning of the national government. The student considers the basic concepts underlying the government structure and the powers, procedures, and problems of the branches.

	Lec	Lab	Cred	
PSY 100 Introduction to General Psychology	3	0	3	emphasis on biological and environmental causal factors and human coping mechanisms.
Prerequisite: None				
A course designed to help the student understand himself in relationship to the environment and to provide the student a basic understanding of the principles of general psychology. The course is conducted on an informal lecture-discussion basis and is recommended as a foundation course for students who plan further study in psychology.				
PSY 101 General Psychology	5	0	5	PSY 283 Psychology and Physiology of Aging 3 0 3
Prerequisite: None				Prerequisite: PSY 101
A course designed to help the student understand himself in relationship to the environment and to provide an in-depth study of the principles of general psychology.				A survey course concerning the physical and psychological changes occurring in late middle age with emphasis on the care and treatment of the aged in our society.
PSY 102 Principles of Psychology	3	0	3	PSY 290 Applied Psychology 3 0 3
Prerequisite: None				Prerequisite: PSY 100 or PSY 101
An academic approach to the terminology and principles of psychology, designed to help students understand their behavior as well as that of others. The focus is on behavioral topics such as motivation, emotion, perception, learning, and intelligence.				A study of those principles of psychology which will assist the student in dealing with interpersonal relationships in a job-related situation. The student considers motivation, feelings, and emotions in problem situations. By studying personal and group dynamics, the student learns to apply principles of mental health to adjustment problems as both as workers and as a member of a general community.
PSY 112 Personal Development	3	0	3	SOC 100 Principles of Sociology 5 0 5
Guides the student toward seeing the importance of his own development. The physical, intellectual, social, and emotional aspects of personality development are studied, and the student begins a program of exercises geared for self-improvement.				Prerequisite: None
PSY 130 General Psychology for Respiratory Therapy	3	0	3	An introduction to the principles of sociology, providing a basis for understanding collective behavior, community life, social institutions, and social change. The student deals with the scientific study of man's behavior in relation to other men, the general laws affecting the organization of these relationships, and the effects of social life on personality and behavior.
Prerequisite: None				SOC 102 Studies in Sociology 3 0 3
A study of the various fields of psychology, including the development process, motivation, emotion, frustration and adjustment, mental health, attention and perception, and problems in group living.				Prerequisite: None
PSY 170 Adolescent Psychology for Police Science	5	0	5	An introductory study of the terminology, concepts, and fields of sociology through an examination of social organization, culture, and personality.
Prerequisite: PSY 100 or PSY 101				SOC 130 Principles of Sociology for Respiratory Therapy 3 0 3
A study of the nature and source of the problems of adolescents in the western culture. The student considers the physical, emotional, social, intellectual, and personality development of the adolescent. The course is conducted on an informal contract basis and allows each student to choose activities which they wish to pursue.				Prerequisite: None
PSY 171 Abnormal Psychology	3	0	3	An introduction to the principles of sociology, providing a basis for understanding collective behavior, community life, social institutions, and social change with special emphasis on the medical environment.
Prerequisite: PSY 101				SOC 190 Introduction to Social Science I 3 0 3
A survey of the behavioral disorders of psychological origin. Particular emphasis is on the relationship existing between the disorders and their courses. The detection and treatment of these disorders receive lesser consideration.				Prerequisite: None
PSY 180 Adolescent Psychology for MHA	3	0	3	Studies in the social sciences, with emphasis on anthropology, psychology, history, and sociology. This course shows the integration of all the social science and how each discipline contributes to the total environment.
Prerequisite: PSY 101				SSC 191 Introduction to Social Science II 3 0 3
A study of the nature and source of the problems of adolescents in western culture, the physical, emotional, social, intellectual, and personality development of adolescents.				Prerequisite: SSC 190
PSY 181 Growth and Development	5	0	5	A continuation of a study of the social sciences, emphasizing economics, political science, and social problems.
Prerequisite: PSY 101				SSC 290 Marriage and the Family 3 0 3
A study of the basic principles of physiological and psychological growth stages of child from conception through adolescence.				Prerequisite: None
PSY 182 Behavior Disorders	5	0	5	A study of the origin and development of the family as a social institution, with emphasis on courtship, marriage, parenthood, family relationships, and problems dealing with the contemporary American family.
Prerequisite: PSY 101				SSC 291 History of Women and Feminism 3 0 3
A study of general patterns of disordered behavior with				Prerequisite: None

Public Service

COMMUNICATIONS TECHNOLOGY Two-Year Associate Degree Program

The Communications Technology Curriculum is designed to prepare men and women to enter the communications field in industry or education. Students will acquire technical and professional experiences in various aspects of media production. Graduates may be employed as media technicians by industrial education departments, libraries, public schools, community colleges, universities, medical centers or other educational facilities. The program will provide students with a broad range of skills from which they may choose to specialize. Technicians may have duties including photography, graphic art, producing, directing, equipment maintenance and others.

FIRST QUARTER

	Lec	Lab	Cred
¹ ENG 101 Communication Skills I	3	0	3
SCI 111 Physical Science and Math for Media	3	4	5
AUD 101 Intro. to AV Equipment & Production	4	0	4
VIS 101 Visual Communications	5	0	5

SECOND QUARTER

ENG 102 Communication Skills II	3	0	3
² BUS 102 Typing	4	1	4
PSY 111 Creative Problem Solving	3	0	3
PHO 101 Basic Photography	4	0	4

THIRD QUARTER

¹ ENG 103 Communication Skills III	3	0	3
¹ ENG 203 Interpersonal Communication	3	0	3
AUD 102 Media Production I	3	0	3
DFT 103 Drafting for Media	2	4	4
LIB 208 Media Resources and Bibliography	3	0	3

FOURTH QUARTER

DES 101 Basic Drawing and Design	3	0	3
DES 102 Type and Lettering	3	6	6
AUD 103 Media Production Lab Project	0	10	5
** General Elective	3	0	3

FIFTH QUARTER

PHO 201 Advanced Photography	2	4	4
AUD 204 Media Production II	4	8	8
RTV 101 Introduction to TV Production	3	0	3
* Technical Elective	3	0	3
** General Elective	3	0	3

SIXTH QUARTER

PHO 203 Basic Film Technology	2	4	4
AUD 205 Media Production III	4	8	4
* Technical Elective	3	0	3
** General Elective	3	0	3

SEVENTH QUARTER

AUD 206 Media Production IV	0	12	6
DES 203 Selective Media	2	4	4
* Technical Elective	3	0	3
** General Elective	3	0	3

Minimum total hours required for graduation:

115

* Technical Electives: AUD 207, AUD 208, AUD 209, RTV 202, DES 204, ELC 111, ELC 112, DES 205, DES 206 RTV 203.

** General Electives: Must be selected from approved list.

1- Refer to General Education Course Descriptions

2- Refer to Business Education Booklet

AUD 101 Introduction to Audio-Visual Equipment and Basic Production

Lec Lab Cred
4 0 4

Prerequisite: None

A study in understanding the operation of project equipment, tape recorders, record players and synchronization equipment. Includes production techniques for basic transparencies and sound-slide presentation.

AUD 102 Media Production I

3 0 3

Prerequisite: AUD 101

A student learns to make transparencies, including acetate, diazo, and reproductions of printed illustration. Students will be taught skills for overlays and how-to-add color. Students must also produce a simple educational slide-tape program, and a video tape production of several minutes in length.

AUD 103 Media Lab Project

0 10 5

Prerequisites: AUD 102, PHO 101

Student will work in cooperation with audiovisual services department in the production of instructional media.

AUD 204 Media Production II

4 8 8

Prerequisites: AUD 102, PHO 101

Students will be required to do a photographic series, including processing the film, editing the negative, making prints, mounting the prints and displaying them. Students will also be required to develop a slide series.

AUD 205 Media Production III

4 8 4

Prerequisites: AUD 204, PHO 101

Student will be required to do a filmstrip and sound-slide presentation. Students will write and videotape a one-act play.

AUD 206 Media Practicum

0 12 6

Prerequisites: AUD 205, PHO 101

Student would receive on-the-job training at a local school, library, or business under the close supervision of the program coordinator.

AUD 207 Multi Media Techniques

1 4 3

Prerequisites: AUD 101, PHO 101

Student can create from a chosen topic a multi-media presentation in the form of a slide-tape series. Student may create all visuals and audio for the project.

AUD 208 Display Design

2 2 3

Prerequisite: AUD 101

To develop techniques and design concepts in the design of bulletin boards, classroom displays, working models, and other areas not covered by projected media.

AUD 209 Equipment Repair

2 2 3

Prerequisite: AUD 101

A study in understanding the mechanical and electrical operation of projection equipment, tape recorders, record players, and other magnetic storage devices; covering repair problem locating and trouble shooting.

	Lec	Lab	Cred		Lec	Lab	Cred
DES 101 Basic Drawing and Design			3 0 3		PHO 101 Basic Photography		4 0 4
Prerequisite: None					Prerequisite: None		
An introduction to drawing and basic design fundamentals and principles. Emphasis will be placed on line, two and three dimensional shapes, perspective, light and shade, and color combinations.					Basic photography techniques to include camera handling, lighting, exposure, composition, negative development and enlarging.		
DES 102 Type and Lettering			3 6 6		PHO 201 Advanced Photography		2 4 4
Prerequisite: None					Prerequisite: PHO 101		
A course on the use of type and lettering as an element of visual communication. Both hand lettering and use of transfer letters will be studied.					Continuation of PHO 101 with special emphasis on slide presentations, copy stand techniques, slide duplication, filmstrip production, and advanced darkroom techniques.		
DES 102 Selective Media			2 4 4		PHO 203 Basic Film Technology		2 4 4
Prerequisite: None					Prerequisites: PHO 101, PHO 201		
Designed to give students an opportunity to work in a variety of media not otherwise studied. The media selected will include: silk-screen printing, lithography, painting with oils, polymers, and acrylics, pen and ink, television, photography for newspapers and annuals.					Student will learn basic film techniques to include camera manipulation, lighting, exposure and editing.		
DES 204 Commercial Graphics and Photography	3	3	5		PSY 111 Creative Problem Solving		3 0 3
Prerequisite: PHO 101					Prerequisite: None		
Introduction to lay out and design for printing reproduction processes.					A study of the analysis and criticism of verbal and visual presentations drawing heavily of esthetics and logic, followed by the creation of a verbal or visual answer to a given problem.		
DES 205 Basic Craft I			0 10 5		RTV 101 Introduction to TV Production		3 0 3
Prerequisite: None					Prerequisite: None		
An extensive laboratory course designed to introduce the student to stage carpentry, set painting, lighting basics, and idiosyncratic theatrical procedures.					Introduction to basic techniques of camera manipulation, sound, lighting, and video taping.		
DES 206 Costume Construction			2 2 3		RTV 202 Lighting and Sound		2 2 3
Prerequisite: None					Prerequisite: AUD 101		
A consideration of the techniques of costume construction, accenting the creative use of materials and the suitability of the creation to the production.					Course will focus on specific problem in monochrome and color lighting, microphone types, use of audio mixers and studio sound problems.		
DFT 103 Drafting for Media			2 4 4		RTV 203 Theatre Production Project		0 10 5
Prerequisite: None					Prerequisite: None		
The field of drafting is introduced as the student begins the 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, free-hand orthographic and pictorial sketching, geometric construction, orthographic investment drawing of principle views, and standards and practices of dimensioning. The principles of isometric, oblique, and perspective are introduced.					A laboratory experience devoted totally to the practical necessity of staging a production. During the practicum the student will be able to experiment with diverse positions in the technicians role.		
ELC 111 Electrical Principles and Equipment Modification			3 6 6		SCI 111 Physical Science and Math for Media		3 4 5
Prerequisite: ELC 111					Prerequisite: None		
A consideration of sophisticated circuitry, its construction, upkeep, modification and repair.					A consideration of elements of physics, geometry, and trigonometry which relate to construction, electricity, sound, color and drafting.		
ELC 112 Advanced Electrical Principles and Equipment Modification			3 6 6		VIS 101 Visual Communications		5 0 5
Prerequisite: ELC 111					Prerequisite: None		
A further consideration of sophisticated circuitry, its construction, upkeep, modification and repair.					An introduction to theatre, film, television and radio. Each is defined as an art form and explained as a separate medium while analyzing component elements. Both perception and communication theory are considered.		
LIB 208 Media Resources & Bibliography			3 0 3		EARLY CHILDHOOD ASSOCIATE		
Prerequisite: None					Two-Year Associate Degree Program		
Operations of library mechanics, indexes, catalogues, bibliographies, audio-visual software and equipment sources from which one can secure illustrations, facts to prepare audio visuals. Emphasis will be placed on how the technician can "unlock" the door to a vast amount of source materials with the least bit of effort.					One-Year Diploma Program		
					The purpose of the Early Childhood Associate Program is to train students to provide warm, caring, enrichment experiences for preschool children. The focus of the program is child centered and the philosophy is child oriented. The overall objective is to provide the necessary learning experiences in the classroom and laboratory to enable the students to function effectively upon graduation as child care specialists.		

An important aspect of this program is the student practicum. It is believed that actual experience with children, under supervision, will enable the student to put into practice the theories and concepts learned in the classroom. Familiarity with different day care and developmental centers will also provide opportunities for students to select and expand areas of interest.

The program has dual exit levels which give students the option to continue to develop their skills and abilities beyond the basic four quarters curriculum. Students can exit after four academic quarters with a diploma, or after six quarters with an associate degree. Students exiting at either level will have learned how to relate to children in a positive manner in order to maximize the development of each child's potential.

FIRST QUARTER

	Lec	Lab	Cred
EDU 101 Child Growth & Development	3	0	3
EDU 104 Creative Activities	2	3	3
EDU 105 Health Safety of Young Children	3	0	3
EDU 106 Children's Literature	3	0	3
EDU 111 Seminar—Practicum I	3	6*	6

SECOND QUARTER

EDU 102 Child Growth & Development II	3	0	3
EDU 107 Interpersonal Relations	3	0	3
EDU 108 Physical Activities	2	3	3
AUD 101 Audio-Visual Equipment	4	0	4
EDU 112 Seminar—Practicum II	3	6*	6

THIRD QUARTER

EDU 103 Child Growth & Development	3	0	3
EDU 109 Exceptional Child	3	0	3
EDU 110 Nutrition	3	0	3
ENG 101 Communication Skills I	3	0	3
EDU 113 Seminar—Practicum III	3	6*	6

FOURTH QUARTER

EDU 204 Preschool Education	3	0	3
EDU 205 Community Resources	3	0	3
EDU 206 Adjustment Problems in Childhood	3	0	3
ENG 102 Communication Skills II	3	0	3
EDU 201 Seminar—Practicum IV	3	6*	6

FIFTH QUARTER

EDU 207 Career Information	3	0	3
SOC 100 Principles of Sociology	3	0	3
SSC 290 Marriage & Family	3	0	3
ENG 103 Communication Skills III	3	0	3
EDU 202 Seminar—Practicum V	3	6*	6

SIXTH QUARTER

Soc 207 Group Leadership—Social Change	3	0	3
PSY 100 Introduction to General Psychology	3	0	3
ENG 203 Interpersonal Communications	3	0	3
* Elective	3	0	3
EDU 203 Seminar—Practicum VI	3	6*	6

Minimum total hours required for graduation: 109

*Practicum Hours

- 1-Refer to General Education Course Descriptions
2-Refer to "Communications Technology" Course Descriptions

EDU 101 Child Growth and Development I Lec Lab Cred 3 0 3

Prerequisite: None

An introduction to child development from birth to age six (6). Emphasis will be on factors influencing development, the developmental needs of children, and the role of the child care worker in an affective day care setting.

EDU 102 Child Growth and Development II 3 0 3

Prerequisite: None

A detailed study of the physical, social, psychological, and cognitive development of the child from birth to age three (3). Emphasis will be on the importance of experiences in establishing behavior patterns, attitudes, and interpersonal relationships.

EDU 103 Child Growth and Development III 3 0 3

Prerequisites: EDU 101, EDU 102

A detailed study of the development of the pre-school child, ages three (3) to six (6). The physical, social, psychological, and cognitive aspects of growth will be explored.

EDU 104 Creative Activities 2 3 4

Prerequisite: None

This course will cover creative activities, including art, music, and crafts, which will be aimed at the stimulation of infants and the readiness skills for pre-schoolers. Basic concepts will be examined through a creative approach with emphasis on the physical and mental development in preparing young children for learning experiences that lie ahead. Students will demonstrate competencies in the selection, application and designing processes of developmentally appropriate activities for infants and pre-schoolers.

EDU 105 Health and Safety of Young Children 3 0 3

Prerequisite: None

This course deals with the safe operation of a day care facility to meet the development needs of its inhabitants and those components of health that assure affective care of its inhabitants.

EDU 106 Children's Literature 3 0 3

Prerequisite: None

This course is a survey of the various types of children's literature and how to utilize it appropriately and affectively. Assignments for the course will be both fixed and flexible. Students will have an opportunity to 1) evaluate books based on specific criteria, 2) develop topical files and 3) select projects of interest leading to curriculum design.

EDU 107 Interpersonal Relations 3 0 3

Prerequisite: None

A framework for understanding and utilizing those emotional and social skills necessary for effective communication from a perspective aimed at three levels: Caregiver—Child; Caregiver—Parent; Caregiver—Co-worker.

EDU 108 Physical Activities 2 3 3

Prerequisite: EDU 104 or equivalent

An introduction to physical activities which are developmentally appropriate for infants as well as pre-school age children. Rhythmic games, songs, dance, creative movement, and dramatizations will provide opportunities for stimulation and learning basic concepts.

	Lec	Lab	Cred		Lec	Lab	Cred
EDU 109 Exceptional Child	3	0	3	EDU 203 Seminar—Practicum VI	3	0	6
Prerequisites: EDU 101, EDU 102 or equivalent				Prerequisites: EDU 111, EDU 112, EDU 113, EDU 201, EDU 202			
A course designed to orient student in the career field to exceptional children. The students will be exposed to current programs, community resources and professionals essential to supportive efforts in the education and care of the various areas of exceptionalities. Emphasis will be placed on procedures in early diagnosis, referral and remediation.				The course will deal specifically with regularly scheduled seminars on the philosophy and organization of child care settings. During the practicum, a supervised observation of independent implementation of child care, supervision, and organizational skills will be focused on.			
EDU 110 Nutrition	3	0	3	EDU 204 Preschool Education	3	0	3
Prerequisite: None				Prerequisites: EDU 101, EDU 102, EDU 103			
This course is designed to acquaint the student with the nutritional needs of the child through his/her development aimed at three levels: 1) nutrients essential to human life and well being including their metabolic functions and food sources; 2) basic requirements and practices of food selections and preparation in a child care environment and 3) the utilization of the nutritional component in a child care setting.				A comprehensive analysis of how to assess the child's level of cognition, and how to develop a congruent approach to readiness skills. The student will be subject to making informal observations; completing initial assessment of developmental abilities using the (LAP) Learning Accomplishment Profile and planning long-range instructional objectives for individual children. Consultants, slides, filmstrips, as well as practical application will be the primary means of instruction.			
EDU 111 Seminar—Practicum I	3	0	6	EDU 205 Community Resources	3	0	3
Prerequisite: None				Prerequisite: None			
This course will be comprised of regularly scheduled seminars and practicum assignments. Students will observe children in day care centers. They will keep a log on a particular child and will learn to observe and record information on specific topics relating to child care. The seminar will be taught in small groups to facilitate discussion of the practicum experience. Emphasis will be on the affective approach to physical care.				The course offers the student a general overview of community resources and how they can best be utilized for effective child care center operations. Group discussions will include an analysis of child needs with respect to community planning and the identification of local, state, and national resources.			
EDU 112 Seminar—Practicum II	3	0	6	EDU 206 Adjustment Problems in Childhood	3	0	3
Prerequisite: EDU 111				Prerequisites: EDU 101, EDU 102, EDU 103			
Students will be briefed during regularly scheduled seminar sessions on a variety of learning processes relevant to their particular work setting. During the practicum, all students will be subject to a supervised observation requiring implementation of basic child care skills. Emphasis will be placed on affective interpersonal communications and the interns' feelings about children.				The students will be exposed to a developmental survey of normal childhood adjustment problems via case presentations, films, observations and group discussions. Emphasis will be placed on the range of normal development and how to deal with specific problems. Techniques for promoting desirable behaviors and for coping with undesirable behaviors will be employed.			
EDU 113 Seminar—Practicum III	3	0	6	EDU 207 Career Information	3	0	3
Prerequisites: EDU 111, EDU 112				Prerequisites: EDU 101, EDU 102, EDU 103, EDU 107, EDU 204			
This course deals specifically with a supervised implementation of continued child care skills. Emphasis is placed on the selection, application, and problems of developmentally appropriate activities for specific age groups. The seminar sessions will focus on effective activities for the development of various readiness skills.				This course will involve inquiries into the foundations of current child care practices. Each student will have an opportunity to examine his role as care-giver in aiding parents in the guidance for child development. Emphasis will be placed on techniques for reporting child progress to parents, the purposes and value of home visitation and ways to involve parents in center activities.			
EDU 201 Seminar-Practicum IV	3	0	6	EDU 207 Group Leadership—Social Change	3	0	3
Prerequisites: EDU 111, EDU 112, EDU 113				Prerequisites: EDU 107, EDU 207			
This course will deal specifically with a supervised implementation of continued child care skills with respect to the parent's role and primary care. During the seminar sessions, students will focus on the child in the family and how best to serve the whole family.				This course attempts to provide advanced students in child care with the necessary skills needed to satisfactorily operate a child care center. The seminars will include discussions and lectures aimed to three levels: 1) leadership 2) organization and 3) decision-making.			
EDU 202 Seminar—Practicum V	3	0	6				
Prerequisites: EDU 111, EDU 112, EDU 113, EDU 201							
This course will deal specifically with the independent implementation of child care skills, giving special attention to the overall performance and evaluation of competencies. The seminar will focus on serving the whole child and how to meet his/her needs, physically, socially, and emotionally.							

FIRE SCIENCE**Two-year Associate Degree Program**

Durham Tech's Fire Science program has a somewhat unique focus. Durham Technical Institute cooperates and coordinates specific fire fighting practice skills with the Durham Public Safety Academy. Practice in modern and effective fire fighting techniques and procedures take place at the academy campus. At Durham Tech, fire science topics and develop specific competencies for the performance of fire science administration and supervision duties. The Fire Science curriculum, offered only at night, is designed to enable the individual to draw from a vast store of technical and professional knowledge so that the Fire Science graduate will be able to make proper decisions both on and off the emergency fire scene. Students are involved in both classroom and structured laboratory situations which provide current and sophisticated methods in such topics as municipal fire protection needs, grading fire defenses, fire prevention programs, fire detection and investigation, and fire protection law.

EVENING CURRICULUM**FIRST QUARTER**

	Lec	Lab	Cred
1ENG 101 Communication Skills I	3	0	3
1PHY 170 Physics for Fire Science	3	2	4
1MAT 170 Technical Mathematics	5	0	5
FIP 115 Fire Prevention Programs	3	0	3
FIP 101 Introduction to Fire Protection Hazards	3	0	3

SECOND QUARTER

1ENG 102 Communication Skills II	3	0	3
1PSY 290 Applied Psychology	3	0	3
2BUS 272 Principles of Supervision	3	0	3
FIP 211 Grading of Fire Defenses	3	0	3
FIP 102 Municipal Fire Protection	3	0	3

THIRD QUARTER

1ENG 103 Communications Skills III	3	0	3
FIP 105 Applied Electricity for Fire Protection	3	2	4
FIP 120 Municipal Finance	5	0	5
FIP 135 Training Programs and Methods of Instruction	3	0	3

FOURTH QUARTER

1ENG 203 Communication Skills IV	3	0	3
1CHM 170 Chemistry for Fire Science	4	2	5
FIP 201 Fire Detection and Investigation	3	0	3
FIP 230 Hydraulics and Water Distribution Systems	3	2	4
FIP 103 Construction Codes and Material Rating 2	2	2	2

FIFTH QUARTER

FIP 220 Fire Fighting Strategy	3	2	4
FIP 218 Chemistry of Hazardous Material	3	2	4
FIP 231 Sprinkler and Standpipe Systems*	3	2	4
FIP 208 Municipal Public Relations	3	0	3
Technical Elective	5	0	5
Elective	3	0	3

SIXTH QUARTER

FIP 235 Inspection Principles and Practices	3	2	4
FIP 245 Automatic Alarm and Extinguishing System*	3	2	4
2BUS 233 Personnel Management	3	0	3
FIP 225 Fire Protection Law	3	0	3
Elective	3	0	3

Minimum Total Credit Hours Required for Graduation: 108

- 1-Refer to General Education Booklet
2-Refer to Business Education Booklet

*Six Hours Electives required. Three hours to be selected from the business Department offerings and three hours to be selected from the General Education Course offerings. Electives must be approved by the Program Coordinator. Technical elective to be approved by the Program Coordinator.

COURSE DESCRIPTION

FIP 101 Introduction to Fire Protection Hazards 3 0 3
Prerequisite: None

History and development of fire science, safety and security movements. The role of the fire service, protection and safety personnel. Ancillary organizations. Identification of general fire hazards and their causes and the application of fire protection principles to them.

FIP 102 Municipal Fire Protection 3 0 3

Prerequisite: FIP 101

Fire department organization, personnel management, and the department's relationship with other city departments. Evaluation of public fire protection needs, financial factors, records and reports, equipment procurement policies, apparatus, tools, training needs and programs, maintenance needs and facilities, and other equipment necessary for modern fire protection.

FIP 103 Construction Codes and Material Rating 2 2 3

Prerequisite: FIP 101

A thorough study of building codes applicable to fire prevention, and principles and practices used in various types of building construction. Fire resistance tests and ratings of building materials.

FIP 105 Applied Electricity for Fire Protection 3 2 4

Prerequisite: None

A thorough study of methods and means of utilizing electricity to provide power. The installation and maintenance of electric circuit and machinery.

FIP 115 Fire Prevention Programs 3 0 3

Prerequisite: None

Principles and application of fire prevention related to the community and industrial plants. The development and maintenance of fire prevention programs, educational programs, and inspection programs. Specific applications of related disciplines to fire prevention problems.

	Lec	Lab	Cred		Lec	Lab	Cred
FIP 120 Municipal Finance	5		5	FIP 230 Hydraulics and Water Distributive Systems	3	2	4
Prerequisite: None				Prerequisites: MAT 101, PHY 101			
Municipal finance based on sound government principles and practice. A study of budget items, preparation of budget, justifying budgets, financial statements, cost accounting and record systems, taxation and audits.				Mechanics of the flow of fluids through fire hose, nozzles, and appliances, pumps, standpipes, watermain, and other devices. Design, testing, and use of nozzles and appliances, pumps, and water distribution systems. Measurement of fluid flow and methods of determining quantities of water available from a distribution system. Practical applications of principles.			
FIP 135 Training Programs and Methods of Instruction			3 0 3	FIP 231 Sprinkler and Standpipe Systems	3	2	4
Prerequisite: FIP 115				Prerequisite: FIP 230			
Purposes of fire service drills and training programs. The development and operation of the departments' training programs. Facilities and equipment necessary for modern training. Selecting and training the instructional staff. Suitable methods of instruction.				Types of sprinkler and standpipe systems, system devices and their operation, advantages of sprinkler systems, codes governing installation, water supply requirements, testing, inspection, and maintenance.			
FIP 201 Fire Detection and Investigation			3 0 3	FIP 235 Inspection Principles and Practices	3	4	5
Prerequisite: None				Prerequisite: FIP 103			
Determination of cause of accidental and incendiary fire, fire losses and loss of records, points of origin, location and preservation of physical evidence, and scientific aid to investigation. Courtroom procedure in presenting evidence. Motives and methods for fire setting and investigative methods are covered.				A study of the fundamentals of fire inspections including standards, techniques of evaluation of hazards as to degree of the hazard and practical recommendations. Reports including maps and sketches of each building inspected. On-the-site inspections of buildings to locate hazards and to recommend safe practices and improvements.			
FIP 208 Municipal Public Relations			3 0 3	FIP 245 Automatic Alarm and Extinguishing Systems	3	2	4
Prerequisite: None				Prerequisite: FIP 105			
A general survey of municipal public relations and their effect on the governmental process. Principles of public relations such as planning, staffing, controlling and directing information to the general public is studied. Emphasis is placed upon personal responsibilities, means of communications, policies and organization of an effective public relations program.				A study of the types of fixed extinguishing systems, standard and special fire alarm and fire detection systems; their operation, installation requirements, testing, inspection, and maintenance.			
FIP 211 Grading of Fire Defenses			3 0 3				
Prerequisite: Consent of advisor							
Insurance grading schedules and their principles of application. Methods of analyzing fire hazards and the effects of fire hazards on fire insurance rates. A study of the National Board Grading Schedule is made in detail with other schedules covered briefly.							
FIP 218 Chemistry of Hazardous Materials			3 2 4				
Prerequisite: CHM 170							
Theories of combustion and extinguishment, including the analysis of flammable materials and the nature of extinguishing agents. The properties of matter affecting fire behavior. The application of the laws and principles of chemistry and physics to the use, storage, and disposal of flammable liquids, solids, gases and dusts.							
FIP 220 Fire Fighting Strategy			3 2 3				
Prerequisite: FIP 102							
The aspects of tactics and strategy in extinguishing fires. Pre-fire plans, mutual aid problems, techniques of using available equipment and manpower, configurations, techniques of predicting fires by fuel analysis. Emphasis will be on developing thinking skill in relation to crises.							
FIP 225 Fire Protection Law			3 0 3				
Prerequisite: FIP 102							
A study of law in relation to fire protection. Torts, Terms and Contracts studied by case method. Liability of fire protection personnel when making inspections, recommendations, fighting fires, and other tasks. Pertinent laws, ordinances, and codes and the responsibilities and powers of the individual or organization concerning enforcement.							

LIBRARY ASSISTANT

Two-year Associate Degree Program

The Library Assistant program is designed to prepare persons for employment in various types of libraries—public, school, academic, government, and industry. The curriculum provides a background of general education and basic library skills to prepare interested students to enter library work above the level of clerk. The practicums introduce the student to a variety of on-the-job library experiences. The library content courses are not designed to transfer as library science courses in the professional degree program at an accredited library school; however, the library courses would be helpful background for students desiring to enter the profession and the business courses could provide a background for further business training. Thus the graduate of the Library Assistant program is afforded a variety of career opportunities.

FIRST QUARTER

	Lec	Lab	Cred
LIB 101 Introduction to Media	4	0	4
1ENG 101 Communication Skills	3	0	3
1HUM 110 Introduction to Western Culture	4	0	4
2BUS 102 Typewriting I	3	2	4

	Lec	Lab	Cred
SECOND QUARTER			
LIB 102 Selection and Ordering of Media Materials	3	0	3
¹ ENG 102 Communication Skills	3	1	3
³ AUD 101 Introduction to AV Equipment and Production	4	2	5
¹ MAT 100 Basic Math	5	0	5
² BUS 103 Basic Typewriting II	3	2	4
THIRD QUARTER			
LIB 201 Introduction to Classification and Cataloging	4	2	4
¹ ENG 103 Communication Skills	3	0	3
³ AUD 102 Media Production I	3	0	3
¹ PSY 101 General Psychology	5	0	5
¹ MAT 110 Business Math	5	0	5
FOURTH QUARTER			
¹ ENG 203 Interpersonal Communications	3	0	3
¹ POL 111 State and Local Government	5	0	5
* Elective	3	0	3
FIFTH QUARTER			
LIB 103 Basic Reference Materials	3	0	3
LIB 203 Practicum	0	6	3
¹ SOC 100 Principles of Sociology	5	0	5
* Elective	3	0	3
SIXTH QUARTER			
² BUS 110 Office Machines	5	0	4
LIB 204 Practicum	0	6	3
* Elective	3	0	3
* Elective	3	0	3
SEVENTH QUARTER			
LIB 207 Seminar	2	0	2
LIB 205 Practicum	0	6	3
¹ GEO 110 Physical Geography	4	0	4
* Elective	3	0	3

Total hours required for graduation: 105

*15 hours electives required.

- 1-Refer to General Education Course Descriptions
- 2-Refer to Business Booklet
- 3-Refer to Communications Technology Course Descriptions.

COURSE DESCRIPTIONS

	Lec	Lab	Cred
LIB 101 Introduction to Media	4	0	4
Prerequisite: None			
General background and philosophy of information service, including a brief history of libraries and information centers and their recent developments. Introduction to administration, organization of materials, functions and uses of information centers, and terminology. A study of the duties and qualifications of the personnel who staff these centers.			
LIB 102 Selection and Ordering of Media Materials	3	1	3
Prerequisite: LIB 101			
Policies and practices of acquisition of various kinds of materials, information relative to their sources, and the techniques of ordering. Includes borrowing films, and film rentals, interlibrary loan materials, microfilm, etc.			

	Lec	Lab	Cred
LIB 103 Basic Reference Materials	3	0	3
Prerequisite: None			
Study of general and special reference works and other basic sources of information. This course also includes practice in preparation of simple bibliographies (emphasizing correct form) of all kinds of media.			
LIB 201 Introduction to Classification and Cataloging	4	2	4
Prerequisite: None			
Routine aspects of simple cataloging. Includes study of the organization of media collections, bibliographic searching for cataloging information, practice in descriptive cataloging, production and filing of catalog cards, and physical preparation of materials of use.			
LIB 203 Practicum	0	6	3
Prerequisite: None			
Student will be placed in an approved location for six hours per week of supervised learning experiences under a professional librarian or media specialist, putting into practice the various skills learned.			
LIB 204 Practicum	0	6	3
Prerequisite: None			
Continuation of supervised practice. Six hours per week.			
LIB 205 Practicum	0	6	3
Prerequisite: None			
Continuation of supervised practice. Six hours per week.			
LIB 207 Seminar	2	0	2
Prerequisite: None			
A group discussion seminar on current library work-oriented problems and personal development. Emphasis is placed on the responsibilities of the Library Technical Assistant as a member of the Library staff.			

PARALEGAL TECHNOLOGY

Two-year Associate Degree Program

The increased need for legal services in all aspects of law has placed a heavy demand on the attorney's time. In response to this situation, a special committee of the American Bar Association has recommended the use of Paralegals to relieve the attorney of many routine legal matters. At the local level, positive responses from attorneys in recent surveys have also indicated the need for Paralegal services.

The purpose of this curriculum is to train those entering the program to assist the attorney in many facets of law, including work on probate matters, conducting investigations, searching public records, preparation of tax forms, serving and filing legal documents, bookkeeping, library research, and providing office management.

EVENING CURRICULUM

	Lec	Lab	Cred
FIRST QUARTER			
¹ ENG 106 Composition I	3	0	3
LEC 100 Introduction to the Legal System	3	0	3
LEC 101 Real Property	5	0	5
LEC 102 Family and Juvenile Law	5	0	5

	Lec	Lab	Cred		Lec	Lab	Cred	
SECOND QUARTER								
¹ ENG 107	Composition II	3	0	3	LEC 101 Real Property	5	0	5
LEC 104	Title Abstracting	5	0	5	Prerequisite: None			
LEC 105	Business Law	5	0	5	This course includes the study of the preparation of simple contracts for sale of real estate, preparing simple titles, ordering title insurance, preparing of settlement sheets, and holding closings.			
THIRD QUARTER								
¹ ENG 108	Composition III	3	0	3	LEC 102 Family and Juvenile Law	5	0	5
LEC 106	Land Finance	4	0	4	Prerequisite: None			
LEC 113	Business Associations Social Science Elective	3	0	3	Students will be instructed in different areas of family law pertaining to separation agreements, divorces, alimony, child custody and child support. The student will also receive instruction in juvenile law.			
FOURTH QUARTER								
¹ ENG 204	Introduction to Public Speaking	3	0	3	LEC 103 Criminal Law Procedure	5	0	5
¹ MAT 110	Business Mathematics	5	0	5	Students will be instructed in the elements of North Carolina criminal offenses along with the rules of law relating thereto. Attention will also be paid to the rules of North Carolina criminal procedure and an emphasis on the laws of search and seizure, arrest and pretrial discovery.			
LEC 116	Uniform Commercial Code	5	0	5	LEC 104 Title Abstracting	5	0	5
LEC 107	Torts	3	0	3	Prerequisite: LEC 101			
FIFTH QUARTER								
BUS 120	Accounting I	5	2	6	An examination will be made of the applicable statutory and common law principles including the form and adequate execution of documents, the function of judgements and estates in determining whether a title to real estate is marketable, and the study and function of various documents, indices and files on public record in various county offices. Forms of abstracting title information from public records and summaries thereof will be included. Typical problems and errors which may render a title unmarketable will also be studied.			
LEC 114	Legal Research	5	0	5	LEC 105 Business Law	5	0	5
LEC 103	Criminal Law and Procedure	5	0	5	Prerequisite: None			
SIXTH QUARTER								
BUS 121	Accounting II	5	2	6	This course is designed to instruct the student in the law as it applies to ordinary business transactions including the law of contracts, bailments and negotiable instruments.			
LEC 110	Civil Procedure and Trial Practice	5	0	5	LEC 106 Land Finance	4	0	4
LEC 108	Evidence	3	0	3	Prerequisites: LEC 101, LEC 104			
SEVENTH QUARTER								
LEC 109	Estate Administration	5	0	5	This course is designed to cover the drafting of mortgages and deeds of trust, the closing procedures for these land financing transactions and foreclosure upon default.			
LEC 112	Law Office Management Technical Elective	3	0	3	LEC 107 Torts	3	0	3
² BUS 122	Accounting III or	5	2	6	Prerequisite: None			
PHO 101	Photography	4	0	4	This course is designed to instruct the student in the principles involving personal injury settlements and litigation as well as Workman's Compensation.			
EIGHTH QUARTER								
LEC 111	Estate and Gift Tax	3	0	3	LEC 108 Evidence	3	0	3
LEC 118	Consumer Protection Technical elective:	5	0	5	Prerequisite: None			
LEC 115	Corporate Documentation or	3	2	4	Instruction emphasizes rules of law governing the admissibility of evidence in court including the hearsay rule and its exceptions, privileged communications and authentication of physical and photographic evidence.			
² BUS 269	Auditing Social Science Elective	3	2	4	LEC 109 Estate Administration	5	0	5
		3	0	3	Prerequisite: None			
NINTH QUARTER								
² BUS 229	Taxes	3	2	4	Students will be instructed in the drawing of wills, making arrangements for the probate of wills or the issuance of Letters of Administration, preparing Interim and final accounting and preparing of refunding bonds and releases.			
LEC 119	Public Administration	3	0	3				
LEC 117	Professional Responsibility	2	0	2				
PSC 210	Investigation	5	0	5				

Minimum Total Credit Hours Required for Graduation 129

- 1-Refer to General Education Booklet
2-Refer to Business Education Booklet
3-Refer to Police Science Course Descriptions

COURSE DESCRIPTION

LEC 100 Introduction to the Legal System 3 0 3
Prerequisite: None
This course is designed to introduce students to the structure of the state and federal court systems so that they may more easily understand the basic legal structure. Emphasis will also be placed on legal terminology and vocabulary which will be encountered in subsequent courses.

	Lec	Lab	Cred		Lec	Lab	Cred
POL 270 Constitutional Law	5	0	5	PSC 211 Introduction of Criminallstics	5	0	5
Prerequisite: None.				Prerequisite: PSC 210			
An intensive study and analysis of the United States Constitution and court decisions which interpret the Constitution; a study of court decisions which determine the admissibility of evidence in criminal cases and which affect police procedures; and a consideration of the criminal procedure process with emphasis on the role of law enforcement in the process.				Continuation of the study of criminal investigation including a general survey of the methods and techniques used in modern scientific investigation of crime, with emphasis upon the practical use of these methods by the student will participate in actual use of the scientific equipment.			
PSC 101 Introduction to Law Enforcement	5	0	5	PSC 215 Fingerprints and Photography	5	0	5
Prerequisite: None				Prerequisite: None			
A general course designed to familiarize the student with a philosophy and history of law enforcement, including its legal limitations in a democratic republic, a survey of the primary duties and responsibilities of the various law enforcement agencies, delineation of the basic processes of justice, an evaluation of law enforcement's current position, and an orientation relative to law enforcement as a vocation.				This is a general course consisting of specialized study of fingerprints as a means of positive identification in law enforcement work. The course involves the history of fingerprints; basic patterns, and the Henry system for classification. Training in classification and filing with practical problems and the taking of fingerprints and handling simple latent fingerprint patterns receive major emphasis.			
PSC 100 Police Role in Crime and Delinquency	5	0	5	Also included is a general course in the utilization of crime scene photography techniques and equipment. These are tailored toward the introduction of the student to 4 x 5 crown and speedgraphic cameras, the fingerprint camera, the 35 mm. camera, the lens setting, proper film, and the basic developing process.			
Prerequisite: None				PSC 220 Police Organization and Administration	5	0	5
The study is primarily concerned with scientific efforts to understand crime and to understand man in relation to crime phenomena. It deals with those definitions and formulations of crime and criminals upon which an adaptation system of criminology must be based. It examines the law as the basic framework with which social deviations of a peculiar character assume their functions as criminal acts and those broad principles upon which a science of criminology must rest.				Prerequisite: PSC 101			
PSC 115 Criminal Law	5	0	5	Introduction to principles of organization and administration, discussion of the service functions; e.g., personnel management, police management, training, communications, records, property maintenance and miscellaneous services.			
Prerequisite: None				PSC 225 Criminal Procedure	5	0	5
Designed to present a basic concept of criminal law, and create an appreciation of the rules under which one lives in our system of government.				Prerequisites: PSC 205, PSC 210			
PSC 201 Traffic Planning and Management	5	0	5	This course is designed to provide the student with a review of court systems, procedures from incident to final disposition; principles of constitutional, federal, state and civil laws as they apply to and affect law enforcement.			
Prerequisite: None							
A study which covers the history of the traffic enforcement problem and gives an over-view of the problem as it exists today. Attention will be given to the 3 E's and legislation, the organization of the traffic unit, the responsibilities to the traffic function of the various units within the law enforcement agency, enforcement tactics, evaluation of the traffic program effectiveness, and the allocation of men and materials.							
PSC 205 Criminal Evidence	5	0	5				
Prerequisite: PSC 115							
Instruction covers the kinds and degrees of evidence and the rules governing the admissibility of evidence in court.							
PSC 210 Criminal Investigation	5	0	5				
Prerequisite: PSC 115							
This course introduces the student to fundamentals of investigation, crime scene search, recording, collection and preservation of evidence, sources of information, interview and interrogation, case preparation and court presentation, and the investigation of specific offenses such as arson, narcotics, sex, larceny, burglary, robbery and homicide.							



Durham Technical Institute

1637 Lawson Street
Drawer 11307, (919) 596-9311
Durham, N. C. 27703

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7

**Continuing
Education**

Durham Technical Institute
1978-1979

CLASSES BEGIN:

September 27, 1978
 January 8, 1979
 April 2, 1979
 July 10, 1979

How to get a catalog

Catalog booklets may be picked up free of charge at the Durham Tech campus. All mail requests should be addressed to Durham Technical Institute, 1637 Lawson Street, P.O. Drawer 11307, Durham, N.C. 27703, (919) 596-9311. So that we may properly assist you, please specify which booklets are desired.

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 General Office Technology
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BOOKLET 5**Industrial Education and Special Technologies**

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 Automotive Mechanics
 Electrical Installation and Maintenance
 Electronics Engineering Technology
 Historic Preservation Technology
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 Apprenticeship Training
 New & Expanding Industry Training
 Senior Citizen Services
 Retired Senior Volunteer Program

The provisions of these publications are not to be regarded as an irrevocable contract between the student and Durham Technical Institute. The Institute reserves the right to make changes in the regulations, courses, fees, and other matters of policy and procedure as and when deemed necessary. The Institute further reserves the right, at any time, to request the student to withdraw when it considers such action to be in the best interest of the Institute.

This catalog is published for informational purposes and every effort is made to insure accuracy at the time of printing. However, the provisions in this catalog are not to be regarded as an irrevocable contract between the student and the Institute. Durham Technical Institute reserves the right to change any provision or requirement at any time. Students are advised to study the Schedule of Classes available at registration and periodically check with counselors or Student Records for information not available when this catalog was published.

Durham Technical Institute complies with the Title IX Regulation of the Educational Amendments of 1972. The regulation requires that no person solely on the basis of sex be excluded for participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity. Durham Technical Institute is an open door admission, equal opportunity institution.

Continuing Education

Bill L. Gunn, Dean of Continuing Education
Michael L. Bowen, Continuing Education Coordinator
Lowell A. Speight, Continuing Education Coordinator
Mary Ingram, Director of Retired Senior Volunteer
Program

GENERAL INFORMATION

Admission

Any adult who has reached the age of eighteen (18) and is not enrolled in public school is eligible to enroll.

Class Locations

A number of adult classes are held on the Institute campus. Classes are also conducted in Durham and Orange counties whenever a sufficient number of students have indicated an interest and adequate facilities are available.

Course Scheduling

Classes are scheduled when there is a sufficient demand for a particular course or courses and when facilities and a qualified instructor can be found.

Persons wishing to take courses should contact the Office of Student Services.

Fees

A \$5.00 registration fee is charged for Continuing Education classes. Such fees, when charged, are due and payable at the first class session. Additional charges may be required for certain classes offered by Continuing Education. Books and supplies are available through the Institute bookstore. When classes meet at community centers the Institute's bookstore makes it possible for books to be purchased at the community center.

Attendance

Adults are expected to attend class regularly. Attendance records are maintained by the class teacher.

Certificates and Diplomas

Certificates are awarded students meeting requirements for any of the classes and programs for adults.

Continuing Education Units

Continuing Education Units are awarded for some courses. A continuing education unit is defined as "ten contact hours of participation in an organized continuing education experience under responsible sponsorship, capable direction, and qualified instruction."

AREAS OF STUDY

Personal Interest

In this area the Institute offers the individual an opportunity to attain skills for personal use and general education to broaden the individual culturally. Classes are begun at any time fifteen (15) or more individuals register for a course. Some of the current courses offered are listed below:

Personal Income Tax
Medical Terminology
Interior Decoration
Speed Reading
Auto Tune Up
Sewing

Investments
Motorcycle Tune Up
Small Engine Repair
Woodworking
Drawing and Sketching
Aviation Ground School

ADULT HIGH SCHOOL EDUCATION PROGRAMS

Durham Technical Institute operates three programs designed to upgrade adults in the area of academic education. The are: Adult Basic Education (ABE), Adult High School Equivalency (GED), and Adult High School Diploma Programs. All three programs operate on main campus and in off-campus facilities in Durham and Orange counties. On-campus programs operate also in the Learning Resources Center. Off-campus programs operate in Adult Education centers in Durham and Chapel Hill. All prgrams make extensive use of a variety of learning materials with the materials selected to accommodate varied student differences.

Beginning with Adult Basic Education Program, this outline shows the sequence of programming through high school graduation. Students completing the Adult Basic Education Program have three options open to them. They may (1) terminate their eduaction at grade eight, or they may (2) enroll in the high school program and work towards either an Adult High School Diploma or (3) the High School Equivalency Certificate.

Durham Technical Institute and the participating school systems in the Durham Tech service area have entered into a cooperative agreement covering the High School Diploma program. The purpose of this agreement is to provide the testing, guidance, and instruction which will enable the adult student to complete the requirements for and be awarded the adult high school diploma. Durham Technical Institute certifies satisfactory completion of the requirements and the respective school system issues the diploma.

In addition to the High School Diploma program, a second high school program option is open to Durham Tech students. This program, commonly called the High School Equivalency or GED Program, offers to the student high school level courses in the fields of English, Social Studies, Sciences and Mathematics. Upon completion of the required academic work, students working toward the high school equivalency certificate take the General Education Development Test administered by the Student Services Division of Durham Technical Institute. The diploma is issued.

For admission to the Adult High School Education program, a person must be at least 18 years of age. Upon written recommendation of the local school superintendent, individual public school drop-outs between the ages of 16 and 18 may be admitted as students with special needs. The student is responsible for acquiring a release from the public school system prior to enrollment. No person under 18 years of age will be admitted to the program without a written release from the Superintendent of Schools. The student also must show a notarized letter attesting to date of birth signed by the student's parent or guardian.

Each student will be given a reading placement test. If his score indicates less than eighth (8th) grade level, he will be enrolled in an Adult Basic Education class (ABE Level I-grades 1 through 4; or ABE level II-grades 5 through 9). If his score indicates eighth grade or higher, he will be enrolled in the appropriate level Adult High School Program. The student must demonstrate an average eighth grade reading level before he will be admitted to the High School Program. Students who have completed any high school level previously must furnish a transcript of work completed.

On-Campus Classes

For admission to on-campus high school classes, all applicants must apply to the Admissions Office. A counselor will be assigned to each applicant for the purpose of completing the application and orientation as to the nature of the program. Upon completion of the application, the student will be assigned to a Multimedia Specialist in the Learning Resources Center. The Multimedia Specialist will administer the placement tests, work with students in the selection of an appropriate program and materials, and assist the student in scheduling of course work.

Off-Campus Classes

Announcements of off-campus high school classes giving location and time schedule are published semi-annually. Persons wishing to enroll in an off-campus class may register at the class location.

Fees

No fee shall be charged a student enrolled in the Adult High School program in the Learning Resources Center.

There is a five dollar (\$5.00) registration fee charged each academic quarter for students enrolling in the Adult High School program in off-campus classes. There is no fee for Adult Basic Education classes

OCCUPATIONAL EDUCATION EXTENSION

An occupational extension course is a short course which does not count toward a diploma or degree, but for which a certificate of completion is given. Occupational extension classes are designed to meet the general or specific occupational needs of employees in business, industry, governmental agencies, and other public institutions. The training provided is of an upgrading or updating nature. Any adult 18 years old or older who needs training or re-training, or who can otherwise profit from the proposed course, may be enrolled. Classes vary in length; are held whenever instructor, space, and funds are available; and are conducted both day and night; and are taught by part-time instructors selected by the Institute.

Major areas of emphasis are as follows:

- Distribution and Marketing Extension
- Health Occupations Extension
- Occupational Home Economics Extension
- Occupational Office Extension
- Technical Extension
- Trades and Industry Extension
- Apprenticeship Programs
- New and Expanding Industry Training

Course offerings in the major areas listed above fall into one of two categories: Individual Occupational Classes and Special Occupational Programs.

INDIVIDUAL OCCUPATIONAL CLASSES

Most occupational extension offerings are flexible in that course content is tailored to meet specific individual or group needs. Classes are initiated as the need is indicated by surveys, interviews, request. Examples of individual occupational extension classes offered in the past are as follows:

Blueprint Reading for the Parachute Industry
Blueprint Reading and Math for Masons
Brick Masonry
Caulking
D C Electricity
Drafting, Basic
Drafting, Advanced
Electricity, Basic
Electricity and Electronics, Basic
Electronics, Basic
Machine Shop
National Electric Code
Oil Burner Service
Plumbing Theory and Code
Radio and TV Service and Repair
Small Gasoline Engines
Statistics and Trend Forecasting, Basic
Welding
Public Speaking
Research Machining and Design
Production Reporting
Techniques of Merchandising
Fundamentals of Real Estate
Ambulance Attendant Training
Quantity Food Production Management
First Aid
Introduction to PL/1 Programming
Introduction to System/360
Business English
Medical Terminology
Beginning Typing
Refresher Typing
Advanced Typing
Bank Public Relations and Marketing (American Institute of Banking)
Analyzing Financial Statements (American Institutes of Banking)
Overview of Pharmacy
Equipment Use and Care (School Food Service)
Organization and Personnel Management (School Food Service)
Pre-Portioned and Pre-Costed Cycle Menus (School Food Service)
Nutrition and Menu Planning (School Food Service)
Certified Life Underwriter, Part I
Certified Life Underwriter, Part II
Commercial Law (American Institute of Banking)
Accounting I (American Institute of Banking)
Effective Speaking (American Institute of Banking)
Money and Banking (American Institute of Banking)
Introduction to Economics
Oral Communications (American Institute of Banking)
Principles of Bank Operations (American Institute of Banking)
Effective Business Correspondence
Home Nursing
Human Relations and Communications for Head Nurses
Nurse Assistant
Pharmacology Theory for the Licensed Practical Nurse

Pharmacology Math for the LPN
Porcelain Fused to Gold
Pre-Pharmacology for the LPN
Pre-Pharmacology Math for the LPN
Creative Activities and Safety for Young Children
Health, Safety, and Creative Activities for Young Children
Nature and Scope of Day Care
Pre-School Guidance Activities
Sewing-Alterations and Tailoring
Use of Audio-Visual Aids to Better Understand Children
College Accounting
Library Science for Aides (New Careers)
Typing-Library Aides (New Careers)
Gregg Shorthand Refresher
Fundamentals of Computing Systems
Bookkeeping
Engineering and Business Writing
Surveying, Basic
VASCAR
Auto Electric Tune-Up
Automatic Transmissions
Blueprint Reading
Blueprint Reading for Construction Trades

This list should be endless. Almost any occupational subject can be taught at any achievement level if the following sequence takes place:

- (1) Fifteen to twenty individuals indicate a desire to take a specific course.
- (2) The Institute finds a qualified part-time instructor to teach the proposed class and secure adequate classroom facilities.
- (3) At least fifteen individuals register to begin the course.
- (4) An active attendance of seven or more for each meeting.

SPECIAL OCCUPATIONAL PROGRAMS

In an attempt to meet the more specialized needs of various organizations Durham Technical Institute offers the following Special Occupational Programs:

Management Development Training
Hospitality Training
Law Enforcement Training
Fire Service Training
Apprenticeship Training
New and Expanding Industry Training
Senior Citizens Service
Retired Senior Volunteer Program

MANAGEMENT DEVELOPMENT TRAINING

Management Development Training is an educational program, designed to upgrade the competency of Supervisory and Mid-Management level personnel.

Durham Technical Institute is aware of the need for training supervisors in industry, business, institutions, and other types of organizations. Because of this awareness, Management Development Training Programs have been made available to supervisors through a wide variety of courses. Some courses are short while others range up to sixty-nine hours in length. Some are basic for all supervision, while others offer instruction for certain special interests.

The current Management Development Program consists of twenty-six well prepared courses which, in many instances, can be taught verbatim. Each course of training described herein serves one or more of the following purposes: to help develop potential supervisors

to assume full supervisory responsibilities; to prepare present supervisors for advancement to greater responsibilities; to improve abilities of supervisors at all levels; and most importantly, to make supervisors and potential supervisors more proficient in their present assignments. A supervisor may pursue as many courses as desired. Emphasis has been placed on group dynamics and creative problem-solving techniques.

COURSE DESCRIPTION

MDP 1 Principles of Supervision 48 hours

This course presents basic and general principles of effective supervisory techniques. The course is divided into seven (7) parts which include: Fundamentals of Supervision, Relationships on the Job, Communications, How to Train Employees, Performance and Job Evaluation, Job Management, and Work Improvement. This course may be taken in its entirety or individual parts.

MDP 2 Job Relations Training 10 hours

This course is concerned with the fundamentals of Human Relations. It is, perhaps, the most popular and meaningful of all MDP courses. The course content is divided in five (5) distinct sections which include: The Foundation of Human Relations, Bases for Decisions, The Four-Step Problem Solving Methods, Taking Preventive Action, and Importance of Getting the Facts. It is highly recommended for all phases of management.

MDP 3 Science of Human Relations 18-20 hours

This course relates to the development of the Science of Humanics. Emphasis is given to the following topics: Machines and the Human Element, The Personal Needs That Stimulate Behavior, Leadership and Supervision, Factors Influencing Attitudes, The Foundation of Business, Employer-Employee Relations, and Techniques for Handling People. Several case studies are reviewed and discussed at length. This course is strongly recommended for new and present supervisors in charge of hourly employees.

MDP 4 Art of Motivating People 22 hours

This course is designed to show the importance of properly motivated employees in relation to production. Emphasis is placed on specific problems in the area of motivation. A further value derived from this course is that of providing the opportunity for self-evaluation for those responsible for motivating others.

MDP 5 Economics in Business and Industry 22 hours

Training in Economics gives the supervisor a better understanding of the American Free Enterprise System. Included in this course are: The Five (5) Basic Principles of Capitalism, The Function of Government and Its Responsibility to People, The Laws of Supply and Demand, Wages and Productivity, and The Profit Motive.

MDP 6 Effective Communications 22 hours

Emphasis in this course is placed on clear and forceful oral, written, and implied communications. It will provide supervisors with an opportunity to improve their effectiveness in day-to-day communications with employees and fellow supervisors through face-to-face contact.

MDP 7 Effective Writing 22 hours

This course is designed to help supervisors improve their writing skills with the use of reports, letters, and memoranda which are necessary in daily operation. Fundamentals of sentence structure and elements of clear, concise, and correct writing will be emphasized.

MDP 8 Effective Speaking 15 hours

This course emphasizes the theory and practice of the art of self-expression. A step-by-step guide is provided for the supervisor to follow in helping to overcome fear and self-consciousness when addressing a group.

MDP 9 Speed Reading 20 hours

The objectives of this course are to broaden the span of perception and recognition, and to increase the speed and comprehension in reading for those in business and industry whose jobs require significant amounts of reading.

MDP 10 Work Measurement 22 hours

The Work Measurement course is designed to acquaint the supervisor with the purposes and uses of time and motion studies. Areas of discussion include: Production Standards, Wage Rates, Job Standards, Incentives, Base Rates, and Various Employee Ratings.

MDP 11 Job Methods 10 hours

Emphasis in the course is placed on the importance of finding more efficient ways of completing daily tasks. Each participant is given an opportunity to study and submit a proposed method improvement project.

MDP 12 Conference Leadership Training 10 hours

This course is designed to aid the supervisor when presiding over groups through sessions in group dynamics. Each participant is given an opportunity to serve in the role of a conference leader.

MDP 13 Instructor Training* 15 hours

This course will provide the future supervisor-instructor with an approved method of instruction based on the basic principles of learning. Students will be enabled to teach others the related technology or manipulative skills of the trade.

*An instructor training program is available for those who desire to teach in the MDP program.

MDP 14 Creative Thinking 22 hours

The aim of this course is to improve attitudes and thinking abilities of supervisors, to develop a strong motivation to utilize one's creative potential, to develop curiosity in problem solving, and to gain openmindedness toward ideas of others.

MDP 15 Industrial Safety and Accident Prevention 22 hours

This course offers the supervisor a systematic approach to a better understanding and scope of safety and accident prevention problems. Attention is given to preventive safety measures and understanding the causes of accidents and injuries. It is an OSHA approved training course.

MDP 16 Industrial First Aid 10 hours

This course is designed to give the basics of first aid techniques to supervisors who will be confronted with injuries from accidents likely to occur in the work area. To be Red Cross certified, instruction is done by a certified Red Cross instructor, multi-media materials may be used in an (8) hour course.

MDP 17 Employee Evaluation and Interviewing 12 hours

This course provides fundamental information and basic guides for setting up and using a sound employee evaluation program in relation to what is expected of the supervisor. It also gives the supervisor some insight into the problems of talking to the employee about his or her evaluation. This interview procedure includes preparation, opening statements, directing the conversation, tact, and closing the interview. This course should give the supervisor another useful tool in dealing with people.

MDP 18 Job Analysis Training 12 hours

This course is designed to familiarize the supervisor with techniques necessary to gather facts about the specific operations and responsibilities of the job and what it entails. These include such areas as mental ability, skill, and physical requirements.

MDP 19 Management Primer 44 hours

This course is designed primarily for supervisors in mid-management positions. It is meant as an introduction to managerial thinking. It will make a contribution toward better performance by helping participants see their problems more clearly in terms of accepted management practices. Eleven (11) parts are covered in this course: Management and Production, Enterprise Organization, Human Relations in Management, Personnel Administration, Controls and Supervision, Production Management, Procurement and Inventory, Financial Management, Distribution and Sales, Research and Public Relations, and Records and Reports.

MDP 20 Job Instruction Training 12 hours

This course is something every supervisor is responsible for. It covers such points as (1) how to get a thorough analysis of the job to be taught, (2) how to develop skills in the art of teaching, (3) an understanding of the individual as a learner, and (4) an appreciation of the employee's part in the organization. All supervisors are teachers of a type, but few really know how to perform this function adequately. Therefore, the need for this course.

MDP 21 Supervision in Hospitals 40 hours

Hospitals represent the fourth largest business in North Carolina. A training course, similar to MDP 1, has been developed specifically for hospital supervisors. This series covers supervisory areas of human relations, leadership, job methods, housekeeping, and training subordinates. The course may be taken as a block or in units, depending on the needs of the participants.

MDP 22 Motion and Time Study 10 hours
[For Supervisors]

This course is designed to give the supervisor certain basic information and knowledge necessary to understand and appreciate the importance of Motion and Time Study principles. Through this course the supervisor should be able to initiate and carry out simple Time and Motion Studies, and also to help the engineering staff when such a study is done, both physically and when instructing the employees.

MDP 23 Transportation and Traffic Management 69 hours

The purpose of this course is to acquaint the participant with the important phases of Transportation and Traffic Management-classification of freight and freight classification, principles of freight rates and tariffs, shipping documents and their application, special freight services, freight claims, construction and filing of tariffs, switching, routing, warehousing and distribution, mater-

ials handling, technical tariff interpretations, import and export traffic, construction and application of the Interstate Commerce Act and practice and procedure before the Interstate Commerce Commission.

MDP 24 Principles of Business and Industrial Management 38-56 hours

The purpose of this course is to develop in supervisors, managers, and potential supervisors and managers the basic understanding of: The forms, purposes, and organizational types of businesses and industries; the relationships among owners, managers, workers, and the public and their respective functions; the understanding and development of employee relations; and the knowledge of suitable and efficient internal organizations and operations.

MDP 25 Labor Laws for Supervisors 12 hours

This course introduces the supervisors to the important labor laws so that they may know the legal responsibility of supervisors and what legal protection is available to business and its employees.

MDP 26 Pre-Supervisory Training 28 hours

This course is designed to prepare those employees who are being considered for supervisory positions. Employers should select their key employees as participants in this program. Major topics covered are Personnel Relations, Organization, and Job Responsibility. The objective of this course is to give industry and business a training program designed to develop a pool of qualified employees from which to select supervisory personnel. It is not a complete training program.

HOSPITALITY TRAINING

The Hospitality Education Program is one answer to North Carolina's need for more trained personnel in the area of food, lodging, recreation and travel information. This program has three primary objectives:

1. To provide employers with well-trained personnel to operate their business.
2. To develop within individuals skills that will qualify them for better employment opportunities.
3. To provide better hospitality services to the citizens of North Carolina and visitors to the State.

Hospitality Education courses are arranged and scheduled in accordance with the needs of the industry.

FOOD SERVICE COURSES

(1) Commercial Food Preparation and Service

Food Service Selling 20 hours

A course dealing with the responsibilities of a waiter or waitress from the time he walks on the job until his day's work is done. Much emphasis is placed on the fact that the good waitress is a dignified salesperson rather than a "hash slinger." Every good salesperson needs certain essential job knowledge and this course is designed to help the waitress develop the knowledge and attitudes necessary to do an effective job.

Basic Quantity Cooking 150 hours
A course dealing with principles of interpreting menus, menu terms, recipes, measurements and other data relative to the cooking profession. Skill in selection, preparation, and serving goods, also purchasing food, and keeping records of supplies and expenses. To capitalize on native food handling talent to insure a profitable profession.

Food and Beverage Purchasing* 20 hours
A summary of knowledge and principles of quantity food buying that would take years to learn by experience. Tells importance of purchase specifications and how to write them.

Food and Beverage Management and Service* 20 hours
This course is designed for those who have a sincere desire to prepare themselves for entry or advancement in a very complex field requiring a balanced blending of knowledge and skills in food, its preparation, its merchandising and service, buttressed by a good and sound knowledge of financial and business practices.

Food and Beverage Controls* 20 hours
This course deals with each step in production and merchandising of food with special emphasis on calculating costs, establishing standards and production planning.

Food Service Supervision for Hospital Personnel 90 hours
This course consists of classroom instruction and 6 months of supervised experience in a hospital kitchen. It is designed to provide a standardized educational program for food service supervisors which will qualify them to assume the responsibilities delegated to them by the dietitian and prepare them to meet the performance level of current concept of supervisory leadership in their respective areas. Upon successful completion of this course the food service supervisor is eligible for membership in the Hospital, Institution, and Education Food Service Society.

[2] School Food Service Training Courses

Overview of School Food Services 60 hours
The prerequisite course for all school service personnel. A basic orientation course presenting the history of school feeding, characteristics of a good program, personnel and human relations, nutrition and menu planning, organization and management; purchasing, storing, preparation and serving of food; sanitation and safety.

Nutrition and Menu Planning 60 hours
Prerequisite: Course I
A course for all school food service personnel in depth of the role in nutrition of protein, fats, carbohydrates, minerals, and vitamins; factors in developing good food habits, dietary needs of children and youth; advanced work in planning and evaluating menus.
Course outline available for classroom use or in combination with ETV and classroom.

Use and Care of Equipment 60 hours
Prerequisites: Courses I and II
A course for all school food service personnel in general care and safety in the use of equipment; specific use and care of large and small pieces of food service equipment; inventory and maintenance records.

Quantity Food Preparation 60 hours
Prerequisites: Courses I, II and III
A course for all school food service personnel with experience in methods of quantity food preparation which retain nutritive values; use of standardized recipes; use of weights and measures; use and care of equipment; timing, selection, preparation and service of foods for the school lunch.

HOTEL-MOTEL MANAGEMENT

Introduction to Hotel Management* 20 hours
This course is an introduction to the hotel business, its departments, its responsibilities and the opportunities for creative employment it offers.

Motel-Motor Hotel Management* 20 hours
This course is designed to make the student more aware of the scope of managerial responsibility in the motel industry. Effort is made to develop within the student a familiarity with various technical requirements, a basic knowledge of the working problems of inn-keeping, and a better understanding of the total effort and work experience required to successfully operate today's motel.

Front Office Procedures* 20 hours
This is a course dealing with front office management, routines and accounting plus crucial material on human relations and public relations.

Hotel-Motel Accounting* 20 hours
This course deals with basic accounting terms, practices and statements in common use in hotels, and the use of accounting information in making management decisions.

Hotel-Motel Law* 20 hours
The purpose of this course is
1. To illustrate the consequences of lack of foresight in the innkeeper's managerial functions.
2. To supply sufficient information to understand the attitudes of the courts when an innkeeper is involved in a litigation.
3. To create an awareness of the many responsibilities which the law imposes upon the innkeeper.

Human Relations* 20 hours
This is a course illustrating the principles of business psychology and the many ways in which employees and guests react to each other. Improved employee cooperation and guest relations are stressed.

Supervisory Development* 34 hours
This course deals with how to train and how to supervise. Emphasis is placed on the department heads' responsibility in communicating with people, training employees, controlling costs and improving methods.

Communications* 20 hours
This course has been designed as an overview of the uses and techniques of communication with particular reference to the innkeeping industry. It can be beneficial to employees at any level of the organization, but should be especially helpful to those having managerial responsibilities. Special emphasis and attention is given to:

*This course offered in co-operation with the American Hotel-Motel Association.

1. The theory of communication
2. Application of communication principles to basic management functions
3. Effective listening
4. Improving reading ability
5. Developing speaking skills
6. Communicating on the job
7. Writing better letters
8. Audio-visual communication techniques

Supervisory Housekeeping* 20 hours

This course deals with the housekeeper's executive responsibilities, with emphasis on employee training and record keeping.

Produced in cooperation with the National Executive Housekeepers Association, this course carries credit toward NEHA's own program for accreditation.

Maintenance and Engineering* 24 hours

This course deals with essential technical information on electronics, air conditioning, plumbing, heating, electricity, acoustics, elevators and other equipment necessary to establish preventive maintenance routines and to make necessary operating decisions.

Maid Training 20 hours

This course stresses the importance of the maid to the overall operation of a hotel or motel. Much emphasis is placed on techniques for doing the job more quickly, more effectively and with less effort.

How to Organize Work 10 hours

*This course offered in co-operation with the American Hotel-Motel Association.

TRAVEL SERVICE

Travel Information 4-10 hours

These courses are set up to fit the local situation and may vary in length. Great stress is placed on the importance of travel service to the overall economy of the area. Visual aids are used to illustrate what there is to see and do in the area. Often these courses are used to motivate the community to develop its travel potential and to point out the need for trained personnel in the Hospitality Industry.

Service Station Selling 15-20 hours

This course is designed to assist gasoline service station attendants to improve their selling techniques and thereby render better customer service. Much emphasis is given to the importance of knowing the area in order to answer customer questions and give good travel directions.

Personality Development 10 hours

Customer Relations 10 hours

HOSPITAL TRAINING

Hospital Human Relations 20 hours

This course is designed to train personnel who are responsible for keeping the hospital clean and sanitary. All of the basic problems of hospital housekeeping are covered with a good breakdown of what should be done daily and what can be done only periodically. There is much information on techniques for doing the job more effectively and with maximum efficiency.

Hospital Housekeeping 40 hours

Custodial Training 40-400 hours

Modified Diets 20 hours

LAW ENFORCEMENT TRAINING

The goal of the law enforcement training program of the Department of Community Colleges is to promote adequate training and education courses in the legal and technological fields that will keep law enforcement officers abreast of these advancements and, at the same time, aid them in moving toward professionalism. More specifically, the objectives are:

1. To provide an adequate, well-rounded program in law relative to police subjects and human relations with emphasis on practical application. This affords the new officer the necessary job knowledge and skills to carry out the task of protecting lives and property and maintaining peace and tranquility; and at the same time, providing a foundation for future specialized training.
2. To coordinate and provide series of specialized training programs for law enforcement officers such as supervisor's training, and comprehensive seminar presentations.

COURSE DESCRIPTION

Introduction to Police Science 120 hours

A program in law, applied police subjects, special courses, communicative skills, and human relations. The program may be offered on a basis of 6 hours per day, 5 days per week, for 4 weeks; or 5 hours per day, 5 days per week, for 5 weeks. It may also be offered one course at a time on an updating, upgrading basis; whereby, the class meets one or two nights a week over a designated period of time.

Each of the 15 divisions of the Introduction to Police Science is a separate and distinct course within itself and requires differential instructional knowledge and ability. Therefore, a course description is submitted for each of them. Introduction to Police Science (120 hours) is transferable for credit to the Police Science degree program.

Courts and Law 6 hours

Course covers: History of law enforcement, constitutional law, state and local government, and evolution of the law.

- Elements of Offenses** 24 hours
 Course covers: Use of legal and research materials, general principles of criminal law, crimes against the person, crimes against property, crimes against public morality and decency; against the state and public justice; against the public peace and safety; general police regulations.
- Law of Arrest** 9 hours
 Course covers: Introduction, arrest with a warrant, arrest without a warrant, use of force, escape and re-arrest, rights and duties after arrest, and jurisdiction of officers.
- Search and Seizure** 3 hours
 Course covers: Constitutional bases, search with a warrant, search without a warrant, and illegally obtained evidence.
- Evidence** 6 hours
 Course covers: Evidence in general, legislative power to prescribe rules and fix weight of evidence, jurisdiction and venue, kinds of evidence, hearsay rule, evidence distinguished from proof, the burden of proof, opinion evidence, rules of admissibility, judicial notice, privileges, and collection and preservation of evidence.
- General Criminal Investigation** 12 hours
 Course covers: Original complaint, crime scene searches-identification and preservation, interrogation and interview, scientific aids, and descriptions of persons.
- Special Courses** 6 hours
 Course covers: Report writing, note taking, records systems, records completion, concise report writing, and first aid.
- Motor Vehicle Law** 18 hours
 Course covers: Motor vehicle law in general, driver license law, rules of the road, traffic direction and control, enforcement techniques, accident investigation, emergency vehicle operation, Financial Responsibility Act of 1957; size, weight and equipment regulations.
- Liquor Laws** 3 hours
 Course covers liquor laws in general, manufacture of intoxicating liquor, possession of intoxicating liquor, use of intoxicating liquor, transportation, jurisdiction and general powers of the Alcoholic Board of Control, drunkenness and other liquor offenses.
- State Parole Board** 3 hours
 Course covers parole systems and parole laws.
- Court Structure and Procedure** 6 hours
 Course covers history and development of courts, officers of the court-courtroom demeanor and testifying in court.
- Juveniles** 6 hours
 Course covers: Types of juvenile cases most frequently encountered, cause of juvenile misbehavior, effects of gangs, and neighborhood conditions on juveniles, legal restrictions upon treatment of juveniles, juvenile probation laws, the juvenile and his parents, police procedure in juvenile cases, disposition and follow-up of juvenile cases, juvenile traffic offenders, juvenile sex offenders, the functions of local facilities and agencies, and prevention of juvenile delinquency.
- Law Enforcement Procedures** 6 hours
 Course covers pursuit driving; raids and road-blocks; patrol procedures; riots, unlawful assemblies and crowd control; defensive tactics and weapons and fire-arms safety.
- Police Administration** 6 hours
 Course covers fundamentals of supervision and administration.
- Human and Public Relations** 6 hours
 Course includes: Development of the speaking voice, pronunciation and enunciation, kinds of oral communication, diction and delivery, group discussion, taking part in group discussion and conference meetings and interviews.
- Supervision for Law Enforcement Personnel** 120 hours
 Officers will cover such subjects as principles of police administration, the police supervisor, development of a police supervisor, decision making, human relations, leadership, role of the supervisor in training, evaluation, performance rating, personnel complaints, discipline and control of personnel, planning, report writing, and public relations. Supervision for Law Enforcement Personnel (120 hours) is transferable for credit to the Police Science degree program.
- Chemical Tests for Alcohol Operators** 68 hours
Training Course
 Studies covered in this course are mathematics and metric system; scientific concepts; pharmacology and physiological effects of alcohol; background and history of chemical testing; theory of breath test instruments; maintenance of breath test instruments; simulated courtroom situation; introduction to supervision of chemical test programs.
- Chemical Test for Alcohol Operator's** 28 hours
Retraining Course*
 Studies covered in this course are: Mathematics and metric system; scientific concepts; pharmacology and physiological effects of alcohol; background and history of chemical testing; theory of breath test instruments; maintenance of breath test instruments; simulated courtroom situation; introduction to supervision of chemical test programs.
- Coping with the Drinking Driver*** 8 hours
 A course to aid every law enforcement officer in North Carolina to recognize, arrest and prosecute people who drive upon the highways while they are under the influence of alcohol and drugs.
- Chemical Tests for Alcohol Supervisor's Training Course***
 Studies covered in this course are: Mathematics and metric system; scientific concepts; pharmacology and physiology effects of alcohol, background and history of chemical testing; theory of breath test instruments; maintenance of breath test instruments; simulated courtroom situation; introduction to supervision of chemical test programs.
- Traffic Accident Investigation** 30 hours
 Course covers: The various laws of physics as they apply to traffic accidents, determining speed from brake marks, making collision diagrams, witness interrogation and hit-and-run investigations.
- Fingerprint Identification*** 30 hours
 Course covers: Search, classifying and filing of fingerprints; developing latent fingerprints and presenting fingerprint evidence in court.

Firearms Training* 30 hours
Course covers firearms safety and firearms proficiency with the revolver, shotgun, rifle and gas gun, with some emphasis placed on gas grenades and projectiles.

Riot and Crowd Control* 30 hours
Course covers: Philosophy of crowds, laws pertaining to riots and unlawful assemblies, riot control formulations and use of special weapons.

*Curriculum credit may be allowed on an individual basis in the Law Enforcement courses above.

FIRE SERVICE TRAINING

Firefighting is becoming more complex. With the demands of technological and economic changes, the fireman's problems increase—ranging from the technical to the psychological, from the area of mechanical equipment to the area of human relations. Confronting him are situations virtually non-existent a few years ago, and his responsibilities demand a continuous program of training and education. The following objectives have been established for the Fire Service Training Program:

1. To teach the fireman safe habits and the correct techniques for using tools and equipment on the fire ground.
2. To develop the fireman's initiative and judgement.
3. To train firemen to accept individual responsibility.
4. To teach the fireman the technical information and the skills necessary to perform selected operations on the fire ground.
5. To teach the fireman the importance of planning jobs and operations for greater accuracy and efficiency of operation.
6. To develop in the fireman self-reliance and confidence.
7. To present to the fireman a variety of experiences and problems which will develop an ability to master the practical problems that will be encountered.

COURSE DESCRIPTION

Ambulance Attendant Training 22 hours
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, to safe transportation of the sick or injured, and to 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.

Hospital Fire Training
The reason for a fire drill, fire protection and drill for hospital, chemistry of fire, classification and types of firefighting appliances, rescue and evacuation techniques.

Fire Science Technology
A 108 quarter-hour curriculum consisting of English, math, science and fire technologies.

Home Fire Safety
Suggestions for protecting a house from fire, the fire triangle, definition and control of fires by classification, fire extinguishers, rescue practices and techniques, and home safety check list.

Arson and Unlawful Burning
Firemen's responsibility in unlawful burnings, finding the point of origin, determining the cause of fire, identification of incendiary fires, searching fire scene, types of fire setters and modes of operation, techniques for collecting, protecting and preserving evidence, questioning witnesses, and appearing in court.

The Company Officer
Introduction to fire service organization, the fire department, officership, the company officer, training fire company personnel, human relations, public relations, the fireman's responsibility in arson detection, and codes.

Introduction to Firefighting 42 hours
Introduction to the fire service, forcible entry practices, portable fire extinguisher practices, fire service rope practices, fire apparatus practices, fire stream practices, fire hose practices, ventilation practices, ladder practices, salvage and overhaul practices, rescue practices, protective breathing equipment, firefighting procedures, and course postmortem.

Fire Service Training 120 hours
Major titles of the course are: forcible entry, rope practices, portable fire extinguishers, ladder practices, hose practices, salvage and overhaul practices, fire stream practices, fire apparatus practices, ventilation, rescue practices, protective breathing equipment, and firefighting procedures.

APPRENTICESHIP TRAINING

Under General Statute 115A, enacted in 1963, the institutions under the Department of Community Colleges have been given the responsibility for conducting the related training for apprentices in North Carolina. The major objective for related instruction for apprentices is to teach the apprentice that part of the technical related information pertaining to the trade which can best be taught in the classroom. Other objectives include the development of ability to apply technical related information, the involvement of proper attitudes and human relations, and the adjustment to social problems encountered in the world of work.

The following apprentice classes have been offered:

1. Electrical Apprentice
2. Mould-Maker Apprentice
3. Sheetmetal Apprentice
4. Carpentry Apprentice
5. Bricklayer Apprentice

NEW AND EXPANDING INDUSTRY TRAINING

Durham Technical Institute in cooperation with the Industrial Services Division of the North Carolina Department of Community Colleges may provide state-sponsored industrial training and related service for:

1. **New Industry.** Industry locating in North Carolina from another state.
2. **Expanding Industry.** Local industry expanding its North Carolina facilities, either building another plant or expanding additional capital for expanding present capacity; that is, additional equipment, manpower, and/or space. This training applies only to **new jobs** created through expansion.

One of the basic objectives of Durham 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 and 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 descriptions; 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 and outside sources.
3. Payment of instructor's 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 Durham Technical Institute or lease space in the community.
5. Assumption of installation costs of equipment in the temporary training facility.
6. Payment of 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 such industry to develop a long-range training program of its own to satisfy its continuing replacement and retraining needs.

SENIOR CITIZEN SERVICES

Durham Technical Institute is committed to fulfilling its obligations to the senior citizens of its service area. Through the Continuing Education Division, the Institute offers various courses designed to upgrade the education and skills of persons who are employed in the institutional settings for the aged as well as persons who care for the elderly in their homes.

In addition, the Institute makes available a wide variety of personal interest courses of a general nature for the senior citizen as well as courses designed specifically for the senior citizen.

Individuals or agency representatives interested in establishing courses for the senior citizen should contact the Continuing Education Division of Durham Technical Institute.

Senior citizens are also invited to enroll in Associate Degree and Diploma programs.

RETIRED SENIOR VOLUNTEER PROGRAM [RSVP]

The Retired Senior Volunteer Program operates as a coordinating agency between the non-commercial service organizations and the senior citizens of the Durham community. This program enables older people to find a place where they can make a contribution to the community welfare with the free time and talents they have at their disposal but at no cost to them and at minimal cost to Durham.

The Retired Senior Volunteer Program is designed to give people aged 60 and over an opportunity to share their experience and skills with other through meaningful volunteer service in the community.

Volunteers are needed to teach crafts and hobbies; help as librarians, teachers' aides, office workers; sew, knit or crochet; take care of children; offer companionship to the confined; provide escort service in hospitals; make dolls for children; prepare mailings; serve in information centers; and for many other areas.

Volunteer hours can be arranged to meet individual schedules. There are no restrictions based on education, income or experience. Volunteers are eligible for reimbursement such as meals, parking, transportation (car or bus). RSVP will attempt to arrange transportation.

For more information contact the Director of RSVP, Durham Technical Institute, 1637 Lawson Street, Box 11307, Durham, North Carolina 27703. 919/596-9311.

Notes:



Durham Technical Institute

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