



# **JACKSON COUNTY INDUSTRIAL EDUCATION CENTER**

**Unit of  
Asheville-Buncombe  
Technical Institute**



# **JACKSON COUNTY INDUSTRIAL EDUCATION CENTER**

**SYLVA, NORTH CAROLINA**



**C A T A L O G**  
**1967 — 1968**

**UNIT OF  
ASHEVILLE-BUNCOMBE TECHNICAL INSTITUTE**



## FOREWORD

The Jackson County Industrial Education Center, a Unit of the Asheville-Buncombe Technical Institute, was founded in 1964 as an area school to meet the occupational training needs of the people of Western North Carolina and of the growing industrial community.

This institution is dedicated to the task of providing the educational opportunities needed by people to meet the challenging needs of modern industry. In addition, the institution pledges itself to help its students grow in the ability to contribute to society to their fullest potentialities.

The Jackson County Industrial Education Center offers a variety of programs, both during the day and the evening. Each program is designed to meet specific needs of the young people and adults of Western North Carolina.

E. E. Bryson

Resident Director



## **NOTE**

The Jackson County Industrial Education Center issues this catalogue for the purpose of furnishing prospective students and other interested persons with information about the institution and its programs. Announcements contained herein are subject to change without notice and may not be regarded in the nature of binding obligations on the Center or the State. Efforts will be made to keep changes to a minimum, but changes in policy by the State Board of Education, The Department of Community Colleges, or by local conditions may make some alterations in curriculums, fees, etc., necessary.

## **VISITORS**

Visitors, and in particular prospective students, are always welcome at the Jackson County Industrial Education Center, which is located on the Webster Road. Guide service for groups or individuals will be provided by the Director of Student Personnel on week days between 9:00 a.m. and 4:00 p.m. The school is open until 10 p.m. and individuals may visit at their convenience.



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# SCHOOL CALENDAR

## 1967 - 1968

### FALL QUARTER

Registration ..... September 5 and 6  
Classes Begin ..... September 7  
Classes End ..... November 22

Total number of class days: 55

Thanksgiving Holidays — November 23 and 24

### WINTER QUARTER

Registration ..... November 29 and 30  
Classes Begin ..... December 1  
Classes End ..... February 28

Total number of class days: 56

Christmas Holidays December 21 through January 1

### SPRING QUARTER

Registration ..... March 4 and 5  
Classes Begin ..... March 6  
Classes End ..... May 24

Total number of class days: 56

Easter Holidays — Good Friday, April 12

Easter Monday, April 15

### SUMMER QUARTER

Registration ..... June 3 and 4  
Classes Begin ..... June 5  
Classes End ..... August 21

Total number of class days: 55

Holiday — July 4

Graduation — Saturday, August 24



# ADMINISTRATION

## STATE BOARD OF EDUCATION

Robert W. Scott .....	Lieutenant Governor
Edwin Gill .....	State Treasurer
Charles F. Carroll .....	State Supt. of Public Instruction, Secretary
J. A. Pritchett .....	Windsor, Vice-Chairman
W. Dallas Herring .....	Rose Hill, Chairman
Charles E. Jordan .....	Durham
Garland Garriss .....	Troy
William R. Lybrook .....	Winston-Salem
George Douglas Aitken .....	Charlotte
R. Barton Hayes .....	Hudson
John M. Reynolds .....	Asheville
Guy B. Phillips .....	Chapel Hill
Harold L. Trigg .....	Salisbury

## STATE STAFF

I. E. Ready .....	Director, Department of Community Colleges
<del>A. J. Bevacqua</del> <del>I. E. Valentine</del> .....	Assistant Director, Division of Vocational-Technical Programs

## ASHEVILLE-BUNCOMBE TECHNICAL INSTITUTE

Thomas W. Simpson .....	President
<del>James R. Winning</del> <del>J. B. Edwards</del> .....	Director of Extensions

## GENERAL ADVISORY COMMITTEE

Carl Cagle	Woody Hampton
Claude Campbell	Paul Holt
James Childress	George Lee
Kent Coward	Bruce MacMurray
W. B. Dillard	Tom Sturken Max Witt



# **CURRICULUM ADVISORY COMMITTEES**

## **Automotive Mechanics**

Sammy Cogdill  
John Cope

J. D. Reece  
Reid Womack

## **Business**

James Childress  
Bruce MacMurry

Dr. Eugene Vosecky  
Frances Winstead

## **Masonry**

W. B. Dillard

Dan Hooper

## **Mechanical Drafting**

J. E. Corbin  
Robert J. Fritz

M. L. Hook  
Dr. Rodney Leftwich

## **Practical Nurse Education**

Rev. Robert Clegg  
Dr. P. E. Dewees  
Vivian Faison  
Mrs. T. A. Fuller

Carolyn Middleton  
Don C. Morgan  
Dr. Creighton Sossomon

## **Radio and Television Servicing**

Claude Curtis  
Verlin Curtis

Robert Lovedahl

## **OFFICERS OF LOCAL ADMINISTRATION**

Bryson, E. E. ....	Resident Director
B. S., Western Carolina College; M. A., Western Carolina College	
Freeman, Joel ....	Night Director
B. S., Western Carolina College	
Wilson, Richard O. ....	Student Personnel Director
B. S., Western Carolina College	
Flanagan, Mike ....	Extension Director
Asheville-Biltmore College	
McCollum, Joy ....	Bookkeeper
Gates, Peggy ....	Secretary
Dark, Sandra ....	Secretary
Buchanan, Elizabeth ....	Secretary



## FACULTY

- Anderson, J. B. .... Automotive Mechanics  
Curtiss-Wright Technical Institute; Chicago's Sun  
Tune-Up School; General Motors Automotive School;  
Boeing Aircraft Engine and Maintenance; Extension work,  
North Carolina State University
- Collins, Darlene .... Head, Business Department  
B. S., Western Carolina College; M. A., Western Carolina  
College; Graduate Work, George Peabody College
- Hart, Phyllis .... Business  
B. S., Western Carolina College; East Tennessee State  
University; East Carolina College
- Parker, Percy .... Related Subjects  
A. B., Wake Forest; Mars Hill College; Western Carolina  
College
- Searcy, James .... Brick and Block Masonry  
B. S., Western Carolina College
- Slagle, Helen Reid, R.N. .... Practical Nurse Education  
Graduate of Bellevue Hospital School of Nursing;  
Syracuse University
- Ulsenheimer, Edwin .... Drafting  
University Center, Oahu, Hawaii; St. Petersburg Junior  
College; Extension Work, North Carolina State University
- Woodson, John Rex .... Radio and TV  
Philco Service Training Schools; Western Carolina College
- Mann, Sarah .... Learning Laboratory Coordinator  
B.S., Frederick College

## PART-TIME FACULTY

- Ball, Howard .... Radio and TV  
Mars Hill College; National Radio Institute, Washington,  
D. C.
- Clark, Ray .... Mathematics  
B.S., Western Carolina College; M.A., Western Carolina  
College
- Harris, Fred Eugene .... Business  
B.S., Western Carolina College
- Ray, Rufus .... Automotive Mechanics  
G.M. Training Centers, 1951 to present



## BASIC ADULT

Bryson, Viola .....	Reading
M.A., Western Carolina College	
Dehart, Jean .....	English
B.A., Western Carolina College	
Disbrow, Esther .....	English
South-Western Normal School, San Marcos, Texas	
Dryman, Merle .....	English
M.A., Western Carolina College	
Hawkins, LaVerne .....	Mathematics
B.S., Western Carolina College	
Jenkins, Sally .....	English
B.R.E., Western Carolina College	
Jones, Ed .....	Social Studies
Mehaffey, Zeb .....	English
B.S., Western Carolina College	
Slagle, Alice .....	Reading
B.S., Western Carolina College	
Taylor, Emma .....	Mathematics
B.S., Western Carolina College	
Vinson, Robert .....	Social Studies
B.A., Western Carolina College; Warren Wilson College; Berea College	
Walker, Carolyn .....	Reading
B.S., Western Carolina College	
Workman, Suzanne .....	English
A.B., Center College of Kentucky	

## EXTENSION

Bailey, Victoria .....	Beginning Sewing
Beck, Sam .....	Home Fire Safety
Bennett, P. R. ....	Home Fire Safety
Bolton, Mariam .....	Painting and Design
Boyle, Carole .....	Modern Math
Brooks, John L. ....	Modern Math
Capps, Barbara .....	Modern Math
Cope, Bart .....	Fire and Rescue
Flake, J. T. ....	Modern Math
George, Lucy .....	Basket Weaving
Gibson, Mary Jo .....	Knitting
Henry, Howell .....	Small Engine Repair
Jones, Virginia .....	Line and Design
Martin, Lois .....	Modern Math
Ordway, Lorraine .....	Knitting
Pruett, David .....	Adult Driver Training
Roth, Isabel .....	Advanced Knitting
Shelton, Carl .....	Tractor Repair
Sparrow, Cora .....	Quantity Cooking



# Quality Points

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

A—4 quality points per credit hour

B—3 quality points per credit hour

C—2 quality points per credit hour

D—1 quality point per credit hour

Grades of F (Below 70), WP (withdrawal passing), WF (Withdrawal failing), and I (Incomplete) carry no quality points.

Quality ratings are determined by dividing the total number of quality points by the number of hours attempted. If a course is repeated, the last grade will be used in determining a student's hour-quality point ratio. A ratio of 2.00 indicates that the student has an average of C; above 2.00 indicates he has an average above C; below 2.00 indicates that he has an average of below C.

## Honor Roll

In order to honor outstanding students, the Honor Roll will be published after each quarter. To qualify for the Honor Roll, a student must maintain an average grade of 88 (B) or above.

## Additional Counseling and Testing

As mentioned under admission procedure all applicants will be required to be subjected to a series of aptitude tests. This will be accomplished prior to acceptance and registration. The counselor will schedule interviews with students concerning interpretation of their test scores and he will advise the student concerning course selections. Additional aptitude tests may be desirable to determine individual ability. Applicants are not encouraged to enroll unless it is believed that the student has made a sound choice and that he will profit from his choice.

Students are encouraged to use the counseling services at any time. The counseling service will work at all times with individuals to keep them informed of the progress they are making. Also, many reference materials are made available to students during the training program through the counseling service.



# **Placement Service**

The Center provides placement service by working with the Employment Security Commission which will assist the students and alumni in securing employment. The objective of this service is to guide and assist the student and graduate in obtaining the type of position for which he is best qualified.

Active contacts are maintained throughout North Carolina with industries. Informative booklets, brochures, and industrial directories are available to students and alumni. Group and individual job interviews will be arranged.

## **Student Lounge**

A refreshment and lounge area equipped with a variety of modern vending machines is provided for the convenience of students and faculty. Foods and drinks may not be carried into a classroom, shop, or laboratory.

## **Smoking**

Smoking will be confined to designated areas inside and outside the building.

## **Admission Procedure**

Persons wishing to take courses at the Center must file an application for admission. Application forms may be obtained by writing or calling the Center. The telephone number is 586-4091. A transcript of courses and grades from the last school attended must be on file with the Center before an application is considered complete.

While application for enrollment may be made at any time preceding the anticipated date of entry, it is strongly recommended that this be done at least thirty days prior to such date. Sufficient time will thereby be allotted for necessary testing, counseling, and proper evaluation of results.

All pre-employment students will be required to take entrance examinations. High school students will be tested in their respective high schools when possible.

After the completed application form is received, a date will be set for the prospective student to take the above-mentioned tests (if they have not already been taken). No application will be considered complete until all requested information has been supplied and a personal interview conducted with the Director or his representative.



## Admission with Advance Standing

The Jackson County Industrial Education Center will accept work and give credit for work completed in other Technical Institutes, Industrial Education Centers, and Colleges. Applicants for admission with advanced standing should make application as a regular applicant and submit a transcript of work from prior schools. Acceptance of such work will be at the discretion of the Director.

## Diplomas, Certificates, and Degrees

### Diploma Courses Defined

The Jackson County Industrial Education Center will grant diplomas in the name of the North Carolina State Board of Education on successful completion of any trade level curricula. A state comprehensive examination will be required before graduation in any trade level curriculums.

### Certificates

Certificates will be issued in the name of the Jackson County Industrial Education Center to students who successfully complete any short term program or course.

### Degree Program Defined

The Asheville-Buncombe Technical Institute will confer an Associate in Applied Science degree in all Technical Curricula. A state comprehensive examination will be required before graduation in any Technical curriculum. The degree is awarded in the name of the North Carolina State Board of Education.

## Fees

### TUITION:

Full Time Students — per quarter .....	32.00 <del>\$30.00</del>
Part Time Students — per credit hour .....	\$2.50

## Textbooks

All curriculum students will be expected to purchase adopted textbooks in all courses. These textbooks will be sold at a less than retail price to students. Every effort will be made to keep the total price of all textbooks between \$30 and \$40 in most areas.

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



# Student Insurance

Certain risks are inherent in any work involving regular contact with mechanical and electrical equipment. While stringent precautions will be taken to insure safety, it is felt to be in the interest of all students to provide some measure of insurance protection.

A group policy providing the desired insurance protection will be maintained in effect by the Center and all students will be **REQUIRED** to subscribe to such coverage. The cost of accident insurance to the student will be approximately \$2.50 per year.

## Withdrawals

Any student who must withdraw because of illness or personal hardship may, if his work is deemed satisfactory at the time of withdrawal, re-enter the course provided that such action is taken upon the immediate next offering of the course. Any student withdrawing without authorization may re-enter only at the discretion of the Director.

A student may be dismissed from school for failure to achieve a passing grade for two grading periods or for infraction of the rules that apply to student conduct. Re-entrance of dismissed students will be at the discretion of the Director. A failing grade for one report period will automatically place the student upon probationary standing for the following report period.

## Refunds

Tuition refund for students shall not be made unless the student is, in the judgment of the institution, compelled to withdraw for unavoidable reasons. In such cases, two-thirds ( $2/3$ ) 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, except if a course or curriculum fails to materialize, all the students' tuitions shall be refunded.

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



## **Extension Division**

The extension division offers avenues of learning to those men and women who, though employed, seek to upgrade, update, and generally enhance their individual knowledge and performance. Most curriculums in the technical and trade divisions will be offered on an extension level.

Included in this division are short term courses designed as specific courses for upgrading and updating. Also included in this division are supervisory-level courses designed to stimulate those individuals who aspire to advance their knowledge in the fields of management.

Special classes, both day and night, may be provided to accommodate such students.

## **Basic Adult Education**

To meet the challenge of the space age, the curriculum of adult education will provide studies in subjects as current as the morning headlines and as old as organized knowledge. Any adult, 18 years of age or older, is eligible to enroll in this area. Today's program stresses training or retraining for jobs of upgrading in business or industry, homemaking and parent education, areas of instruction of special community interest, and a high school diploma program for those adults who wish to attain a high school equivalency diploma.

## **New Industry Training**

Training for new and expanding industry constitutes an important segment of the extension division. In cooperation with the industry involved, workers may be trained for specific occupational areas.

# **Admission Requirements and Procedures**

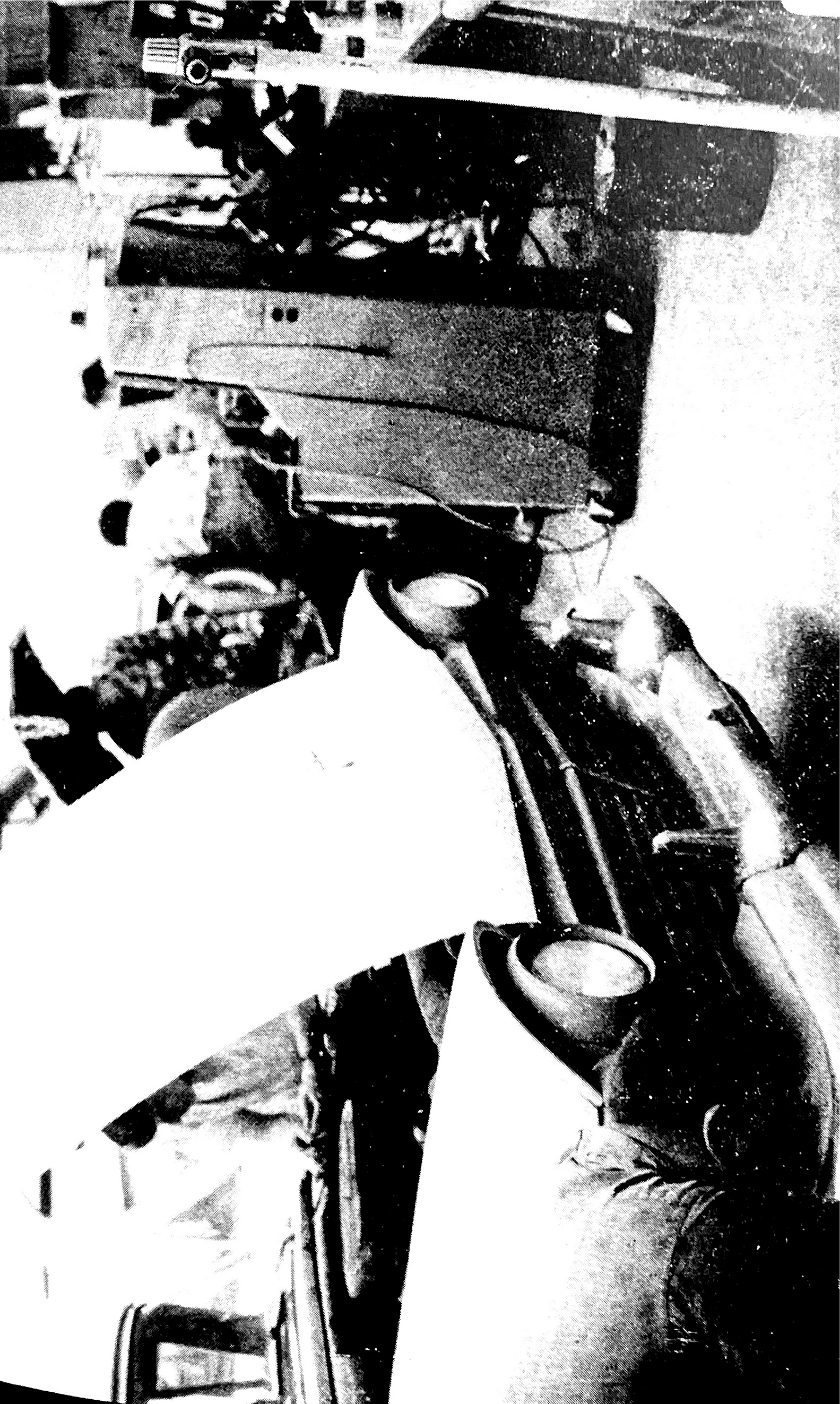
## **General Requirements**

Any North Carolina citizen may be enrolled in a course if he meets the admission requirements. Such requirements will necessarily depend upon the course of study chosen. The applicant must be eighteen years or older (or be a high school graduate) and must possess certain basic aptitudes and interest. No applicant may enroll in more than one curriculum.

The applicant should be in reasonably good health with no impairment of vision or physical defect that would restrict his ability in a particular field of work. The applicant may under certain conditions be required to furnish evidence of satisfactory health.

Educational background, experience, and aptitudes will all be considered when an application is made to the Center.







# School of Trades

The following areas of study are included in the School of Trades:

Automotive Mechanics

Radio and Television Servicing

Block and Brick Masonry

Mechanical Drafting

Practical Nurse Education

The School of Trades will offer a variety of courses on a 4 quarter basis. The areas of study reflect the employment opportunities in the Western part of North Carolina. These curriculums require one full year for completion. If a student elects to enroll in the School of Trades through extension because of his work load, the time required for completion will be doubled. The extension division will offer fifteen hours per week in a particular area of study. The full time schedule will require thirty hours per week.

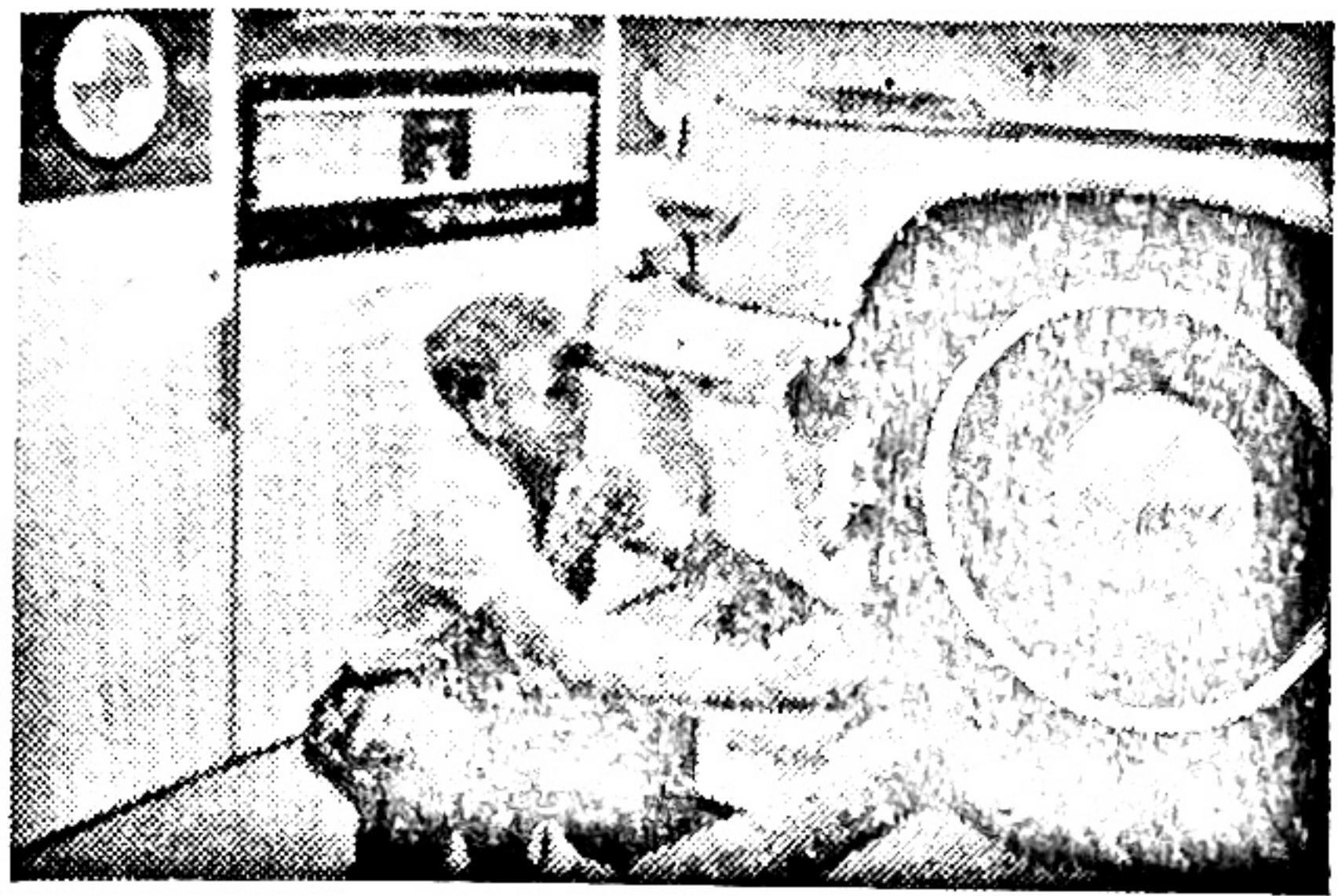
The student enrolled in the School of Trades will spend most of his time in the shop working under actual industrial conditions. The rest of the time will be in the classroom and laboratory in related subjects. The School of Trades will require each student to demonstrate an ability to do work in his particular trade. Emphasis will be placed on becoming proficient in the use of machines, instruments, and other equipment related to a particular area of work.

Certain courses will be required of every student irrespective of his curriculum. These courses will enhance the student's ability toward his work. A thorough understanding of the American System of Economics as it relates to the free enterprise system and corporate structure will be required of every student.

The contact hours shown in curriculums are minimal. Institutions may enroll students for additional hours, upon request and with the approval of the institution, in order to enrich and broaden their educational experiences. Students so enrolled will be expected to follow strictly the schedules for which enrolled.



# AUTO MECHANICS



This is a one-year program providing a thorough training in the theoretical as well as manual skills in servicing, testing and diagnosing. All phases of the electrical system, the power plant, braking system, the power train will be studied.

The courses are arranged in a sequence that gives the student the required technological and special courses as they are needed to coordinate his laboratory experiences.

Emphasis is placed on the mechanical parts and operation of the various automobile units. Trouble shooting and servicing of the live project is also stressed.

## OCCUPATIONAL OPPORTUNITIES

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

Course	Class	Lab	Shop Practice	Credit
<b>First Quarter</b>				
AUT 1121 Automotive Theory and Practice	3	0	12	7
MAT 1121 Mathematics	5	0	0	5
ENG 1101 Reading Improvement	2	0	0	2
PHY 1104 Physics	3	2	0	4
	<hr/> 13	<hr/> 2	<hr/> 12	<hr/> 18
<b>Second Quarter</b>				
AUT 1122 Automotive Theory and Practice	3	0	12	7
PHY 1105 Applied Physics	3	2	0	4
ENG 1102 Communication Skills	2	0	0	2
DFT 1121 Blueprint Reading	3	0	0	3
	<hr/> 11	<hr/> 2	<hr/> 12	<hr/> 16
<b>Third Quarter</b>				
AUT 1123 Automotive Theory and Practice	3	0	12	7
AUT 1101 Small Engine Repair	3	0	0	3
SOC 1101 Human Relations	2	0	0	2
WLD 1112 Welding	0	0	3	1
PHY 1106 Applied Physics	3	2	0	4
	<hr/> 11	<hr/> 2	<hr/> 15	<hr/> 17
<b>Fourth Quarter</b>				
AUT 1124 Automotive Theory and Practice	3	0	9	6
SOC 1103 Management Procedures	3	0	0	3
AUT 1125 Automotive Testing and Service	3	0	9	6
	<hr/> 9	<hr/> 0	<hr/> 18	<hr/> 15



# Automotive Mechanics

## COURSE DESCRIPTION

### AUT 1121 AUTOMOTIVE THEORY AND PRACTICE — ENGINES

Designed to give the student a thorough knowledge in the use, maintenance, and storage of the various tools and measuring devices needed in automotive work. A study of the construction and operation of components of automotive engines. The student will learn testing of engine performance; servicing and maintenance for pistons, valves, cams and camshafts, fuel and exhaust systems, cooling systems; proper lubrication; and methods of testing, diagnosing and repairing of failure and defects in the various engine mechanisms. Prerequisite: None.

### AUT 1122 AUTOMOTIVE THEORY AND PRACTICE — ELECTRICAL AND FUEL SYSTEMS

A thorough study of the electrical and fuel systems of the automobile, the electrical system and its components; battery cranking mechanism, generator, ignition, accessories, and wiring. Intensive training in the components and operation of various types of automotive fuel systems. Characteristics of fuels and types of fuel systems for which they are best adapted. The special tools, circuits, and testing equipment for the fuel and electrical system are studied. Prerequisite: AUT 1121.

### AUT 1123 AUTOMOTIVE THEORY AND PRACTICE — CHASSIS AND SUSPENSIONS

Principles and functions of the components of automotive chassis. Practical job instruction in adjusting and repairing of the suspension, steering, and braking systems. Units to be studied will be shock absorbers, springs, steering systems, steering linkage, front end adjustments, types and servicing of brakes, etc. Prerequisites: AUT 1121, 1122.

### AUT 1101 — SMALL ENGINE REPAIR

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

### AUT 1124 AUTOMOTIVE THEORY AND PRACTICE — POWER TRAIN

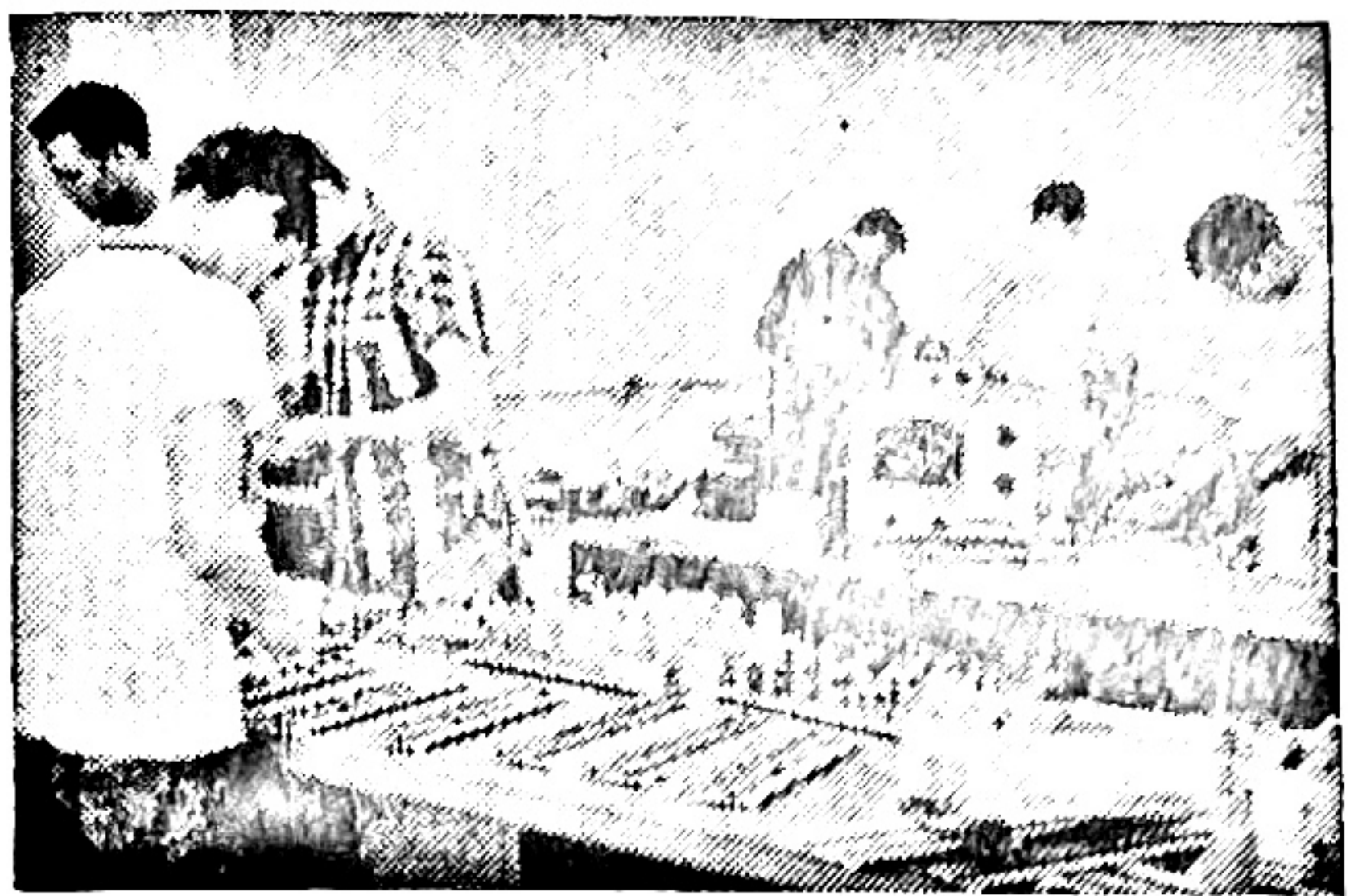
Detailed analysis of the components of the automotive power train system, with the emphasis on identification of troubles which develop in these components and the correct servicing and repair. Included are: types of clutches, clutch operation, inspection and servicing clutches; functions of the transmission gears, principles and operation of the various transmission and torque converter types, service and repair; operation, diagnosis and servicing for drive shaft assemblies, rear axles, and differentials. Prerequisites: Phy 1105; 1106; AUT 1121, 1122, 1123.

### AUT 1125 AUTOMOTIVE TESTING AND SERVICE

Emphasis is on the shop procedures necessary in determining the nature of troubles developed in the various component systems of the automobile. Extensive use of testing equipment will be made on the actual problem situations. A close simulation to the actual automotive shop will be maintained and every effort will be made to give the student a full range of testing and servicing experience. Prerequisites: AUT 1121, 1122, 1123, 1124.



# RADIO AND TELEVISION SERVICING



This curriculum is designed to fill the tremendous need for radio and television repairmen. With the number of televisions increasing every year, the need for individuals to service and install these receivers is also increasing every year. This particular curriculum will start with the basic information as a foundation on which their advanced courses are established. The individuals enrolled in the school of radio and television repair will spend over half of their time in the laboratory with typical servicing and installation problems found in the field of work.

## OCCUPATIONAL OPPORTUNITIES

Radio Serviceman, Television Serviceman, Radio and Television Salesman, Installation, and Manufacturer Representative.

Course	Class	Lab	Shop Practice	Credit
<b>First Quarter</b>				
MAT 1125 Electrical Math	5	0	0	5
ELC 1122 Direct and Alternating Current	7	8	3	12
ENG 1101 Reading Improvement	2	0	0	2
	<hr/>	<hr/>	<hr/>	<hr/>
	14	8	3	19
<b>Second Quarter</b>				
ELN 1122 Vacuum Tubes and Circuits	5	10	0	10
ELN 1123 Amplifier Systems	2	0	6	4
ENG 1102 Communication Skills	2	0	0	2
SOC 1101 Human Relations	2	0	0	2
	<hr/>	<hr/>	<hr/>	<hr/>
	11	10	6	18
<b>Third Quarter</b>				
ELN 1124 Vacuum Tubes and Circuits	4	4	0	6
ELN 1125 Radio Receiver Servicing	2	0	6	4
ELN 1126 Transistor Theory and Circuits	5	4	0	7
SOC 1103 Management Procedures	3	0	0	3
	<hr/>	<hr/>	<hr/>	<hr/>
	14	8	6	20
<b>Fourth Quarter</b>				
ELN 1127 Television Receiver Circuits	10	0	15	15
or				
ELN 1128 Television Receiver Circuits and Servicing	5	0	12	9
Elective (1)	5	0	6	7
	<hr/>	<hr/>	<hr/>	<hr/>
	10	0	18	16
<b>ELECTIVE</b>				
ELN 1129 Single Side Band Systems .....	5	0	6	7
ELN 1130 Two-way Mobile maintenance .....	5	0	6	7

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# Radio and Television Servicing

## COURSE DESCRIPTION

### ELC 1122 DIRECT AND ALTERNATING CURRENT

A study of the structure of matter and the electron theory, the relationship between voltage, current and resistance in series, parallel and series-parallel circuits. Analysis of direct current by Ohm's law and Kirchoff's law; sources of direct current potentials. Fundamental concepts of alternating current flow; a study of reactance, impedance, phase angle, power and resonance and alternating current circuit analysis. Prerequisite: None.

### ELN 1122 VACUUM TUBES AND CIRCUITS

An introduction to vacuum tubes and their development; the theory, characteristics and operation of vacuum tubes, semi-conductor diodes, rectifier circuits, filter circuits, triodes and simple voltage amplifier circuits.

### ELN 1123 AMPLIFIER SYSTEMS

An introduction of commonly used servicing techniques as applied to monophonic and stereophonic high fidelity amplifiers and auxiliary equipment. The operation and servicing of intercommunication amplifiers and switching circuits will also be taught.

### ELN 1124 VACUUM TUBES AND CIRCUITS

A continuing study of tubes and circuits; the theory, characteristics, and operation of the tetrode and pentode tubes, voltage, and power amplifiers, tunable RF Amplifiers, oscillators and demodulator circuits.

### ELN 1125 RADIO RECEIVER SERVICING

Principles of radio reception and practices of servicing; included are block diagrams of radio receivers, servicing techniques of AM and FM receivers by resistance measurements, signal injection, voltage, analysis oscilloscope methods of locating faulty stages and components, and the alignment of AM and FM receivers.

### ELN 1126 TRANSISTOR THEORY AND CIRCUITS

Transistor theory, operation, characteristics and their application to audio and radio frequency amplifier and oscillator circuits.

### ELN 1127 TELEVISION RECEIVER CIRCUITS

A study of principles of television receivers, alignment of radio and intermediate frequency amplifiers, adjustment of horizontal and vertical sweep circuits will be taught. Techniques of trouble shooting and repair of TV receivers with the proper use of associated test equipment will be stressed. Additional study of more specialized servicing techniques and oscilloscope waveform analysis will be used in the adjustment, trouble-shooting and repair of the color television circuits.

### ELN 1128 TELEVISION RECEIVER CIRCUITS

This course, taught in conjunction with an elective, will be a shortened version of ELN 1127.

### ELN 1129 SINGLE SIDE-BAND SYSTEMS

An inductory course of single side-band transmission systems with carrier frequency or without and the associated balanced modulator or phasing system used to produce this type of transmission. Time will be allotted also to the necessary circuitry in the receiver to receive this type transmission.

### ELN 1130 TWO-WAY MOBILE MAINTENANCE

A course to acquaint the student with the theory and maintenance of fixed station and mobile station transmitters and receivers. Except for radio laws, sufficient information will be given to qualify the student to take the FCC second class radio-telephone license examination.



# BRICK AND BLOCK MASONRY



This curriculum is designed to give the students knowledge of the fundamentals of masonry. Emphasis in the shop is placed on fundamental skills using the trowel, level, line, jointers, and masonry saw.

Shop projects include building corners, fireplaces, chimneys, all types of bonds, and ornamental work.

Students take related courses in mathematics, English, and blueprint reading. Latest developments in the masonry field, and related plumbing, heating, electrical, and carpentry are included in the classroom part of the masonry courses.

Upon completion of the requirements listed below, the student should be a qualified apprentice brick mason with an opportunity to advance rapidly in the masonry field.

## OCCUPATIONAL OPPORTUNITIES

With the tremendous growth of industries and the volume of masonry being used for building, employment is no problem. Opportunities are found with private builders, general contractors or one's own business after several years' experience.

## MASONRY

	Hours Per Week		Qtr. Hrs.
	Class	Lab	Credit
<b>First Quarter</b>			
MAS 1101 Bricklaying	5	15	10
MAT 1101 Fundamentals of Mathematics	5	0	5
DFT 1110 Blueprint Reading: Building Trades	5	0	5
	—	—	—
	15	15	20
<b>Second Quarter</b>			
MAS 1102 Bricklaying	5	15	10
MAT 1112 Building Trades Mathematics	5	0	5
DFT 1111 Blueprint Reading & Sketching	5	0	5
	—	—	—
	15	15	20
<b>Third Quarter</b>			
MAS 1103 General Masonry	5	15	10
MAS 1113 Masonry Estimating	2	3	3
DFT 1112 Blueprint Reading & Sketching	3	2	4
	—	—	—
	10	20	17

## COURSE DESCRIPTION

### MAS 1101

History of brick. Spreading mortar. Block laying. Simple leads and laying bricks to the lines. Mortar mixing techniques. Use and care of tools. Safety. Motion study. Basic unwritten laws of the masonry trade. Masonry definitions. Joining. Classification of brick.

### MAS 1102

Types of bonds. Bond layout. Corner building. Reading the mason's rule. Related carpentry. Related electricity. Related plumbing. Development of speed in the basic skills.

Estimating. Use of masonry saw. Patterns and ornamental bonds. Laying



all types of brick and block. Laying window sills. Economics of the masonry trade.

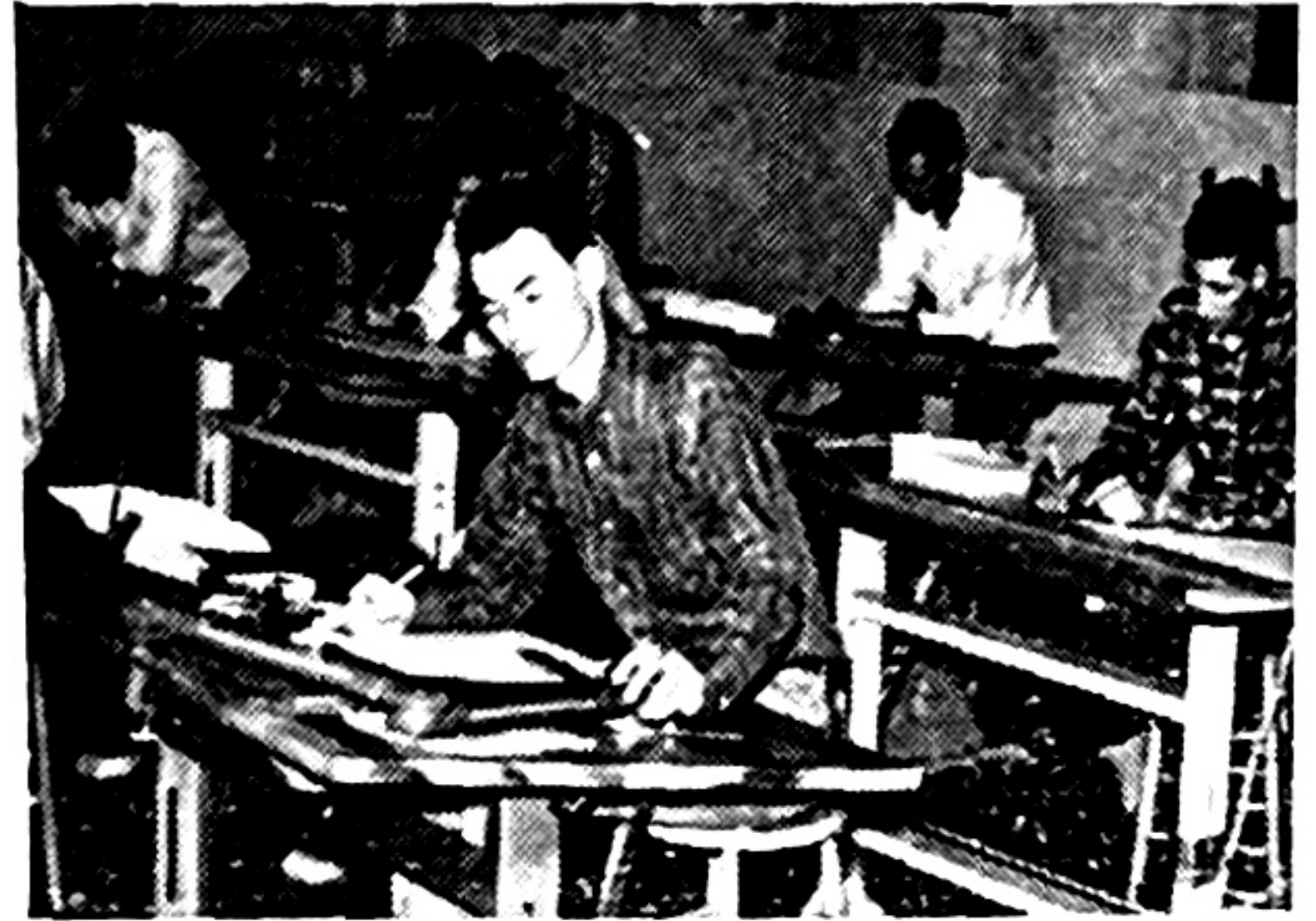
This particular course is designed to help the mason understand the types of plumbing and heating systems that are used in modern building construction. The requirements to special framing on the part of the mason will be practiced.

MAS 1103

Building layout. Use of transit. Arches, fireplaces and chimneys. Study of recent developments in the masonry trade. Structural clay tile. Precast stone. SCR brick. Development of speed in all phases of the masonry trade.

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## DRAFTING - MECHANICAL



### INTRODUCTION

#### Purpose of Curriculum

This curriculum is designed to prepare students to enter the field of mechanical drafting. The first two quarters contain courses basic to all fields of drafting. The third and fourth quarters contain specialization and related courses that prepare one to enter mechanical drafting occupations.

Each course is prepared to enable an individual to advance rapidly in drafting proficiency upon entering the field of work. Courses are arranged in sequence to develop drafting skills and proficiency in mathematics and science. The draftsman associates with many levels of personnel—administrative, architects, engineers, skilled workmen—and must be able to communicate effectively with them. Courses to develop knowledge and skills in communication, human relations, economics and industrial organization are provided to assist the student in developing understandings and confidence in his relations with other persons.

#### Job Description

**Draftsman** prepares clear, complete, and accurate working plans and detail drawings, from rough or detailed sketches or notes for engineering or manufacturing purposes, according to the specified dimensions: makes final sketch of the proposed drawing, checking dimension of parts, materials to be used, the relation of one part to another, and the relation of the various parts to the whole structure. Makes any adjustments or changes necessary or desired. Inks in lines and letters on pencil drawings as required. Exercises manual skill in the manipulation of triangle, T-square, and other drafting tools. Lays tracing paper on drawing and traces drawing in pencil or ink. Makes charts for representation of statistical data. Makes finished designs from sketches. Utilizes knowledge of various machines, engineering practices, mathematics, building materials, and other physical sciences to complete the drawings.

**Mechanical draftsman** performs the general duties of a draftsman and also specializes in making rough drafting sketches of proposed mechanical devices, and then drawing necessary details. Prepares accurate scale drawings of parts or machines from specifications. Performs the general duties of a draftsman and also specializes in organizing and drawing of working drawings from final preliminary sketches from the designer, mechanical equipment and structural drawings included.



First Quarter		Course Hours		Per Week	Qtr.
Course Title				Shop	Hours
	Class	Lab	Practice		Credit
DFT 1121 Drafting	3	12	0		7
MAT 1103 Geometry	3	0	0		3
ENG 1101 Reading Improvement	2	0	0		4
PHY 1101 Applied Science	3	2	0		4
	—	—	—		—
	11	14	0		18
Second Quarter					
DFT 1122 Drafting	3	6	0		6
DFT 1125 Descriptive Geometry	2	3	0		3
MAT 1102 Algebra	5	0	0		5
ENG 1102 Communication Skills	3	0	0		3
PHY 1102 Applied Science	3	2	0		4
	—	—	—		—
	16	11	0		21
Third Quarter					
DFT 1131 Mechanical Drafting	3	12	0		9
MAT 1104 Trigonometry	3	0	0		3
PSY 1101 Human Relations	2	0	0		2
MECH 1113 Shop Processes	2	3	0		3
DFT 1141 Building Trade Drafting	2	3	0		3
	—	—	—		—
	12	18	0		20
Fourth Quarter					
DFT 1142 Building Trade Drafting	3	12	0		9
DFT 1145 Specifications and Contents	3	0	0		3
CIV 1101 Surveying	2	3	0		3
BUS 1103 Small Business Operations	3	0	0		3
	—	—	—		—
	11	15	0		18

### COURSE DESCRIPTION

#### DFT 1121 DRAFTING

An introduction to drafting and the study of drafting practices. Instruction is given in the selection, use and care of instruments, singlestroke lettering, applied geometry, freehand sketching consisting of orthographic and pictorial drawings. Orthographic projection, reading and instrument drawings of principal views, single auxiliary views (primary), and double (oblique) auxiliary views will be emphasized. Dimensioning and note practices will be studied with reference to the American Standards Association practices. Methods of reproducing drawings will be included at the appropriate time. Prerequisite: None.

#### MAT 1103 GEOMETRY

Fundamental properties and definitions; plane and solid geometric figures, selected general theorems, geometric construction of lines, angles and plane figures. Dihedral angles, areas of plane figures, volumes of solids. Geometric principles are applied to shop operations. Prerequisite: None.

#### ENG 1101 READING IMPROVEMENT

Designed to improve the student's ability to read rapidly and accurately. Special machines are used for class drill to broaden the span of recognition, to increase eye coordination and word group recognition and to train for comprehension in larger units. Prerequisite: None.

#### PHY 1101 APPLIED SCIENCE

An introduction to physical principles and their application to industry. Topics in this course include measurement; properties of solids, liquids, and gases; basic electrical principles. Prerequisite: None.

#### DFT 1122 DRAFTING

The trainee will study simple and successive revolutions and their applications to practical problems. Sections and conventions will be studied and



both detail and assembly sections will be drawn. Intersections and developments will be studied by relating the drawing to the sheet metal trades. Models of the assigned drawings will be made from construction paper, cardboard, or similar materials as a proof of the solution to the problems drawn.

Methods of drawing and projecting axonometric, oblique, and perspective drawings will be studied with emphasis on the practical applications of pictorial drawings. Various methods of shading will be introduced and dimensioning and sectioning of oblique and axonometric pictorials will be done. Prerequisite: DFT 1121.

#### **DFT 1125 DESCRIPTIVE GEOMETRY**

Graphical analysis of space problems. The problems deal with practical design elements involving points, lines, planes, connectors, and a combination of these. Included are problems dealing with solid geometry theorems. Where applicable, each graphical solution shall be accompanied by the analytical solution. Prerequisite: DFT 1121.

#### **MAT 1102 ALGEBRA**

Basic concepts and operations of algebra: historical background of our base-10 number system; algebraic operations: addition, subtraction, multiplication and division; fractions, letter representation, grouping, factoring, ratios and proportions, variation; graphical and algebraic solution of first degree equations; solution of simultaneous equations by: addition and subtraction, substitution, graphing; exponents, logarithms, tables and interpolation. Prerequisite: None.

#### **ENG 1102 COMMUNICATION SKILLS**

Designed to promote effective communication through correct language usage in speaking and writing. Prerequisite: ENG 1101.

#### **PHY 1102 APPLIED SCIENCE**

The second in a series of two courses of applied physical principles. Topics introduced in this course are heat and thermometry, and principles of force, motion, work, energy, and power. Prerequisites: PHY 1101.

#### **DFT 1131 MECHANICAL DRAFTING**

An introduction to mechanical drafting beginning with problems concerning precision and limit dimensioning. Methods of fastening materials, and fasteners: keys, rivets, springs, and welding. Symbols will be studied and drawings will be made involving these items. Principles of design will be introduced with the study of basic mechanisms of motion transfer; gears, cams, power trains, pulleys, belting and methods of specifying and calculating dimensions will be studied. Drawings will be made involving these mechanisms. Prerequisite: DFT 1122.

#### **MAT 1104 TRIGONOMETRY**

Trigonometric ratios; solving problems with right triangles, using tables, and interpolating; solution of oblique triangles using law of sines and law of cosines; graphs of the trigonometric functions; inverse functions, trigonometric equations. All topics are applied to practical problems. Prerequisites: MAT 1102, MAT 1103.

#### **PSY 1101 HUMAN RELATIONS**

A study of basic principles of human behavior. The problems of the individual are studied in relation to society, group membership, and relationships within the work situation. Prerequisite: None.

#### **MEC 1113 SHOP PROCESSES (Materials and Processes)**

A study of practices and processes used in the shaping, forming, and fabrication of wood, metal, plastics, and ceramics. The properties of these materials and their utilization in the various industries. A study of the various industries. A study of the various machines used in the forming of these materials and their capabilities. Practices used in fastening and forming these materials. Demonstrations of methods, machines, and processes.

#### **DFT 1141 BUILDING TRADES DRAFTING**

An introduction to architectural drafting. Further development of



techniques in lettering, dimensioning, freehand sketching and instrument drawing. Drawing of construction details, using appropriate material symbols and conventions. Working drawings, including plans, elevations, sections, scale details and full-size details will be prepared from preliminary sketches. Prerequisite: DFT 1112.

#### **DFT 1142 BUILDING TRADES DRAFTING**

Individual and group participation in the preparation of complete working drawings for a complex architectural structure. Study of drafting room organization and relationships of personnel within the architectural office. Prerequisites: DFT 1141, DFT 1143, DFT 1144.

#### **DFT 1145 SPECIFICATIONS AND CONTRACTS**

The purpose and writings of specifications will be studied along with their legal and practical application to working drawings. Contract documents will be analyzed and studied for the purpose of client-architect-contractor responsibilities, duties and mutual protection. Prerequisites: DFT 1141, DFT 1143, DFT 1144.

#### **CIV 1101 SURVEYING**

Basic instrumentation and topography will be studied together with field trips and drafting room application of site surveying. Prerequisite: MAT 1104.

#### **BUS 1103 SMALL BUSINESS OPERATIONS**

An introduction to the small business world, problems of small business operation, basic business law, business forms and records, financial problems, ordering and inventorying, layout of equipment and offices, methods of improving business, and employer-employee relations. Prerequisite: None.

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## **PRACTICAL NURSE EDUCATION**

### **INTRODUCTION**

The accelerated growth of population in North Carolina and rapid advancement in medical technology demand an increased number of well-trained personnel for health services. Realizing this need, the State Department of Community Colleges, in conjunction with local hospitals, administers programs of practical nurse education in local school systems, community colleges, technical institutes and in industrial education centers throughout the state.

### **STATE DIPLOMA AWARDED**

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

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

Throughout the one-year program the student is expected to grow continuously in acquisition of knowledge and understandings related to nursing, the biological sciences, the social sciences and in skills related to nursing practice, communications, interpersonal 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 examination given by the North Carolina Board of Nursing. This examination is given twice each year, usually in April and September. A passing score entitles the individual to receive a license and to use a legal title "Licensed Practical Nurse." The license must be renewed annually. The Licensed Practical Nurse can apply for license in other states on the basis of a satisfactory examination score, without repeating the examination.



## OCCUPATIONAL OPPORTUNITIES

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

Job requirements for the Licensed Practical Nurse include suitable personal characteristics, ability to adapt knowledge and understandings of nursing principles to a variety of situations, technical skills for performance of bedside nursing, appreciation for differences of people and for the worth of every individual, a desire to serve and help others, and readiness to conform to the requirements of nursing ethics and hospital policies.

	Class	Lab.	Clinic	Qtr. Hrs. Credit
<b>First Quarter</b>				
Practical Nursing I	18	2	3	20
<b>Second Quarter</b>				
Practical Nursing II	12	2	21	20
<b>Third Quarter</b>				
Practical Nursing III	10	2	24	19
<b>Fourth Quarter</b>				
Practical Nursing IV	10	2	24	19
Totals .....				<hr/> 78

## Practical Nurse Education

### PRACTICAL NURSING I

#### COURSE DESCRIPTIONS

#### COURSE MATERIAL:

Nursing — History — Introduction to patient care

Health — Personal, physical and mental — Family — Community

Basic Science — Body structure and function — Bacteriology — Basic nutrition

Vocational Adjustments — Introduction to ethics and legal aspects of nursing

Communications and Human Relations

**Classroom activities** are planned to assist students in development of knowledge, understanding, appreciations and attitudes basic to effective nursing of patients of all ages and backgrounds with nursing needs arising both from the individuality of the patient and from inability for self-care as a result of a health deviation. The student is encouraged to develop beginning skills in analysis of patient needs, both through classroom study of hypothetical patient situations and through planned patient experiences in the clinical environment. Beginning skills in nursing methods are developed through planned laboratory experiences, followed by related practice in actual patient care.

**Clinical activities** provide introduction to actual patient care through selected clinical assignments requiring application of current classroom and laboratory learnings.

**PREREQUISITE:** Admission requirements.



## PRACTICAL NURSING II

### COURSE MATERIAL:

Medical-Surgical Nursing — Patients care — Therapeutic Methods, including administration of oral medication.

Introduction to Maternity Nursing

Introduction to Nursing the Sick Child

Communications and Human Relations

**Classroom activities** center around analysis of nursing needs as viewed in perspective with the needs arising from the individuality of the patient and from the illness condition. Related information is presented as it is relevant to student's understanding of and ability to meet nursing needs of patients.

**Clinical activities** provide selected experiences in patient care in order for the student to develop skill in applying classroom learnings to a variety of patient situations.

PREREQUISITE: Practical Nursing I.

## PRACTICAL NURSING III

### COURSE MATERIAL:

Common Medical-Surgical Conditions

Care of the Subacutely Ill Child

Care of Maternity Patient and Newborn Infant With Complications

**Classroom activities** center around analysis of nursing needs arising from the specific illness condition and the medical plan.

**Clinical activities** consist of guided experiences in nursing patients with conditions which illustrate classroom learnings.

PREREQUISITE: Practical Nursing II.

## PRACTICAL NURSING IV

### COURSE MATERIAL:

Needs of the Seriously Ill Patient

Needs of Patients in Immediate Post-Operative Period

Needs of Labor Patient

Needs of the Seriously Ill Child

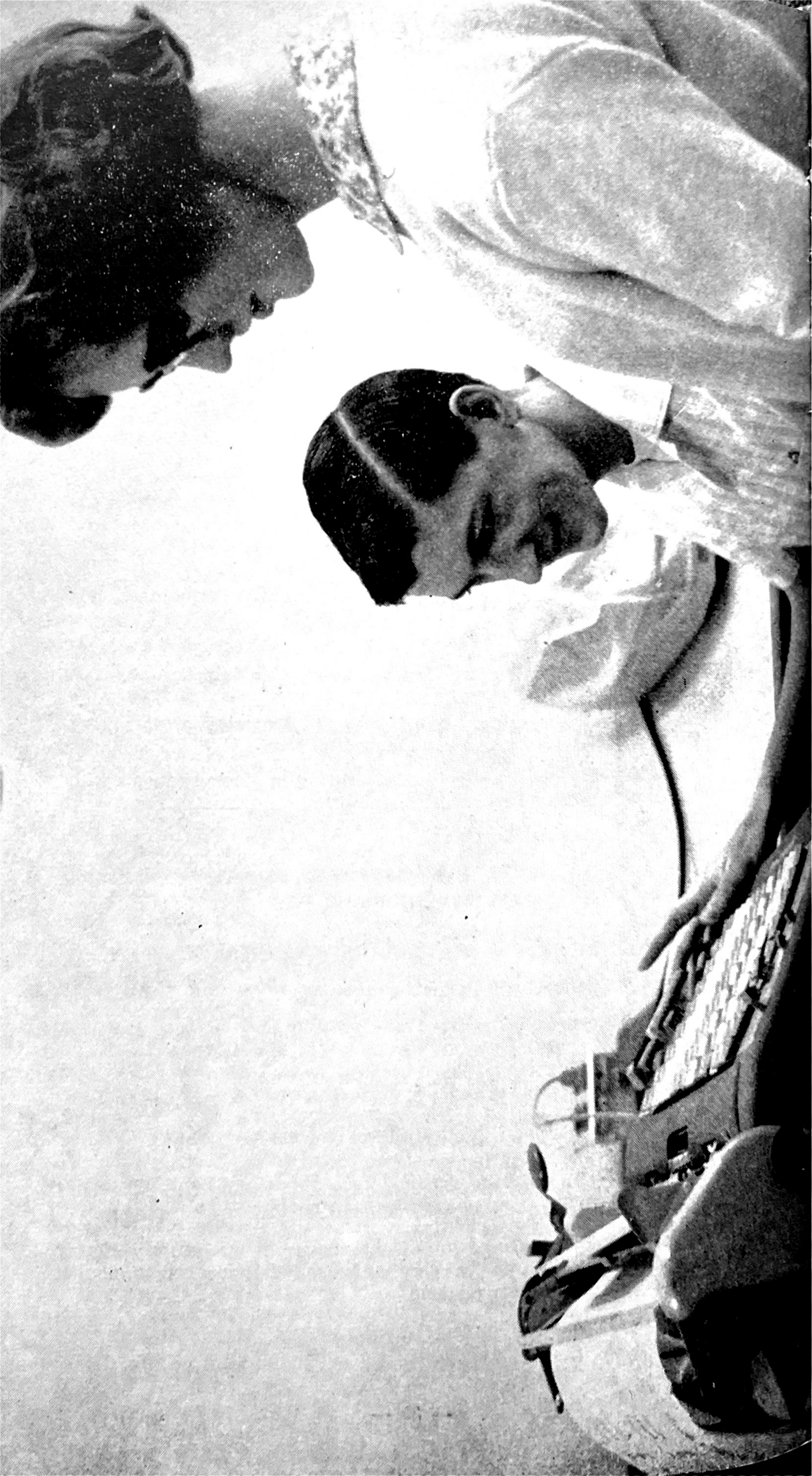
Assuming the Role of Graduate Practical Nurse

**Classroom activities** center around the needs of seriously ill patients of all ages, of labor patients, and of patients immediately following surgery.

**Clinical activities** consist of guided experiences in the care of seriously ill patients, labor patients, and surgery patients, and is planned to parallel classroom learnings whenever possible.

PREREQUISITE: Practical Nursing III.







# SCHOOL OF TECHNOLOGY

The following areas of study are included in the school of technology:

## **Business Administration**

### **Executive Secretarial**

The area of study in the School of Technology is two years in duration and will require from twenty to thirty hours per week of course work. If a student elects to enroll in the School of Technology through extension because of his work load, the time required for completion will be doubled. The extension or evening school division will offer fifteen hours per week in an area of study.

In addition to regular classroom work each student will be required to spend additional time on outside work assignments.

The School of Technology will require each student to become fully aware of the latest methods employed in the business world.

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

The contact hours shown in curriculums are minimal. Institutions may enroll students for additional hours, upon request and with the approval of the institution, in order to enrich and broaden their educational experiences. Students so enrolled will be expected to follow strictly the schedules for which enrolled.

## **BUSINESS ADMINISTRATION**

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

1. Understanding of the principles of organization and management in business operations.
2. Understanding and skill in effective communication for business.
3. Knowledge of human relations as they apply to the successful operations in the rapidly expanding economy.

### **Occupational Opportunities**

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



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# BUSINESS ADMINISTRATION

Course Title	Class	Lab	Credit
<b>First Quarter</b>			
T-ENG 101 Grammar	5	0	5
T-MAT 110 Business Mathematics	5	0	5
T-BUS 101 Introduction to Business	5	0	5
T-ECO 102 Economics	3	0	3
	<hr/> 18	<hr/> 0	<hr/> 18
<b>Second Quarter</b>			
T-ENG 102 Composition	5	0	5
T-BUS 120 Accounting	5	2	6
T-ECO 104 Economics	3	0	3
T-BUS 115 Business Law	3	0	3
T-BUS 123 Business Finance	3	0	3
	<hr/> 19	<hr/> 2	<hr/> 20
<b>Third Quarter</b>			
T-ENG 103 Report Writing	5	0	5
T-BUS 124 Business Finance	3	0	3
T-BUS 110 Office Machines	3	2	4
T-BUS 121 Accounting	5	2	6
T-BUS 116 Business Law	3	0	3
	<hr/> 19	<hr/> 4	<hr/> 21
<b>Fourth Quarter</b>			
T-ENG 204 Oral Communication	5	0	5
T-BUS 122 Accounting	5	2	6
T-BUS 232 Sales Development	3	0	3
T-BUS 239 Marketing	5	0	5
	<hr/> 18	<hr/> 2	<hr/> 19
<b>Fifth Quarter</b>			
T-EDP 104 Introduction to Data Processing Systems	3	2	4
T-BUS 225 Cost Accounting	3	2	4
T-ENG 206 Business Communication	5	0	5
T-SSC 201 Social Science	3	0	3
T-BUS 235 Business Management	3	0	3
	<hr/> 17	<hr/> 4	<hr/> 19
<b>Sixth Quarter</b>			
T-BUS 243 Advertising	3	2	4
T-SSC 202 Social Science	3	0	3
T-BUS 229 Taxes	3	2	4
T-BUS 272 Principles of Supervision	3	0	3
T-BUS 271 Office Management	3	0	3
	<hr/> 15	<hr/> 4	<hr/> 17
<b>Seventh Quarter</b>			
T-PSY 206 Applied Psychology	3	0	3
T-BUS 247 Business Insurance	5	0	5
T-BUS 233 Personnel Management	3	0	3
T-BUS 219 Credit Procedures and Problems	3	0	3
T-BUS 245 Retailing—Wholesaling	5	0	5
	<hr/> 19	<hr/> 0	<hr/> 19



# **Business Administration**

## **COURSE DESCRIPTIONS**

### **T-BUS 101 INTRODUCTION TO BUSINESS**

A survey of the business world with particular attention devoted to the structure of the various types of business organizations, methods of financing, internal organization, and management. Prerequisite: None.

### **T-BUS 123 BUSINESS FINANCE**

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

### **T-BUS 124 BUSINESS FINANCE**

Financing, federal, state, and local government and the ensuing effects upon the economy. Factors affecting supply of funds, monetary and credit policies. Prerequisite: T-BUS 123.

### **T-BUS 232 SALES DEVELOPMENT**

A study of retail, wholesale and specialty selling. Emphasis is placed upon mastering and applying the fundamentals of selling. Preparation for and execution of sales demonstrations required. Prerequisite: None.

### **T-BUS 239 MARKETING**

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

### **T-BUS 235 BUSINESS MANAGEMENT**

Principles of business management including overview of major functions of management, such as planning, staffing, controlling, directing, and financing. Clarification of the decision-making function versus the operating function. Role of management in business — qualifications and requirements. Prerequisite: None.

### **T-BUS 243 ADVERTISING**

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

### **T-BUS 229 TAXES**

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. Prerequisite: T-BUS 121.

### **T-BUS 272 PRINCIPLES OF SUPERVISION**

Introduces the basic responsibilities and duties of the supervisor and his relationship to superiors, subordinates, and the associates. Emphasis on securing effective work force and the role of the supervisor. Methods of supervision are stressed. Prerequisite: None.

### **T-BUS 271 OFFICE MANAGEMENT**

Presents the fundamental principles of office management. Emphasis on the role of office management including its functions, office automation, planning, controlling, organizing and actuating office problems. Prerequisite: None.

### **T-BUS 247 BUSINESS INSURANCE**

A presentation of the basic principles of risk insurance and their application. A survey of the various types of insurance is included. Prerequisite: None.

### **T-BUS 233 PERSONNEL MANAGEMENT**

Principles of organization and management of personnel, procurement, placement, training, performance checking, supervision, remuneration, labor relations, fringe benefits and security. Prerequisite: None.

### **T-BUS 219 CREDIT PROCEDURES AND PROBLEMS**

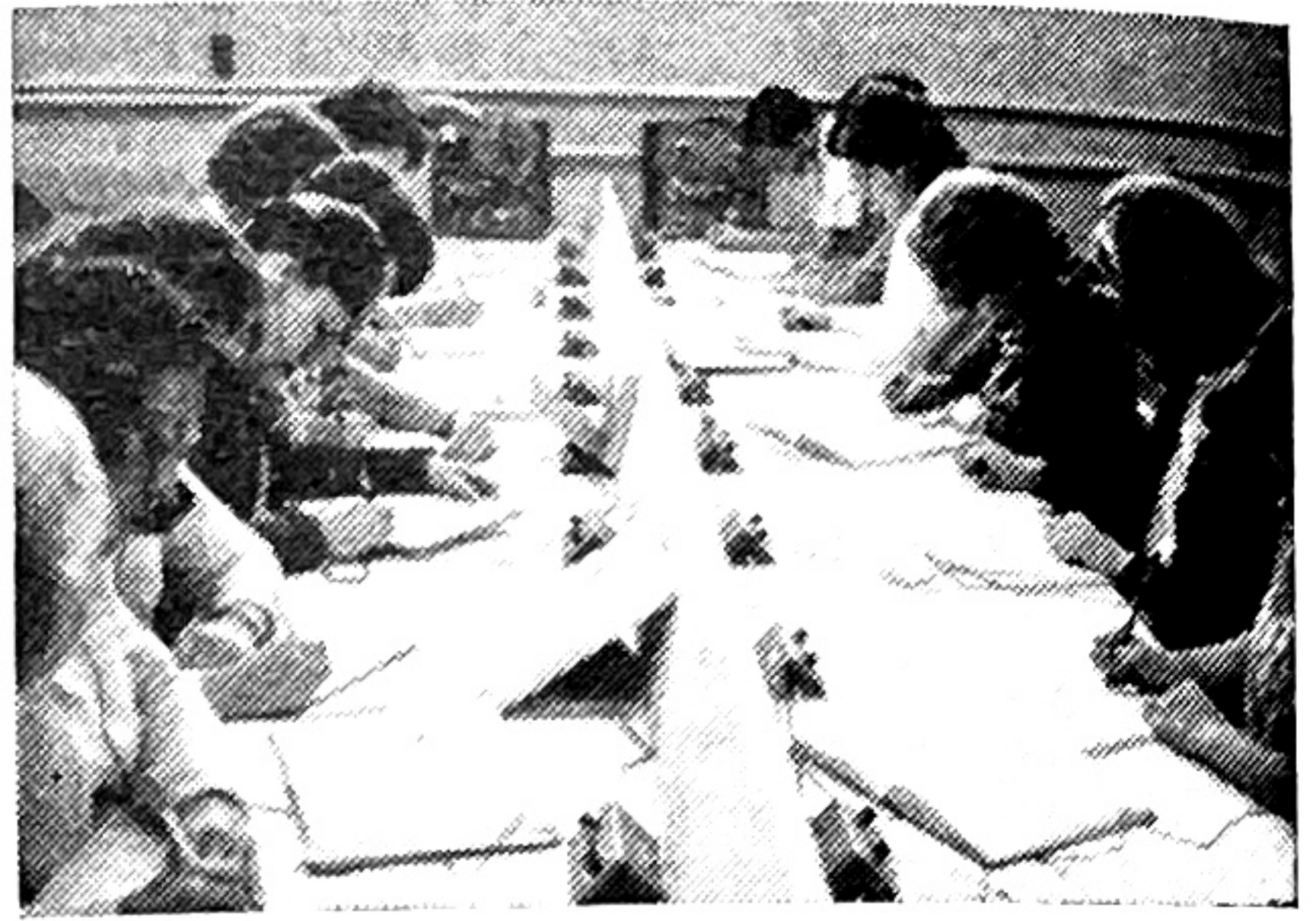
Principles and practices in the extension of credit; collection procedures; laws pertaining to credit extension and collection are included. Prerequisite: T-BUS 120.

### **T-BUS 245 RETAILING**

A study of the role of retailing in the economy including development of present retail structure, functions performed, principles governing effective operation and managerial problems resulting from current economic and social trends. Prerequisite: None.



# EXECUTIVE SECRETARIAL



The demand for better qualified secretaries in our ever-expanding business world is becoming more acute. The purpose of this curriculum is to outline a program that will provide training in the accepted procedures required by the business world and to enable persons to become proficient soon after accepting employment in the business office.

## OCCUPATIONAL OPPORTUNITIES

The graduate of the Executive Secretarial Curriculum should have a knowledge of the business terminology, skill in dictation and accurate transcription of the business letters and reports. The graduate may be employed as a stenographer or a secretary. Stenographers are primarily responsible for taking dictation and transcribing letters, memoranda, and reports. The secretary, in addition to taking dictation and transcribing, is given more responsibility in connection with meeting office callers, screening telephone calls, and being an assistant to an executive. She may enter a secretarial position in a variety of offices in businesses such as insurance companies, banks, marketing institutions, and financial firms.



# EXECUTIVE SECRETARIAL

Course Title	Class	Lab	Credit
<b>First Quarter</b>			
T-ENG 101 Grammar	5	0	5
T-BUS 102 Typewriting	2	3	3
T-MAT 110 Business Mathematics	5	0	5
T-BUS 101 Introduction to Business	5	0	5
T-BUS 106 Shorthand	3	2	4
	<hr/> 20	<hr/> 5	<hr/> 22
<b>Second Quarter</b>			
T-ENG 102 Composition	5	0	5
T-BUS 103 Typewriting	2	3	3
T-BUS 107 Shorthand	3	2	4
T-BUS 120 Accounting	5	2	6
T-BUS 115 Business Law	3	0	3
	<hr/> 18	<hr/> 7	<hr/> 21
<b>Third Quarter</b>			
T-ENG 103 Report Writing	5	0	5
T-BUS 104 Typewriting	2	3	3
T-BUS 108 Shorthand	3	2	4
T-BUS 121 Accounting	5	2	6
T-BUS 116 Business Law	<del>3</del>	<hr/> 7	<hr/> <del>18</del>
	<del>18</del>		21
<b>Fourth Quarter</b>			
T-BUS 110 Office Machines	3	2	4
T-BUS 112 Filing	3	0	3
T-ENG 204 Oral Communication	5	0	5
T-BUS 206E Dictation and Transcription	3	2	4
T-BUS 205 Advanced Typewriting	2	3	3
	<hr/> 16	<hr/> 7	<hr/> 19
<b>Fifth Quarter</b>			
T-BUS 211 Office Machines	3	2	4
T-EDP 104 Introduction to Data Processing Systems	3	2	4
T-BUS 207E Dictation and Transcription	3	2	4
T-BUS 214 Secretarial Procedures	3	2	4
T-SSC 201 Social Science	3	0	3
	<hr/> 15	<hr/> 8	<hr/> 19
<b>Sixth Quarter</b>			
T-ENG 206 Business Communications	5	0	5
T-SSC 202 Social Science	3	0	3
T-BUS 208E Dictation and Transcription	3	2	4
T-BUS 271 Office Management	3	0	3
	<hr/> 14	<hr/> 2	<hr/> 15
<b>Seventh Quarter</b>			
T-PSY 206 Applied Psychology	3	0	3
T-PSY 112 Personality Development	3	0	3
T-BUS 215E Office Application	6	0	6
T-ECO 102 Economics	3	0	3
	<hr/> 15	<hr/> 0	<hr/> 15



# Executive Secretarial

## COURSE DESCRIPTIONS

### T-BUS 102 TYPEWRITING

Introduction to the touch typewriting system with emphasis on correct techniques, mastery of the keyboard, simple business correspondence, tabulation, and manuscripts. Prerequisite: None.

### T-BUS 106 SHORTHAND

A beginning course in the theory and practice of reading and writing shorthand. Emphasis on phonetics, penmanship word families, brief forms, and phrases. Prerequisite: None.

### T-BUS 103 TYPEWRITING

Instruction emphasizes the development of speed and accuracy with further mastery of correct typewriting techniques. These skills and techniques are applied in tabulation, manuscript, correspondence, and business forms. Prerequisite: T-BUS 102 or the equivalent. Speed requirement, 30 words per minute for five min.

### T-BUS 107 SHORTHAND

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

### T-BUS 104 TYPEWRITING

Emphasis on production typing problems and speed building. Attention to the development of the student's ability to function as an expert typist, producing mailable copies. The production units are tabulation, manuscript, correspondence, and business forms. Prerequisite: T-BUS 103. Speed requirement, 40 words per minute.

### T-BUS 108 SHORTHAND

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

### T-BUS 112 FILING

Fundamentals of indexing and filing, combination theory and practice by the use of miniature letters, filing boxes, and guides. Alphabetic, Triple Check, Automatic, Geographic, Subject, Soundex, and Dewey Decimal filing. Prerequisite: None.

### T-BUS 206E DICTATION AND TRANSCRIPTION

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

### T-BUS 205 ADVANCED TYPEWRITING

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

### T-BUS 211 OFFICE MACHINES

Instructions in the operation of the bookkeeping-accounting machines, duplicating equipment, and the dictating and transcribing machines. Prerequisite: T-BUS 110.



## **T-BUS 207E DICTATION AND TRANSCRIPTION**

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

## **T-BUS 214 SECRETARIAL PROCEDURES**

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

## **T-BUS 208E DICTATION AND TRANSCRIPTION**

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

## **T-BUS 271 OFFICE MANAGEMENT**

Presents the fundamental principles of office management. Emphasis on the role of office management including its functions, office automation, planning, controlling, organizing and actuating office problems. Prerequisite: None.

## **T-PSY 112 PERSONALITY DEVELOPMENT**

Designed to help the student recognize the importance of the physical, intellectual, social, and emotional dimensions of personality. Emphasis is placed on grooming and methods of personality improvement. Prerequisite: None.

## **T-BUS 215E OFFICE APPLICATION**

During the sixth quarter only, students are assigned to work in the business, technical, or professional office for six hours per week. The objective is to provide actual work experience for secretarial students and an opportunity for the practical application of the skills and knowledge previously learned, according to the course of study.



# LEARNING LABORATORY

The Jackson County Industrial Education Center Learning Lab

## A Brief Summary of What It Is

The Learning Laboratory program at the Jackson County Industrial Education Center is designed to provide study opportunities in practically any field that might be of interest to residents of the Jackson, Macon, or Swain County area. Programmed study courses to meet the needs of the non-reader as well as the college graduate are available in the laboratory.

Persons interested in participating in the Learning Laboratory, after an initial interview, are provided study materials starting at a point in keeping with their achievement level and are able to progress from there. Students may elect study times adjusted to their own convenience and schedules in that the Laboratory will be in operation on a schedule adjusted to the needs of participants.

The Fundamentals Learning Laboratory system was designed by Dr. Edward T. Brown of the North Carolina Department of Curriculum Studies and Research. Labs are operated throughout the State under the North Carolina Department of Community Colleges in cooperation with the Community Colleges, Technical Institutes, and Industrial Education Centers. At the present time, there are thirty-two Learning Laboratories in operation over the State.

A "Learning Laboratory" is essentially an individual study situation, in which any person eighteen years of age or older may undertake most any level of reading, English, math, social studies, or science that he desires. All of the material used in the lab is programmed; therefore, there is no need for a classroom teacher. In fact, Dr. Brown has attempted to remove all resemblances of a classroom from the Learning Lab.

Programmed material is designed in such a manner as to aid the student in learning information in small sequences called "Frames." Each frame requires an immediate response, and each response is immediately checked. If the student fails to learn, or learns incorrectly, the program makes the correction or re-teaches. In this manner the student progresses at his own rate; he neither has to wait for others to catch up nor slow down to someone else's rate.

The coordinator, the person in charge of the learning lab, has the responsibility of locating the level at which a student can proceed to learn by himself, of formulating the sequence of programs the students will undertake to achieve his desired goal, and of administering the tests that will assure the student that he is approaching his goal.

Because there are no classes in the learning lab, there is no need for anyone to wait until the new quarter to enroll. Each student sets his own work sessions and attends the lab as many days each week and as many hours each day as he thinks he can attend regularly. There are no fees, and any adult can take as many courses as fit his needs.

The majority of students presently enrolled in learning labs are seeking to prepare themselves for the high school equivalency examination or to gain educational improvement of their own choosing. Some, however, are enrolled to upgrade themselves for a possible job promotion; while others are using the program for reinforcement in a technical curriculum or in their college work.

The stated purposes for the existence of the learning laboratories suggest that every effort should be made to meet the needs of those who are interested in participating in the program.

## Admission Requirements For Learning Laboratory

Any adult who has a desire to raise his or her educational level and who is able to benefit from study in the Learning Laboratory may enroll.

## Expenses

There is no charge for study in the Learning Laboratory.



# RELATED COURSES

## COURSE DESCRIPTIONS

### T-ENG 101 GRAMMAR

Designed to aid the student in the improvement of self-expression in grammar. The approach is functional with emphasis on grammar, diction, sentence structure, punctuation, and spelling. Intended to stimulate students in applying the basic principles of English grammar in their day-to-day situations in industry and social life. Prerequisite: None.

### T-ENG 102 COMPOSITION

Designed to aid the student in the improvement of self-expression in business and technical composition. Emphasis is on the sentence, paragraph and whole composition. Prerequisite: T-ENG 101.

### T-ENG 103 REPORT WRITING

The fundamentals of English are utilized as a background for the organization and techniques of modern report writing. Exercises in developing typical reports, using writing techniques and graphic devices are completed by the students. Practical application in the preparation of a full-length report is required of each student at the end of the term. This report must have to do with something in his chosen curriculum. Prerequisite: T-ENG 102.

### T-ENG 204 ORAL COMMUNICATION

A study of basic concepts and principles of oral communications to enable the student to communicate with others. Emphasis is placed on the speaker's attitude, improving diction, voice, and the application of particular techniques of theory to correct speaking habits and to produce effective oral presentation. Particular attention given to conducting meetings, conferences, and interviews. Prerequisite: T-ENG 101.

### T-ENG 206 BUSINESS COMMUNICATION

Develops skills in techniques in writing business communications. Emphasis is placed on writing action—getting sales letters and prospect-uses. Business reports, summaries of business conferences, letters involving credit, collections, adjustments, complaints, orders, acknowledgements, remittances, and inquiry. Prerequisite: T-ENG 102.

### T-ECO 102 ECONOMICS

The fundamental principles of economics including the institutions and practices by which people gain a livelihood. Included is a study of the laws of supply and demand and the principles bearing upon production, exchange, distribution, and consumption both in relation to the individual enterprise and to society at large. Prerequisite: None.

### T-ECO 104 ECONOMICS

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

### T-SSC 201 SOCIAL SCIENCE

An integrated course in the social sciences, drawing from the fields of anthropology, psychology, history, and sociology. Prerequisite: None.



## **T-SSC 202 SOCIAL SCIENCE**

A further study of social sciences with emphasis on economics, political science, and social problems as they relate to the individual. Prerequisite: T-SSC 201.

## **T-PSY 206 APPLIED PSYCHOLOGY**

A study of the principles of psychology that will be of assistance in the understanding of inter-personal relations on the job. Motivation, feelings and emotions are considered with particular reference to on-the-job problems. Other topics investigated are: employee selection, supervision, job satisfaction, and industrial conflicts. Attention is also given to personal and group dynamics so that the student may learn to apply the principles of mental hygiene to his adjustment problems as a worker and a member of the general community. Prerequisite: None.

## **T-BUS 110 OFFICE MACHINES**

A general survey of the 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. Prerequisite: None.

## **T-BUS 115 BUSINESS LAW**

A general course designed to acquaint the student with certain fundamentals and principles of business law, including contracts, negotiable instruments, and agencies. Prerequisite: None.

## **T-BUS 116 BUSINESS LAW**

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

## **T-EDP 104 INTRODUCTION TO DATA PROCESSING SYSTEMS**

Fundamental concepts and operational principles of data processing systems, as an aid in developing a basic knowledge of computers, prerequisite to the detail study of particular computer problems. This course is a prerequisite for all programming courses. Prerequisite: None.

## **T-BUS 120 ACCOUNTING**

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

## **T-BUS 121 ACCOUNTING**

Partnership and corporation accounting including a study of payrolls, federal and state taxes. Emphasis is placed on the recording, summarizing and interpreting data for management control rather than on bookkeeping skills. Accounting services are shown as they contribute to the recognition and solution of management problems. Prerequisite: T-BUS 120.

## **T-BUS 223 ACCOUNTING**

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

## **T-BUS 225 COST ACCOUNTING**

Nature and purposes 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. Prerequisite: T-BUS 121.

## **DFT 1121 BLUEPRINT READING**

Interpretation and reading of blueprints used by industry. A course designed to develop the ability to read and interpret blueprints, charts, instruction and service manuals, and wiring diagrams. Information on the basic principles of lines, views, dimensioning procedures, and notes. Prerequisite: None.



#### DFT 1122 BLUEPRINT READING

Interpretation and reading of blueprints used by industry. Information on basic principles of the blueprint; lines, views, dimensioning procedures and notes. Prerequisite: None.

#### DFT 1123 BLUEPRINT READING

Further practice in interpretation of blueprints as they are used in industry; study of prints supplied by industry; making plans of operations; passing on ideas, information, and processes. Prerequisite: DFT 1122.

#### DFT 1307 GENERAL DRAFTING

An introductory course in drafting for students needing a knowledge of drawing principles and practices for reading describing objects in the graphic language. The student is expected to gain basic skills in drawing with instruments, lettering, geometrical constructions, freehand sketching, and describing objects orthographically with principal views. Freehand sketching and orthographic reading are to be emphasized.

#### ELC 1122 DIRECT AND ALTERNATING CURRENT

A study of the electrical structure of matter and the electron theory, the relationship between voltage, current and resistance in series, parallel and series-parallel circuits. Time will be devoted to the analysis of direct current circuits by Ohm's law and Kirchhoff's law; time will be allotted for the study of sources of direct potentials. Fundamental concepts of alternating current flow; a study of reactance, impedance, phase angle, power and resonance. Time will be allotted for alternating current circuit analysis.

#### ENG 1101 READING IMPROVEMENT

A concentrated effort to improve the student's ability to comprehend what he reads by training him to read more rapidly and accurately. The tachistoscope is used for class drill to broaden the span of recognition, to increase eye coordination and word group recognition, and to train for comprehension in larger units. Reading faults of the individual are analyzed for improvement, and principles of vocabulary building are stressed.

#### ENG 1102 COMMUNICATION SKILLS

Development to the trainee's ability to communicate effectively with other individuals through the medium of good language usage in speaking and writing, to think more clearly, and to reason more forcefully in work problems pertaining to his job.

#### ENG 1103 REPORT WRITING

Brief review of English grammar, spelling, and punctuation. Concentrated effort will be applied to the fundamentals of good writings; sentence structure, proper development of descriptive reporting, and the mechanics of report construction. Practice in writing letters and various report forms will be given and some time will be devoted to oral speech and note taking.

#### MAT 1000 ESTIMATING

This course is designed to give the student a basic understanding of estimating building materials from a blueprint, with emphasis on his major field.

#### MAT 1120 FUNDAMENTALS OF MATHEMATICS

Practical number theory. Analysis of basic operations, addition, subtraction, multiplication and division. Fractions, decimals, powers and roots percentages, ratio and proportion. Plane and solid geometric figures used in industry; measurement of surfaces and volumes. Introduction to algebra used in trades. Practice in depth.

#### MAT 1121 MATHEMATICS

Review of fundamental number concepts, operations, and systems of measurement. Mathematical situations dealing with common and decimal fractions, powers and roots, ratio and proportions, and percentages. A study of algebraic and geometric principles and concepts needed in understanding calculations, formulas, solution of equations, and selected plane and solid geometric forms. Prerequisite: None.



## **MAT 1122 MATHEMATICS**

Foundation for a better understanding of applied mathematics. This course is a review of simple mathematical situations dealing with fractions, decimals, conversion of one to the other, short methods and checks, percentages and applications, ratio and proportion, and powers and roots. It will also present an introduction to axiomatic solution of equations and includes special products and factoring, algebraic fractions and their applications to equations. Prerequisites: None.

## **MAT 1123 MATHEMATICS**

Fundamental geometric concepts and construction of plane and solid figures, surface and volume measurements, and related problems; introduction to trigonometry of the right triangle. Introduces gear ratio, lead screw and indexing problems with emphasis on application to the machine shop. Practical applications and problems will furnish the trainee with experience over the wide range of geometric propositions and trigonometric relations in shop problems, concluded by an introduction to compound angle problems. Prerequisite: MAT 1122.

## **MAT 1124 ALGEBRA**

Basic concepts and operations of algebra: historical background of our base-10 number system; algebraic operations: addition, subtraction, multiplication and division; fractions, letter representation, grouping, factoring, ratio and proportions, variation; graphical and algebraic solution of first degree equations; solutions of simultaneous equations by: addition and subtraction, substitution, graphing; exponents, logarithms, tables and interpolation.

## **MAT 1125 ELECTRICAL MATHEMATICS**

To acquaint the student with the fundamental concepts of algebra; basic operations of addition, subtraction, multiplication and division are covered; time is spent in the solution of first order equations, use of letters and signs, grouping, factoring, exponents, ratios, proportions. Solution of equations, both algebraically and graphically; a study of logarithms and use of tables. An introduction to trigonometric functions and their application to right triangles; a study of vectors for use in alternating current.

## **MAT 1126 TRIGONOMETRY**

Trigonometric ratios; solving problems with right triangles, using tables, and interpolating; solution of oblique triangles using law of sines and law of cosines; graphs of the trigonometric functions; inverse functions, trigonometric equations. All topics are applied to practical problems.

## **MAT 1200 ADVANCED ESTIMATING AND LAYOUT**

This course is designed to give detailed methods of estimating and use of the builders level and transit in layout work. Prerequisite: MAT 1000.

## **WLD 1112 WELDING**

Demonstration by the instructor and practice by student in the welding shop. Safe and correct methods of assembly and operating the welding outfit will be emphasized. Practice will be given for surface welding, bronze welding, silver brazing, and flame cutting methods applicable to mechanical repair work. Prerequisite: None.

## **WLD 1114 SHOP PROCESSES**

Comparison of the unit-production and mass-production systems. Casting, forging and allied processes, welding and sheet metal working processes are demonstrated and discussed. Mass-production methods are studied in relationship to precision dimensional control. Prerequisite: WLD 1112.

## **PHY 1104 APPLIED PHYSICS I**

Introductory course in physics and its applications. Covers systems of measurement, theory of matter, properties of solids, liquids, and gases. Prerequisite: None.



### PHY 1105 APPLIED PHYSICS II

Basic principles of electricity, types of electricity, and its production, transmission, and transformation. Such factors as the electron theory, electrical measurement, magnetism, electromagnetism, and the magnetic effects of electricity constitute major areas of study. Prerequisite: PHY 1104.

### PHY 1106 APPLIED PHYSICS III

Physical principles of force, energy, work and power; equilibrium and the laws of motion; principles of machines, mechanical advantage, and transmission of power in practical applications and the use of vectors and graphical presentations.

### SOC 1101 HUMAN RELATIONS

The purpose of the course is to help the student acquire greater understanding of his relations to other persons through learning and applying some of the basic principles of human psychology. The problems of the individual and his work situation are studied in relations to the established organization of modern business and industry and in relation to government practices and labor organization, with special emphasis on the operating responsibilities of good management.

### SOC 1103 MANAGEMENT PROCEDURES

Management procedures are developed to familiarize the prospective businessman with the many important functions that must be carried on in the operation of a small business or enterprise. An introduction to the business world, problems of small business operation, basic business law, business forms and records, financial problems, ordering and inventorying, layout of equipment and offices, methods of improving business, and employer-employee relations are some of the subjects studied.







# **BASIC ADULT EDUCATION**



# BASIC ADULT EDUCATION

## General Information

### REGISTRATION

Students may register at the Admissions Office at Jackson County Industrial Education Center, Webster Road, Sylva, North Carolina.

### ELIGIBILITY

Persons 18 years old or over will be eligible to take these courses. Prerequisite courses will be indicated in the course descriptions.

### COSTS

A nominal tuition fee may be charged to defray the expense of registration and enrollment, and also for supplies.

Students will be expected to purchase the necessary textbooks.

All fees for books, tuition, and supplies are due and payable at the beginning of the course.

Classes may meet between the hours of 8:30 A.M. and 10:00 P.M. on weekdays and evenings, once or twice weekly. Class periods will customarily be two or three hours in length. A schedule showing meeting nights and hours will be available as soon as possible after registration.

### WHEN COURSES WILL BEGIN

Following registration, classes will begin as soon as an instructor is secured. Every effort will be made to avoid conflicts and to arrange courses for the convenience of students. Students who complete registration will be notified when classes begin.

## Types of Programs

Students may choose one of three types of programs in scheduling courses.

1. Full-time Preparatory: This is a program organized for adults and out-of-school youth who desire to pursue a technical or trade preparatory course on a full-time basis. Classes, laboratories, and shop periods are scheduled for a minimum of six hours a day.

2. Part-time Preparatory: Adults and out-of-school youth may enroll for a trade preparatory or technical course on a part-time basis with classes scheduled at night. This program requires a minimum of three hours daily or five days a week in classroom, shop, and laboratory.

3. Adult Evening Extension, Upgrading, and Updating: This program is organized for apprentices, trainees, tradesmen, mechanics, industrial workers, agricultural workers, farmers, sales and marketing personnel, pesticide handlers, and manufacturers and distributors of agricultural products. Classes are offered at night in such courses as Blueprint Reading, Practical Mathematics, Drafting, Welding, Electricity, Automatic Transmissions, National Electric Code, National Plumbing Code, Pesticides, Fertilizers, Gas and Diesel Engines, Farm Management, Farm Records and Accounts, Swine Production, Farm Credit, Salesman Techniques, Practical Nursing, Business Law, Feed Mill Operation, and Grain Handling. Courses usually last from 18 to 144 clock hours and meet at least two evenings weekly.

## Other Classes

1. Supervisory Development Training: Classes in such subjects as Quality Control, Reading Improvement, Job Instruction, Job Methods, and Job Relations are provided for management, mid-management, supervisors, foremen, and foreladies in trades or industry.

2. Fire Service Training: Fire fighting techniques, pump operations, and fire control methods are taught by certified instructors in this organized instruction in fire service training, especially designed for volunteer fire departments.

4. New and Expanding Industry Class: This program is designed to assist in training workers to staff new or expanding industry.

5. Adult Basic Education.



# Supervisory Development Training Program

In an effort to meet the needs of North Carolina industry, a Supervisory Development Training Program has been developed by the Department of Community Colleges.

The Supervisory Development Training Program has been developed to train persons interested in becoming supervisors and to provide instruction for supervisors at various levels of management as preparation for advancement.

## Programs Available to Supervisors

- I. Individual Course Program
- II. Block of Course Program
- III. Supervisory Development Training Diploma Program

## Requirements for Certificates and Diploma

Certificates and diplomas for supervisory training are awarded on the basis of the following: (1) official enrollment, (2) class participation in discussions and projects, and (3) regular attendance. Certificates and diplomas cannot be awarded to those whose attendance is less than eighty per cent of the clock hours assigned to each course.

### SDT Courses Currently Available:

Course No.	Course Title	Hours
SDT-1:	Principles of Supervision .....	44-48
Part I	Fundamentals of Supervision .....	6-8
Part II	Relationships on the Job .....	8-10
Part III	Communications .....	6-8
Part IV	How to Train Workers .....	6-8
Part V	Performance and Job Evaluation .....	6-8
Part VI	Job Management .....	6
Part VII	Work Improvement .....	6
SDT-2:	Human Relations I .....	10
SDT-3:	Human Relations II .....	22
SDT-4:	Art of Motivating People .....	22
SDT-5:	Economics in Business and Industry .....	22
SDT-6:	Effective Communications .....	22
SDT-7:	Effective Writing .....	22
SDT-8:	Effective Speaking .....	15
SDT-9:	Reading Improvement .....	15
SDT-10:	Work Measurement .....	22
SDT-11:	Job Methods .....	10
SDT-12:	Conference Leadership .....	10
SDT-13:	Instruction Training .....	10
SDT-14:	Creative Thinking .....	22
SDT-15:	Industrial Safety and Accident Prevention .....	22
SDT-16:	Industrial First Aid .....	10
SDT-17:	The Supervisor in North Carolina .....	10
SDT-18:	The Supervisory and Employee Benefits .....	10
SDT-19:	Job Analysis Training .....	12
SDT-20:	Cost Accounting for Supervisors .....	12
SDT-21:	Supervision in Hospitals .....	30-40



## **Fire Service Training**

The units of study are designed to increase the firefighter's technical knowledge and improve his skills in fire-ground operations.

The course outlines (units) are not listed in sequential order and may be presented according to the needs of the individual fire departments. It is suggested, however, that "Firefighting Procedures" conclude any long-range program in which all of the units are studied.

The following titles are the broad classification of material to be presented. For a more detailed explanation, contact the Jackson County Industrial Education Center.

- TIE C/O 6-1    Forcible Entry
- TIE C/O 6-2    Rope Practices
- TIE C/O 6-3    Portable Fire Extinguishers
- TIE C/O 6-4    Ladder Practices
- TIE C/O 6-5    Hose Practices
- TIE C/O 6-7    Salvage and Overhaul Practices
- TIE C/O 6-8    Fire Apparatus Practices
- TIE C/O 6-9    Ventilation
- TIE C/O 6-10    Rescue Practices
- TIE C/O 6-11    Protective Breathing Equipment
- TIE C/O 6-12    Firefighting Procedures

## **Basic Peace Officers Training**

The following program is available for the training of peace officers in the area. The curriculum guide has been prepared by Mr. James C. Harper, a research assistant for the Institute of Government at Chapel Hill.

The following is a partial list of the courses available in this area:

- I.    Courts — Law
- II.   Elements of Offenses
- III.   Law of Arrest
- IV.   Evidence
- V.    Search and Seizure
- VI.   Motor Vehicle Law
- VII.   Court Structure and Procedure
- VIII.   Liquor Law
- IX.   Techniques and Procedures of Arrest
- X.    Law Enforcement Procedures
- XI.   General Criminal Investigation
- XII.   Human Relations
- XIII.   Special Courses

Any interested persons should contact the Center for more specific information



## Adult Basic Education

This program is designed to give opportunities to adults to take courses in basic education such as reading, writing, and arithmetic. Those interested may also take courses on the high school level such as these:

- General Mathematics
- Economics
- American Government
- History
- English
- Natural Science

Through the Division of Cultural Development and Community Services, adults may enroll in vocational programs such as the following:

- Art
- Art Appreciation
- Music Appreciation
- Dress Designing
- Ceramics
- Flower Arranging
- Arts and Crafts

For further information concerning the Adults Evening Program and Adult Basic Education, contact

The Jackson County Industrial Education Center  
Webster Road  
Post Office Box 95  
Sylva, North Carolina 28779  
Telephone 586-4091

## Information on the High School Equivalency Program

An effort will be made to offer school subjects for adults who failed to graduate from high school. In order that credit be given toward graduation, however, it will be necessary that a plan be worked out with the State Department of Public Instruction. Those who fit this circumstance should request by visit, letter, or telephone an appointment for taking placement tests which will determine if the applicant needs further study before applying for the General Educational Development Test. If additional study is indicated, one or more of the following courses will be available on a night schedule for approximately six hours each week:

1. Correctness and Effectiveness of Expression (English).
2. Literature (American and English).
3. Social Studies (history, civics, economics, government, etc.).
4. Mathematics (arithmetic, algebra, geometry, general math, etc.).
5. Natural Science (general science, biology, chemistry, physics, etc.).

Perhaps a more advantageous plan for others desiring certification of having completed a high school course of study is the High School Equivalency Program. Under this plan, individuals may take a series of tests called the General Education Development Tests (GEDT). Those receiving an acceptable passing score of 225 points with no single test score below 35 will be awarded a High School Equivalency Certificate. This certificate is generally accepted on a basis equal to a high school diploma for employment, promotion, or further education.

The GEDT tests cover five broad areas: English Expression, Literature, Mathematics, Social Studies, and Natural Science. They are administered at designated testing centers, the nearest of which is Western Carolina College in Cullowhee.



The following requirements must be met before taking the tests:

1. Minimum age: 18.
2. Residence: At least one year's bona fide residence in North Carolina.
3. File application on a special form, which is available in the office of the Superintendent of Schools.
4. Application must be endorsed and approved by the Superintendent of Schools.
5. Cost: A fee of \$10 for the testing.
6. Have a valid vocational, educational, or other purpose in applying.

Retests may be taken on any or all tests not sooner than six months following the original testing date, or at the end of an intensive training course. Only one retest will be allowed within a twelve-month period.

Suggestions for preparing for the examination are the following:

Enroll in one of the adult classes which are available in the Adult Education Program.

## **NEW INDUSTRY TRAINING**

The training needs of a new or expanding industry are considered as priority items in the services offered by this institution.

Training needs are met by providing skilled instruction (usually by the plants' own supervisors) to the prospective employees within the plant facility. This service is provided at no cost to the industry.



