1960

1960-1962 Southern Illinois University Bulletin Carbondale Campus (Division of Technical and Adult Education)

Southern Illinois University Carbondale

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Objectives of
Southern Illinois University

TO EXALT BEAUTY
IN GOD,
IN NATURE,
AND IN ART;
TEACHING HOW TO LOVE THE BEST
BUT TO KEEP THE HUMAN TOUCH;

TO ADVANCE LEARNING
IN ALL LINES OF TRUTH
WHEREVER THEY MAY LEAD,
SHOWING HOW TO THINK
RATHER THAN WHAT TO THINK,
ASSISTING THE POWERS
OF THE MIND
IN THEIR SELF-DEVELOPMENT;

TO FORWARD IDEAS AND IDEALS
IN OUR DEMOCRACY,
INSPIRING RESPECT FOR OTHERS
AS FOR OURSELVES,
EVER PROMOTING FREEDOM
WITH RESPONSIBILITY;

TO BECOME A CENTER OF ORDER
AND LIGHT
THAT KNOWLEDGE MAY LEAD
TO UNDERSTANDING
AND UNDERSTANDING
TO WISDOM.
Division of Technical and Adult Education

Announcements for 1960-1962
The following issues of the *Southern Illinois University Bulletin* may be obtained without charge from General Publications, Southern Illinois University, Carbondale, Illinois.

General Information  
Summer Session  
Schedule of Classes  
Graduate School  
College of Education  
College of Liberal Arts and Sciences  
School of Agriculture  
School of Applied Science  
School of Business  
School of Communications  
School of Fine Arts  
School of Home Economics  
University Institutes  
Division of Technical and Adult Education
Board of Trustees

TERM
John Page Wham, Chairman, Centralia 1965
Lindell W. Sturgis, Vice-Chairman, Metropolis 1965
Melvin C. Lockard, Secretary, Mattoon 1965
Stella Collins, West Frankfort 1961
Kenneth L. Davis, Harrisburg 1963
Harold R. Fischer, Granite City 1963
Martin F. Oehmke, East St. Louis 1961
George T. Wilkins, (Ex-officio), Springfield
Louise Morehouse, Recorder

Officers of Instruction

Delyte W. Morris, President
Charles D. Tenney, Vice-President for Instruction

CARBONDALE CAMPUS
John E. Grinnell, Vice-President
T. W. Abbott, Acting Dean of Academic Affairs

Dean Ernest J. Simon, M.S. (Illinois) 1950
Assistant Dean Harry B. Bauernfeind, M.A. (Northwestern) 1951
Director of Vocational-Technical Institute Keith Humble, Ph.D. (Missouri) 1955
Supervisor of Adult Education Glenn E. Wills, Ed.D. (Kentucky) 1959

Registrar Robert A. McGrath, Ph.D. (Iowa) 1949
Director of Admissions Willis E. Malone, Ph.D. (Ohio State) 1939
This Bulletin . . .

covers in detail questions concerning the Division of Technical and Adult Education. It does not cover all questions concerning Southern Illinois University. For complete information about the University the prospective student should refer to the General Information bulletin.
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University Calendar, 1960-1961

SUMMER SESSION

Session Begins
Independence Day Holiday
Final Examinations
Commencement

Monday, June 20
Monday, July 4
Wednesday–Thursday, August 10–11
Friday, August 12

FALL QUARTER

New Student Week
Quarter Begins
Thanksgiving Recess
Final Examinations

Friday–Tuesday, September 16–20
Wednesday, September 21
Wednesday, 12 noon–Monday, 8 a.m.
November 23–28
Monday–Saturday, December 12–17

WINTER QUARTER

Quarter Begins
Final Examinations

Tuesday, January 3
Monday–Saturday, March 13–18

SPRING QUARTER

Quarter Begins
Memorial Day Holiday
Final Examinations
Commencement

Monday, March 27
Tuesday, May 30
Wednesday–Tuesday, June 7–13
Wednesday, June 14

Summer classes will begin Tuesday, June 21. During a quarter, day classes will begin on the second day of the quarter. Evening classes (5:45 p.m. or later) will begin on the first day of the quarter.
University Calendar, 1961-1962

SUMMER SESSION*

Session Begins
Independence Day Holiday
Final Examinations
Commencement

Monday, June 19
Tuesday, July 4
Wednesday–Thursday, August 9–10
Friday, August 11

SUMMER QUARTER*

Quarter Begins
Independence Day Holiday
Quarter Ends

Monday, June 19
Tuesday, July 4
Friday, September 1

FALL QUARTER

New Student Week
Quarter Begins
Thanksgiving Recess
Final Examinations

Sunday–Tuesday, September 17–19
Wednesday, September 20
Wednesday, 12 noon–Monday, 8 a.m.
November 22–27
Monday–Saturday, December 11–16

WINTER QUARTER

Quarter Begins
Final Examinations

Tuesday, January 2
Monday–Saturday, March 12–17

SPRING QUARTER

Quarter Begins
Memorial Day Holiday
Final Examinations
Commencement

Monday, March 26
Wednesday, May 30
Wednesday–Tuesday, June 6–12
Wednesday, June 13

Summer classes will begin on Tuesday, June 20. During the fall, winter, and spring quarters, day classes will begin on the second day of the quarter. Evening classes (5:45 p.m. or later) will begin on the first day of the quarter.

* Provision has been made for either an eight-week summer session or a regular summer quarter. The one to be followed will not be known until after the Illinois General Assembly acts on the University’s budget during the 1961 legislative session.
The University

**Southern Illinois University** was established in 1869 as Southern Illinois Normal University. The shortened name became official in 1947 by action of the state legislature.

For some years after its establishment, Southern operated as a two-year normal school. In 1907 it became a four-year, degree-granting institution, though continuing its two-year course until 1936. In 1943 the state legislature changed the institution, which had been in theory exclusively a teacher-training school, into a university, thereby taking official recognition of the great demand in the area for diversified training.

The Graduate School, approved in 1943, at first granted only the Master of Science in Education degree. In 1948 it was authorized to grant also the Master of Arts and Master of Science degrees. In 1952 the Master of Fine Arts degree was added to this list, and in 1955 the Doctor of Philosophy degree was added. The Master of Music and the Master of Music Education degrees were authorized in 1956.

In 1949 the Belleville Residence Center was established and the Alton and East St. Louis residence centers in 1957. In 1958 the Southwestern Illinois Residence Office was created to co-ordinate and direct the University's educational activities in the Madison–St. Clair counties area. In 1959 its name was changed to the Southwestern Illinois Campus and the residence centers to the Alton Center and the East St. Louis Center.

**LOCATION**

The general administrative offices for the University's campuses at Carbondale, Southern Acres, and Little Grassy Lake are located at Carbondale. The Southwestern Illinois Campus, the administrative office for the Alton Center and the East St. Louis Center, is located at Edwardsville.
The facilities at Carbondale now include more than twenty-three hundred acres of land, thirty-six permanent buildings, and numerous temporary buildings. These buildings house classrooms, auditoriums, laboratories, libraries, offices, living quarters, cafeterias, and farm equipment and animals. The Little Grassy Lake and Southern Acres campuses are each about ten miles from Carbondale.

The Southwestern Illinois Campus at Edwardsville offers classes at the Alton and East St. Louis centers. The facilities of the former Shurtleff College have been leased by the University for the operation of the Alton Center. The East St. Louis Center is located at the former East St. Louis High School building.

SESSIONS

The academic year is divided into three quarters. Each quarter is approximately twelve weeks in length.

The fall quarter opens near the middle of September and closes just prior to the Christmas vacation period. The winter quarter begins early in January and ends about the middle of March. The spring quarter begins the latter part of March and ends about the second week in June. Definite dates for each quarter may be found in the University Calendar.

In addition to the three quarters, there is an eight-week summer session which begins immediately following the close of the spring quarter. The summer session consists of a comprehensive program of courses offered by the departments of the University. In addition to the courses which run the full eight weeks, there are workshops and short courses covering shorter periods of time.

REGULATIONS

The University and its various instructional units reserve the right to change the rules regulating admission, instruction, and graduation; to change courses and fees; and to change any other regulation affecting the student body. Such regulations shall go into force whenever the proper authorities so determine, and shall apply both to prospective students and to those who have enrolled in the University.
Division of Technical and Adult Education

In September of 1953, the Division of Technical and Adult Education was established by action of the Board of Trustees, with the appointment of a regularly constituted academic dean. From 1950 to 1953, some types of instruction had been given under different administrative responsibility.

The responsibilities of the division, as set forth in the By-laws and Statutes of the Board of Trustees, Southern Illinois University, are two-fold:

1. To administer the Vocational-Technical Institute as an agency in advisement and instruction of
   a. Students enrolling in vocational and technical credit courses leading toward the two-year degree of Associate in Business or Associate in Technology.
   b. Other students enrolling in one-year vocational or technical courses toward a certificate.

2. To administer non-credit adult education courses taught by staff of the Vocational-Technical Institute, other university college departments, and qualified persons successfully active in industry, business, and the professions.

Both functions of the division have experienced rapid growth due to the offerings which have met particular occupational training needs in business, merchandising, technical, and semi-professional fields. The Vocational-Technical Institute's programs are carefully planned to meet changing demands in business and industry. Most of the adult education courses result from co-operative planning with local and association educational committees.
Vocational-Technical Institute

Associate Professor Walter J. Elder, M.S. (New York) 1954
Associate Professor Marvin P. Hill, M.S. (Colorado) 1956
Associate Professor Francis D. Modlin, M.S. (Kansas State Teachers) 1954
Associate Professor Karl K. Webber, D.D.S. (St. Louis University) 1960
Associate Professor Herbert D. White, Ph.D. (Leipzig, Germany) 1957
Assistant Professor S. Charles Balsamo, D.D.S. (Kansas City) 1958–60
Assistant Professor Daniel Boza, F.A.A.R. (American Academy in Rome, Italy) 1960
Assistant Professor George C. Brown, M.S. (Kansas State Teachers) 1956
Assistant Professor Ruth H. Burnett, M.S. (New York) 1956
Assistant Professor Jason J. Collins, M.S.Ed. (Southern Illinois) 1955
Assistant Professor Charles C. Crookshank, M.A. (Columbia) 1960
Assistant Professor John William Cundiff, J.D. (Northwestern) 1958
Assistant Professor Stanley Gettle, B.S. (Illinois Institute of Technology) 1960
Assistant Professor Charles M. Green, M.S. (Illinois Normal) 1957
Assistant Professor Kenneth D. Jennings, B.S. (Illinois) 1960
Assistant Professor Paul J. Lougeay, B.S. (Illinois) 1954
Assistant Professor John M. McDermott, M.S. (Southern Illinois) 1956
Assistant Professor Frank W. Muhich, M.S.Ed. (Southern Illinois) 1952
Assistant Professor Raymond Schultz 1952
Assistant Professor Lucian D. Willey, B.Ed. (Western Illinois) 1953
Instructor Marion Lorene Davis, M.A. (Wisconsin) 1959
Instructor Richard W. Anschutz, B.S. (Kansas) 1957
Instructor Jack E. Bizzell, M.A. (Southern Illinois) 1958
Instructor Billy James Briggs, M.M.A. (Southwestern State College) 1957–59
Instructor Joseph H. Crenshaw, M.S. (Illinois) 1958
Instructor Charles T. Crowe, M.A. (Southern Illinois) 1958
Instructor Murnice H. Dallman, M.S. (Southern Illinois) 1954
Instructor Robert C. Etherton, M.S. (Southern Illinois) 1954
Instructor Margaret Garrison, M.S.Ed. (Southern Illinois) 1955
Instructor John E. Griswold, M.Ed. (Illinois) 1955
The institute's campus, called Southern Acres, is about ten miles east of Carbondale and five miles west of Marion on old Route 13. Buildings in the administration area of the former Illinois Ordnance Plant have been remodeled, and additional buildings have been added for instruction, food
services, recreation, and housing. Hourly bus service between Southern Acres and the Carbondale Campus is free for all students of the University.

OBJECTIVES OF THE INSTITUTE

The Vocational-Technical Institute was established in September, 1952, to provide college-level programs of instruction of shorter duration than the usual four-year programs. The institute’s programs qualify students for employment at the semiprofessional and technical level in industry and business. A combination of technical courses and general-education courses is included in each curriculum to provide a comprehensive preparation for occupational competence.

Scientific and technical changes have increased the possibilities for employment at the technician’s level. For every professional person, industry and business require two to seven properly trained technicians.

DEGREES AND CERTIFICATES OFFERED BY THE INSTITUTE

The Vocational-Technical Institute offers three types of programs for high school graduates:

1. Two-year programs leading to an Associate in Business degree;
2. Two-year programs leading to an Associate in Technology degree; and
3. One-year programs, each leading to a certificate in practical nursing, cosmetology, welding, calculating machines, bookkeeping-clerical, or stenographic.

The institute’s programs should not be confused with the first two years of any of the four-year programs offered by other academic units of the University. The extent to which credits earned in the various programs of the institute may be transferred to any of the four-year programs, or vice versa, will be determined by the Registrar in co-operation with the dean of the appropriate academic units. Transferrable credits will be evaluated on the basis of the student’s previous course of study in relation to the requirements of his desired new program.

The quarter hour is the unit of credit used at Southern and throughout this bulletin. One quarter hour is two-thirds of a semester hour.
ADMISSION AND REGISTRATION

Admission to the Vocational-Technical Institute should be initiated through the University’s Admissions Office. Application for admission may be made at any time during the year but should be initiated at least thirty days in advance of the desired entrance date to permit necessary processing to be completed. A high school senior should apply at the beginning of his last semester.

At the time a student is admitted, he receives information concerning registration dates and procedures.

Complete details concerning admission, tuition, fees, housing, financial assistance, and student employment are given in the General Information bulletin. For a free copy write to General Publications, Southern Illinois University, Carbondale, Illinois.

TUITION AND FEES

At the present time legal residents of Illinois registered for more than eight hours pay a total of $61.50 per quarter. This includes $42.00 tuition, a $5.00 book rental fee, a $5.00 student union building fund fee, and a $9.50 student activity fee. Out-of-state students pay an additional $50.00 tuition, or a total of $111.50. Students registered for eight hours or fewer pay one-half tuition, one-half book rental fee, full student union building fund fee; they have the option of paying the student activity fee.

ADVISEMENT

Institute students participate in the same entrance test program as students entering four-year programs. Each student is assigned to an adviser who assists him in planning his program in a way to provide him an opportunity to acquire the highest vocational or technical competence.
SPECIAL SERVICES

Students at the Vocational-Technical Institute enjoy the benefits and privileges generally available to students of the University. Meals may be purchased at the cafeteria on the Southern Acres Campus and at the one on the Carbondale Campus. Regular facilities of the Health Service are supplemented by a local doctor, a nearby hospital, and a nurse whose headquarters are on the Southern Acres Campus. Textbooks are issued at the beginning of each quarter through the Textbook Service and are returned at the end of the quarter. Supplies and supplemental educational materials may be purchased at the University Store on the Carbondale Campus. The Placement Service, which is in contact with industrial, business, and professional groups, arranges interviews for graduates and provides credentials to prospective employers. A branch of the University Libraries operates at Southern Acres, and the facilities of Morris Library at Carbondale are available. Hourly bus service between Southern Acres and the Carbondale Campus is free for students and faculty members.

STUDENT ORGANIZATIONS AND ACTIVITIES

Students share in the government of the institute under the supervision of the administration. The Student Council sponsors activities and makes recommendations on school matters to the director.

Recreational facilities are available on the campus for indoor and outdoor activities. Crab Orchard Lake, which is less than a mile away, affords excellent facilities for swimming, fishing, boating, and picnicking.

PROGRAMS IN BUSINESS

Business programs at the Vocational-Technical Institute are of two types: (1) two-year programs in various phases of business leading to an Associate in Business degree and (2) one-year programs each leading to a certificate in calculating machines, bookkeeping-clerical, or stenographic.

The business programs train young men and women for their initial jobs in accounting; executive, legal, or medical secretarial work; clerical bookkeeping; office machine operation; insurance; and retailing. In addition to skill training, related courses are required which give the student business-background information as a basis for occupational advancement.
ASSOCIATE IN BUSINESS DEGREE PROGRAMS

Each candidate for the Associate in Business degree must complete a minimum of ninety-six hours of approved courses plus any deficiency requirements in the chosen field of specialization which are apparent when the adviser prepares the student’s program.

Placement tests will be given to students who have had typewriting and shorthand in high school. Evidence of proficiency, as shown by the placement tests, will permit students to take electives in lieu of some required courses.

Accounting

This curriculum offers thorough and practical training for a position as bookkeeper, payroll clerk, junior accountant, or assistant to an accountant or auditor. Positions with governmental agencies and in public accounting are also filled by graduates of this curriculum.

SUGGESTED CURRICULUM

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<tr>
<th></th>
<th>FIRST QUARTER</th>
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<tbody>
<tr>
<td>101B</td>
<td>Accounting I</td>
<td>2-7</td>
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<td>201B</td>
<td>Accounting IV</td>
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<td>126B</td>
<td>Fundamentals of Business</td>
<td>3</td>
<td>202B</td>
<td>Cost Accounting I</td>
<td>4</td>
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<td>100G</td>
<td>English Fundamentals</td>
<td>3</td>
<td>226B</td>
<td>Business Law II</td>
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<tr>
<td>104G</td>
<td>Mathematics Fundamentals</td>
<td>5</td>
<td>227B</td>
<td>Office Administration and Supervision</td>
<td>2-5</td>
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<tr>
<td>105G</td>
<td>Algebra Fundamentals</td>
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<td>Psychology of Human Relations</td>
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<tbody>
<tr>
<td>102B</td>
<td>Accounting II</td>
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<td>204B</td>
<td>Cost Accounting II</td>
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<tr>
<td>235B</td>
<td>Business Statistics</td>
<td>4</td>
<td>233B</td>
<td>Federal Taxes</td>
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<td>101G</td>
<td>Business Correspondence</td>
<td>3</td>
<td>275B</td>
<td>Credits and Collections</td>
<td>5</td>
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<tr>
<td>101K</td>
<td>Calculating Machines I</td>
<td>3</td>
<td>127G</td>
<td>Economic Principles</td>
<td>5</td>
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<tr>
<td>101S</td>
<td>Typewriting I</td>
<td>3</td>
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<tbody>
<tr>
<td>103B</td>
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<td>5</td>
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<td>Accounting V</td>
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<td>Business Law I</td>
<td>4</td>
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<td>230B</td>
<td>Auditing</td>
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<tr>
<td>116G</td>
<td>Principles of Speech</td>
<td>4</td>
<td>201X</td>
<td>Job Orientation</td>
<td>2</td>
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<tr>
<td>102K</td>
<td>Calculating Machines II</td>
<td>3</td>
<td>121G</td>
<td>Problems of American Democracy</td>
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<tr>
<td>109B</td>
<td>Departmental Accounting</td>
<td>7</td>
<td>232G</td>
<td>Labor Management Relations Problems</td>
<td>4</td>
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<tr>
<td>103K</td>
<td>Calculating Machines III</td>
<td>3</td>
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<tr>
<td>107S</td>
<td>Filing</td>
<td>2</td>
<td></td>
<td>136G</td>
<td>Introductory Sociology</td>
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<tr>
<td>227R</td>
<td>Personnel Management</td>
<td>3</td>
<td>102S</td>
<td>Typewriting II</td>
<td>3</td>
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<tr>
<td>102G</td>
<td>English Problems Analysis</td>
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Recommended Electives

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<td>Departmental Accounting</td>
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<td>Calculating Machines III</td>
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<td>107S</td>
<td>Filing</td>
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<tr>
<td>227R</td>
<td>Personnel Management</td>
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<td>102G</td>
<td>English Problems Analysis</td>
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</table>
Executive Secretarial

This curriculum is planned for students who wish to prepare for positions as professional secretaries in business, industrial, and governmental offices. It includes a combination of general education and skill-building courses which provide a high degree of occupational competence. Graduates qualify for positions as private secretaries and executive secretaries as well as for department or field positions in federal or state civil service.

SUGGESTED CURRICULUM

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<tr>
<th>FIRST QUARTER</th>
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<tbody>
<tr>
<td>101S Typewriting I</td>
<td>205S Typewriting IV</td>
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<tr>
<td>104S Shorthand Theory</td>
<td>209S Shorthand Dictation III</td>
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<tr>
<td>107S Filing</td>
<td>221S Transcription III</td>
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<tr>
<td>100G English Fundamentals</td>
<td>104B Secretarial Accounting</td>
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<td>126B Fundamentals of Business</td>
<td>101K Calculating Machines I</td>
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<td>204S Shorthand Dictation I</td>
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<td>207S Transcription I</td>
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<td>102G English Problems Analysis</td>
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<td>116G Principles of Speech</td>
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<td>103S Typewriting III</td>
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<tr>
<td>206S Shorthand Dictation II</td>
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<td>220S Transcription II</td>
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<td>127B Business Law I</td>
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<tbody>
<tr>
<td>208S Typewriting V</td>
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<td>224S Legal-Dictation Shortcuts</td>
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<td>230S Legal Transcription I</td>
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<tr>
<td>121G Problems of American Democracy</td>
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<tr>
<td>142G Psychology of Human Relations</td>
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<tbody>
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<tr>
<td>233S Dictation IV</td>
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<td>234S Transcription IV</td>
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<tr>
<td>223S Secretarial Office Procedures</td>
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<tr>
<td>101G Business Correspondence</td>
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Recommended Electives

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>225S Medical Dictation I</td>
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<tr>
<td>226S Medical Transcription I</td>
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<tr>
<td>214S Co-operative Secretarial Experience</td>
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</tr>
<tr>
<td>102K Calculating Machines II</td>
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<tr>
<td>103K Calculating Machines III</td>
<td></td>
</tr>
<tr>
<td>101B Accounting I</td>
<td></td>
</tr>
<tr>
<td>227B Office Administration and Supervision</td>
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</tbody>
</table>

Transcription on electric typewriters
Legal Secretarial

This curriculum provides a proper balance in the secretarial skills and in the special and general knowledge a trained legal secretary needs. Graduates may secure positions as legal secretaries with attorneys, judges, and legal consultants or may continue their study in order to become conference or court reporters.

SUGGESTED CURRICULUM

FIRST QUARTER

120H Stenograph Theory 7
101S Typewriting I 3
100G English Fundamentals 3
142G Psychology of Human Relations 4

SECOND QUARTER

121H Stenograph Dictation I 7
123H Stenograph Transcription I 2
103G English Problems Analysis 3
101K Calculating Machines I 3
102S Typewriting II 3

THIRD QUARTER

122H Stenograph Dictation II 7
124H Stenograph Transcription II 2
103S Typewriting III 3
127B Business Law I 4

FOURTH QUARTER

205S Typewriting IV 3
209S Shorthand Dictation III 5
221S Transcription III 2
225S Medical Dictation I 5
226S Medical Transcription I 2

FIFTH QUARTER

208S Typewriting V 2
224S Legal-Dictation Shortcuts 5
230S Legal Transcription I 2
226B Business Law II 4
121G Problems of American Democracy 5

SIXTH QUARTER

210S Typewriting VI 2
227B Office Administration and Supervision 5
104B Secretarial Accounting 5
107S Filing 2
116G Principles of Speech 4

Recommended Electives

101B Accounting I 7
126B Fundamentals of Business 3
112H Jury Charge 3
210H Two-Voice Testimony 4
102K Calculating Machines II 3
231S Courtroom Orientation 2
232S Work Experience 5
136G Introductory Sociology 5

Instruction on voice-writing equipment
Co-operative Medical Secretarial

This curriculum is of special interest to young women with good mental and personal traits and a sincere desire to be of service to the community.

Part-time work experience, in addition to technical and general-background training, is provided in the office of a doctor, dentist, or hospital. This curriculum leads to such positions, in the medical field, as receptionist-secretary, X-ray secretary and record clerk, hospital records clerk, and secretary in the office of a physician, dentist, or hospital.

**SUGGESTED CURRICULUM**

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<thead>
<tr>
<th>FIRST QUARTER</th>
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<tr>
<td>101S Typewriting I</td>
<td>208S Typewriting V</td>
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<td>223S Secretarial Office Procedures</td>
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<td>227S Medical Dictation II</td>
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<td>100G English Fundamentals</td>
<td>228S Medical Transcription II</td>
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<td>142G Psychology of Human Relations</td>
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<td>234S Transcription IV</td>
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<td>207S Transcription I</td>
<td>121G Problems of American Democracy</td>
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<td>102G English Problems Analysis</td>
<td>141G Introduction to Physiology</td>
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<td>215S Work Study Problems</td>
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<td>218S Co-operative Medical Secretary Experience</td>
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<td>141G Introduction to Physiology</td>
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<td>104B Secretarial Accounting</td>
<td>136G Introductory Sociology</td>
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<td>215S Work Study Problems</td>
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<td>218S Co-operative Medical Secretary Experience</td>
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**Insurance**

This curriculum is designed for students who will go into business for themselves or become associated with others engaged in the practice of insurance. The courses are designed to build a suitable background for
entering the insurance field, and to prepare for the Chartered Life Underwriter's examinations upon suitable attainment of experience in the field.

SUGGESTED CURRICULUM

FIRST QUARTER

<table>
<thead>
<tr>
<th>Course</th>
<th>Students</th>
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<td>3</td>
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<tr>
<td>00G English Fundamentals</td>
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<td>04G Mathematics Fundamentals or 05G Algebra Fundamentals</td>
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SECOND QUARTER

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<td>07G Technical Mathematics</td>
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<td>21G Problems of American Democracy</td>
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<td>27G Economic Principles</td>
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THIRD QUARTER

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<tr>
<td>25B Business Statistics</td>
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<td>16G Principles of Speech</td>
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FOURTH QUARTER

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<tr>
<td>236B Insurance Principles I</td>
<td>5</td>
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<tr>
<td>237B Real Estate Appraisal</td>
<td>3</td>
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<tr>
<td>101S Typewriting I</td>
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<td>142G Psychology of Human Relations</td>
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FIFTH QUARTER

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<td>239B Fire and Inland Marine Insurance</td>
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<tr>
<td>240B Property and Casualty Insurance I</td>
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<tr>
<td>102S Typewriting II</td>
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SIXTH QUARTER

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<tr>
<td>233B Federal Taxes</td>
<td>5</td>
</tr>
<tr>
<td>241B Property and Casualty Insurance II</td>
<td>4</td>
</tr>
<tr>
<td>201X Job Orientation</td>
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<td>Elective</td>
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Recommended Electives

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>107S Filing</td>
<td>2</td>
</tr>
<tr>
<td>227R Personnel Management</td>
<td>3</td>
</tr>
<tr>
<td>101N Drawing and Composition I</td>
<td>3</td>
</tr>
<tr>
<td>177G Economics of Distribution</td>
<td>2</td>
</tr>
</tbody>
</table>

Co-operative Retailing

Co-operative retailing is a merchandising program with particular emphasis on retail buying and selling. This two-year offering consists of on-campus instruction and of college-credit work experience in selected merchandising establishments. An opportunity is offered for limited specialization in the areas of apparel, hardline, sundries, groceries, etc.

Learning which results from experience, gained through twenty weeks of on-the-job training during the second school year, is one of the unique features of this program. Those selected merchandising establishments which co-operate with the University to provide this co-operative training program meet certain accepted educational criteria. Through this co-operative arrangement, each student has an opportunity to learn acceptable merchandising information and skills while working in a store.
The University, through its merchandising faculty, makes every effort to provide second year students with satisfactory on-the-job training; however, the student must understand that he has mutual responsibility in finding employment and maintaining satisfactory employee-employer relationships.

In addition to formal course requirements, each student is expected to provide a record of 320 clock hours of satisfactory merchandising experience gained independently of the University before he will be recommended for graduation. This experience can be gained during vacation periods.

Each student must satisfactorily complete at least 104 hours in recommended courses to be eligible for graduation.

**SUGGESTED CURRICULUM**

<table>
<thead>
<tr>
<th>FIRST QUARTER</th>
<th>FOURTH QUARTER</th>
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<tbody>
<tr>
<td>124R Introduction to Retailing</td>
<td>206R Records and Statistics</td>
</tr>
<tr>
<td>176R Product Analysis</td>
<td>(On campus eight weeks)</td>
</tr>
<tr>
<td>116G Principles of Speech</td>
<td>227R Personnel Management</td>
</tr>
<tr>
<td>142G Psychology of Human Relations</td>
<td>232G Labor Management Relations</td>
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<tr>
<td>Elective</td>
<td>Problems</td>
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<td></td>
<td>(Off campus four weeks)</td>
</tr>
<tr>
<td>177R Product Information Laboratory</td>
<td>201R Co-operative Work Experience</td>
</tr>
<tr>
<td>100G English Fundamentals</td>
<td>(On campus eight weeks)</td>
</tr>
<tr>
<td>127G Economic Principles</td>
<td>205R Merchandising Principles</td>
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<tr>
<td>Electives</td>
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<tr>
<td>127R Salesmanship</td>
<td>224R Retail Store Organization and Operation</td>
</tr>
<tr>
<td>177R Product Information Laboratory</td>
<td>127B Business Law I</td>
</tr>
<tr>
<td>179R Retail Mathematics</td>
<td>(Off campus four weeks)</td>
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<tr>
<td>101G Business Correspondence</td>
<td>201R Co-operative Work Experience</td>
</tr>
<tr>
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<td>(On campus eight weeks)</td>
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<tr>
<td>SUMMER SESSION</td>
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<tr>
<td>(Off campus eight weeks)</td>
<td>(Off campus four weeks)</td>
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<td>201R Co-operative Work Experience</td>
<td>201R Co-operative Work Experience</td>
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<td>4-20</td>
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<tr>
<td></td>
<td>(On campus eight weeks)</td>
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<tr>
<td></td>
<td>207R Sales Promotion</td>
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<td></td>
<td>208R Fashion Merchandising</td>
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<td>280R Retail Credits and Collections</td>
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<tr>
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<td>201X Job Orientation</td>
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Recommended Electives:

| 126B Fundamentals of Business | 153J Printing Layout and Design |
| 227B Office Administration and Supervision | 101K Calculating Machines I |
| 121G Problems of American Democracy | 150N Art Appreciation |
| | 101S Typewriting I |
| | 125S Personality Development I |
| | 126S Personality Development II |
CERTIFICATE PROGRAMS IN BUSINESS

Bookkeeping-Clerical

Major emphasis is on training which permits students to seek general clerical jobs in business offices as clerk-typists, payroll clerks, inventory clerks, and stock record clerks.

A minimum of forty-eight hours of approved courses must be completed for graduation.

SUGGESTED CURRICULUM

FIRST QUARTER

<table>
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<th>Hours</th>
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<tbody>
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<td>01S Typewriting I</td>
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<tr>
<td>11L Clerical Procedures</td>
<td>5</td>
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<tr>
<td>00G English Fundamentals</td>
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<td>04G Mathematics Fundamentals</td>
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SECOND QUARTER

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THIRD QUARTER

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</tr>
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<td>121G Problems of American Democracy</td>
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Recommended Electives

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<tbody>
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<tr>
<td>102G English Problems Analysis</td>
<td>3</td>
</tr>
<tr>
<td>107G Technical Mathematics</td>
<td>5</td>
</tr>
<tr>
<td>116G Principles of Speech</td>
<td>4</td>
</tr>
<tr>
<td>127G Economic Principles</td>
<td>5</td>
</tr>
<tr>
<td>136G Introductory Sociology</td>
<td>5</td>
</tr>
<tr>
<td>103K Calculating Machines III</td>
<td>3</td>
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</tbody>
</table>

Calculating Machines

Major emphasis is on training which will enable students to become occupationally proficient in the operation of the major types of machines ordinarily used in business offices.

A minimum of forty-eight hours of approved courses must be completed for graduation.

SUGGESTED CURRICULUM

FIRST QUARTER

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Stenographic

Four academic quarters are normally required for this program. It is an intensive program which provides only the minimum training for an initial stenographic position in business.

A minimum of sixty-two hours of approved courses must be completed for graduation.

SUGGESTED CURRICULUM

FIRST QUARTER

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Recommended Electives

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<tr>
<td>136G</td>
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PROGRAMS IN TECHNOLOGY

Technology programs at the Vocational-Technical Institute are, like the business programs, of two types: (1) two-year programs leading to the Associate in Technology degree, and (2) one-year programs each leading to a certificate in cosmetology, practical nursing, or welding.

The courses are taught by instructors who have had industrial experience in their respective fields in addition to their professional education. The laboratories are equipped with modern instruments and machines comparable to those used in industry and reflecting the needs in technical employment.
ASSOCIATE IN TECHNOLOGY DEGREE PROGRAMS

The purpose of the Associate in Technology degree programs is to give the student a broad foundation in special subjects in the technical field, together with sufficient knowledge of theoretical principles to prepare him for successful participation in the industrial world.

The programs also include courses in general education to help the student understand problems encountered in living and working within his community. These programs are six quarters or more in length and require a minimum of 102 to 114 quarter hours.

Graduates are qualified for positions as estimators, technical assistants, draftsmen, engineering aids, commercial artists, servicemen, factory representatives, and technicians in the fields of radio, electronics, television, building construction, dental laboratory work, industrial woodworking, machine tool, and printing.

The technology programs also provide background courses for further study and training for students who intend to become vocational education teachers.

Architectural Drafting and Design Technology

This curriculum provides training for students in various aspects of the architectural profession. It offers courses of a technical and technically related nature which will provide the student with the basic knowledge required in the architectural profession. It leads to employment as assistant designers, draftsmen, junior engineers, estimators, detailers, and architectural supervisors.

Planning, design, and structural technology are necessary for total understanding of architectural problems.
Several field trips to nearby cities to study historical and contemporary architecture are made each school year. Allowance should be made for the purchase of small amounts of equipment and supplies used in the training program.

A minimum of 109 hours must be completed for graduation.

**SUGGESTED CURRICULUM**

**FIRST QUARTER**

<table>
<thead>
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<tr>
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**SIXTH QUARTER**

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**Recommended Electives**

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<td>232G</td>
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<td>Relations Problems</td>
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</table>

**Automotive Technology**

This curriculum presents an opportunity to acquire complete technical training in the areas of wheel alignment, brakes, ignition, carburetion, hydraulic and electric servo-mechanisms, automatic transmissions, drive trains, and engine rebuilding. This training is designed to acquaint the student with the basic principles of operation, rather than diversified application of those principles, and to reduce the time required to surpass journeyman standards of diagnosis and repair.

A minimum of 104 hours must be completed for graduation.
## SUGGESTED CURRICULUM

### FIRST QUARTER

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<td>Chassis and Brake Systems</td>
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<td>Principles of Speech</td>
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<tr>
<td>201A</td>
<td>Drive Train</td>
<td>7</td>
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<td>142G</td>
<td>Psychology of Human Relations</td>
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### FIFTH QUARTER

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<td>202A</td>
<td>Multiple Gear-Set Transmissions</td>
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<td>175M</td>
<td>Basic Machine Shop Practice</td>
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### SIXTH QUARTER

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<tr>
<td>203A</td>
<td>Engine Rebuilding</td>
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<td>101W</td>
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### Recommended Electives

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<td>229B</td>
<td>Record Keeping</td>
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Working on automotive transmissions

### Building Construction Technology

This curriculum provides training for positions in the maintenance, production, construction, sales, and management fields of the building industry. The courses provide training in the basic fundamentals and the construction methods, materials, equipment, procedures, and structures that
are essential in a successful building operation. Training of personnel for home building, the nation's largest industry, is emphasized although specialization for another field is possible through careful selection of electives.

The courses are specifically designed to train the technician who is the link between the architect and the craftsman who executes the work. Appropriate periods of gaining practical experience and knowledge are necessary to supplement the academic training before the education of the building construction technician is completed. Subsequent to graduation, the student should plan to spend an additional period gaining practical experience which is essential for positions of leadership in the home building industry.

The well-balanced program of studies and training leads to positions as home builders, supervisors, foremen, estimators, building inspectors, timekeepers, building materials salesmen, and materials expediters in the industry.

Field trips to nearby cities to study and observe various types of construction are made each school year. Allowance should be made for the purchase of small amounts of equipment and supplies used in the training program.

A minimum of 105 hours must be completed for graduation.

**SUGGESTED CURRICULUM**

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</table>
Field work is a major activity in building construction technology.

Commercial Art

Experienced commercial artists receive excellent incomes in the growing field of art. This field offers continuous advancement for persons of ability and ambition. Graduates are in demand by a variety of business and industrial firms such as publishers, printers, advertising agencies, department stores, television studios, aircraft manufacturers, and the automobile industry.

The curriculum provides training and experience in sketching, drawing, and designing applied to commercial art. A professionally equipped commercial art studio is used for training purposes.

A student may select any one or two of the following areas for special emphasis: (1) advertising layout and production, (2) advertising and story illustration, (3) technical illustration, and (4) fashion illustration.

Each student will be required to prepare a portfolio of his work before graduation. A minimum of 102 hours must be completed for graduation.

SUGGESTED CURRICULUM

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Dental Laboratory Technology

A dental technician is an individual trained and educated to perform one or more phases of the dental laboratory procedures required in the fabrication of dental prosthetic appliances. He may work in a dentist's office or he may find employment in an approved dental laboratory.
This curriculum is designed to meet the high standards established by the Council on Dental Education and the Council on Dental Trades and Laboratories of the American Dental Association, and has been fully approved by that association, and requires at least 104 hours for graduation.

SUGGESTED CURRICULUM

FIRST QUARTER
101Y Tooth Anatomy and Nomenclature 9
100G English Fundamentals 3
104G Mathematics Fundamentals 5
or
105G Algebra Fundamentals (2)

SECOND QUARTER
102Y Removable Partial Dentures 9
128Y Oral Anatomy 2
113Y Chemical and Physical Principles 3
Elective 2

THIRD QUARTER
103Y Complete Denture Construction 9
277M Metallurgy II 3
Elective 5

RECOMMENDED ELECTIVES
230N Technical Illustration I 3-12
229B Record Keeping 2
101G Business Correspondence 3
111G Basic Physics I 4

FOURTH QUARTER
201Y Beginning Crown and Bridge Work 9
121G Problems of American Democracy 5
Elective 3

FIFTH QUARTER
202Y Advanced Crown and Bridge Work 9
142G Psychology of Human Relations 4
Elective 4

SIXTH QUARTER
203Y Ceramics, Precision Attachments 9
202X Professional Ethics 2
Elective 6

Electronics Technology

This curriculum consists of the fundamentals, theories, and application of principles in electronics to provide the necessary background for employment in many areas of industrial electronics and the radio and television field.

A minimum of 105 hours must be completed for graduation.

SUGGESTED CURRICULUM

FIRST QUARTER
101T Audio Systems 7
125T Principles of Electronics 5
104G Mathematics Fundamentals 5

SECOND QUARTER
102T Electrical Tests and Measurements 7
126T Fundamentals of Electronic Circuitry 5
100G English Fundamentals  
107G Technical Mathematics  

THIRD QUARTER  
103T Circuit Analysis I  
127T Principles of Analysis and Diagnosis I  
110G Trigonometry  
112G Basic Physics II  

FOURTH QUARTER  
201T Circuit Analysis II  
225T Principles of Analysis and Diagnosis II  
228T Federal Communications Commission License  

FIFTH QUARTER  
202T High Frequency Tests and Measurements  
226T Fundamentals of Antennas and Television Circuitry  
101G Business Correspondence  
142G Psychology of Human Relations  

SIXTH QUARTER  
203T Circuit Analysis and Alignment  
227T Principles of Analysis and Diagnosis III  
229T Fundamentals of Color Television  
201X Job Orientation  

Recommended Electives  
175D Technical Drafting I  
177D Technical Drafting III  
127R Salesmanship  
101S Typewriting I  
111G Basic Physics I  
116G Principles of Speech  
232G Labor Management Relations Problems  

Laboratory instruction in circuit analysis  

Machine Drafting and Design Technology  

This curriculum is designed to provide students with knowledge and abilities in drafting and design of a mechanical nature for employment in industries needing these services.  

Emphasis is placed on product and tool design, engineering standards, manufacturers' standards, and the selection of methods for efficient and economical production. Also included are courses dealing with the properties and heat treatment of metals, applied mathematics, mechanisms, and human relations aspects of our American industrial life.
Graduates of this curriculum are prepared for positions in industry as laboratory technicians, research and development engineering assistants, technical supervisors, draftsmen, and jig and fixture designers. With additional experience, students may aspire to positions as industrial supervisors, machine and tool designers, tool buyers, production expeditors, and cost estimators.

### Suggested Curriculum

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<thead>
<tr>
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<th>Course Name</th>
<th>Credits</th>
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**Recommended Electives**

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### Machine Tool Technology

This curriculum is designed to provide knowledge and abilities which are required in industries for services of technical operators of machines and equipment.

Emphasis is placed on modern machines and hand tools, production tooling, jig and fixtures, dies, and methods for efficient and economical production and manufacture of industrial products and machines. Also in-
cluded are courses dealing with the properties and heat treatment of metals, applied mathematics, technical drafting, and human relations aspects of our American industrial life.

Graduates of this curriculum accept jobs as inspectors, test technicians, tool and die makers, planners, operators of mechanical equipment, tool inspectors, and tool room technicians. With additional experience graduates may advance to positions of tool room supervisors, tooling foremen, expediters, and tool and machine salesmen.

A minimum of 104 hours must be completed for graduation.

SUGGESTED CURRICULUM

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Recommended Electives

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Visual inspection of a thread with a fifty-to-one optical comparator
**Printing Technology**

Employment opportunities in the graphic arts industry, composed of printing, publishing, and allied businesses, are available to students who have college training and are familiar with the technical processes of printing.

This curriculum prepares students to enter printing trades after completing work in hand and machine composition, presswork, and bindery processes and fundamental work in offset duplicator operation. Courses in proofreading, layout and design, and estimating are included to broaden the student’s background.

A minimum of 108 hours must be completed for graduation.

**SUGGESTED CURRICULUM**

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<td>121G Problems of American Democracy</td>
<td>153J Printing Layout and Design</td>
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<td>177G Economics of Distribution</td>
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**Suggested Electives**

- 127B Business Law I
- 177G Economics of Distribution
- 116G Principles of Speech
- 140N Advertising Illustration
- 201N Technical Illustration I
- 127R Salesmanship

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*Operating a line-casting machine*
Woodworking Technology

This curriculum provides training for positions in the rapidly expanding woodworking industries. New developments in wood utilization in building and construction, manufacturing, and wood research laboratories provide increasing opportunities in the various woodworking occupations. Graduates find employment as construction estimators, kiln technologists, production specialists, and technicians in furniture and millworking plants.

A minimum of 102 hours must be completed for graduation.

**SUGGESTED CURRICULUM**

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CERTIFICATE PROGRAMS IN TECHNOLOGY

Cosmetology

Cosmetology is one of the registered trades under the supervision of the Department of Registration and Education of the State of Illinois. The standards for the trade are established by state law.

The curriculum in cosmetology offered by the institute meets State of Illinois standards as to the total time, teaching staff, equipment, facilities, library, and course content. The curriculum requires three quarters and one summer session.

SUGGESTED CURRICULUM

FIRST QUARTER

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THIRD QUARTER

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FOURTH QUARTER

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<tr>
<td>229B</td>
<td>Record Keeping</td>
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Knowledge of the Wall Plate is important to the cosmetologist.

Practical Nursing

The practical nurse is a person trained to care for selected subacute convalescent and chronic patients and to assist the professional nurse in a team relationship, especially in the care of those acutely ill. She provides nursing service in private homes and in institutions. She may be employed
by the lay public, hospitals, or health agencies. A practical nurse works only under the direct orders of a licensed physician or the supervision of a registered professional nurse.

This curriculum includes seventeen weeks of class work and thirty-one weeks of hospital training in actual care of patients in affiliated hospitals. During the clinical period, a minimum amount of earnings is possible. Graduates of this program must pass the state examination in order to be licensed.

**SUGGESTED CURRICULUM**

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<tr>
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**Welding**

This curriculum provides training in the various types of welding equipment, the welding of mild steel in all positions, machine cutting, hand cutting, testing of welds, and welding of non-ferrous metals. Each student is given individual attention in his shop training.

*Completing a section of structural steel welding*
This program has been designed to prepare students for employment as tool room welders, construction welders, job shop welders, and welding inspectors.

The courses as outlined are required for the welding certificate. To complete the required number of quarter hours the student must choose additional courses from the list of recommended electives. A minimum of fifty hours must be completed for graduation.

SUGGESTED CURRICULUM

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<td>125W</td>
<td>Theory of Oxy-Acetylene Welding</td>
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<td>100G</td>
<td>English Fundamentals</td>
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Recommended Electives

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<td>110G</td>
<td>Trigonometry</td>
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<tr>
<td>121G</td>
<td>Problems of American Democracy</td>
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<td>Principles of Speech</td>
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<tr>
<td>142G</td>
<td>Psychology of Human Relations</td>
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<td>101G</td>
<td>Business Correspondence</td>
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<td>229B</td>
<td>Record Keeping</td>
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COURSE DESCRIPTIONS

101A–2 to 7. AUTOMOTIVE ENGINES. The student disassembles and assembles laboratory units according to approved trade procedures. He learns to develop manipulative skills, use of measuring tools, proper shop practices, and the importance of manufacturers' service manuals for reference use.

102A–2 to 7. BRAKE AND STEERING. Principles learned in 126A are practiced and applied to laboratory units. When adequate skills and abilities are acquired, the student is permitted to effect repairs and corrections on live units.

103A–2 to 7. IGNITION AND CARBURETION. Students learn to repair and test those units having to do with fuel and electrical systems; emphasis is on the proper use of diagnostic equipment.

125A–5. INTERNAL COMBUSTION ENGINES. This course encompasses construction, repair, and operation of the automobile engine with accent on the principles of operation.

126A–5. CHASSIS AND BRAKE SYSTEMS. A survey of the bushing and ball joint types of suspension with emphasis on the theory of wheel balancing, factors of steering geometry, power steering, and power brakes.

127A–5. THEORY OF IGNITION AND CARBURETION. A study of the principles of operation of carburetors, storage batteries, electrical generators
and regulators, starting motors, ignition systems, lighting and signaling devices.


201A-2 to 7. DRIVE TRAIN. Laboratory units are used to familiarize the student with drive train components. When sufficient progress has been made he is permitted to diagnose and repair live differentials and hydraulic transmissions.

202A-2 to 7. MULTIPLE GEAR-SET TRANSMISSIONS. Multiple gear automatic transmissions are accepted for diagnosis and repair in this course. Prerequisite: 201A.

203A-2 to 7. ENGINE REBUILDING. The student learns to grind valves and seats, hone bushings, replace valve seats, rebore cylinders, knurl pistons, and grind crankshafts, i.e., skills that require working to minute tolerances. Prerequisite: 201A.

220A-5. AUTOMATIC TRANSMISSIONS. An advanced study of automatic transmissions used on late model automobiles. Special effort is made to offer general information which will be applicable to transmissions that may be produced in the future. Prerequisite: 128A.

227A-3. ENGINE REBUILDING. Follows the same logical order that the mechanic-machinist would follow in rebuilding an engine. The theory of operation and repair of the engine parts is discussed with accent on the machining operations and tolerances. Prerequisite: 125A.

101B-2 to 7. ACCOUNTING I. A study of the balance sheet, profit and loss statements, trial balance, journalizing and posting, sales, purchases, adjusting and closing balance, and periodic summaries.

102B-5. ACCOUNTING II. Accounting principles in the preceding course are applied to partnerships and corporations. Notes and interest, valuation of assets, the voucher system, payroll and tax accounting, and prepaid items are studied in this course. Prerequisite: 101B.

103B-5. ACCOUNTING III. Corporate organization and records, stocks and bonds, surplus and dividends, departmental and branch accounting, accounting for manufacturing analysis, and interpretation of financial statements. Prerequisite: 102B.

104B-2 to 5. SECRETARIAL ACCOUNTING. Basic principles of accounting are presented from the viewpoint of the secretary. The accounts of private individuals, professional men, institutions, and small business firms of various types are studied.

109B-2 to 7. DEPARTMENTAL ACCOUNTING. Accounting principles are applied to special departments such as sales, purchasing, payroll, real-estate holdings, insurance and equipment. Prerequisite: 203B.

126B-3. FUNDAMENTALS OF BUSINESS. A survey of business services intended to give the student a general knowledge of the modern business world and a basis for determining occupational possibilities and requirements.

127B-4. BUSINESS LAW I. Introduction of torts, contracts, sales, liens, negotiable instruments, law of insurance agency, master and servant, real property and landlord and tenant.

201B-4. ACCOUNTING IV. An advanced study of accounting records, merchandising and manufacturing accounts, end of year procedures, cor-
ctions of profits of prior periods, accounting statements, analysis of working capital, analytical and comparative per cents, analytical ratios. Prerequisite: 103B.

202B-4. COST ACCOUNTING I. The relation of cost accounting to management for control; general principles involved in constructing a cost system; distribution of cost-materials, labor and burden; cost record; operating reports; joint and by-product cost and budgetary control. Prerequisite: 103A.

203B-4. ACCOUNTING V. An advanced study of current assets, investments, tangible fixed assets, intangible fixed assets, liabilities, reserves, and the statement or application of funds. Prerequisite: 201B.

204B-4. COST ACCOUNTING II. Process cost accounting; costing by-products and joint products; budgeting; estimated cost system; standard cost; cost control and analysis. Prerequisite: 202B.

226B-4. BUSINESS LAW II. Legal problems in normal business relationships, including the law of contracts, agency, sales, bailments, negotiable instruments, insurance, private property, and business organization. Prerequisite: 127B.

227B-2 to 5. OFFICE ADMINISTRATION AND SUPERVISION. Principles of management as applied to office work. Emphasis on the role of the office in business management; office organization; physical facilities of the office; office services, procedures, standards, and controls; and records management.

229B-2. RECORD KEEPING. The complete cycle of records necessary in running a business in buying, selling, inventories, payroll, and stock control.

230B-5. AUDITING. The preparation of the audit program, working papers, and reports are considered. In addition, selected problems dealing with various asset, liability, and capital accounts are worked and discussed. Prerequisite: 204B.

233B-5. FEDERAL TAXES. Problem material in income, estates, and gift taxes as they affect individuals and various forms of business organization. Prerequisite: 103B.

234B-3. REAL-ESTATE PRINCIPLES. Real-estate economics, terminology and definitions, real-estate law, real-estate investment.

235B-4. BUSINESS STATISTICS. Collection, tabulation, and graphic presentation of data, averages and index numbers, economic trends, cycles, correlation, and application.

236B-5. INSURANCE PRINCIPLES I. History, ethics, and economics of insurance; types of insurance; Illinois state laws relating to transactions of insurance; agency and brokerage contracts; types of casualty and property insurance.

237B-3. REAL ESTATE APPRAISAL. The practical approach to solving appraisal problems of residential, rural, urban, and commercial properties. Includes on-the-site analysis of properties.

238B-5. LIFE INSURANCE I. Principles underlying the structure of life insurance and its various operations, ways life insurance can be applied to the needs for personal estate, property estate, and business.

239B-3. FIRE AND INLAND MARINE INSURANCE. General principles of insurance, with emphasis upon fire insurance and inland marine insurance.
240B–4. PROPERTY AND CASUALTY INSURANCE I. Principles of insurance as applied to illness, injury, and property damage claims.

241B–4. PROPERTY AND CASUALTY INSURANCE II. First party claims, third party claims, policy coverages, damage appraisals, law of torts, legal doctrines, and injury evaluations.

250B–3. REAL ESTATE FOR HOME BUILDERS. A survey of the real-estate field with emphasis on the essentials that concern the consumer. The purpose is to develop a full understanding of realty as a commodity and to equip the student with the fundamentals essential to a successful building operation.

251B–3. RECORD KEEPING FOR HOME BUILDERS. Fundamental training in business practice and record keeping. A study of business records and papers; recording transactions; classification and interpretation of cost data; special problems; preparation of financial statements and reports.

275B–5. CREDITS AND COLLECTIONS. Organization and operation of the credit department including sources and analysis of credit information, collection methods, and correspondence. Credit management emphasized.

101C–6 to 12, 102C–6 to 12, 103C–6 to 12, 104C–6 to 12. COSMETOLOGY LABORATORY I, II, III, IV. Laboratory practice in the skills involved in giving a permanent wave, pin curl and finger wave, scalp treatment, haircut, facial massage, hand and arm mold, hair tint and bleach, and manicure.

125C–5. COSMETOLOGY THEORY I. Study of the skin and hair and how each is affected by massage and treatment. Elementary chemistry of the various materials used in the treatment of the scalp, hair, and skin. Disorders of hair, scalp, and skin. Sanitation and sterilization as applied to cosmetology. That part of Illinois law pertaining to cosmetology is introduced.

126C–5. COSMETOLOGY THEORY II. Further study of Illinois law affecting cosmetology; circulation of blood and lymph. Hair tints and bleaches; neurology, including the effect of massage upon the nerves; use of electricity in the treatment of hair, scalp, and skin.

127C–5. COSMETOLOGY THEORY III. Salon management including location, equipment, ventilation, sanitation, supplies, inventories, purchasing, and personnel problems. Salesmanship with special emphasis on the selling of personal service.

101D–2 to 7. MACHINE DRAFTING AND DESIGN I. Supervised practice in vertical lettering and in applying the principles of technical drawing to a variety of problems.

102D–2 to 7. MACHINE DRAFTING AND DESIGN II. Supervised practice in pictorial drawing, inking, using American Standard welding symbols, and applying the principles of descriptive geometry to a variety of problems.

103D–2 to 7. MACHINE DRAFTING AND DESIGN III. Supervised practice in the making of sets of drawings for both unit and mass production of small machines and products involving machine tool operations. Use of many handbooks, manuals, and catalogs ordinarily found in the libraries of engineering departments.

110D–2 to 7. ARCHITECTURAL PROJECTIONS. Use of the instruments; lettering; projections; intersections; developments; oblique; isometric; shades and shadows; perspectives. Laboratory and lecture.
115D-2 to 7. RESIDENTIAL ARCHITECTURE I. Lettering; use of the instruments; projections; isometric drawings; perspective and presentation drawings; study and development of basic floor plans of a residential nature. Laboratory and lecture.

116D-3. RESIDENTIAL ARCHITECTURE II. Study and development of projects in contemporary residential design; basic influence which environment, materials, and psychological and physical functions exert on man's development of shelter. Laboratory and lecture. Prerequisite: 115D or consent of adviser.

117D-3. RESIDENTIAL ARCHITECTURE III. Study and development of projects in contemporary residential design of a complex nature; emphasis on proper orientation, materials, environment, and psychological and physical functions as the solution to the problem. Laboratory and lecture. Prerequisite: 116D or consent of adviser.

121D-4. ARCHITECTURAL DESIGN I. Beginning study of architectural planning, design, composition, and presentation. Laboratory and lecture. Prerequisite: 110D or consent of adviser.

125D-3. MACHINE DRAFTING AND DESIGN THEORY I. Essentials of the draftsman's language dealing with sketching, lettering, geometric constructions, instrumental drawing, multiview projection (including sections and single auxiliaries), dimensioning, threads, fasteners, springs, assembly, and detail drawings.

126D-3. MACHINE DRAFTING AND DESIGN THEORY II. Pictorial drawing principles and techniques; descriptive geometry principles involved in successive auxiliary views, true dihedral angle determination, revolutions, intersections, developments, and bent-part design; inking techniques; and welding specification.

127D-3. MACHINE DRAFTING AND DESIGN THEORY III. Principles and practices in precision dimensioning (especially for interchangeable manufacture), drawing of gears and piping, design of cams, and reproduction and changing of drawings.

146D-3. ARCHITECTURAL RENDERING I. Pencil drawing from still life and landscape; use of the elements of drawing. Laboratory and lecture.

147D-3. ARCHITECTURAL RENDERING II. Pencil drawing and watercolor from still life and landscape; study of theory of color. Laboratory and lecture. Prerequisite: 146D or consent of adviser.

148D-3. ARCHITECTURAL RENDERING III. Watercolor from still life and landscape. Laboratory and lecture. Prerequisite: 147D or consent of adviser.

150D-3. INTRODUCTION TO ARCHITECTURE. Illustration of basic forms and their organization; discussion of professional ethics; conduct of architectural practice; methods of making estimates; contracts and contract documents. Lecture.

151D-3. MATERIALS AND METHODS OF CONSTRUCTION I. Comprehensive study of light frame construction including foundations, manufacture and performance characteristics of materials, framing systems, finish materials, development of construction details and working drawings. Laboratory and lecture. Prerequisite: 110D, 115D, or consent of adviser.

152D-2. SITE ENGINEERING. Site selection considerations; land surveys;
survey computations, contours, uses of contours, leveling, computations of cut and fill, drainage and grading, staking out buildings and roads, check list for site plans. Laboratory and lecture. Prerequisite: 110D or consent of adviser.

153D-3. SITE PLANNING AND CONSTRUCTION I. Elementary problems emphasizing physical development of specific sites involving population densities, architectural forms, grading, public utilities, traffic and parking, and functioning street patterns. Laboratory and lecture. Prerequisite: 110D or consent of adviser.

154D-3. INTRODUCTION TO RESIDENTIAL BUILDING. A survey of the home-building industry with emphasis on the common problems; economic outlook, design and construction trends, financing, special housing, labor, and legislation. Lecture.

175D-3. TECHNICAL DRAFTING I. Principles of orthographic projections, conventional representations and symbolism, dimensioning and other specifications, and practice in the reading and sketching of technical drawings, the language of industry.

176D-3. TECHNICAL DRAFTING II. Technical drawing with instruments. Working drawings including sectional and auxiliary views, threads and fasteners, details and assemblies, welding, and precision dimensioning for interchangeable and noninterchangeable manufacture.

177D-3. TECHNICAL DRAFTING III. The drawing of jigs, fixtures, and special tools.

178D-3. BASIC WOODWORKING DRAFTING. Conveying ideas by means of freehand sketches, orthographic projections including auxiliary, isometric, and oblique projections, dimensioning, as applied to detail and assembly working drawings in the woodworking industries.

179D-3. FURNITURE DRAFTING AND DESIGN. A study of furniture design and the development of working drawings and blueprints as applied to furniture construction.

201D-2 to 7. MACHINE DRAFTING AND DESIGN IV. Selected problems in mechanisms which include completed drawing ready for manufacture.

202D-2 to 7. MACHINE DRAFTING AND DESIGN V. Selected problems of machines which include completed drawing ready for manufacture.

203D-2 to 7. MACHINE DRAFTING AND DESIGN VI. Selected problems of jigs and fixtures. Actual manufactured parts are used as a basis to design the tooling necessary for producing these parts in a small lot, medium lot, and large lot. The operational procedure of production is also required.

210D-3. CONSTRUCTION I. A technical study of masonry, concrete, metal, and synthetics used in home construction. Time for the development of skills is limited to the very basic processes and tools. Laboratory and lecture. Prerequisite: 250D or consent of adviser.

211D-3. CONSTRUCTION II. A course in the fundamentals of bench woodworking, carpentry, and cabinetmaking with emphasis on the skills and knowledge common to home building construction. Laboratory and lecture. Prerequisite: 210D or consent of adviser.

212D-3. CONSTRUCTION III. Continuation of 211D with the addition of finishing and preservation. Laboratory and lecture. Prerequisite: 211D or consent of adviser.

220D-2 to 6. ARCHITECTURAL DESIGN II. Continuation of 121D with em-
phasis on small structures. Laboratory and lecture. Prerequisite: 121D or consent of adviser.

221D-2 to 6. ARCHITECTURAL DESIGN III. Continuation of 220D with emphasis on more complex structures and building groups. Laboratory and lecture. Prerequisite: 220D or consent of adviser.

222D-2 to 6. ARCHITECTURAL DESIGN IV. Continuation of 221D with emphasis on more complex low rise structures and building groups. Laboratory and lecture. Prerequisite: 221D or consent of adviser.

225D-3. MACHINE DRAFTING AND DESIGN THEORY IV. Analysis of mechanical movements selected from automatic machines and various other forms of mechanical apparatus embodying ideas or principles applicable in designing machines or devices requiring automatic features or mechanical control.

226D-3. MACHINE DRAFTING AND DESIGN THEORY V. Stress, strain, elasticity, ultimate strength, safety factor. Shear, tensile, and torsional stresses. Beam strength, loading deflection, bending moment, shear strength. Torsion in shafts.

227D-3. MACHINE DRAFTING AND DESIGN THEORY VI. The principles of production machine tooling involving machine tools such as turret lathes, production mills, drill presses, and grinding machines with the use of jigs and fixtures.

246D-3. ARCHITECTURAL RENDERING IV. Water color from still life and landscape. Laboratory and lecture. Prerequisite: 148D or consent of adviser.

247D-4. MECHANICS AND STRENGTH OF MATERIALS. Elementary technical study of force systems; centroids and moments of inertia of areas, deformation and stress, flexure and deformation of beams, combined stresses in short blocks, columns. Lecture. Prerequisite: 110G or consent of adviser.

250D-3. MATERIALS AND METHODS OF CONSTRUCTION II. Semi-fireproof construction, framing systems and foundations, manufacture and performance characteristics of materials, finish materials, development of construction details and drawings. Laboratory and lecture. Prerequisite: 151D or consent of adviser.

251D-3. MATERIALS AND METHODS OF CONSTRUCTION III. Fireproof construction; long span systems; industrial and commercial structures; finish materials, preparation and interpretation of construction detail working drawings, and shop drawings. Laboratory and lecture. Prerequisite: 250D or consent of adviser.

252D-2 to 6. MATERIALS AND METHODS OF CONSTRUCTION IV. Selected problems in architectural construction with emphasis on working drawings; detailing, schedules and specifications; quantity surveys. Report of individual investigations and study required. Laboratory and lecture. Prerequisite: 251D or consent of adviser.

254D-4. MECHANICAL EQUIPMENT OF BUILDINGS. Code requirements and specifications affecting mechanical equipment; design and installation of plumbing; heating, ventilating, and air-conditioning equipment; electrical wiring; illumination and vertical transportation. Lecture. Prerequisite: Fourth-quarter status or consent of adviser.

258D-4. STRUCTURAL ELEMENTS. Structural design as a correlated part of the design and planning. Analysis of building loads; action of forces,
strength of materials; theories of shear, flexure, and deflection; design of wood, steel, and concrete structural members. Lecture. Prerequisite: 110D or consent of adviser.

259D–2 to 6. ARCHITECTURAL DESIGN V. Selected problems in architectural design of high rise buildings and building groups. Laboratory and lecture. Prerequisite: 222D or consent of adviser.

260D–2 to 6. MATERIALS AND METHODS OF CONSTRUCTION V. Selected problems in building construction with emphasis on working drawings; detailings; construction equipment; contract documents; construction costs and estimates. Report of individual investigations and study required. Laboratory and lecture. Prerequisite: 252D or consent of adviser.

265D–2. SANITARY SERVICES FOR RESIDENTIAL BUILDINGS. Study of design and installation of sewage and water-supply systems; plumbing estimates and costs; rough layouts; code requirements and trade practices affecting electrical installations. Lecture. Prerequisite: consent of adviser.

266D–2. ELECTRICAL SERVICES FOR RESIDENTIAL BUILDINGS. Study of design and installation of electrical wiring, illumination and special electrical services; electrical estimates and quantity surveys; code requirements and trade practices affecting electrical installations. Lecture. Prerequisite: consent of adviser.

267D–2. HEATING AND AIR–CONDITIONING FOR RESIDENTIAL BUILDINGS. Study of design and installation of modern heating, ventilating and air-conditioning equipment; estimates and costs; selection of equipment; code requirements and trade practices affecting installations. Lecture. Prerequisite: consent of adviser.

280D–3. HISTORY OF ARCHITECTURE. Analysis of the development of architecture from the ancient to the present time as it is related to the environmental and cultural setting. Lecture.

282D–3. INTERIOR DESIGN I. Selected individual or group projects in the design of interior spaces and furnishings. Prerequisite: consent of adviser.

283D–3. ARCHITECTURAL CONSTRUCTION ANALYSIS I. Selected individual or group projects in materials and methods of architectural construction as applied to the selection and use of contemporary architecture.

284D–3. STRENGTH OF MATERIALS. Beam analysis; shear, moment, and deflection diagrams; relationship of external forces and stresses produced; centroids; moments of inertia; theory of bending. Prerequisite: 247D or consent of adviser.

285D–3. ARCHITECTURAL DESIGN ANALYSIS I. Selected individual or group projects in architectural design. Laboratory and lecture. Prerequisite: consent of adviser.

301D–3. THEORY OF STRUCTURES I. Principles of steel and timber construction, theory of design of structural elements, and use of the handbooks. Prerequisite: 284D or consent of adviser.

302D–3. THEORY OF STRUCTURES II. Principles of reinforced concrete construction, theory of design of structural elements and use of handbooks. Prerequisite: 284D or consent of adviser.

101F–2 to 8. INTRODUCTORY WOODWORKING. Includes construction principles and procedures in sizing and shaping wood with modern hand and power tools. Individual project work is planned and completed.
VOCATIONAL-TECHNICAL INSTITUTE

102F-2 to 8. CABINET AND MILLWORK. Includes principles and procedure planning, development of skills and knowledge in fabrication of cabinet and millwork characteristic of that used in home construction.

103F-2 to 8. FURNITURE CONSTRUCTION. The construction principles, procedures, skills, and knowledge required in the construction of high grade furniture.

128F-2 to 4. WOOD TECHNOLOGY. Study of the structure, identification and physical properties of wood.

130F-2 to 4. LUMBER SEASONING. Advanced work in air drying and kiln drying for the student who desires to specialize in lumber seasoning. Kiln operation, tune up, maintenance, and design. A full size kiln at the Wood Products Pilot Plant is available for practical seasoning work.

131F-2. LUMBER GRADING. Study of and practice with the National Hardwood Rules, Southern Pines Rules, and West Coast Rules. Tally methods and grading for special products.

132F-2. WOOD PRESERVATION. Wood preservatives: their use, limitations, and methods of application.

201F-2 to 8. LIGHT FRAME CONSTRUCTION. Development of carpentry, joinery, and building construction techniques and skills common to light frame construction. Conventional methods of construction are emphasized.

202F-2 to 8. PRE-FABRICATED FRAME STRUCTURES. Development of skills and related technical information common to the manufacture, erection, and completion of pre-fabricated and pre-cut types of light frame structures.

203F-2 to 8. WOOD PRODUCTION MANUFACTURING. Industrial production methods in the manufacture of wood products, including the study and application of quality and quantity controls, production scheduling and routing of safety, plant layout, and equipment and supply problems.

229F-2 to 6. WOOD FINISHING. Principles of wood finishing and the characteristics of finishing materials. Development of skills and knowledge in the uses and applications of various types of wood finishes.

300F-3. PLANT ORGANIZATION AND OPERATION. The study of the organization and layout of woodworking plants; materials handling methods; safety programs; organization and management of personnel; motion and time studies, quality control, purchasing, inventory, industrial cost.

100G-3. ENGLISH FUNDAMENTALS. Writing practice, mostly expository. Student uses chiefly his own ideas and materials and aims at the development of skill in organizing and arranging these ideas and materials; emphasis on unity and coherence in the whole composition. An acquaintance with the library, an amount of directed reading, studies of the structure of the sentence, and conferences on the work.

101G-3. BUSINESS CORRESPONDENCE. A brief review of fundamentals and a complete study of letter forms and letter mechanics. Various types of business letters and report writing with adequate practice in writing application, sales, adjustment, inquiry, and credit letters. Prerequisite: 100G or equivalent.

102G-3. ENGLISH PROBLEMS ANALYSIS. For the student who will specialize in stenographic and secretarial occupations. Individual problems
in punctuation, spelling, and grammatical construction are analyzed for
the purpose of development of skill in word usage.

104G–5. MATHEMATICS FUNDAMENTALS. A refresher on the mathemat-
ical tools needed by the student in his work and in his later courses.
Includes a review of arithmetic and some basic topics of elementary
algebra.

105G–2. ALGEBRA FUNDAMENTALS. A briefer refresher than 104G. Most of
the time is devoted to algebra.

107G–5. TECHNICAL MATHEMATICS. The study of algebra with specific
orientation of the vocational needs of the students: Separate sections for
the various curricula as designated in the Schedule of Classes.

110G–3. TRIGONOMETRY. Usual topics of trigonometry.

111G–4. BASIC PHYSICS I. A study of mechanics, mechanical vibrations,
sound, wave motion, and light, to give a basic understanding of these
phases of physics.

112G–4. BASIC PHYSICS II. A study of the basic laws of heat measurements
and transfers, fundamentals of magnetism, electrical charges and cur-
rents, electrical measurement, and fundamentals of acoustics.

114G–2. ELEMENTS OF HUMAN BIOLOGY. Lectures and demonstrations
presenting a basic concept of the human body. A background for courses
in dental anatomy.

115G–3. INORGANIC AND ORGANIC CHEMISTRY. A study of inorganic
and organic dental materials including impression and duplicating com-
ounds, denture base materials, acrylic resin teeth and bridges, dental
waxes, and porcelains.

116G–4. PRINCIPLES OF SPEECH. Development of an understanding of basic
principles and proficiency in the skills involved in everyday commun-
ication.

121G–5. PROBLEMS OF AMERICAN DEMOCRACY. Problems pertaining
to civil liberties, pressure groups and propaganda, the electoral system,
and general governmental organization and procedures.

127G–5. ECONOMIC PRINCIPLES. The economic system, markets, produc-
tion, value, price distribution, the cycle, comparative system.

136G–5. INTRODUCTORY SOCIOLOGY. Survey of Sociology. Interrelation-
ships of personality, social organization and culture, major social pro-
cesses; structure and organization of social groups.

141G–5. INTRODUCTION TO PHYSIOLOGY. A survey of the functions of
the human body. Designed for students in various fields desiring a basic
but comprehensive knowledge of human physiology.

142G–4. PSYCHOLOGY OF HUMAN RELATIONS. Training in development
of personality, ability to analyze problems involving human relations,
and good foundations for personnel relations. Actual cases of human-
relations problems in business and industry are studied with a view
toward developing the technique of working with superiors, associates,
and subordinates.

177G–2. ECONOMICS OF DISTRIBUTION. A review of our economic sys-
tem, markets, production value, price, etc, emphasizing the place and
function of distribution in our national and world economy.

200G–2. ECONOMICS FOR HOME BUILDERS. An introduction to the sci-
ence of economics; examinations of fundamental principles; understand-
ing of value, price, cost, rent, interest, wages, profit, and business cycles.
201G-2. ETHICS FOR HOME BUILDERS. Ethical standards and theories of right and justice underlying business relations. Stress on problems involving social morality, the profit motive, prices, and unfair competition.

232G-4. LABOR MANAGEMENT RELATIONS PROBLEMS. Personnel policies, selection and employment, employee benefits, labor organizations and governmental activities, employee-employer relations, grievance procedure, wage and salary standards, and use of practical industrial psychology.

279G-3. PUBLIC RELATIONS–COMMUNITY PROBLEMS. A study of how a retail business can execute its responsibilities in the community and develop good will for the store and the trading area in general.

112H-3. JURY CHARGE. Material is dictated from actual jury charges from official records. Because this form is different from ordinary dictation, it is necessary for the prospective court reporter to have this practice.

120H-2 to 7. STENOGRAPH THEORY. A study of the principles of stenograph with emphasis and intensive drill on brief forms, phrases, and word families. Correct reading and writing techniques are emphasized. Dictation speeds are gradually increased to sixty words per minute for five minutes.

121H-2 to 7. STENOGRAPH DICTATION I. Primarily for stenograph majors. Provides for learning an automatic vocabulary of brief forms, special forms, and word families. Writing practices on familiar materials and introduction of new material in dictation are provided. Students are gradually introduced to sustained writing situations. Emphasis on speeds from sixty to eighty words per minute. Prerequisite: 120H.

122H-2 to 7. STENOGRAPH DICTATION II. Speeds up to 100 words per minute. Emphasis on brief forms, word families, and special forms. Students are gradually introduced to sustained writing situations with emphasis on mailable transcripts. Prerequisite: 121H or equivalent.

123H-2. STENOGRAPH TRANSCRIPTION I. Introduction to the principles of transcription, placement of letters, spelling, vocabulary building, and application of grammar. Transcription of business letters and reports according to business standards. Prerequisite: 120H.

124H-2. STENOGRAPH TRANSCRIPTION II. Practice on transcription of notes taken from the dictation of unfamiliar material, transcription of “cold” notes and notes taken from “natural” dictation. Emphasis on speed development and correct usage in transcription. Prerequisite: 123H.

210H-4. TWO-VOICE TESTIMONY. Two people dictate, alternating their questions and answers, to give the student practice in taking dictation under these conditions, which occur in court procedure. Prerequisite: 124H.

101J-2 to 7. PRINT SHOP I. Introduction to printing involving hand composition of type and problems encountered by the compositor. Practice in setting type by hand, spacing, punctuating, and making-up simple forms.


103J-2 to 7. PRINT SHOP III. Linotype and Intertype operation, with emphasis on learning correct touch system, and practice in many types of Linotype composition.
125J-5. PRINT SHOP THEORY I. A study of the point system, printers’ measure, spacing, and justification.

126J-3. PRINT SHOP THEORY II. A study of rule and tabular composition, correct method of setting rules, borders, and ornaments.

127J-3. PRINT SHOP THEORY III. A study of the correct keyboard system for the slug-casting machine, word division, etc.

152J-3. PROOFREADING. A study of word division, spelling, punctuation, and how they apply to printing.

153J-3. PRINTING LAYOUT AND DESIGN. Training in making layouts for advertisements, direct mail pieces, etc. A study of type faces, use of white space, etc.

201J-2 to 7. PRINT SHOP IV. Technical knowledge of line-casting machine maintenance. Machines are studied by units, and the quarter culminates in a group project of dismantling and erecting a Linotype machine.

202J-2 to 7. PRINT SHOP V. Elementary presswork, with emphasis on hand-fed presses. Study of ink, paper, and other materials used in presswork.

203J-2 to 7. PRINT SHOP VI. Presswork and bindery problems, with emphasis on automatic platen and cylinder presses. Use of stitcher, paper cutter, paper drill, and other simple bindery tools and machines.


226J-3. PRINT SHOP THEORY V. A study of the correct ink to use with different papers, problems of the different presses, make-ready, etc.

227J-3. PRINT SHOP THEORY VI. A study of bindery problems such as folding, stitching, and paper-cutting.

251J-3. ESTIMATING AND COSTS IN PRINTING. A study of correct methods of pricing jobs. The Porte catalog is used as a basic text.

101K-3. CALCULATING MACHINES I. Introduction to office machines such as calculators, comptometers, adding-listing machines, and bookkeeping machines used in business establishments.

102K-3. CALCULATING MACHINES II. Emphasis on building skill in the operation of key-stroke and rotary-type calculators. Prerequisite: 101K.

103K-3. CALCULATING MACHINES III. High speed drills to develop occupational competency in the operation of the comptometer, the Burroughs Calculator, and the other key-driven business machines. Prerequisite: 102K.

111L-5. CLERICAL PROCEDURES. Non-stenographic skills in record-keeping are practiced. Preparing stock records, perpetual inventories, invoices, bills of lading, checks, receipts, and statements; auditing invoices and proving petty cash.

101M-2 to 7. LATHE AND BENCH WORK LABORATORY. Supervised practice of operations with hand tools and the engine lathe. Exercises and projects.

102M-2 to 7. SHAPER AND PLANER LABORATORY. Procedure and practice in operations using the shaper and planer. Measuring instruments and the various set-ups which are incorporated with these machines are also used.

103M-2 to 7. PRECISION MEASUREMENT TECHNIQUES LABORATORY. Practice by using gauges, indicators, comparators, gauge block set-ups measuring machines, and optical measurement on actual piece parts as they are being machined in the laboratory.
125M-5. LATHE AND BENCH THEORY. Provides the technical knowledge required for the proper performance of hand tools and engine lathe, the geometry of tools for engine lathes, and orientation of other machine tools used in industry.

126M-3. SHAPER AND PLANER THEORY. Various types of shapers, slotters, planers, and set-ups are analyzed; also, types of tools used for different kinds of metals.

127M-3. PRECISION MEASUREMENTS. The history and principles of measurement. Study of fixed gauges, thread gauges, thread systems, dial gauges, test indicators, gauge blocks, optical measurement, angular measurement, measuring machines, surface roughness, and lapping compounds.

175M-3. BASIC MACHINE SHOP PRACTICE. Machine shop for the allied trades stressing the use of hand tools, drilling, and basic lathe work.

176M-3. MANUFACTURING PROCESSES I. Chip machining. Understanding machine shop practice, fundamental processes, hand tools, machine tool, and precision equipment. For students of machine drafting.

177M-3. MANUFACTURING PROCESSES II. Chipless machining. Understanding production-line machines, sand castings, hot and cold forging, plastic processes, die casting, presswork, and mass production processes. For students of machine drafting.

201M-2 to 7. MILLING MACHINE LABORATORY. Emphasizes making jigs, fixtures, dies, and cutting tools with the use of machine tools and other essential accessories described in course 225M.

202M-2 to 7. PRECISION GRINDING LABORATORY. Practice on actual manufactured parts. Includes set-ups on the surface, cylindrical, and cutter grinders. Industry's standards of finish are used as a basis for performance and completion of the piece part.

203M-2 to 7. PRODUCTION MACHINE LABORATORY. Emphasizes the set-up of tooling for a production machine such as the turret lathe, production mill, and drill press with the use of jigs and fixtures. Complete set-ups and machining of a quantity of parts for time study, with tolerances within manufacturers' standards.

225M-3. MILLING MACHINE THEORY. Study of various types, sizes, and manufacturers of milling machines; the shape, sizes and types of milling cutters; the holding devices, calculations of speed and feed, calculations of spur, bevel, helical and spiral gearing with the use of the index head; use of coolants; indicators and end standards for co-ordinate method of hole location.

226M-3. PRECISION GRINDING TECHNIQUES. Emphasizes grinding principles as applied to both tool room and production grinding. Analysis of grinding wheel shape, size, abrasives, and structure. Types of grinding machines such as surface, cylindrical, off-hand, tool and cutter, disc, and centerless grinding.

227M-3. PRODUCTION MACHINES AND TOOLING. Historical review of the machine tool industry. The principles of tooling as applied to semi-automatic and automatic machine tools with the use of jigs, fixtures, and special tooling. Cost and routing of materials as applied to the operational procedure of producing small, medium, and large lots of parts.

276M-3. METALLURGY—PRECIOUS METALS. Study of precious metals and their alloys; the constitution of alloys and their heat treatment; the dimensional changes through working and heating; the casting of gold alloys, their preparation for investment castings; microstructures.

277M-3. METALLURGY II. General characteristics of the metallic elements, theory of alloys, constitutional and phase diagrams, ferrous metals and the seven important non-ferrous metals and their principal alloys, standard hardness testing, tensile testing, microstructures, corrosion and work hardening, SAE and AISI classification of steels, and the selection and use of medium alloy and tool-and-die steels.

101N-3, 102N-3, 103N-3. DRAWING COMPOSITION I, II, and III. Drawing any object in any position through a study of perspective and other form concepts; bringing objects together in relationships that are both dynamic and balanced through a study of line, form, value, color, and texture as elements of design. Studio problems and field sketching.

125N-3, 126N-3, 127N-3, 225N-3, 226N-3, 227N-3. FIGURE DRAWING I, II, III, IV, V, and VI. Study of the human figure for action proportions and construction. Sketches from life and from costumed models reveal the relationships of the body to clothing. Interpretation of the figure and apparel are studied in relation to advertising and fashion illustration.


140N-3, 141N-3, 142N-3. ADVERTISING ILLUSTRATION I, II, III. Practical problems of advertising design and illustration. Students develop skill in using pen, brush, ink, and wash. They gain experience in modern techniques for preparing art for reproduction in black and white and in color. Training in using color and screen-tint overlays, masking, photo retouching, airbrush, paste-up, and mark-up of art of engraving and printing.

150N-3. ART APPRECIATION. Development of understanding of art through a survey of fine arts with emphasis upon relationship to daily environment and the field of commercial art.

201N-3 to 12, 202N-3 to 12, 203N-3 to 12. ADVERTISING LAYOUT AND PRODUCTION I, II, III. The student develops skill in detailed planning and production of advertising. This includes preparation of layouts, planning of copy and typography, and much of the finished art work. Ways of providing instructions to those who work with the advertising and production man in the preparation of advertising.

210N-3 to 12, 211N-3 to 12, 212N-3 to 12. ADVERTISING AND STORY ILLUSTRATION I, II, III. Development of skill in the rendering of illustrations of merchandise for advertising as well as decorative illustrations and stylized cartoons for advertising story illustration, greeting cards, children’s books and television art.
220N-3 to 12, 221N-3 to 12, 222N-3 to 12. FASHION ILLUSTRATION I, II, III. Development of style and taste in the illustration of fashion apparel and accessories in mediums appropriate to newspaper, magazine, and catalog advertising.

230N-3 to 12, 231N-3 to 12, 232N-3 to 12. TECHNICAL ILLUSTRATION I, II, III. Preparing technical illustrations at a professional level for the aircraft, automotive, and industrial fields with special emphasis on rendering and reproduction suitability.

101P-2 to 7, 102P-3. NURSING PRACTICE AND THEORY I, II. Supervised practice of nursing techniques for practical nurses. Includes theory applied to practice in nursing procedures, conditions of illness, care of well child, care of mothers and newborn, diversional and rehabilitation activities, personal and vocational relations.


130P-2. HOMEMAKING. (24 clock hours) Basic home-making skills and related instruction as applied to the practical nurse.

131P-4. FOODS. (50 clock hours) Meal planning, marketing, preparation, table service, and normal dietary needs.

132P-3. HEALTH I. (52 clock hours)

1. Personal Health. (13 clock hours) The scope of scientific knowledge which enables man to maintain vigorous health and guard against disease. Principles of hygiene.

2. Community Health. (16 clock hours) Health of people as a group; social and governmental activities responsible for environmental control and health promotion.

3. Body Structure and Function. (23 clock hours) Study of specific systems of the body. Development of the concept of interlocking dependence of one system on another and the contributions of each system to the well-being of the entire body.

133P-1. HEALTH II. (10 clock hours) Continuation of categories one and three of 132P.

124R-4. INTRODUCTION TO RETAILING. This course is introductory to all retail programs. It deals with the distribution functions, modern store organization, history and background of modern retailing, and the basic responsibilities of the beginning co-operative retail student.

127R-2 to 6. SALESMANSHIP. Principles and techniques of selling, primarily in retail stores. Outside selling included.

176R-3. PRODUCT ANALYSIS. Basic theories and principles used in analyzing merchandise. A background course which will later aid in collecting and interpreting pertinent data on specific types of merchandise.

177R-2 to 15. PRODUCT INFORMATION LABORATORY. Student will acquire information concerning a wide variety of products or study intensely concerning a particular line of merchandise, e.g. groceries, hardlines, sundries, or apparel. Use, quality, appropriateness, handling, care, design, value, and demand. Prerequisite: 176R or consent of instructor.

179R-5. RETAIL MATHEMATICS. Analysis and calculations encountered daily in merchandising. Mark-up, mark-down, stock records, profits, expense, discount, budgeting.
201R-4 to 20. CO-OPERATIVE WORK EXPERIENCE. Full-time training in a University-approved merchandising establishment. Each student receives some instruction and supervision by a retailing faculty member. The employer is the immediate supervisor during this period and the student abides by his regulations. Assigned study projects are completed. Training experience is discussed in frequent meetings.

205R-4. MERCHANDISING PRINCIPLES. The buying process (what, where, how, and when to buy), orders, terms, prices, invoices, types of buying, trade relations, duties of the buyer or department manager.

206R-5. RECORDS AND STATISTICS. Survey of systems of keeping and interpreting systematic retail records and statistics. Analyzing merchandising and expense control data. Related technically to 205R. Prerequisite: 179R.

207R-2 to 6. SALES PROMOTION. Fundamentals of sales promotion and its relationship to advertising and display. The principles of composition, color, and design, the evaluation of media and agents, and the procedures involved in the planning and preparation of advertising and display to promote sales. The appraisal of the total effectiveness of a sales promotion program and its application to sound public relations.

208R-2 to 6. FASHION MERCHANDISING. The influence of fashion in all phases of merchandising. Aid in forecasting fashion trends. Analysis and appreciation of color and line in design. Interpretation of the underlying factors which determine fashion.

224R-4. RETAIL STORE ORGANIZATION AND MANAGEMENT. Organization and operation of a retail business. Forms of ownership, financing a new business, location, building and layout, non-selling duties, insurance, and store policies.

227R-3. PERSONNEL MANAGEMENT. Retail personnel management, employee relations, policies and techniques. Methods of recruitment, selection, placement, and training.

280R-3. RETAIL CREDITS AND COLLECTIONS. Modern consumer credit management, consumer credit sales practices, collection procedures, legal aspects, human relations in the credit department, credit letters, trends.

101S-3. TYPEWRITING I. An introductory course in touch typewriting. Developing a net typing rate of at least 30 words per minute and the ability to type simple business correspondence, tables, and manuscripts. Students who demonstrate competence may be excused from this course.

102S-3. TYPEWRITING II. Development of basic typing skill. Emphasis on the mechanics of typewriting in preparation for transcription. Business letters and their various styles. A rate of forty words per minute is required. Prerequisite: 101S or equivalent.

103S-3. TYPEWRITING III. Advanced letter writing problems of the usual business forms, manuscripts, and report typing. A rate of fifty words per minute is required. Prerequisite: 102S or equivalent.

104S-2 to 7. SHORTHAND THEORY. An introductory course in Gregg Shorthand. Chalkboard demonstrations, drills on word lists, practice in reading materials, intensive drill on brief forms, phrases, and word families. Students who demonstrate competence may be excused from this course.

107S-2. FILING. Basic principles of modern filing systems; alphabetic, subject, numeric, and geographic. Student work with practice filing equipment,
learning the rules of indexing, cross referencing, coding, charge-outs, color devices, and setting up a modern system.

125S-2. PERSONALITY DEVELOPMENT I. To help students improve their personalities, Social usage, personal appearance, and good grooming; living and working with others; emotional and social maturity; and the effect of good nutrition and health on personality.

126S-2. PERSONALITY DEVELOPMENT II. Continuation of 125S. Adapting one's self to office regimen, with emphasis on voice modulation, diction, correct posture, poise, effective attitudes, social amenities, and correct grammar.

204S-2 to 5. SHORTHAND DICTATION I. Builds the student’s shorthand vocabulary of brief forms, special forms, and word families. English fundamentals, punctuation rules, and spelling aids. A rate of eighty words per minute is required. Prerequisite: 104S or equivalent.

205S-3. TYPEWRITING IV. Intermediate speed drills combined with rapid straight typing for the building of competent business typing skill. Major emphasis on accuracy and speed building with review of office production typing. Prerequisite: 103S or equivalent.

206S-2 to 5. SHORTHAND DICTATION II. Speed building in dictation with emphasis on mailable transcripts. Sustained writing practice, building speed to one hundred words per minute. Prerequisite: 204S.

207S-2. TRANSCRIPTION I. Instruction in the principles of transcription, placement of letters, punctuation, spelling, vocabulary building, and application of grammar; transcription of business letters and reports according to business standards. Prerequisite: 104S.

208S-2. TYPEWRITING V. Intensive drills and exercises to build accuracy and speed. One day each week is given to office production typing under timed conditions. Prerequisite: 205S or equivalent.

209S-2 to 5. SHORTHAND DICTATION III. Drills build speed to one hundred ten words per minute. Emphasis on dictation for transcription under timed conditions. Attention given to most-used business phrases, common business words and terms, spelling, English fundamentals, and shorthand theory. Prerequisite: 204S.

210S-2. TYPEWRITING VI. High-speed typing drill is employed using speed sentences, phrases, continuity paragraphs. One day per week is given to timed production office typewriting problems. Prerequisite: 208S or equivalent.

214S-5. CO-OPERATIVE SECRETARIAL EXPERIENCE. The student spends either half days or two weeks at a time in an office to gain experience in the field of his major (in stenographic, non-stenographic, accounting, or office machines). The half-day plan is used within a radius of 20 miles of the institute; in others, part-time placement is planned in the student’s home town, or environs, wherever possible.

215S-5. WORK STUDY PROBLEMS. The student spends half days in a seminar with the co-ordinator of the work-study plan to improve techniques as used in the co-operative part-time position; to study problems and activities as they are met in the work-study plan. Remedial work where necessary on an individual basis, depending on the type of work and problems in the part-time placement under the co-operative plan.

218S-4. CO-OPERATIVE MEDICAL SECRETARY EXPERIENCE. The stu-
dent spends either half days or two weeks at a time in an office of a physician, dentist, or hospital to gain experience in the field of his major. The half-day plan is used in offices within a radius of 20 miles of the institute; in others, part-time placement is planned in the student's home town, or environs, wherever possible.

220S–2. TRANSCRIPTION II. Building speed and accuracy in transcription. Practice in transcribing from cold notes, office style dictation, and other types of dictation. Builds speed to twenty-five words per minute. Emphasis on spelling, punctuation, and English usage. Prerequisite: 207S.

221S–2. TRANSCRIPTION III. Emphasis on office situations, such as checking information and dictated material, taking dictation at the typewriter, and transcription from cold notes. Builds speed to thirty words per minute. Prerequisite: 220S.

223S–2 to 5. SECRETARIAL OFFICE PROCEDURES. Lectures and laboratory practice in handling office work in a detailed manner. The student assumes the responsibility of receiving callers, handling correspondence, planning itineraries, care of appointments, preparation of legal documents, personnel records, and telephone technique. Techniques of successful placement for employment are integrated with the placement counselor of the institute. Prerequisite: 209S.

224S–2 to 5. LEGAL–DICTATION SHORTCUTS. Special dictation, involving special legal terms, vocabulary building, shortcuts in writing legal terms in Gregg shorthand, or in machine shorthand. Special forms involving phrasing, advanced brief forms, and technical terms needed in legal secretarial work. Prerequisite: 209S or equivalent.

225S–2 to 5. MEDICAL DICTATION I. Advanced dictation involving medical terminology, phrasing, and vocabulary. Special terms and definitions are used in preview of materials found in the dictation for transcription. Emphasis on meaning, spelling, and shorthand writing of medical prefixes and suffixes. Prerequisite: 206S.

226S–2, 228S–2. MEDICAL TRANSCRIPTION I AND II. Conducted on the laboratory basis, the student transcribes from dictated notes, using terminology from general medicine, and specialized related areas. Attention is given to the preparation of medical case histories, X-ray reports, post-operative diagnosis, etc.

227S–2 to 5. MEDICAL DICTATION II. Increasing speed and proficiency. Advanced medical terms, special cases of case histories, medical phrases, and special forms. Special medical-secretarial techniques stressed. Prerequisite: 225S.

230S–2. LEGAL TRANSCRIPTION I. Transcription from dictation notes with content peculiar to the work of a legal secretary or court stenographer. Special work in preparation of briefs, court testimony, and legal documents with State of Illinois Standard Form.

231S–2. COURTROOM ORIENTATION. Designed particularly for the legal secretary who may spend time in the courtroom. Particular attention to court attitude, courtesies, behavior, and correct procedures demanded by the presiding judge.

232S–5. WORK EXPERIENCE. The student spends half-days on the job to gain actual experience in the special field. Co-ordinated by a staff member.
233T-2 to 5. DICTATION IV. Considerable drill and instruction in the use of shortcuts in Gregg shorthand dictation to attain rates up to 140 words per minute. Prerequisite: 209S.

234S-2. TRANSCRIPTION IV. Transcription from high-speed dictation notes, using business, commercial, and industrial vocabulary. Attention to word usage, sentence structure, punctuation, and spelling. Prerequisite: 221S.

101T-2 to 7. AUDIO SYSTEMS. Construction, installation, and testing of audio systems and general application of electronic principles.

102T-2 to 7. ELECTRICAL TESTS AND MEASUREMENTS. Testing, measuring, and circuit tracing of intercommunication systems, recording equipment, oscillators, amplifiers, and receiving equipment. Laboratory.

103T-2 to 7. CIRCUIT ANALYSIS I. Analysis and diagnosis applied to receiving equipment, amplifiers and test equipment. Laboratory.

125T-2 to 5. PRINCIPLES OF ELECTRONICS. AC and DC theory of resistance, capacitance, inductance, and vacuum tubes.

126T-2 to 5. FUNDAMENTALS OF ELECTRONIC CIRCUITRY. Theory of power supplies, amplifiers, oscillators, photo-electric circuitry, and radio circuitry.

127T-2 to 5. PRINCIPLES OF ANALYSIS AND DIAGNOSIS I. Theory of analysis and diagnosis as applied to power supplies, radio receivers, audio systems, and test equipment.

201T-2 to 5. CIRCUIT ANALYSIS II. Analysis and diagnosis applied to oscilloscopes, electronic test equipment, transistor circuitry, and amplifying equipment. Laboratory.

202T-2 to 5. HIGH FREQUENCY TESTS AND MEASUREMENTS. Tests and measurements as applied to antenna systems and television circuitry. Laboratory.

203T-2 to 5. CIRCUIT ANALYSIS AND ALIGNMENT. Analysis and alignment applied to monochrome television circuitry, color television circuitry, and test equipment. Laboratory.

225T-2 to 5. PRINCIPLES OF ANALYSIS AND DIAGNOSIS II. Theory applied to electronic test equipment, transistor circuitry and wave form interpretation.

226T-2 to 5. FUNDAMENTALS OF ANTENNAS AND TELEVISION CIRCUITRY. Theory.

227T-2 to 5. PRINCIPLES OF ANALYSIS AND DIAGNOSIS III. Theory applied to television circuits.

228T-3. FEDERAL COMMUNICATIONS COMMISSION LICENSE. Fundamentals of transmitting circuitry, FCC laws, and rules. Test by authorized FCC officer must be taken before final grade is awarded.

229T-3. FUNDAMENTALS OF COLOR TELEVISION. Theory of colorimetry and color television circuitry.

101W-2 to 7. OXY-ACETYLENE WELDING SHOP. Shop experience in oxy-acetylene welding. The welding of steel in all positions and the welding repair of such metals as aluminum and cast iron. Correct use of the oxy-acetylene cutting blow pipe with experience in both manual and machine cutting.

102W-2 to 7. ARC WELDING SHOP I. Introduction to metallic arc welding on heavy gauge steel. The use of AC and DC machines. Introduction to the various positions.
103W-2 to 7. ARC WELDING SHOP II. Metallic arc welding on heavy and light gauge steel, in all positions. Special emphasis on special application electrodes, inert arc welding (Heliare), and its applications.

125W-3. THEORY OF OXY-ACETYLENE WELDING. The proper use of oxy-acetylene equipment such as, welding blowpipes, generators, oxygen and acetylene cylinders and regulators. The weldability and techniques of welding non-ferrous and ferrous metals and their alloys. Discussion and demonstration.

127W-3. THEORY OF ARC WELDING. The study of metallic arc, and inert arc welding. The types of welding machines, the kinds of electrodes, their uses, their identifications, and welding inspection.

175W-3. OXY-ACETYLENE AND ELECTRIC ARC WELDING. Provides the machinist or other tradesman with enough welding experience to make simple repairs.

201X-2. JOB ORIENTATION. Each student prepares a portfolio consisting of a personal data sheet, an analysis of prospective employing firms, sample letters of application, and an acceptance or refusal. Practice in being interviewed by representatives of business and industry.

202X-2. PROFESSIONAL ETHICS. Required of the technician within his own craft organization and the ethics necessary in dealing and co-operating with the dental profession. Legal requirements of the technician and the dental laboratory.

101Y-2 to 9. TOOTH ANATOMY AND NOMENCLATURE. Individual teeth are drawn to scale three times the natural size. Plaster blocks are made, and each tooth is carved in anatomic detail to the same scale.

102Y-2 to 9. REMOVABLE PARTIAL DENTURES. Elementary wire bending and soldering, acrylic partials, waxing, investing, casting and finishing of chrome-cobalt metal (Ticonium). Some casting of gold partials.

103Y-2 to 9. COMPLETE DENTURE CONSTRUCTION. Bite blocks, jaw movements, and Hanau's Laws of Articulation. Setting up full dentures in bilaterals balance, carving and festooning, and tooth form and selection.

113Y-3. CHEMICAL AND PHYSICAL PRINCIPLES. An introduction to the basic principles of physical science with some emphasis on the materials used in dentistry, their structure and behavior.

128Y-2. ORAL ANATOMY. Detailed study of the parts and functions of the temporomandibular articulation; surface oral tissues and the underlying supporting tissues; and supporting structures for bridge abutments.

201Y-2 to 9. BEGINNING CROWN AND BRIDGE WORK. A laboratory study of gold inlays, crowns, veneers, pontics, and small bridges; carving, casting, polishing, and soldering.

202Y-2 to 9. ADVANCED CROWN AND BRIDGE WORK. A study of advanced crown and bridge work and mouth rehabilitation.

203Y-2 to 9. CERAMICS, PRECISION ATTACHMENTS. Working with ceramics, precision attachments, jacket crowns, stains, and glazing.
Adult Education

Adult education is becoming not a “making up,” but a “keeping up” and “going ahead” factor in American society. “All men by nature desire to know,” wrote Aristotle, and to help meet this desire the Division of Technical and Adult Education offers a variety of non-credit courses. Any interested group may request assistance in the development of a course to meet its particular needs.

The Division of Technical and Adult Education attempts to meet the fundamental functions of adult education in its performance in our society. These functions are (1) to expand communication skills, (2) to develop in adults the ability and willingness to change in a changing world, (3) to improve human relations, (4) to help adults to participate in, and to be concerned with, the responsibilities of citizenship, (5) to build personal growth for the adult learner, and (6) to provide use of leisure time, to create new interests, and to seek ways of spending time productively.

TYPICAL COURSES

Adult education offerings by the Division of Technical and Adult Education encompass a variety of subjects:

Courses in agriculture for farms owners and workers help them improve their operation and ownership. The following are courses which meet once each week for from two to six weeks:

- Agronomy
- Beef Production
- Crop Diseases
- Dairy Production
- Egg Grading
- Farm Management
- Farm Records
- Fruit Production
- Sheep Production
- Vegetable Growing for Market

There is a growing recognition that creative arts are important in adult education. The following courses and others have been offered in this category:

- Art Appreciation
- Oil Painting
- Sketching
- Music Appreciation
- Leathercraft
- Jewelry
- Ceramics
Courses in home and family life meet the ever-increasing need and demand of adults. As circumstances change, new courses are added. Courses such as the following are available:

Clothing Construction
Home Work Simplification
Party Foods
Tailoring
Parenthood in a Free Nation
Nutrition Weight Control

Demands in business are met through a variety of adult education courses. These range from beginning courses for adults who wish to prepare for initial positions to advanced courses for employed adults who desire promotions. The following are representative courses:

Bookkeeping-Accounting
Calculating Machines
Cost Control
Filing
Insurance
Medical Clinic Office Procedure
Real Estate Law, Appraisal, and Sales
Retail Management
Small Retail Store Problems
Shorthand
Stocks, Bonds, Investments

Many adults evidence increased interest in foreign languages, possibly because of more international travel or emphasis to retain native languages. The division meets the interest of adults by offering courses such as these:

Conversational Spanish
French
German for Travelers
Technical Russian

Industry today has an ever-increasing demand for vocational and technical workers to build a stronger nation through increased production. The following courses illustrate how adult education meets the demands of industry:

Automotive Procedures
Electronics
Electricity
Machine Drafting
Blueprint Reading for Shop Mechanics

Refrigeration theory class
Many courses for labor groups are conducted to help selected adults prepare as apprentices and journeymen. Each course is specifically planned for the particular trade in co-operation with the local union and the University’s Labor Institute. The following courses have been offered:

- Blueprint Reading for Building Trades
- Carpenter Apprentice Related Training
- Mathematics for Carpenters
- Plumber Estimating
- Refrigeration for Plumbers
- Cable Splicing for Electricians
- Welding for Plumbers

The importance of better use of leisure time is increasing in our modern society. Courses such as the following have been offered by adult education:

- Great Books
- Reading Improvement
- Furniture Re-upholstering
- Photography
- Home Mechanics
- Planning for Retirement

Demonstrations form a large part of adult education special short courses.

The Division of Technical and Adult Education, in co-operation with associations which represent business, industrial, personal service, and public utility groups, offers special short courses such as the following:

- Illinois Bankers School for Development of Junior Executives
- Hospital Managers and Accountants Short Course
- Restaurant Manager Short Course
- Rural Electric Co-operatives Short Course
- School of Advanced Cosmetology

Other non-credit courses to meet the needs evidenced by local groups, local adult education planning committees, and association committees will be planned and offered by the Division of Technical and Adult Education upon request.
A recent development has been the organization and planning of adult education courses in industrial management. These courses have been the result of co-operative planning with representatives from industry and this division. Representative courses are Practical Psychology for Supervisors, Industrial Report Writing, Quality Control, Labor Management Relations, Dielectric Heating, and Metallurgy.

Representatives from labor, business, and industry serve on advisory committees to keep programs geared to changing needs.

TEACHING STAFF

The teaching staff in Adult Education is drawn from business, industry, the professions, and the University's academic units. All teaching assignments, which are made as the needs arise, are on a part-time basis.

Max Abram, B.S.Ed. (Southwest Missouri), 1958–59 Reading Improvement
Department of Personnel, Scott Air Force Base

Helen Allen, B.S.Ed. (Eastern Illinois), 1959–60 Typewriting
Business Teacher, Salem High School

Richard Aton, Associate in Technology (Southern Illinois), 1958–60 Automotive Courses
Owner, Carterville Motors

Carol Auman, B.S. (Eastern Illinois), 1958–59 Physical Fitness for Women
Physical Education Teacher, Staunton High School

Henrik Aune, Ph.D. (Minnesota), 1958 Farm Credits; Farm Records
Assistant Professor, Department of Agricultural Industries,
Southern Illinois University

Oliver Baechle, B.S. (Missouri), 1957–58 Quality Control
Quality Control Engineer, Dow Chemical Company

Marguerite Barra, Ph.D. (Texas State College for Women), 1958 Tailoring;
Assistant Professor, Department of Clothing and
Textiles, Southern Illinois University

Interior Decoration
ADULT EDUCATION STAFF

EMILIO BASSY, M.Ed. (Springfield College), 1958-59
Science Teacher, Columbia High School

Industrial Chemistry

ROBERT BAYSINGER, 1958-59
Electronic Designer, Sangamo Electric Company

Basic Radio I and II

CROOM BEATTY, Ph.D., (Yale), 1958-60
Owner, Beatty Flying Service

Commercial and Private Ground School

WINNIE BELL, B.S. (Murray State), 1958-60
Business Teacher, Cairo High School

Typewriting; Shorthand

JAY BENDER, Ph.D. (Illinois), 1957
Professor, Department of Physical Education for Men, Southern Illinois University

Physical Fitness

ROBERT BEST, B.S.Ed. (Southern Illinois), 1958-60
Industrial Arts Teacher, Waterloo High School

Woodworking for Householders

GLORIA BIZNEK, B.S. Voc. H.E. (Southeast Missouri), 1958-59
Home Economics Teacher, Staunton High School

Beginning Sewing; Intermediate Sewing

ACK BIZZEL, M.A. (Southern Illinois), 1958
Instructor, Vocational-Technical Institute, Southern Illinois University

Typewriting

AMES BLEYER, LL.B. (University of Notre Dame), 1958-59
Attorney at Law

Everyday Law for the Layman

BURTON BOND, 1958-59
Welding for Plumber Apprentices

President, Plumber Apprenticeship Committee

ALFRED BORKOWSKI, B.B.A. (Massachusetts), 1958-59
Chief Accountant, Sangamo Electric Company

Accounting

HARRY BOTT, B.S. (Washington University), 1957-58
Superintendent of Personnel, Granite City Steel Co.

Effective Management

DAVID BROWNING, M.A. (Missouri), 1957
Research Assistant, Agronomy Experimental Station, Southern Illinois University

Forage Products

VAN BUBOLTZ, M.A. (Northwestern) 1937
Assistant Professor, School of Business, Southern Illinois University

Stocks, Bonds, Investments

JOSEPH BURNSIDE, Ph.D. (Wisconsin), 1955
Associate Professor, Department of Animal Industries, Southern Illinois University

Swine Production

ROBERT L. BUTLER, LL.B., 1955-60
Assistant State's Attorney

C.P.C.U. Law; Real Estate Law

KENNETH CARAWAY, B.S. (Southern Illinois), 1955-60
Industrial Arts Teacher, Nashville High School

Woodworking

ALFRED CASTER, Ph.D. (Arizona), 1957
Professor, Department of Plant Industries, Southern Illinois University

Plant Industries

FRANK CENY, B.S.Ed. (Southern Illinois), 1958-59
Physics Teacher, Hillsboro High School

Basic Radio

HARRY CHAMBERS, 1959-60
Carpenter Apprentice Related General Contractor

Clarence Christensen, Welding Certificate (Southern Illinois), 1958-60
Arc Welder and Machinist, Auto Machine Company

and Gas Welding

ohn Clayton, LL.B. (Illinois), 1959-60
Everyday Law for the Layman

Attorney at Law

Alvin Cohen, Ph.D. (Southern Illinois), 1959-60
Psychologist, Southern Illinois Mental Health Clinic

Basic Psychology

ason Collins, (Southern Illinois), 1955
Radiological Detection
Assistant Professor, Vocational-Technical Institute, Southern Illinois University

William Cornman, B.S. (Murray State), 1958–59 Woodworking
Shop Teacher, Litchfield High School

Jane Cremer, B.S. (Murray State), 1958–60 Bookkeeping-Accounting
Business Teacher, Harrisburg Township High School

Joyce Crouse, M.S. (Southern Illinois), 1958–60 Beginning Sewing; Tailoring
Lecturer, Department of Home and Family, Southern Illinois University

John William Cundiff, J.D. (Northwestern), 1958 Accounting
Assistant Professor, Vocational-Technical Institute, Southern Illinois University

Murnice Dallman, M.S. (Stout), 1954 Welding
Instructor, Vocational-Technical Institute, Southern Illinois University

Mildred Day, B.A. (MacMurray), 1959–60 Contemporary Prose
English Teacher, Jerseyville High School

Bryon Dodd, B.S.Ed. (Southern Illinois), 1958–59 Radiological Detection
Science Teacher, Anna-Jonesboro High School

Robert Donham, B.S. (Indiana State), 1959–60 Bookkeeping; Typing
Business Teacher, Mt. Carmel High School

Anna Duckworth, B.S. (Harding), 1959–60 Art
Art Teacher, Pana High School

Bessie Duggan, B.S. (Kansas State Teachers), 1957–60 Business and Professional Speaking
Debate Coach, Belleville Junior College

Teacher, Litchfield High School

Walter Elder, M.S. (New York), 1954 Merchandising; Sales
Associate Professor, Vocational-Technical Institute, Southern Illinois University

Charles Ellis, B.A. (Southern Illinois), 1958–59 Blueprint Reading for Carpenters
Carpenter and Contractor

George Ferguson, B.S. (Washington University), 1957–58 Material Handling
Work Simplification, Dow Chemical Company

Jesse Florer, (American Academy of Art), 1958–59 Art
Commercial Artist

Marilyn Flowers, B.S.Ed. (Eastern Illinois), 1959–60 Bookkeeping-Accounting
Business Teacher, Marshall High School

Lena Joanne Forker, B.S.Ed. (Southern Illinois), 1956 Shorthand
Lecturer, Vocational-Technical Institute, Southern Illinois University

Richard Franklin, Ed.D. (Columbia), 1956 Community Development
Assistant Professor, Community Development Institute, Leadership
Southern Illinois University

Anna Carol Fults, Ph.D. (Florida State), 1952 Parent Leadership
Professor, Department of Home Economics Education, Southern Illinois University

Ben Gelman, (New York City), 1957–59 Photography
Photographer, Southern Illinoisan

Lewis Goekler, B.S.Ed. (Eastern Illinois), 1959–60 Woodworking
Woodworking Teacher, Marshall High School

Gene Goforth, M.Ed. (Illinois), 1957–58 First Aid
Principal, Trico High School
ADULT EDUCATION STAFF

Billy Goodman, Ph.D. (Ohio State), 1958
Assistant Professor, Department of Animal Industries,
Southern Illinois University

Bill Green, LL.B. (Washington University), 1959-60
Attorney at Law

Charles Green, M.S. (Illinois Normal), 1957
Assistant Professor, Vocational-Technical Institute,
Southern Illinois University

Thomas Gregory, 1952-60
General Accountant, Electric Energy, Inc.

John Griswold, M.Ed. (Illinois), 1955
Instructor, Vocational-Technical Institute, Southern Illinois University

Edna Hake, M.A. (Washington University), 1958-59
Conversational German

Charles Haldi, (Washington University), 1958-59
Blueprint Reading

Registered Architect, Illinois, Missouri, Iowa

Jerry Hardy, B.S.Ed. (Eastern Illinois), 1959-60
Business Teacher, Pana High School

Robert Hardy, B.S. (Carthage), 1958-59
Teacher, Murphysboro High School

Jennie Harper, Ph.D. (Cornell), 1958
Associate Professor, Department of Food and Nutrition,
Southern Illinois University

Catherine Hasenmeyer, M.S.H.Ed. (Illinois), 1958-59
Homemaking Teacher, Mt. Carmel High School

James Hatfield, B.S.Ed. (Eastern Illinois), 1959-60
Typing

Business Teacher, Pittsfield High School

Lawrence Hazelip, B.S. (Washington University), 1958-59
Industrial Engineer, Laclede Steel Company

William Heer, Ph.D. (Cornell), 1957
Farm Records

Associate Professor, School of Agriculture, Southern Illinois University

Max Heinzman, B.Ed. (Illinois), 1956-57
Life Insurance Representative

Ray Heinzman, M.A. (Illinois), 1957-60
Bookkeeping-Accounting

Business Teacher, Benton High School

William Held, 1957-60
Refrigeration for Plumbers

Licensed Master Plumber, Illinois and Kentucky

Lemuel Henager, B.S. (Oakland City College), 1959-60
Bookkeeping-Accounting

Business Teacher, Mt. Carmel High School

Harold Hertenstein, M.S. (Illinois), 1956-57
Metallurgy

Engineering Training, McDonnell Aircraft Company

Russell Hewitt, M.Ed. (Illinois), 1957-60
Welding

Shop Teacher, Vandalia High School

Jean Heye, M.Ed. (Illinois), 1959-60
Physical Fitness for Women

Physical Education Teacher, Jerseyville High School

James Higgins, M.B.A. (Harvard), 1957-58
Industrial Management

Assistant to Production Manager, Olin Mathieson Chemical Company

Henriette Hill (University d'Aix-Marceille), 1959-60
Conversational French

Faculté de Droit d'Aix

Mary Hinners, M.S. (Southern Illinois), 1959-60
Sewing

Scott Hinners, Ph.D. (Illinois), 1951
Egg Production
Elias Hoagland, 1958-59
Fifty years with the St. Louis Police Department

Adeline Hoffman, Ph.D. (Pennsylvania State), 1957
Professor, Department of Clothing and Textiles, Southern Illinois University

Margie Holifield, B.S. (Southern Illinois), 1958-59
Business Teacher, Mt. Carmel High School

Emery Hood, 1958-59

William Hoover, M.A. (Washington University), 1957-58
Science Teacher, Carbondale Community High School

Quentin Hopkins, B.S. (James Millikin), 1957-58
Safety Director, Laclede Steel Company

William Horrell, Ed.D. (Indiana), 1949
Assistant Professor, Department of Printing and Photography, Southern Illinois University

Lucille Howell, M.S. (Southern Illinois), 1957-58
Speech teacher, Anna-Jonesboro High School

Hugh Hudgens, 1959-60
Twenty years' experience as a Carpenter Foreman and Superintendent

Berdie Hughes, B.S. (Southern Illinois), 1958-60
Home Economics Teacher, Carmi High School

Robert Husmann, B.S. (Illinois), 1957-59
Training Director, Laclede Steel Company

Mildred Hutchens, M.A. (Indiana State), 1959-60
Business Teacher, Marshall High School

Chester Johnston, M.A. (George Peabody), 1955
Instructor, Vocational-Technical Institute, Southern Illinois University

Instructor, Vocational-Technical Institute, Southern Illinois University

William Kammlade, Ph.D. (Illinois), 1954
Associate Professor, Department of Animal Industries, Southern Illinois University

Robert Kern, D.V.M. (Illinois), 1956-58
Animal Diseases

Warren King, 1958-59
Eleven years' experience in telephone and electrical work

Owen Kirkendall, B.S. (St. Louis), 1956-58
Cost Accountant, Dow Chemical Company

Rolland Kluge, B.S.M.E., B.S.I.E. (Washington University), 1957-58
Industrial Engineer, Dow Chemical Company

Virginia Kornya, M.A. (Ohio State), 1959-60
Food Service Supervision

Chief Dietician, Southern Illinois Hospital Association

Edward Kosky, (Tennessee), 1958-59
Auxiliary Police

Morse Twist Drill and Machine Company

Curtis Kurtz, M.S. (Stanford), 1957-58
Production Development, Norge Division

Howard Lambert, M.S. (Southern Illinois), 1956-60
Driver Education Teacher, Carbondale Community High School
ADULT EDUCATION STAFF

BERNARD LANCE, M.S.Ed. (Illinois), 1959–60
Industrial Arts Teacher, Salem, Illinois

LIONEL LEBEAU, B.S.C. (St. Louis), 1959–60
French Teacher, Vandalia High School

CHARLES LERNER, LL.B. (Harvard), 1959–60
Investment Counselor

ROBERT LINDERS, D.V.M. (Kansas State), 1958–59
Animal Diseases

BILL LOVIN, A.B. (Washington University), 1956–58
Industrial Management

LIONEL LEBEAU, B.S.C. (St. Louis), 1959–60
Conversational French

ANIMAL DISEASES

CHARLES LERNER, LL.B. (Harvard), 1959–60
Stocks, Bonds, Investments

LIONEL LEBEAU, B.S.C. (St. Louis), 1959–60
Typing

Business Teacher, Metropolis High School

FRANK MANSFIELD, LL.B. (Washington University), 1956–59
Industrial Counseling

FRANK MARTINI, M.A. (Washington University), 1956–59
Industrial Psychology

CHARLES LERNER, LL.B. (Harvard), 1959–60
Stocks, Bonds, Investments

LIONEL LEBEAU, B.S.C. (St. Louis), 1959–60
Typing

Business Teacher, Metropolis High School

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Typing

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Industrial Counseling

FRANK MARTINI, M.A. (Washington University), 1956–59
Industrial Psychology

CHARLES LERNER, LL.B. (Harvard), 1959–60
Stocks, Bonds, Investments

LIONEL LEBEAU, B.S.C. (St. Louis), 1959–60
Typing

Business Teacher, Metropolis High School
Business Teacher, Waterloo High School

Merna O'Brien, B.S.Ed. (Southern Illinois), 1958-59
  Office Practice

Business Teacher, Cobden High School

James Ogg, 1957-58
  Cost Control

Electrical Engineer, Shell Oil Company

Otto Ohmert, B.S.Ed. (Southeast Missouri), 1958-59
  Radiological Detection

Science Teacher, Anna-Jonesboro High School

Richard Olmstead, M.S.Ed. (Eastern Illinois), 1958-59
  Advanced Bookkeeping

Business Manager, Pana High School

Howard Olson, Ph.D. (Minnesota), 1954
  Dairy Products

Associate Professor, Department of Animal Industries, Southern Illinois University

Delores Osborn, B.S.Ed. (Eastern Illinois), 1957-58
  Business Machines

Business Teacher, Trenton High School

Harold Osborn, B.S. (Stout), 1955
  Woodworking

Instructor, Vocational-Technical Institute, Southern Illinois University

Barbara Oskins, B.A. (Evansville), 1959-60
  Typing

Business Teacher, Mt. Carmel High School

Joanne Peppard, M.S. (MacMurray), 1958-59
  Physical Fitness for Women

Physical Education Teacher, Carlinville High School

Howard N. Pepple, M.S. (Southern Illinois), 1955
  Printing Inks;
  Manager, Printing Service, Southern Illinois University

Photolithography

Harold Perkins, M.A. (Southern Illinois), 1957-58
  Radiological Detection

Science Teacher, Carbondale Community High School

Eschol Perry, M.A. (Illinois), 1959-60
  Stocks, Bonds, Investments

Vice-President of Investment Brokerage

Walter Pippin, B.S. (Eastern Illinois), 1959-60
  Woodworking

Industrial Arts Teacher, Pittsfield High School

Herbert Portz, Ph.D. (Illinois), 1954
  Crops and Soils; Crop Diseases

Associate Professor, School of Agriculture, Southern Illinois University

George Potts, 1957-58
  Apprentice Training

Eleven years, Contractor

Donald Pyle, B.S.Ed. (Eastern Illinois), 1959-60
  Typing

Business Teacher, Pana High School

Gilbert Ragsdale, M.Ed. (Illinois), 1959-60
  Psychology of Human Relations

Testing, Vandalia High School

Alex Reed, Ph.D. (Illinois), 1946
  Dairy Products

Professor, Department of Animal Industries, Southern Illinois University

Olin Reed, 1956-57
  Welding

Fifteen years, Welder, Sohio Pipe Company

Harold Robbins, M.A. (University of Colorado), 1958-60
  Psychology of Director of Guidance, Carmi High School

Human Relations

Franklin Rogers, M.S. (Washington University), 1956-58
  Metallurgy

Metallurgist, Granite City Steel Company

William Rogers, B.S. (Missouri), 1958-59
  Practical Psychology for Supervisors

Personnel Assistant, Dow Chemical Company

Donald Ross, M.F.A. (Southern Illinois), 1959-60
  Art

Free-lance artist

Raymond Ross, M.S. (Western State Teachers College), 1958-60
  Typing; Office Practice

Business Teacher, Carlinville High School
ADULT EDUCATION STAFF

JOHN ROSSETTI, M.S. (Illinois), 1958-60
Business Teacher, Carlinville High School

CHARLES Rusiewski, B.S. (Southern Illinois), 1958-60
Business Teacher, Nashville High School

PATSY SACHSE, B.S. Voc. Home Ec., 1957-59
Home Economics Teacher, Cairo High School

CARL SCHROEDER, B.S. (Central Michigan), 1955-60
Instructor, Vocational-Technical Institute, Southern Illinois University

FRANK SEEGER, M.S.I.E. (Washington University), 1956-57
Industrial Engineer, Granite City Steel Company

CHARLES SEIBERT, B.S. (Park), 1955-60
Private Pilot Ground School
President, Midwestern Aero Service, Inc.

HARRIS SHETTEL, M.A. (Wayne), 1958-59
Effective Management

MILTON SHUTE, M.S. (Cornell), 1955
Agricultural Engineering

WILLIS SLAYTON, B.S. (Illinois), 1959-60
Stocks, Bonds, Investment

DEAN SMITH, M.S. (Southern Illinois), 1952-60
Accounting

EVELYN SMITH, B.Ed. (Southern Illinois), 1958-60
Office Machines

FLOYD SMITH, M.S.Ed. (Southern Illinois), 1957-58
English Usage

WALLACE SPRINGER, B.S. (Kansas), 1959-60
Stocks, Bonds, Investments

Hazel Stanley, M.A. (Peabody College), 1959-60
Writing Better Business Letters

RAYMOND SURVEYOR, B.I.E. (Rensselaer, 1957-59
Material Handling

JAMES TAXMAN, B.A. (Illinois), 1959-60
Stocks, Bonds, Investments

ADOLPH TENIKAT, M.S. (Illinois), 1958-60
Woodworking

GEORGE L. TRAYLOR, B.S. (Western Kentucky), 1957
Machine Tool

MARJORIE TRULOVE, M.S. (Southern Illinois), 1957-60
Shorthand

LOWELL TUCKER, Ph.D. (Massachusetts), 1947
Home Grounds Beautification

FRANK EUGENE VAUGHN, B.S. (Southern Illinois), 1952
Accounting; Typing

JOSEPH VAVRA, Ph.D. (Purdue), 1951
Crops and Soils

MARY WALKER, B.S.Ed. (Southern Illinois), 1956-59
Medical Secretarial Procedure

ROBERT WALLACE, Ph.D. (Southern California), 1958-60
Business and
Speech Teacher, Marion Public Schools

ROBERT WARD, 1959-60  C.P.C.U. Accounting; Agency Management

Insurance Underwriter for fifteen years

LOUIS WASHAUSER, B.S. (Massachusetts Institute), 1957-58

Industrial Engineer, Dow Chemical Company

DONALD WEHRLE, B.S.Ed. (Illinois Normal), 1958-59

Driver Education Teacher, Wesclin Sr. High School

JOHN WELSH, B.S. (Indiana), 1959-60  Stocks, Bonds, Investments

President, M. W. Welsh and Company

WILLIAM WESTBERG, Ph.D. (Pennsylvania State), 1952  Industrial Psychology

Professor, Department of Psychology, Southern Illinois University

RITTA WHITESEL, M.A. (Columbia), 1955  Tailoring

Associate Professor, Department of Clothing and Textiles,
Southern Illinois University

WALTER WILLS, Ph.D. (Illinois), 1956  Beef Cattle Marketing

Professor, Department of Agricultural Industries,
Southern Illinois University

HAROLD WOEHLER, B.S.Ch.E. (Purdue), 1958-59  Slide Rule