1964

1964-1966 Southern Illinois University Bulletin Edwardsville Campus (Divisional Announcements)

Southern Illinois University Carbondale

Follow this and additional works at: http://opensiuc.lib.siu.edu/ua_bcc

Recommended Citation


This Article is brought to you for free and open access by the University Archives at OpenSIUC. It has been accepted for inclusion in SIU Bulletins and Course Catalogs by an authorized administrator of OpenSIUC. For more information, please contact opensiuc@lib.siu.edu.
Southern Illinois University

Bulletin

Divisional Announcements

EDWARDSVILLE CAMPUS  1964-66
Alton, East St. Louis, Edwardsville
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.
Edwardsville Campus

Announcements for 1964-1966
The following issues of the Southern Illinois University Bulletin may be obtained without charge from Central Publications, Southern Illinois University, Carbondale, Illinois 62903.

General Information
General Studies and AF ROTC
Financial Assistance
Summer Session (Carbondale)
Summer Session (Edwardsville)
Schedule of Classes (Carbondale)
Schedule of Classes (Edwardsville)
Divisional Announcements (Edwardsville)
   Graduate School
   College of Education
College of Liberal Arts and Sciences
   School of Agriculture
   School of Business
School of Communications
   School of Fine Arts
School of Home Economics
   School of Technology
Division of Technical and Adult Education
   Department of Nursing

All intending students should have the General Information bulletin (issued once a year), plus the special bulletins of the various educational units in which they are most interested.

Composed and printed by Printing Service
Southern Illinois University
Carbondale, Illinois
Board of Trustees

TERM EXPIRES

John Page Wham, Chairman, Centralia 1965
Kenneth L. Davis, Vice-Chairman, Harrisburg 1965
Melvin C. Lockard, Secretary, Mattoon 1969
Martin Van Brown, Carbondale 1967
Harold R. Fischer, Granite City 1969
Arnold H. Maremont, Winnetka 1967
Lindell W. Sturgis, Metropolis 1965
Ray Page (Ex-officio), Springfield
Louise Morehouse, Recorder

Officers of Instruction

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

EDWARDSVILLE CAMPUS

Clarence W. Stephens, Vice-President for Operations
William T. Going, Dean of Academic Affairs
John H. Schnabel, Registrar and Director of Admissions
S. D. Lovell, Executive Officer for General Studies

Business Division, John J. Glynn, Head
Education Division, Cameron W. Meredith, Head
Fine Arts Division, Andrew J. Kochman, Head
Humanities Division, Gerald J. T. Runkle, Head
Science and Technology Division, Kermit G. Clemans, Head
Social Sciences Division, Robert F. Erickson, Head
Department of Nursing, Margaret T. Shay, Chairman
This Bulletin

covers in detail questions concerning the Edwardsville Campus. 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.

This issue supersedes Volume 5, Number 5.
# Table of Contents

**Edwardsville Campus** .................................................................................................................. 1  
Programs of Instruction .................................................................................................................. 2  
  Bachelor's Degree Programs ...................................................................................................... 2  
  Preprofessional Programs ......................................................................................................... 2  
  Graduate Programs .................................................................................................................... 3  
  Associate Degree Program ....................................................................................................... 3  
  Adult Education Programs ....................................................................................................... 3  
Admission to the University .......................................................................................................... 3  
Tuition and Fees ............................................................................................................................ 4  
Advisement for Registration ......................................................................................................... 4  
Registration Information .............................................................................................................. 5  
Requirements for the Bachelor's Degree ....................................................................................... 5  
  Outline of General Studies Requirements ............................................................................. 5  
  Concentration Requirements .................................................................................................. 7  
  Exceptions .................................................................................................................................. 7  
  Application for Graduation ..................................................................................................... 7  
  Bachelor of Arts Degree Requirements .................................................................................. 7  

**Business Division** ................................................................................................................... 8  

**Education Division** ................................................................................................................ 25  

**Fine Arts Division** .................................................................................................................. 49  

**Humanities Division** ............................................................................................................. 62  

**Science and Technology Division** .......................................................................................... 75  

**Social Sciences Division** ....................................................................................................... 95  

**Department of Nursing** ........................................................................................................... 113  

**Division of Technical and Adult Education** ........................................................................... 114  

**Index** ...................................................................................................................................... 120
Southwest of Edwardsville, the initial stage of the new campus is taking shape. The three buildings under construction are those shown in the background of the picture below.
Edwardsville Campus

Southern Illinois University was established at Carbondale 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 the summer of 1957, a residence center was established at Alton on the former Shurtleff College campus, and in September of the same year a residence center was opened in East St. Louis.

During the year 1958–59 the communities of Madison and St. Clair counties joined hands to help provide for the program in southwestern Illinois a large central campus site, located southwest of Edwardsville on By-pass 66. The central administrative offices of the Edwardsville Campus are housed on this site, and construction is underway on instructional buildings.

The East St. Louis center occupies a city block facing Ohio Street at Ninth and Tenth. Laboratories, classrooms, libraries, and other facilities of a former senior high school have been redesigned and re-equipped to
provide for a comprehensive undergraduate and graduate program. Faculty offices are located in nearby temporary buildings.

In Alton eight permanent buildings form the nucleus of a 40-acre campus. Eleven additional buildings have been prepared on a temporary basis to meet the needs of an expanded undergraduate and graduate program.

PROGRAMS OF INSTRUCTION

The Edwardsville Campus offers undergraduate, preprofessional, graduate, and adult-education programs.

BACHELOR'S DEGREE PROGRAMS

The six academic divisions of the Edwardsville Campus and the Department of Nursing prepare students for the following degrees: Bachelor of Arts (B.A.), Bachelor of Science (B.S.), Bachelor of Science in Education (B.S. in Ed.), and Bachelor of Music (B. Mus.). Programs leading to these degrees are described in subsequent chapters of this bulletin. The nursing program is described in the Department of Nursing bulletin.

PREPROFESSIONAL PROGRAMS

Preprofessional students may obtain, subject to certain conditions, a bachelor's degree after three years' work (144 quarter hours) at Southern and one or more years' work in a professional school. During their three years of residence at Southern they need to have completed all requirements other than elective hours for the bachelor's degree which they are seeking. In some cases the completion of concentration requirements is possible by their taking certain courses at the professional school, but this is permitted only upon the prior approval of the appropriate divisional head. Also, there needs to be completion of at least one year of professional work with acceptable grades in a Class A medical school, a Class A dental school, a Class A veterinary school, or an approved law school. In all cases, all University graduation requirements must be met. It is advisable for a student interested in this program to make his decision to seek a bachelor's degree before entering the professional school so that any questions may be clarified at an early date.

Students working toward the Bachelor of Science in Agriculture degree may attend the Edwardsville Campus their freshman year and transfer to the Carbondale Campus for the completion of the degree. In preparing
for one of the agricultural professions, the student should follow closely the appropriate curriculum as suggested in the School of Agriculture bulletin.

Students working toward a Bachelor of Science degree in home economics may attend the Edwardsville Campus their freshman and sophomore years and transfer to the Carbondale Campus for the completion of the degree. In preparing for this degree, the student should follow closely the appropriate curriculum in the School of Home Economics bulletin.

**GRADUATE PROGRAMS**

The purpose of graduate course offerings is to make available to advanced students courses and other work which will increase their competencies in particular fields. Development of the power of independent investigation is especially sought. The association of mature and beginning scholars is an important aspect of graduate work and is encouraged.

The Master of Science in Education degree may be obtained on the Edwardsville Campus with five fields of emphasis. These are administration and supervision, elementary education, guidance, special education, and secondary education with several specialties. Graduate courses in other areas are also available.

For information concerning programs leading to master’s degrees and the Doctor of Philosophy degree, refer to the Graduate School issue of the *Southern Illinois University Bulletin*.

**ASSOCIATE DEGREE PROGRAM**

The Associate in Business degree program is described in the Division of Technical and Adult Education issue of the *Southern Illinois University Bulletin* and in a subsequent chapter of this bulletin.

**ADULT EDUCATION PROGRAMS**

The adult education programs are described in the Division of Technical and Adult Education issue of the *Southern Illinois University Bulletin* and in a subsequent chapter of this bulletin.

**ADMISSION TO THE UNIVERSITY**

All inquiries concerning admission to the Edwardsville Campus of Southern Illinois University should be directed to the Admissions Office, Southern Illinois University, Edwardsville, Illinois 62025. Application for
admission and transcripts of high school and previous college work should be in the Admissions Office at least thirty days in advance of the desired entrance date. Applications for admission may be submitted earlier if desired. High school seniors should apply for admission at the beginning of the last semester of the senior year.

Many students find it helpful to visit the campus prior to making application for admission. The University encourages such visits and welcomes interviews with prospective students.

Students desiring to pursue a master’s degree program should refer to the Graduate School bulletin and consult with the graduate adviser in the Graduate Office at the Alton or East St. Louis center.

For regulations and procedures see the General Information issue of the Southern Illinois University Bulletin.

**Complete Details** concerning admission, tuition, fees, degree requirements, and student employment are given in the General Information bulletin. For a free copy write to Central Publications, Southern Illinois University, Carbondale, Illinois 62903.

**TUITION AND FEES**

At the present time legal residents of Illinois registered for more than 8 hours pay a total of $64.50 per quarter. This includes $42.00 tuition, an $8.00 book rental fee, a $5.00 University Center fee, and a $9.50 student activity fee. Out-of-state students pay an additional $80.00 tuition, or a total of $144.50. Students registered for 8 hours or fewer pay one-half tuition, one-half book rental fee, and full University Center fee; they have the option of paying the student activity fee.

**ADVISEMENT FOR REGISTRATION**

To insure that an undergraduate student is properly advised on a course of study which will both broaden his background and prepare him for his chosen career, the Edwardsville Campus has made academic advise-ment a major concern of a chief academic adviser (at each center) and his staff and the division heads and their staffs.

Advisement sessions for the new freshmen are held as part of new student orientation each quarter. Each new transfer student should plan to
meet with his adviser prior to initial registration; appointments can be initiated by calling the office of Academic Advisement.

REGISTRATION INFORMATION

Registration for classes on the Edwardsville Campus is completed at the enrollment division of the Registrar's Office at the Alton and East St. Louis centers and at the Office of the Registrar in Edwardsville. The period of time from the third through the tenth week of each quarter is used for registration for the following quarter. A new student may also register on the opening day of each quarter.

Registration for any session of the University is contingent upon being eligible for registration. Thus a registration including the payment of tuition and fees may be considered invalid if the student is declared to be ineligible to register due to scholastic reasons. The same situation may exist due to financial reasons or to disciplinary reasons if certified to the registrar by the Director of Student Affairs.

REQUIREMENTS FOR THE BACHELOR'S DEGREE

Each candidate for the degree must complete 192 hours of credit in approved courses. At least 64 hours must be in 300-level courses or above. Each student must have a C average and grades not lower than C in subjects aggregating at least three-fourths of the work. A C average is required in the field of concentration. These averages are required for credit made at Southern as well as for the total record. A transfer student must present either a total of three years of work (144 hours) earned at Southern or 48 senior college hours earned at Southern, 16 of which may be earned in extension.

Every bachelor's degree candidate is expected to meet the University's general requirements and to follow the recommendations of his academic unit. The general requirements, besides those listed above, are embodied in the General Studies program. This program is described fully in the General Studies bulletin and is outlined below.

OUTLINE OF GENERAL STUDIES REQUIREMENTS

Area A: Man's Physical Environment and Biological Inheritance....24 hours
A first-level basic sequence 9 hours
A second-level continuation sequence  9 hours
Third-level advanced courses  6 hours

**Area B: Man's Social Inheritance and Social Responsibilities**  24 hours
A first-level basic sequence  9 hours
A second-level continuation sequence  9 hours
Third-level advanced courses  6 hours

**Area C: Man's Insights and Appreciations**  24 hours
A first-level basic sequence  9 hours
A second-level continuation sequence  9 hours
Third-level advanced courses  6 hours

**Area D: Organization and Communication of Ideas**  18 hours
Required college composition and speech  9 hours
Either a foreign language sequence or a basic mathematics sequence  9 hours

**Area E: Health and Physical Development**  6 hours
First-level required physical education  3 hours
Second-level required health education  3 hours

**Total:**  96 hours
If a first-level sequence is waived, the total is only 87 hours.

Specific courses available in these areas are described in the General Studies bulletin and listed in the Schedule of Classes.

There are three ways in which partial requirements of the General Studies program may be met without taking the courses specifically designed to meet those requirements. They are waivers, advanced-standing assignments, and proficiency examinations. These are described in the General Studies bulletin.

The physical education requirement can be waived only by the Graduation Appeals Committee upon the recommendation of a physician approved by the University. Waiver procedure should be initiated early in the student’s college course and in no case later than the end of the sophomore year. Any student thirty years of age or older is not subject to this requirement.

Because of the importance of written and oral communication, each full-time student must enroll each quarter in English Composition until the required sequence has been satisfactorily passed. A transfer student will be granted English proficiency credit only in those composition courses in which he has received a grade of C or better at an accredited institution. (Proficiency credit in courses with grades lower than C will be at the discretion of the English faculty, approved by the head of the Humanities Division.)
CONCENTRATION REQUIREMENTS

Every degree candidate is expected to follow the basic program set out here, plus the advanced work recommended by the division in which he expects to concentrate as indicated in the following pages of this bulletin. If the student intends to take his degree elsewhere, the adviser may recommend changes in these requirements in favor of those of the institution from which the student plans to be graduated. If the student changes his mind and decides to take his degree at Southern, none of the degree requirements can be waived.

EXCEPTIONS

A student may satisfy any of the above requirements by passing non-credit attainment tests. (These tests, which may be taken only one time, must be applied for before the middle of the quarter in which the noncredit pass is to appear on the student’s record.) In some cases, more advanced work may be substituted for the required courses listed. A student who transfers in his junior or senior year may substitute senior college courses in most areas for the freshman and sophomore courses listed previously.

APPLICATION FOR GRADUATION

Every degree candidate should signify his intention to graduate by making application for graduation no later than the first week of his last quarter in attendance before the desired graduation date. Therefore, a person desiring to graduate in the June commencement must make application for graduation during the first week of the spring quarter. The application forms are available in the Registrar’s Office.

BACHELOR OF ARTS DEGREE REQUIREMENTS

In addition to the University’s general requirements for a bachelor’s degree, a person working toward a Bachelor of Arts degree must have the following:

1. A reading knowledge of a foreign language, ordinarily requiring 9 hours of university study or its equivalent.
2. A primary concentration of at least 42 hours and a secondary concentration of at least 24 hours. Some areas of concentration require more than the minimum number of hours.
Business Division

Accounting; Business Education; Economics; Management; Marketing

The Business Division seeks to prepare the student for successful performance in the business world. Opportunity is provided for the student to gain a knowledge of the operational phases of business and a familiarity with the sources of information and methods of collecting and interpreting data. The programs seek to develop in the student an understanding of, and a skill in, the art of human relations and a high sense of integrity and responsibility.

FACULTY OF ACCOUNTING
Associate Professors John E. Dwyer (M.B.A., Chicago), Richard J. Milles (M.S. in C., St. Louis; chairman), Joe R. Small (M.B.A., Kansas).

FACULTY OF BUSINESS ADMINISTRATION
Professors Walter L. Blackledge (Ph.D., Iowa), John J. Glynn (Ph.D., St. Louis), Ralston D. Scott (Ph.D., New York; chairman).
Associate Professors Harlin L. Heath (L.L.B., M.S. in C., St. Louis), Don A. Livinston (Ph.D., St. Louis), John V. Meador (Ph.D., Iowa State), Roy E. Thomas (Ph.D., Texas), Joseph M. Thorson (M.A., Seton Hall).
Instructor Virgil I. Pinkstaff (M.A., Washington University).
Lecturer John Ingwersen (M.B.A., New York).

FACULTY OF ECONOMICS
Professors Leo Cohen (Ph.D., California, Los Angeles), Lewis S. Drake (Ph.D., Michigan State), John J. Glynn (Ph.D., St. Louis; interim chairman), Ralston D. Scott (Ph.D., New York).
Associate Professors Don A. Livingston (Ph.D., St. Louis), Ann S. Schwier (Ph.D., St. Louis), Joseph M. Thorson (M.A., Seton Hall).
Assistant Professors John P. Carew (M.A., Stanford), David C. Luan (Ph.D., Texas), Thomas E. Van Dahm (Ph.D., Michigan).
Term Instructors and Lecturers James A. McDonald, Karl A. Sauber.
BUSINESS DIVISION

FACULTY OF SECRETARIAL STUDIES
Professor Mary M. Brady (Ed.D., New York; chairman).
Associate Professor Gene L. Houser (M.S., Michigan).

Term Instructors and Lecturers Jack Coffey, Dona F. Frost, Walter M. Hansel, Robert J. Motley.

The Bachelor of Science degree may be earned in the Business Division with one of the following concentrations: accounting, business education, economics, management, marketing. The Bachelor of Arts degree may be earned in the Social Sciences Division in economics. The Bachelor of Science in Education degree may be earned in the Education Division in business-teacher education or in economics.

DIVISIONAL REQUIREMENTS

Students who intend to enter the Business Division should take GSD 114a,b and 114d (Business Division section) rather than a foreign language to satisfy the General Studies requirement in Area D.

The professional Core Program required of all candidates for the Bachelor of Science degree in the Business Division, as well as all students electing a primary concentration within the division, consists of 39 or 42 hours of credit (in addition to GSB 211a and GSD 114d) in the following courses:

- GSB 211a
- GSD 114d (Business Division section)
- Accounting 251-12
- Economics 210, 315, 470 (or GSB 311) 9+(3), or 12
- Management 320, 340, 371
- Marketing 230

The student must have at least 77 quarter hours in the Business Division and at least 77 outside the division.

The requirements for the Bachelor of Arts degree with a concentration in economics and for the Bachelor of Science in Education degree with a concentration in business-teacher education are set forth in the respective areas of economics and business education.

ACCOUNTING

Accounting is the means by which the many transactions of business are analyzed, recorded, presented, and interpreted. The ability to analyze,
present, and interpret is not acquired easily; it is one that takes thorough and serious study.

The accounting program is designed to develop those abilities which lead to professional positions in cost accounting, auditing, income tax, financial statement analysis, and general financial accounting. The operation of a business and its financial condition are of interest to its owners, to its employees, to its creditors, to the various governmental bodies, and to the public.

The accounting curriculum is designed to cover four basic areas of study; theory, cost accounting, tax, and auditing. In addition to the four basic areas, special courses are offered in governmental accounting, accounting systems, and Certified Public Accountant problems. Although individuals trained in accounting might work in private industrial firms, public accounting firms, governmental agencies, or in college teaching, the four basic areas in accounting are needed as background. Those individuals desiring to engage in public accounting in Illinois should familiarize themselves with the Illinois laws and regulations covering the certification of certified public accountants. The regulations are published by the Committee on Accountancy, University of Illinois, Urbana, Illinois.

**SUGGESTED CURRICULUM**

**BACHELOR OF SCIENCE DEGREE**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Studies Requirements (See page 5.)</td>
<td>87</td>
</tr>
<tr>
<td>Business Division Requirements (See page 9.)</td>
<td>39-42</td>
</tr>
<tr>
<td>Accounting Concentration Requirements</td>
<td>44-45</td>
</tr>
<tr>
<td>Accounting 331, 341, 351-12, 356, 442</td>
<td>29</td>
</tr>
<tr>
<td>Accounting 355, 432, 458, 461 (any one)</td>
<td>3-4</td>
</tr>
<tr>
<td>Management 170, 271, 372 or 373</td>
<td>12</td>
</tr>
<tr>
<td>Electives</td>
<td>22-18</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>192</strong></td>
</tr>
</tbody>
</table>

**SECONDARY CONCENTRATION**

Requirements for a 24-hour secondary concentration in accounting consist of 251-12, 8 hours of senior credit courses (300-499) in accounting, and Management 170.

**COURSE DESCRIPTIONS**

251-12 (4,4,4). ELEMENTARY ACCOUNTING I, II, III. Principles and practices in handling transactions in books of original entry and books of accounts—trial balances, adjustments, and financial statements—for pro-
prieterships, partnerships, and corporations. Basic problems concerning statement analysis, presentation, and interpretation. Must be taken in a,b,c sequence, or any one part may be taken separately.

301-6. ACCOUNTING READINGS. Directed readings in books and periodicals in a defined field, under supervision of one or more staff members. Periodic written and oral reports are required. Prerequisite: junior standing and consent of division head.

331-5. TAX ACCOUNTING. Study of accounting principles and procedures for meeting requirements of current laws and regulations which relate to federal income tax and social security taxes. Laboratory problems and preparation of tax returns with special emphasis on the individual taxpayer. Prerequisite: 251c.

341-3. COST ACCOUNTING. Departmental, job order, and process cost. Accumulation of material and labor costs; factory overhead and its allocation; cost reports to management—their preparation and use. Prerequisite: 251c.

351-12 (4,4,4). ADVANCED ACCOUNTING I, II, III. Accounting principles and procedures for the preparation of adequate financial statements. Special attention given depreciation, appraisals, investments, intangibles, installment sales, consignments, branch accounts, sinking funds, annuities, leaseholds, and bonds. Preparation and use of special statements, application of funds, statement of affairs, and consolidated statements. Prerequisite: 251c. Must be taken in a,b,c sequence, or any one part may be taken separately.

355-3. GOVERNMENTAL ACCOUNTING. Budget and operating fund accounts, with emphasis on accounting control as a means of improving administration of public enterprises. Prerequisite: 251c.

356-5. AUDITING. Procedures and practices of public accountants in verifying accounts and supplementary data; training in preparation and analysis of reports. Prerequisite: 351c.

432-4. PROBLEMS IN FEDERAL TAXATION. Study of income tax problems which arise from partnership, corporation, estate, and trust type of organization. Brief study of federal estate and gift taxes. Student does research in source materials in arriving at solutions of complicated tax problems. Prerequisite: 331.

442-4. ADVANCED COST ACCOUNTING. Standard costs and distribution costs. Special problems in cost accounting, including joint product, by-product, and capacity costs. Prerequisite: 341.

458-4. ACCOUNTING SYSTEMS. Problems in accounting systems design and installation. Examination of existing systems and practice in system design. Prerequisite: 341 and 351c.

BUSINESS EDUCATION

Two undergraduate programs of study are offered in business education: (1) secretarial studies and office management, for the student preparing to enter this phase of business; and (2) business-teacher education, for the student preparing to teach business subjects in the secondary school.
The secretarial studies and office management program leads to the Bachelor of Science degree in the Business Division. It provides training for responsible positions in secretarial work and in office management.

The business-teacher education program leads to the Bachelor of Science in Education degree in the Education Division. The program is divided into eight teaching areas from which students may select four or more according to their interests.

A graduate secondary concentration is offered in business education, with a concentration in education. This program leads to the Master of Science in Education degree.

**SUGGESTED CURRICULA**

**BACHELOR OF SCIENCE DEGREE**

*General Studies Requirements (See page 5.)* .................................................. 87

*Business Division Requirements (See page 9.)* ............................................. 39–42

*Requirements for Concentration in Secretarial Studies and Office Management* ........................................................... 59–81

- Business Education 201–9, 241, 304, 326, 341, 407, 427, 428 ........................................... 25–34
- Business Education 221–12, 324–8 or 8 hours of electives in accounting, management, or marketing ........................................... 8–20
- Management 170, 240, 271, 361, 372 or 373, 385 .................................................. 23
- Marketing 334 or 336 .................................................. 3–4

*Electives* ........................................................................................................ 7–0

*Total* ........................................................................................................ 192–210

**BACHELOR OF SCIENCE IN EDUCATION DEGREE**

*General Studies Requirements (See page 5.)* .................................................. 87

*Requirements for Concentration in Business-Teacher Education* ............... 27–33

- GSB 201c, 211–9, 331–3 (12) + 3
- GSD 114d (Business Division Section) (3)
- Accounting 251a .................................................. 4
- Management 170, 271, 371 .................................................. 12
- Business Education 201a,b, 407, 411 .................................................. 8–14

*At least four teaching areas selected from the following:* ............................... 43–78

1. Typewriting: BsEd 201c, 241, 304, 403.
2. Shorthand: BsEd 221–12, 324–8, 404.
3. Bookkeeping or Record Keeping: Acct 251b,c; BsEd 408.
4. Basic Business Subjects: Acct 251b,c; Econ 210; Mktg 230, and 331 or 333, BsEd 405.
6. Secretarial Practice and Office Machines: BsEd 201c, 221–12, 241, 304, 324–8, 326, 341, 406, 427. (Equivalent to two areas.)

Professional Education Requirements (See page 40.) 28–32
Electives ........................................................................... 7–0
Total * ............................................................................... 192

SECONDARY CONCENTRATIONS

Secondary concentrations are offered in the following areas: (1) secretarial studies and office management consisting of a minimum of 25 hours in business; (2) business-teacher education consisting of a minimum of 30 hours in business.

Secondary concentrations are generally planned for each student individually by the student and his adviser. This procedure is necessary because students’ backgrounds and needs vary greatly. The typical secondary concentrations which follow, however, will fit the needs of many students.

Typical Secondary Concentrations in Secretarial Studies and Office Management

1. For students with no previous training in typewriting or shorthand: 201–9, 221–12, 241, 304, 324–8. Total: 34 hours.

2. For students with one year of previous training in both typewriting and shorthand or who can type at 35 words per minute and take sustained, new-matter dictation at 70 words per minute: 201c, 221c, 241, 304, 324–8, 341, Management 271. Total: 28 hours.

3. For students with two years of previous training in both typewriting and shorthand or who can type at 45 words per minute and take sustained, new-matter dictation at 80 words per minute: 241, 304, 324–8, 326, 341, 407, Management 271. Total: 29 hours.

1 Students who demonstrate competency in typewriting may be excused from as many as 9 hours.
2 Students who demonstrate competency in shorthand may be excused from as many as 12 hours.
3 The total for most students will be 192 because they may omit the first courses in typewriting and shorthand as a result of their having taken such courses in high school.
4 Students who demonstrate competency in typewriting may be excused from as many as 6 hours.
5 Students who demonstrate competency in typewriting may be excused from as many as 3 hours.
4. For students with two years of previous training in both typewriting and shorthand or who can type at 45 words per minute and take sustained, new-matter dictation at 90 words per minute: 241, 304, 324b–4, 326, 341, 407, Management 271. Total: 25 hours.

Typical Secondary Concentrations in Business-Teacher Education


2. Preparation for teaching typewriting and basic business subjects for students without previous training in typewriting: 201–9, 304, 403, 405, Management 170, 271, 371. Total: 30 hours.

3. Preparation for teaching typewriting and shorthand for students without previous training in typewriting and shorthand: 201–9, 221–12, 304, 324–8, 403, 404. Total: 38 hours.

4. Preparation for teaching typewriting, shorthand, office practice, and office machines for students with two years of previous training in typewriting and one year of previous training in shorthand or who can type at 45 words per minute and take sustained, new-matter dictation at 70 words per minute: 221c, 241, 304, 324–8, 326, 341, 403, 404. Total: 31 hours.

5. Preparation for teaching typewriting, shorthand, and secretarial practice for students with two years of previous training in both typewriting and shorthand, or who can type at 45 words per minute and take sustained, new-matter dictation at 90 words per minute: 241, 304, 324b–4, 326, 341, 403, 404, Management 271. Total: 31 hours.

6. Preparation for teaching typewriting, shorthand, and secretarial practice for students with two years of previous training in both typewriting and shorthand, or who can type at 45 words per minute and take sustained, new-matter dictation at 90 words per minute: 241, 304, 324b–4, 326, 341, 403, 404, 407, Management 271. Total: 31 hours.

7. Preparation for teaching typewriting, shorthand, bookkeeping, and basic business subjects for students with two years of previous training in both typewriting and shorthand, or who can type at 45 words per minute and take sustained, new-matter dictation at 90 words per minute: 241, 304, 324b–4, 403 or 404, 405 or 408. Accounting 251–12, Management 170, 371. Total: 35 hours.

COURSE DESCRIPTIONS

Tests are given during the first week of all shorthand and typewriting courses to insure the correct placement of students in classes.
201-9 (3,3,3). TYPEWRITING I, II, III. Develops skill for business teacher training as well as for personal and vocational use. Training includes not only the development of speed and accuracy on straight-copy work, but also the ability to prepare business letters, tabulations, reports, manuscripts, and other vocational applications. Must be taken in a,b,c sequence, or any one part may be taken separately. (a) May be taken for credit only by students who have had less than one semester of formal training in typewriting. Others may audit. (b) Prerequisite: 201a or one semester of typewriting with the ability to type at least 30 words per minute and to prepare simple business correspondence. (c) Prerequisite: 201b or one year of formal training in typewriting with the ability to type at least 40 words per minute and to prepare business correspondence, tabulations, and manuscripts of moderate difficulty.

221-12 (4,4,4). SHORTHAND I, II, III. A complete study of Gregg Shorthand theory, and the development of skill in dictation and transcription. Must be taken in a,b,c sequence, or any one part may be taken separately. (a) May be taken for credit only by students who have had less than one semester of formal training in shorthand. Others may audit. (b) Prerequisite: 221a or one semester of shorthand with the ability to take dictation for three minutes at 50 words per minute. (c) Prerequisite: 221b or one year of formal training in shorthand with the ability to take dictation at 60 words per minute for three minutes.

241-2. DUPLICATING. Develops skills and knowledge in the preparation of masters for direct-process, stencil, and offset duplicators and the operation of direct-process and stencil duplicators.

304-3. TYPEWRITING IV. Development of advanced skills in typing straight copy, business correspondence, manuscripts, forms, and tables; preparation of copy from rough draft materials; typing master copies for duplicating machines; transcription from machine dictation. Prerequisite: 201c or 1½ to 2 years of high school typing and the ability to type at least 45 words per minute and to prepare business correspondence, tables, manuscripts, forms, etc.

324-8 (4,4). SHORTHAND IV, V. Develops high-level skill in dictation and transcription. Training includes dictation of business and technical copy at varying rates of speed and the development of sustained transcription skill. Must be taken in a,b sequence, or either part may be taken separately. (a) Prerequisite: 221c or 1½ years of formal training in shorthand with the ability to take dictation at 80 words per minute for five minutes. (b) Prerequisite: 324a or two years of formal training in shorthand with the ability to take dictation at 100 words per minute for five minutes.

326-4. OFFICE THEORIES AND PRACTICES. Survey and analysis of office positions, salary rates, office trends, efficiency techniques, and office and desk layout. Opportunities to study reference sources, to prepare for and participate in interviews, to make self evaluations, and to pursue areas of special interest. Prerequisite: 1 year of typewriting.

341-4. OFFICE MACHINES. Training in the operation of all basic office machines, emphasizing the characteristic uses of each type of machine. Laboratory practice required.

403-3. TEACHING TYPEWRITING. Conduct of instruction in typewriting; the programming of activities in typewriting training, methods of in-
struction, skill-building principles and techniques, selection and preparation of practice materials, standards of achievement, and evaluation of pupil progress. Prerequisite: 304 or equivalent.

404-3. TEACHING SHORTHAND AND TRANSCRIPTION. Conduct of instruction in shorthand and transcription: the programming of activities in shorthand and transcription training, methods of instruction, skill-building principles and techniques, selection and preparation of practice and homework materials, standards of achievement, and evaluation of pupil progress. Prerequisite: 324a or equivalent.

405-3 to 4. TEACHING BASIC BUSINESS SUBJECTS. Instructional methods and materials for, and the evaluation of pupil progress in, such basic business subjects as general business, consumer education, economic geography, and business law. Prerequisite: consent of instructor.

406-4. TEACHING CLERICAL PRACTICE AND OFFICE MACHINES. Instructional methods and materials for, and the evaluation of pupil progress in, clerical practice and office machines. Prerequisites: 304, 341, or equivalent.

407-4. OFFICE MANAGEMENT. A study of the principles of management as applied to office problems. Emphasis on the role of the office in business management; office organization; physical facilities of the office; office services, procedures, standards, and controls; records management; and office automation, including integrated data processing. Prerequisite: consent of instructor.

408-3. TEACHING BOOKKEEPING AND ACCOUNTING. Instructional methods and materials for, and the evaluation of pupil progress in, bookkeeping and accounting. Attention also given to the teaching of business arithmetic. Prerequisite: Accounting 251c or equivalent.

411-4. SURVEY OF BUSINESS EDUCATION. The role of the business teacher in the secondary school. An analysis of the objectives as related to secondary education; a study of areas of business education involving courses, scope, and guidance. A survey of trends and external influences. For undergraduate upperclassmen only.

427-4. RECORDS ADMINISTRATION. The requisites for records administration. The value of files, their creation, control, retention, and disposition. Applications to such records as medical, legal, educational. Prerequisite: 407.

428-4. SYSTEMS AND PROCEDURES. A problems approach to the office systems-procedures function in the modern business firm; seminar and laboratory work on improvement of systems and procedures, administrative information and paperwork engineering; theory of office-systems design; systems administration and work simplification. Prerequisite: 407 or consent of instructor.

500-2 to 5. Readings in Business Education.
501-2 to 5. Individual Research in Business Education.
502-4. Research in Business Education.
503-4. Tests and Measurements in Business Education.
506-4. Principles and Problems of Business Education.
ECONOMICS

Courses in economics will help students understand the principles concerning the production and distribution of goods and services. Important but controversial issues, such as depression, inflation, labor unions and business monopoly, tariffs, and government spending, are discussed and analyzed.

Training in economics will prepare an individual for a position in private industry, government service, or teaching. Business and governmental agencies employ economists in management training programs, research, and administrative positions. Economics also provides an excellent background needed for the individual’s understanding and evaluation of economic policy of government.

Students interested in economics, as a field of concentration, may pursue a somewhat specialized study in such fields as money and banking, industrial relations, finance, and international trade. The over-all sequence of courses, including those in related areas such as business, education, psychology, mathematics, and government, should be planned in co-operation with an adviser in the Business Division.

SUGGESTED CURRICULA

BACHELOR OF SCIENCE DEGREE

General Studies Requirements (See page 5.) ............................................. 87
Business Division Requirements (See page 9.) ........................................... 39 or 42
Economics Concentration Requirements ..................................................... 41 or 38
   Economics 310, 328, 330, 418, 440, 441, 450, 470, 481 33 or 30
   GSB 311  (3)
   Management 380, 473  8
Electives ........................................................................................................ 25
Total ............................................................................................................. 192

BACHELOR OF ARTS DEGREE

For a degree in the Social Sciences Division, the following courses constitute a concentration in economics: GSB 211a, 311, Economics 210, 307 (or GSD 114d Business Division section), 310, 315, 328, 330, 440, 441, 450, 470, 481, Accounting 251a, Mathematics 111 (or GSD 114a,b).
BACHELOR OF SCIENCE IN EDUCATION DEGREE

For this degree in the Education Division, the following courses constitute a 48-hour concentration in economics: GSB 211a, 311, Economics 210, 307 (or GSD 114d Business Division section), 310, 315, 328 or 330, 440, Accounting 251a, Marketing 230, plus additional economics electives to meet minimum of 48 hours.

The following courses constitute a 36-hour concentration in economics: GSB 211a, 311, Economics 210, 307 (or GSD 114d Business Division section), 315, 440, plus additional economics electives to meet minimum of 36 hours.

SECONDARY CONCENTRATION

Requirements for a secondary concentration in economics are GSB 211a, Economics 210, 307 (or GSD 114d Business Division section), 315, 440, one economics elective, Accounting 251a.

COURSE DESCRIPTIONS

The prefix GSB indicates a General Studies course which involves the discipline of economics and which is listed here for convenience. The description of such a course appears in the General Studies bulletin.

210-5. PRINCIPLES OF ECONOMICS. The basic principles and tools of economic analysis including national income determination, business fluctuations, price-output determination in product markets, distribution of national income, factor pricing, and other economic problems. Prerequisite: GSB 211a.

GSB 211a-3. POLITICAL ECONOMY I.

301-1 to 6. ECONOMIC READINGS. Reading in books and periodicals in a defined field, under direction of one or more staff members. Periodic written and oral reports. Prerequisite: consent of division head.

307-4. ECONOMIC AND BUSINESS STATISTICS I. Prerequisite: 210; recommended: GSD 114b.

310-4. LABOR PROBLEMS. Prerequisite: 210.

GSB 311-3. ECONOMIC DEVELOPMENT OF THE UNITED STATES.

315-4. MONEY AND BANKING I. Prerequisite: 210.

317-4. ECONOMIC HISTORY OF THE UNITED STATES.

328-4. INTERNATIONAL ECONOMICS I. Prerequisite: 210.


408-4. ECONOMIC AND BUSINESS STATISTICS II. 3 hours lecture; 2 hours laboratory. Prerequisite: 307 (or GSD 114d Business Division section) or consent of instructor.

411-4. COLLECTIVE BARGAINING AND DISPUTE SETTLEMENT. Nature, issues, procedures, economic effects. Analysis of actual collective bargaining situations. Prerequisite: 310 or consent of instructor.

416-4. MONEY AND BANKING II. Emphasis upon the Federal Reserve and other banking systems. Prerequisite: 315 or consent of instructor.
418-4. ECONOMIC HISTORY OF EUROPE. A survey of the economic growth of Europe with emphasis upon the development of European agriculture, industry, finance, and international trade since 1750. Prerequisite: 210 or consent of instructor.

431-3. PUBLIC FINANCE II: STATE AND LOCAL. Prerequisite: 330 or consent of instructor.

432-3. FISCAL POLICY OF THE UNITED STATES. Countercyclical, secular, and emergency use of government expenditures, debt, taxes. Prerequisite: 210 or consent of instructor.

436-3. GOVERNMENT AND LABOR. A study of labor relations and legislation considering both constitutional and economic aspects. Prerequisite: 210; Government 210 or General Studies equivalent or consent of instructor.

440-4. INTERMEDIATE MICRO THEORY. A more intensive treatment of price and income theory. Prerequisite: 210 or consent of instructor.

441-4. INTERMEDIATE MACRO THEORY. Basic analytical concepts of the modern theory of aggregative income theory. Prerequisite: 210 or consent of instructor.

450-3. HISTORY OF ECONOMIC THOUGHT. Great economists and the development of economic theory. Prerequisite: 210 or consent of instructor.

470-3. BUSINESS CYCLES. Major business fluctuations in the United States—prices, employment, production, credit, inflation and deflation, and government action during the cycles. Prerequisite: 315 or consent of instructor.

481-3. COMPARATIVE ECONOMIC SYSTEMS. Capitalism, socialism, fascism, and other forms of the economy. Prerequisite: 210 or consent of instructor.

490-4. WORKSHOP IN ECONOMIC EDUCATION. (Same as Secondary Education 490.) Designed to assist elementary and secondary school teachers in promoting economic understanding through the translation of economic principles and problems into classroom teaching materials.

MANAGEMENT

Courses are offered in these areas of management: general business, finance, and personnel management. Students who do not wish to specialize will select the first area. The latter two areas are more restrictive in their requirements. The objective is to provide a broad, general, liberal educational experience rather than a narrow professional training.

SUGGESTED CURRICULUM

BACHELOR OF SCIENCE DEGREE

General Studies Requirements (See page 5.) ........................................... 87
Business Division Requirements (See page 9.) ........................................... 39-42
Management Concentration Requirements ............................................... 45-47
Economics 310 ........................................... 4
Management 170, 271, 361, 372 or 373, 385 .......... 19
Management: One of the specializations below: .... 22-24
   GENERAL: 327, 380, 421, 473, 479-4, Marketing 334 24
   or 341 or 438 ...........................................
   FINANCIAL: 323, 327, 328, 421, 475, Marketing 334 23
   or 341 or 438 ...........................................
   PERSONNEL: 380, 480, 481, 485, 382-3 or Economics 411-4, GSB 201c 22-23
Electives ................................................................ 21-16
Total .................................................................... 192

SECONDARY CONCENTRATION

Requirements for a 24-hour concentration in management with a specialization in finance include 170, 320, 323, 327, 340; Accounting 251a.

Requirements for a 24-hour concentration in management with a specialization in general business include 170, 320, 340, 371; Accounting 251a; Marketing 230.

COURSE DESCRIPTIONS

170-4. INTRODUCTION TO BUSINESS ADMINISTRATION. A survey of business, intended to give to the student a general knowledge of the modern business world, a better basis for choosing his specialty, and certain information not covered in the various specialized courses offered.

240-4. INTRODUCTION TO DATA PROCESSING. Development of the concept of an organization; problems of co-ordination and control; feedback loop; management by exception. Study covers machine functions, procedure planning, flow charting and integrated data processing; also, the stored program concept, input-output methods and problems involved with electronic data processing equipment. Prerequisite: sophomore standing.

241-4. PRINCIPLES OF PROGRAMMING FOR ELECTRONIC DATA PROCESSING. Comparative study of stored program concepts, binary coding principles, study of machine language and symbolic coding; definition of problem and preparation of flow charts and block diagrams; symbolic programming system; timing sequences for input-output functions. Laboratory work involves practice problems requiring the preparation of flow charts, block diagrams, coding and preparation of source, program, and test running on IBM 1401 equipment. Three hours lecture; two hours laboratory. Prerequisite: 240-4, or equivalent, or consent of instructor.

271-4. BUSINESS WRITING. Principles and practice in writing typical kinds of business correspondence and reports. Prerequisite: GSD 152.

301-1 to 6. MANAGEMENT READINGS. Reading in books and periodicals in
a defined field, under direction of one or more staff members. Periodic written and oral reports. Prerequisite: consent of division head.


323-4. INVESTMENTS. Survey of the problems and procedures of investment management; types of investment risks; security analysis; investment problems of the individual as well as the corporation. Prerequisite: 320.

327-4. GENERAL INSURANCE. Underlying principles and functions of insurance in the economic life of the individual and of business. Prerequisites: Accounting 251c, Economics 210.

328-3. REAL ESTATE. Purchasing, financing, owning, developing, improving, assessing, maintaining, zoning, subdividing, conveying, managing, operating in a real estate business; the influence of recent court decisions on real estate.

340-4. BUSINESS ORGANIZATION AND MANAGEMENT. Theory and practice. Prerequisite: junior standing or consent of instructor.

361-3. BUSINESS REPORT WRITING. Discussion, illustration, and practical application of report writing techniques, including study of uses, forms, and structures of different types of reports.

371-4. BUSINESS LAW I. Introduction to law, contract law, and agency law.

372-4. BUSINESS LAW II. Real property law, personal property law, partnership law, and corporation law.

373-4. BUSINESS LAW III. Negotiable instrument law, sales law, suretyship law, and insurance law.

380-4. PRODUCTION MANAGEMENT. Plant location, design, and construction; internal organization for operations, production control, stores control, routing of materials, job analysis, and time study; wage systems, subdivision of executive responsibilities and duties; methods of coordination and planning. Prerequisite: Economics 210.

382-3. TIME AND MOTION STUDY. Principles and methods for simplifying work and establishing sound time-allowances for performance.

385-4. PERSONNEL MANAGEMENT. Relation of the human element to production; the art of securing understanding and co-operation; employee organizations and outside activities; work of the personnel department; wage standards and working conditions. Prerequisite: Economics 210.

421-4. MANAGEMENT OF BUSINESS FINANCE. The principal problems of managing the financial operations of an enterprise with emphasis upon analysis and solutions of problems pertaining to policy decisions. The scope includes both short-term working capital and long-term financing. Prerequisite: 320.

442-4. MANAGEMENT OF DATA PROCESSING SYSTEMS. A systematic examination of the principles and practices of data processing management. Includes installation layout, employment requirements, machine utilization, scheduling, work loads, interdepartmental relations, legal considerations, etc. Prerequisite: 241.

472-4. SMALL BUSINESS. The position of small business in our national economy, including the organization, financing, location, personnel poli-
cies, merchandising practices, records, government regulation, and taxes.

473-4. BUSINESS ENTERPRISE AND PUBLIC POLICY. Some of the major problems of social control of business arising out of the operation of business in modern society; covering types of control, necessity and effects of control. Prerequisite: senior standing.

475-4. BUDGETING AND SYSTEMS. Budgeting and systems as aids in coordinating and directing business operation. Prerequisites: 320, Accounting 251c.

479-2 to 8. PROBLEMS IN BUSINESS AND ECONOMICS. Application of economic theory to practical business problems. Open to those concentrating in business administration or economics with senior standing.

480-4. SEMINAR IN LABOR LAW. An analysis of the constitutional aspects and recent cases that have arisen interpreting the Taft-Hartley Act, Fair Labor Standards Act, Fair Employment Practice Laws, and "right-to-work" laws. Prerequisite: two quarters of business law or Economics 310.

481-4. ADMINISTRATIVE MANAGEMENT. An intensive study of the principles of management and their application to the current industrial setting. Lecture and case methods are used. Prerequisite: 340.

483-4. ADVANCED PRODUCTION MANAGEMENT. Internal problems of managerial control of production including recent developments in theory and techniques; case material utilized for the development of analytical ability. Prerequisite: 380.

485-4. PROBLEMS IN PERSONNEL MANAGEMENT. Analysis of problems in personnel administration arising from current developments in organization and techniques; case problems and special reports. Prerequisite: 385.


MARKETING

Marketing, which includes all activities concerned with determining and satisfying consumer desires, is rapidly becoming a major function in the business process. Marketing knowledge and techniques provide the tools for developing and distributing goods and services in the dynamic economy of today and the future.

The area of marketing offers a variety of courses that prepare the future marketer for his role in American business. Undergraduate courses are offered in areas such as sales, advertising, marketing management, transportation, retailing, wholesaling, and market research. Additional senior-level or graduate courses are offered to prepare the student for more specialized positions in marketing management.

SUGGESTED CURRICULUM

BACHELOR OF SCIENCE DEGREE

General Studies Requirements (See page 5.) .............................. 87
Business Division Requirements (See page 9.) ............................................... 39-42
Marketing Concentration Requirements ............................................................... 44-47
  Management 170, 361, 373
  Marketing 331, 335, 338, 339, 349 (any three) ............................................. 11-12
  Marketing 333, 334, 336, 337, 341 (any three) ............................................. 11-12
  Marketing 438-4 or 463-3, 444, 490 ................................................................. 11-12
Electives ..................................................................................................................... 22-16
Total ............................................................................................................................ 192

SECONDARY CONCENTRATION

Requirements for a 24-hour concentration in marketing include 230, 444, 490, and one of the four following options:
Sales and Advertising: 333, 337, 438 or 463.
Retailing: 331, 334, 338.

COURSE DESCRIPTIONS

230-5. PRINCIPLES OF MARKETING. A general survey course to acquaint the student with the entire field of marketing. Consideration is given to the underlying economic principles; historical development of distributive systems, channels, agents, institutions, functions, policies, and principles. Prerequisite: Economics 210.

301-1 to 6. MARKETING READINGS. Readings in books and periodicals in a defined field, under the direction of one or more staff members. Periodic written and oral reports. Prerequisite: consent of division head.

331-4. RETAILING. Principles underlying the evolution, organization, and operation of retailing, including techniques used and opportunities offered in this field.

332-4. STORE MANAGEMENT. Store management; organization, location; layout. Procedures in receiving goods, handling sales; packing; wrapping; customer complaints; telephone orders, etc. Prerequisites: 331 and Accounting 250 or 251c.

333-4. PRINCIPLES OF ADVERTISING. Advertising fundamentals in relation to modern business activities; fields of advertising; advertising media, campaigns, and systems. Prerequisite: 230.

334-4. CREDITS AND COLLECTIONS. Organization and operation of the credit department, including the sources and analysis of credit information, collection methods, and correspondence. Retail credit management emphasized. Prerequisite: 230.

335-4. INTERNATIONAL MARKETING. Factors affecting export and import marketing. Emphasis on international regulating bodies, trade agreements, channels of distribution, financing and governmental roles. Prerequisite: 230-5.

336-3. PURCHASING. Dealer-supplier relationship, in manufacturing, whole-
saling, and retailing. Purchasing for resale and for consumption. Influence in sales promotion materials. Buying from single and multiple suppliers. Prerequisite: 230.

337-4. PRINCIPLES OF SALESMANSHIP. History, scope, and importance of selling in modern business; the sales department; the salesman's part in the selling process. Prerequisite: 230.

338-4. CONSUMER BEHAVIOR. An analysis and interpretation of the consumer's buying habits, motives, and the appeals marketing utilizes. The consumer's statistical, psychological, and socio-cultural nature will be stressed. Prerequisite: 230-5.

339-4. INDUSTRIAL MARKETING. Economic and managerial factors affecting policy in the marketing of industrial goods. Channels of distribution, buying, advertising, pricing, research, and selling of industrial goods. Prerequisite: 230-5.


349-3. WHOLESALING. Evolution, economic status, and management of non-retail marketing. Position of wholesaling in distribution. Kinds of wholesaling; types of middlemen; internal organization and operation of wholesalers; trading areas. Analyze relationship between marketing policies of wholesaler and manufacturer and changing patterns of wholesale distribution. Prerequisite: 230.

384-4. ADVERTISING MEDIA ANALYSIS. A study of the businessman's problems of selecting appropriate advertising media for the particular advertising mix that affords him the best strategy. Prerequisite: 333.

438-4. SALES MANAGEMENT. Developing and training a sales force. The different types of sales forces. Managing sales functions: determining salesman's territories, quotas, compensation. Budget preparation. Developing and implementing the merchandise plan. Prerequisites: 230, and 337 or consent of the instructor.

444-4. MARKETING MANAGEMENT. Marketing management's place in theory and as a part of the marketing process. Emphasis given to planning the marketing effort, management of the marketing organization, and control of marketing operations. Prerequisite: 230-5, senior standing.

451-4. TRAFFIC MANAGEMENT. Primary industrial traffic management functions, including determination of rates, classification, routing, and proper documentation. Consideration given to loss and damage claims, terminal charges, demurrage, reconsignment and conversion, transit privileges, warehousing, and packing. Emphasis upon co-operative aspects of traffic management requiring transportation. Prerequisite: 341.

463-3. ADVERTISING MANAGEMENT. The effective way of advertising by business management. An understanding of what advertising can be expected to accomplish under different sets of marketing factors and products. The selection of advantageous advertising programs under different marketing mixes. Prerequisite: 333.

490-4. MARKETING RESEARCH AND ANALYSIS. A non-mathematical development of the basic procedures, methods, and theory underlying analysis of primary and secondary market data. Prerequisite: 230, and one quarter of basic statistics or its equivalent.

Education Division

Education Administration; Elementary Education; Guidance; Health Education; Instructional Materials; Physical Education for Men; Physical Education for Women; Psychology; Secondary Education; Special Education; Student Teaching

The Education Division prepares teachers for all grades from kindergarten through high school and provides basic training in the fields of psychology and guidance. The division is committed to giving professional training to teachers, supervisors, administrators, and specialists. For most undergraduate students preparing to teach in high school, the subject-matter concentration will be taken in other divisions, and the provisional preparation for teaching, including student teaching, will be taken in the Education Division.

FACULTY OF ADMINISTRATION AND CURRICULUM


Associate Professors David E. Bear (Ed.D., Washington University; chairman), Gordon C. Bliss (Ed.D., Nebraska), Merle R. Bolton (Ed.D., Kansas), Regan Carpenter (Ed.D., Colorado), John H. Schnabel (Ed.D., Indiana), Myllan Smyers (Ed.D., Indiana), George T. Wilkins (M.A., Illinois).


Instructors Betty Jo Kelley (M.A., Southern Illinois), David R. Van Horn (M.S., Oklahoma State).

Visiting Professor Charles A. Lee (Ed.D., Columbia).


Term Instructors and Lecturer Paul E. Kunkel.

FACULTY OF GUIDANCE

Professors Alfred E. Kuenzli (Ed.D., Indiana), Cameron W. Meredith (Ph.D., Michigan), Manford A. Sonstegard (Ph.D., Northwestern), Daniel W. Soper (Ph.D., Syracuse), Mark M. Tucker (Ed.D., California, Los Angeles).
Associate Professors Howard V. Davis (Ed.D., Washington University), Orval G. Johnson (Ph.D., Wisconsin), Charles V. Matthews (M.A., Kansas City), Howard D. Southwood (Ed.D., Florida; chairman), Lawrence E. Taliana (Ph.D., Purdue), Raymond E. Troyer (Ph.D., Chicago).

Assistant Professors Erwin H. Brinkmann (Ph.D., Michigan), Mary Jane Loper (M.S., Southern Mississippi), Earl J. Moore (Ed.D., Nebraska), Virginia R. Moore (Ed.D., Illinois), J. Robert Russo (Ed.D., Pennsylvania State), Richard P. Walsh (Ph.D., Maryland).

Instructors Thomas D. Evans (M.S., Southern Illinois), Robert M. Reed (M.A., Iowa).

Visiting Professor John G. Rockwell (Ph.D., Chicago).

Term Instructors and Lecturers Philip L. Eckert, Robert O. Engebretson, Frank L. Everstull, Osborne B. Parker, Philip R. Rucinski.

FACULTY OF HEALTH, RECREATION, AND PHYSICAL EDUCATION


Term Instructors and Lecturers Sara Carpenter, Judith A. Prewett.

DIVISIONAL REQUIREMENTS

All candidates for the Bachelor of Science in Education degree, except those concentrating in psychology, must take the following courses, which carry 23 hours of credit, and must successfully complete a student teaching assignment of 8–16 hours: Administration 355, Guidance 305, GSB 331, and 12 hours of approved electives.

ADMINISTRATION

This area of study includes introductory courses and basic offerings in administration, supervision, and curriculum as well as in the social and philosophical foundations of education and advanced courses and seminars in these areas. The emphasis is mainly on graduate work.

Persons desirous of pursuing such programs should familiarize themselves with the requirements as set forth in the Graduate School bulletin.

COURSE DESCRIPTIONS

The prefix GSB indicates a General Studies course which involves the discipline of educational administration and which is listed here for convenience. The description of such a course appears in the General Studies bulletin.

GSB 331–3. THE AMERICAN EDUCATIONAL SYSTEM. 355–4. PHILOSOPHY OF EDUCATION. The philosophical principles of education and the educational theories and agencies involved in the work of the schools.
420-4. LEGAL BASIS OF AMERICAN EDUCATION. Legal concepts governing education in the United States. Particular emphasis is placed on common-law principles.

431-4. HISTORY OF EDUCATION IN THE UNITED STATES. A historical study of the problems of American education which have relevance to contemporary education.

432-4. PUBLIC OPINION, PROPAGANDA, AND EDUCATION. Analysis and classification of propaganda. Designed to show how public opinion is formed by a use of current materials from the different channels of communication. Differences between propaganda and indoctrination.

456-4. SCHOOL SUPERVISION. The function of the principal or supervisor in the improvement of instruction. Some activities, methods, and devices for improving the effectiveness of teaching.

485-4 to 9. WORKSHOP IN EDUCATIONAL UTILIZATION OF COMMUNITY RESOURCES. (Same as Guidance 485.) Opportunity for teachers, supervisors, and administrators to acquire detailed knowledge of community area resources; produce teaching units, assemble files of resource materials. Visits to business and industries; specialists and consultants enrich the program.

500-4. Research Methods.
502-4. Seminar in Comparative Education.
524-4. School Administration.
534-4. School Finance.
554-4. Contrasting Philosophies of Education.
556-4. Seminar in Educational Supervision.
565-4. The Junior College.
575-2 to 4. Individual Research. (parts a–k)

ELEMENTARY EDUCATION

The Education Division offers undergraduate work leading to the Bachelor of Science in Education degree in elementary education. Completion of the requirements for the degree qualifies one for the State Elementary Certificate on either the early-childhood or the elementary level.

A student in this curriculum must (1) meet all requirements pertaining to prerequisites to student teaching and should study the section in this bulletin which lists such requirements; (2) have at least 24 hours in each of these three fields: language arts, natural science, social science; and (3) satisfy the general requirements of the University and of the Education Division.

Students interested in programs on the master’s level should consult the Graduate School bulletin.
REQUIREMENTS BASED UPON, OR IN ADDITION TO, STATE MINIMUM REQUIREMENTS

Language Arts ................................................................. 24 hours
   GSC 251-6, GSD 101-6, 103, English 300 or 391, plus hours to equal 24.

Natural Science ............................................................. 24 hours
   GSA 101a,b,c, 201a,b,c (200 substitutes for 201b or 201c) plus 6 hours.

Social Science .............................................................. 24 hours
   GSB 101a,b,c, 201a,b plus 8 or 9 hours from History 201 and Government 210 or the General Studies equivalents.

Mathematics ................................................................. 9 hours
   GSD 112a,b,c and Math 310 or equivalent.

Fine and Applied Arts .................................................... 18 hours
   GSC 100 or 101, plus electives to equal 18. Students in early-childhood education should take three quarters of Music 010e or pass a piano proficiency test.

Health Education and Physical Education ............................. 10 hours
   GSE 201, plus 3 hours in physical education activity; plus Physical Education 350.

General Psychology ......................................................... 3 hours
   GSB 201c

Education ............................................................ 48 hours
   GSB 331, Elementary Education 314, 337, 351-8, Educational Administration 355, Guidance 305, Instructional Materials 417, plus approved electives to equal 48 hours.
   Students in early-childhood education should take Elementary Education 316, 350-12, 413 in place of 314, 351.

COURSE DESCRIPTIONS

203-3. UNDERSTANDING THE ELEMENTARY SCHOOL CHILD. Concepts needed to understand the child in the elementary school situation. Two hours of observation. Prerequisite: GSB 253.

314-4. ELEMENTARY SCHOOL METHODS. The fundamental principles of education, the interpretation of current educational theory and practice, the processes of teaching and learning involved in elementary education. 314 cannot be substituted for Secondary Education 315, nor 315 for 314. Prerequisite: Guidance 305.

316-4. KINDERGARTEN-PRIMARY METHODS AND CURRICULUM. Philosophy and principles underlying the teaching of four-to-eight-year-olds. Emphasis upon organization, equipment, materials and methods
for promoting growth of young children. Prerequisite: Guidance 305.

337-4. READING IN THE ELEMENTARY SCHOOLS. The principles of reading, factors that condition reading, together with grade placement of aims and materials. Prerequisite: 314 or Secondary Education 315; Guidance 305.

350D-8 to 12. KINDERGARTEN-PRIMARY STUDENT TEACHING.
350E-4 to 8. ADVANCED KINDERGARTEN-PRIMARY STUDENT TEACHING. Prerequisite: 350D.

351D-8 to 16. ELEMENTARY STUDENT TEACHING.
351E-4 to 8. ADVANCED ELEMENTARY STUDENT TEACHING. Prerequisite: 350D.

413-4. CHILDREN'S LITERATURE. Emphasizes types of literature, analysis of literary qualities, selection and presentation of literature for children. Prerequisite: Guidance 305.

415-2 to 4. IMPROVEMENT OF INSTRUCTION IN ARITHMETIC IN THE ELEMENTARY SCHOOL. Items to be taught, the grade placement of content, newer instructional practices and materials in instruction, and means of evaluating achievement.

433-4. WORKSHOP IN ELEMENTARY EDUCATION. Meets needs of in-service teachers in such areas as curriculum adjustment, remedial teaching, child development.

435-4 to 8. WORKSHOP IN ELEMENTARY SCHOOL FOREIGN LANGUAGE INSTRUCTION. (Same as Foreign Languages 435.) Designed to assist elementary school teachers in integrating foreign languages into their teaching program as well as to encourage high school teachers to introduce or supervise foreign languages or education. Prerequisite: basic language credit.

437-4. PROBLEMS IN READING. Practices and trends in the teaching of reading; materials of instruction in reading, particularly remedial materials; techniques and materials for prevention of reading difficulties; diagnosis and remediation of reading difficulties. Prerequisite: 337.

442-4. MATERIALS AND METHODS IN ELEMENTARY SCHOOL SCIENCE. Study of the content and the methods of elementary school science.

465-4. SEMINAR IN PSYCHOLOGY OF ELEMENTARY SCHOOL SUBJECTS. Psychological principles of learning applied to the mastery of materials used in elementary school subjects. Prerequisites: 314, Guidance 305.

505-4. Improvement of Reading Instruction.
507-2 to 4. Readings in Reading.
514-4. Organization and Administration of Reading Programs.
521-3 to 4. Diagnosis and Correction of Reading Disabilities I.
557-4. The Elementary Principalship.
559-4. Workshop in Instructional Leadership in Elementary Education.
GUIDANCE

No undergraduate concentration is offered in guidance. One who plans to take a master's degree in guidance should consult the Graduate School bulletin and include Guidance 305, 412, and 422 in his undergraduate work. Guidance 305 is an Education Division requirement for the Bachelor of Science in Education degree.

COURSE DESCRIPTIONS

305-4. EDUCATIONAL PSYCHOLOGY. Designed to help the prospective teacher understand human development, learning and adjustment, with special emphasis on individual differences, motivation, evaluation, and discipline in classroom situations. Prerequisite: Psychology 201 or GSB 201c.

412-4. MENTAL HYGIENE. An integration of knowledge and principles concerning factors and conditions in the personal life that tend to facilitate or deter mental health. Prerequisite: 305.

420-4. EDUCATIONAL STATISTICS. The statistics needed by teachers for classroom use, the reading of educational literature, and informal educational research. Includes methods of describing group performance, measures of reliability, and tests of significance. Prerequisite: 305.

422-4. EDUCATIONAL MEASUREMENTS I. Study of the philosophy and techniques of measurement. Special attention to the construction and use of teacher-made tests. Prerequisite: 305.

426-4. INDIVIDUAL INVENTORY. Principles and procedures for studying individual pupils and their problems, for guidance purposes. Emphasis on interview, observation, ratings, case study, and cumulative records. Prerequisite: 422.

485-4 to 9. WORKSHOP IN EDUCATIONAL UTILIZATION OF COMMUNITY RESOURCES. Opportunity for teachers, supervisors, and administrators to acquire detailed knowledge of community area resources; produce teaching units, assemble files of resource materials. Visits to businesses and industries; specialists and consultants enrich the program.


515-4. Psychological Aspects of Education.


522-4. Educational Measurements II.


526-4. Techniques in Individual Guidance.


535-4. Introduction to Individual Measurement.
HEALTH EDUCATION

A second teaching field in health education is 27 hours, including 205, 300, 313S, 334S, 350 or 460, 471, Guidance 412 or Psychology 301. Additional courses may be taken in safety education, school health, and community health.

COURSE DESCRIPTIONS

The prefix GSE indicates a General Studies course which involves the discipline of health education and which is listed here for convenience. The description of such a course appears in the General Studies bulletin.

GSE 201-3. HEALTHFUL LIVING.
205-4. INTRODUCTION TO HEALTH EDUCATION. Introduction to philosophy and history of health education as well as functions of the school health department and voluntary agencies in the health education program. Prerequisite for all 300 and above.
300-3. COMMUNICABLE DISEASE. A study of the communicable diseases with emphasis on control and principles of prevention, and application of these principles to the individual school and community.
302S-4. DRIVER EDUCATION AND TRAINING. To prepare the college student for teaching driver education and training in the secondary school. Prerequisite: a valid driver's license.
313S-4. INTRODUCTION TO SAFETY EDUCATION. Prepares for safety education in the public schools. Concerns safety as a social problem, development of safety skills, accident causes, teacher liability, research in the field.
334S-3. FIRST AID. Red Cross first aid course with lectures, demonstrations, and practical applications. Standard and advanced first aid cards given.
350-4. METHODS AND MATERIALS IN ELEMENTARY HEALTH EDUCATION. Designed to show the prospective teacher fundamental processes, techniques, and material aids involved in elementary school health teaching.
355-4. INTRODUCTION TO PUBLIC HEALTH. Philosophy, organization,
administration, and functions of federal, state, and local, official and voluntary public health agencies. Periodic field trips involved.

400-4. HEALTH APPRAISAL OF CHILDREN. The role of the teacher in the health appraisal of the school child, including school health examinations, use of health records, and emphasis on training for recognition of health deviations from normal common among school children.

415S-4. WORKSHOP IN DRIVER EDUCATION AND TRAFFIC SAFETY. For pre-service and in-service teachers. Individual and group problems are treated. Lectures by safety authorities, demonstrations, field trips, audio-visual materials, and individually supervised research in special problem areas. Prerequisite: 302S or equivalent.

443S-4. METHODS AND MATERIALS IN DRIVER EDUCATION. An advanced course in driver education which includes a study of existing courses of study, review of research, course-of-study planning, visitation and reporting, panel discussions, accident statistics, conducting the secondary school program, testing, and demonstration in the car. Prerequisite: 302S.

460-4. METHODS AND MATERIALS IN SECONDARY SCHOOL HEALTH EDUCATION. Shows the prospective teacher the fundamental processes involved in the teaching of health education at the secondary level.

461-4. WORKSHOP IN HEALTH EDUCATION. Public health aspects of school and community living. Individual problems of classroom health treated as units in such fields as speech defects and their detection and correction, communicable disease control; nutrition, social and mental hygiene. Lectures, demonstrations, films, field trips, and individually supervised research in special problems. Prerequisite: GSE 201.

471-4. ORGANIZATION AND ADMINISTRATION OF SCHOOL HEALTH. Appraisal of over-all school organization for health education, including health service and personnel, health and safety instruction, school environment, school health examination, local, state, and federal resources for health, health councils, and interdepartmental relationships.

480S-4. WORKSHOP IN SAFETY EDUCATION. Safety education as it applies to the public school and the community. Individual problems, lectures, demonstrations, films, field trips, and individual group study in special areas of interest. Prerequisite: 313S or consent of instructor.

INSTRUCTIONAL MATERIALS

The Education Division offers a second teaching field in library science to qualify persons trained primarily as teachers for part-time professional service in a school library.

The required courses are 306, 308, 403, 405, 406, and 417 or 420. Total: 24 hours.

COURSE DESCRIPTIONS

306-4. SCHOOL LIBRARIES AS INFORMATION CENTERS. Evaluation, se-

308-4. SCHOOL LIBRARY TECHNICAL PROCESSES. Organization of library materials for effective service to readers. Acquisition, classification, cataloguing, preparation, preservation, and circulation of materials. Laboratory assignments.

400-2. LIBRARY RESEARCH METHODS. Introduction to the use of library materials in graduate research. Includes a survey of scholarly publishing and the use of reference work in various subjects.

403-4. SCHOOL LIBRARY FUNCTIONS AND MANAGEMENT. Effective library services in relation to the educational objectives of elementary and secondary school programs; organization, supervision, finance, housing, equipment, standards, and evaluation.

405-4. LIBRARY MATERIALS FOR CHILDREN. Study of the aids, methods, and criteria for the selection and use of books and other instructional materials for children in the elementary schools. Open to juniors with consent of instructor.

406-4. LIBRARY MATERIALS FOR ADOLESCENTS. A study of the aids, methods, and criteria for the selection and use of books and other instructional materials for students in the high school. Open to juniors with consent of instructor.

417-4. AUDIO-VISUAL METHODS IN EDUCATION. Selection and utilization of audio-visual methods in the teaching situation, elementary through adult levels. Motion pictures, slides, filmstrips, and recordings particularly stressed. Prerequisite: Guidance 305.

420-4. SCHOOL LIBRARY ACTIVITIES AND PRACTICE. Supervised practice and observation integrated with instruction in the typical activities of school librarianship; storytelling, publicity, developing units of library instruction, and work with students. Prerequisites: 306, 308, 403, and 405 or 406.

445-4. PREPARATION OF TEACHER-MADE AUDIO-VISUAL MATERIALS. Laboratory practice in the preparation of bulletin boards, opaque materials, models, lantern slides, recordings, feltboards, and other graphic materials. Prerequisite: 417 or consent of instructor.

546-4. Integration of Audio-Visual Materials in the Classroom.

PHYSICAL EDUCATION

A Bachelor of Science in Education degree with a teaching field in physical education is offered. The curriculum includes a total of 48 hours of theory and skill courses. This entire unit is intended to qualify young people for positions as teachers, coaches, or specialists in public and private elementary or secondary schools, colleges, and universities as well as other social agencies which promote physical activity programs. The curriculum is designed to meet the requirements of state departments of education and other agencies which have adopted professional standards.

Complete and integrated experience in teaching physical education
and assisting in coaching under qualified supervisors is provided in the co-operating schools of the area. Other valuable experiences are provided to supplement the regular course work. Some of these are gained through membership in the Physical Education Club; membership in professional associations; participation on intramural teams; assisting in service class testing; attendance at clinics, workshops, conventions, and conferences; reading of professional journals; and working with recreational and school groups in teaching techniques of various activities.

**SUGGESTED CURRICULA**

**BACHELOR OF SCIENCE IN EDUCATION DEGREE**

**FOR MEN**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Studies Requirements (See page 5.)</td>
<td>87</td>
</tr>
<tr>
<td>Professional Education Requirements (See page 40.)</td>
<td>32</td>
</tr>
<tr>
<td>Physical Education First Teaching Field Requirements</td>
<td>48</td>
</tr>
<tr>
<td>Physical Education, theory: 303, 305, 341, 350, 354, 370, 381, and 420</td>
<td>29</td>
</tr>
<tr>
<td>Physical Education for Men, skill: 100a–j, and two hours from any of 100k–o</td>
<td>12</td>
</tr>
<tr>
<td>Health Education 334S</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>4</td>
</tr>
<tr>
<td><strong>Second Teaching Field</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>194</td>
</tr>
</tbody>
</table>

**SECOND TEACHING FIELD, 27 HOURS**

**FOR MEN**

Theory courses: 341, 350, 354, 370, 381, and HEd 334S.

Skill courses: 100a, b, c, d, e, and f.

**BACHELOR OF SCIENCE IN EDUCATION DEGREE**

**FOR WOMEN**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Studies Requirements (See page 5.)</td>
<td>87</td>
</tr>
<tr>
<td>Professional Education Requirements (See page 40.)</td>
<td>32</td>
</tr>
<tr>
<td>Physical Education First Teaching Field Requirements</td>
<td>48</td>
</tr>
<tr>
<td>Physical Education for Women, skill: 100a–m and 3 hours from any 100n–y</td>
<td>16</td>
</tr>
<tr>
<td>Health Education 334S</td>
<td>3</td>
</tr>
<tr>
<td><strong>Second Teaching Field</strong></td>
<td>27</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>194</td>
</tr>
</tbody>
</table>
SECOND TEACHING FIELD, 30 HOURS

Theory: 341; 350; 354; 321a, b; 323–1; and H. Ed. 334S.
Skill courses: 100a, b, d, e, g, h, i, j, k, l, t, u.

COURSE DESCRIPTIONS

303–5. KINESIOLOGY. Study of joint and muscle action as a basis for the mechanical analysis of human physical movement as executed in daily life and as executed in physical education activities and sports. Prerequisite: Psychology 300.

305–3. PHYSICAL EDUCATION FOR THE ATYPICAL STUDENT. Deals with the recognition of physical deviations and with the provisions of special or modified physical education or recreational activities for such students. Prerequisite: 303.

341–3. PRINCIPLES OF PHYSICAL EDUCATION. The scientific foundations of physical education based on accepted principles of psychology, physiology, sociology, biology, educational method, philosophy, anatomy, kinesiology and related areas.


349–2. CAMPING EDUCATION. Designed to give the potential camp counselor an understanding of the camp; its physical set-up, equipment and necessary routines; its personnel, purpose, traditions, and possibilities.

350–4. METHODS AND MATERIALS FOR TEACHING PHYSICAL EDUCATION ACTIVITIES IN THE ELEMENTARY SCHOOL. The organization and conduct of the program, program planning, evaluation of materials, observation and practice in creative rhythms, singing games, folk dancing, and games of low organization. (Required for elementary education).

354–3. ORGANIZATION AND ADMINISTRATION OF PHYSICAL EDUCATION AND ATHLETICS. The organization and conduct of the total program of physical education including interscholastic athletics based upon accepted educational policies and practices. Emphasis on problems of administration.

355–2. TECHNIQUES OF TEACHING SWIMMING. Methods of teaching, analysis of strokes, and the devices for teaching swimming and life saving. Prerequisite: current Senior Lifesaving.

365–2. ORGANIZATION AND ADMINISTRATION OF COMMUNITY RECREATION. The social, economic, and governmental structure of the community; establishing the community recreation program; problems of facilities, equipment, finance, promotion; selecting and supervising personnel; integration with associated programs.

370–4. TESTS AND MEASUREMENTS IN PHYSICAL EDUCATION. Measurement as an aid in determining student needs, curriculum construction, teaching effectiveness, and the attainment of educational objectives. Includes the selection, administration, and interpretation of tests.

376–3. EMERGENCY CARE AND PREVENTION OF ATHLETIC INJURIES. The theoretical and practical methods of preventing and treat-
ing athletic injuries; techniques of taping and bandaging; emergency first aid; massage; use of physical therapy modalities.

402-3. ADMINISTRATION OF INTRAMURAL AND EXTRAMURAL ACTIVITIES. Planning extramural programs of sports; planning and coordinating extramural activities commonly associated with physical education.

420-3. PHYSIOLOGICAL EFFECTS OF MOTOR ACTIVITY. The general physiological effect of motor activity upon the structure and function of body organs; specific effect of exercise on the muscular system. Prerequisite: Physiology 300.

PHYSICAL EDUCATION FOR MEN

100-20 (1 per course). PHYSICAL EDUCATION SKILL COURSES FOR MEN. (a) Basic Rhythms I, (b) Folk Dance, (c) Beginning Stunts & Tumbling, (d) Beginning Gymnastics, (e) Personal Fitness, (f) Swimming, (g) Wrestling, (h) Soccer, (i) Beginning Tennis, (j) Indoor Net Games, (Badminton & Volleyball), (k) Baseball, (l) Basketball, (m) Football, (n) Beginning Track and Field, (o) Golf.

345-1 to 3. OFFICIATING TECHNIQUES. Interpretation of rules; code of ethics for officials and players; techniques and problems of officiating. Officiating practice required. (a) Fall: football, cross country, and soccer. (b) Winter: basketball, wrestling, and swimming. (c) Spring: baseball, track and field, tennis and golf.

381-4. THEORY OF COACHING. Principles underlying participation in competitive interscholastic athletics; theory of coaching sports; technique; strategy; organization and administration of programs.


509-4. Supervision of Health and Physical Education.

PHYSICAL EDUCATION FOR WOMEN

025-0. ORIENTATION. Acquaints students with physical education as a profession.


321-6 (2,2,2). METHODS OF TEACHING IN PHYSICAL EDUCATION FOR WOMEN. (a) Team sports, (b) Dance, (c) Individual sports. Prerequisite: consent of instructor or adviser.

323-3 (1,1,1). OFFICIATING TECHNIQUES. Study of rules and their interpretation; requirements for ratings given by the United States Field Hockey Association and the Division for Girls’ and Women’s Sports. Officiating practice required. (a) Fall: field hockey and soccer. (b) Winter: basketball. (c) Spring: volleyball and softball.

352-2. HISTORY OF PHYSICAL EDUCATION. Survey of physical education from ancient times through the modern period, showing the relation
between aims and practices in physical education and social and physiological needs of different periods. Offered in alternate years. 501-4. Curriculum in Physical Education.

**INTRAMURAL ACTIVITIES**

Intramural activities are an integral part of the physical education program at the Edwardsville Campus. The intramural program is designed to allow all students the opportunity to participate in athletic and recreational activities.

**PSYCHOLOGY**

Undergraduate courses in psychology introduce the student to the methods and findings of the scientific study of human behavior. He is given an opportunity to learn what research has shown about how we perceive, learn, and think; how individuals differ from one another; how the personality develops from infancy to maturity and how interpersonal factors affect human relations in the home, on the job, and in the community.

The undergraduate concentration in psychology is primarily aimed at providing broad general education rather than specialized professional training in psychology; to become a professional psychologist the student must usually complete from two to four years of postgraduate study.

**SUGGESTED CURRICULA**

**BACHELOR OF ARTS DEGREE**

For this degree in the Social Sciences Division, a concentration in psychology requires a minimum of 44 hours in psychology and other courses (named below).

The following courses can be counted toward a concentration in psychology: General Studies Area B 201c, Guidance 305, Guidance 420 or GSD 114d or Mathematics 410a, Physiology 209, Special Education 414.

One who intends to pursue graduate studies in psychology should include in his undergraduate psychology concentration the following courses: 211, 305, 307, 311, 407, 421, Guidance 420 or GSD 114d or Mathematics 410a, GSB 201c or Psychology 201.

**BACHELOR OF SCIENCE IN EDUCATION DEGREE**

For this degree in the Education Division, a concentration in psy-
chology requires a minimum of 48 hours in psychology and other courses (named above).

One who intends to teach in the public schools or to pursue graduate studies in guidance should include in his undergraduate program the following courses: 303, 305, 307, 407, 421, Guidance 420, GSB 201c or Psychology 201. It is recommended that a student with psychology as a first teaching field combine this with a strong second teaching field.

SECONDARY CONCENTRATION

A secondary concentration in psychology consists of 27 hours and should include 303, 305, 307, and either 201 or GSB 201c.

COURSE DESCRIPTIONS

The prefix GSB indicates a General Studies course which involves the discipline of psychology and which is listed here for convenience. The description of such a course appears in the General Studies bulletin.

201-4. INTRODUCTORY PSYCHOLOGY. Introduction to the psychological nature of man, his development, motivations, emotions, learning, thinking, and perceiving. Not open to one who has had GSB 201c.

GSB 201c-3. CULTURE, SOCIETY, BEHAVIOR.

211-4. PRINCIPLES AND METHODS OF PSYCHOLOGY I. An introduction to the experimental methods utilized in the study of behavior. The work emphasizes the application of these methods to the study of sensory and perceptual phenomena, and response characteristics. Prerequisite: 201.

301-4. CHILD PSYCHOLOGY. Development of the human person from infancy to maturity, with emphasis on the early and middle years of childhood. Prerequisite: 201.

303-4. ADOLESCENT PSYCHOLOGY. Intensive study of development trends and influences during the adolescent years, with consideration of the special interpersonal problems encountered in this period. Prerequisite: 201.

305-4. PERSONALITY DYNAMICS. Exploration of human motivations, personality patterns, and ways of coping with the stresses of modern life. Prerequisite: 201.

307-4. SOCIAL PSYCHOLOGY. Introduction to the field of social psychology, with emphasis on attitude formation and intergroup relations. Prerequisite: 201.

311-4. EXPERIMENTAL PSYCHOLOGY. Introduction to the experimental analysis of behavior. Lecture and laboratory. Prerequisite: 201.

314-4. EXPERIMENTAL PSYCHOLOGY: COMPARATIVE AND PHYSIOLOGICAL. An examination of the physiological and phylogenetic variables affecting behavior. The laboratory involves work with different types of organisms, emphasizing physiological concomitants of behavior. Lecture and laboratory. Prerequisite: 211.

320-4. INTRODUCTION TO INDUSTRIAL PSYCHOLOGY. A study of the functions of psychology as a science and as a profession in contemporary business and industry. Prerequisite: 201.
407-4. THEORIES OF LEARNING. Consideration of systematic explanations of human and animal learning which have emerged from psychological laboratories. Prerequisite: 201.

409-4. HISTORY AND SYSTEMS. Study of the important antecedents of contemporary scientific psychology. Considers issues, conceptual developments, and research advances, and presents the major schools and systems. Prerequisite: 20 hours in psychology or consent of instructor.

421-4. PSYCHOLOGICAL TESTS AND MEASUREMENTS. Principles of psychological measurement, including errors of measurement, techniques for estimating reliability and validity, techniques of test construction, and problems in assessment and prediction. Prerequisite: 8 hours of psychology.

431-4. PSYCHOPATHOLOGY. The nature, etiology, and treatment of psychological disorders. Observations in a state mental hospital. Prerequisite: 305 or consent of instructor.

437-3. FUNDAMENTALS OF COUNSELING. Introduction to the common assumptions, dimensions, and communicative skills underlying psychological counseling. Prerequisite: 305 or consent of instructor.

440-4. THEORIES OF PERSONALITY. A review and critical evaluation of major personality theories and their supporting evidence. Prerequisite: 305 or consent of instructor.

465-4. GROUP DYNAMICS. Development of principles of group functioning applicable to industry, schools, clinical practice, and community living. Prerequisite: 307 or consent of instructor.

479-4. PSYCHOLOGY OF INDUSTRIAL CONFLICT. Consideration of social and psychological factors underlying controversies between workers and management. Prerequisite: 320 or consent of instructor.

490-1 to 8. INDEPENDENT PROJECTS. Independent readings and projects in psychology. Prerequisite: consent of instructor.

SECONDARY EDUCATION

It is assumed that all candidates for the Bachelor of Science in Education degree have made a commitment to professional education. Secondary education concerns itself with courses in professional education, the teaching fields, and general education. Students should apply for acceptance to the teacher education program and arrange a conference with an adviser in secondary education no later than the sixth quarter.

REQUIREMENTS FOR THE BACHELOR OF SCIENCE IN EDUCATION DEGREE

General Studies Requirements (See page 5.) ........................................... 87-96
A student in the Education Division must complete all general requirements for a bachelor’s degree including American history or government and GSB 331. Depending on his teaching field, 9 hours of General Studies on the first level may be waived. No general requirement in foreign language applies to the B.S. in Ed. degree.

*Professional Education Requirements* .......................................................... 32

Guidance 305 (prerequisite: GSB 201c) ................................................. 4

Educational Administration 355 (prerequisite: GSB 331) ......................... 4

Secondary Education 315 (prerequisite: Guidance 305),
352D (required for a standard special certificate: prerequisite: 315) ........ 12–16

Educational electives with secondary education approval .................... 12–8

*Teaching Fields* (may include some General Studies courses) .......... 75–108

To meet the requirements in the subject-matter course, one must take either one 48-hour first teaching field and one 27-hour second teaching field or one 36-hour first teaching field and two 27-hour second teaching fields.

**TEACHING FIELDS**

The first teaching field shall be at least 48 hours, with a second teaching field of sufficient hours to meet the minimum preparation for teaching in the various fields and subjects (the first teaching field and the second teaching field being in different areas), or the student may carry a 36-hour first teaching field with two approved second teaching fields. It is the policy of the Education Division that the courses and prerequisites within the first teaching field area be approved by the adviser in the teaching field. Additional elective hours in the first teaching field and the second teaching field are encouraged, with a first teaching field and a second teaching field selected from the following subject fields:

<table>
<thead>
<tr>
<th>FIELD</th>
<th>HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art Education</td>
<td></td>
</tr>
<tr>
<td>broad teaching field</td>
<td>67</td>
</tr>
<tr>
<td>2nd teaching field</td>
<td>31</td>
</tr>
<tr>
<td>Botany</td>
<td></td>
</tr>
<tr>
<td>1st teaching field</td>
<td>48</td>
</tr>
<tr>
<td>Biological Science</td>
<td></td>
</tr>
<tr>
<td>1st teaching field</td>
<td>48</td>
</tr>
<tr>
<td>2nd teaching field</td>
<td>27</td>
</tr>
<tr>
<td>Business Teacher Education</td>
<td></td>
</tr>
<tr>
<td>broad teaching field</td>
<td>73–77</td>
</tr>
<tr>
<td>2nd teaching field</td>
<td>27</td>
</tr>
<tr>
<td>Chemistry</td>
<td></td>
</tr>
<tr>
<td>1st teaching field</td>
<td>48</td>
</tr>
<tr>
<td>2nd teaching field</td>
<td>27</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FIELD</th>
<th>HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>1st teaching field 48</td>
</tr>
<tr>
<td></td>
<td>2nd teaching field 27</td>
</tr>
<tr>
<td>Foreign Languages</td>
<td></td>
</tr>
<tr>
<td>1st teaching field</td>
<td>48</td>
</tr>
<tr>
<td>2nd teaching field</td>
<td>27</td>
</tr>
<tr>
<td>General Science and Mathematics</td>
<td></td>
</tr>
<tr>
<td>broad teaching field</td>
<td>84</td>
</tr>
<tr>
<td>57 hours in general science:</td>
<td></td>
</tr>
<tr>
<td>Chemistry 111–15, 341–4, GSA</td>
<td></td>
</tr>
<tr>
<td>201–9, 356–3, Physics 211–15,</td>
<td></td>
</tr>
<tr>
<td>plus 6 hours related earth</td>
<td></td>
</tr>
<tr>
<td>and health science from</td>
<td></td>
</tr>
<tr>
<td>General</td>
<td></td>
</tr>
</tbody>
</table>
Studies; and 27 hours in mathematics: GSD 114-9, Mathematics 150-8, 300-4, 320-3, plus one other mathematics course above 299.

Geography 1st teaching field 48
2nd teaching field 27

Government 1st teaching field 48
2nd teaching field 27

History 1st teaching field 48
2nd teaching field 27

Mathematics 1st teaching field 48
2nd teaching field 27

Music Education
1st teaching field 87-96

Physical Education
1st teaching field 48
2nd teaching field 27

Physics 1st teaching field 48
2nd teaching field 27

Psychology 1st teaching field 48
2nd teaching field 27

Social Studies
broad teaching field 75
27 hours in history, 24 in government or geography, and 12 hours in each of two of the following: anthropology, economics, geography or government, sociology.

Sociology 1st teaching field 48
2nd teaching field 27

Speech Education
1st teaching field 48
2nd teaching field 27

MINIMUM STANDARDS FOR A SECONDARY SCHOOL CERTIFICATE

Students in academic units other than the Education Division who desire to meet minimum standards for a Secondary School Certificate in Illinois may do so by satisfying the following requirements, effective July 1, 1964:

1. Graduation from a recognized institution of higher learning with a bachelor’s degree.
2. Recommendation of the institution of which the student is a graduate.
3. Minimum course work as follows:
   a) Sixty-three quarter hours in general education with 12 hours in language arts, 9 in science or mathematics, 9 in social science including a course in American history and/or government, 9 in humanities, 6 in health and physical education, and 18 additional in any of these fields.
   b) Twenty-eight quarter hours in professional education with work in each of the following fields: educational psychology, including human growth and development; methods and techniques of teaching; history and philosophy of education; a minimum of 8 hours of student teaching in the secondary school; and 8 hours of electives in professional education approved by a secondary adviser.
   c) One first teaching field of 48 hours and one second teaching field of 27 to 36 hours, or three second teaching fields of 27 to 36 hours each. The first teaching field and second teaching field must be in
separate areas or subjects in accordance with minimum standards to teach those subjects in a recognized junior or senior high school.

Students anticipating certification as teachers should become familiar with the requirements for admission to the student teaching program which are listed elsewhere in this bulletin.

Effective September 1, 1962, a student preparing for certification on the secondary level in the state of Illinois must meet the following specific preparation requirements for subject matter fields.

**ART** ................................................................. 30 hours
An appropriate distribution in (1) painting and drawing; (2) two and three dimensional design; (3) crafts; (4) art education; and (5) history and appreciation of art.

**BUSINESS EDUCATION** ............................................ 30 hours
May include a methods course. Following are minimum qualifications for the subject matter areas or courses taught:
1. Typewriting, 9 hours in sequential courses or completion of the advanced course in this sequence.
2. Shorthand and Transcription, 9 hours in sequential courses or completion of the advanced course in this sequence.
3. Bookkeeping, Record Keeping, Accounting, 9 hours in accounting.
4. Business Law, Two courses.
5. Salesmanship, Two courses selected from salesmanship, retailing, marketing, store management, advertising.
6. Office Machines, One course.
7. Office Practice, One course plus qualifications for teaching bookkeeping, typewriting, and office machines.
8. Secretarial Practice, One course plus qualifications for teaching shorthand and typewriting.
9. Business Arithmetic, One course, or 9 hours in accounting.
10. General Business, Four courses distributed in at least four of the following: accounting or business arithmetic, business English, business law, consumer education, economics, introduction to business, marketing, advertising or salesmanship, methods of teaching basic business.

**ENGLISH LANGUAGE ARTS** (English, speech, and journalism) 36 hours
1. English, 36 hours in the field, including a minimum of 9 hours in rhetoric and/or composition, and not more than 12 hours in speech and/or journalism.
2. Speech, qualifications to teach English, including a minimum of 12 hours in speech.
3. Journalism, qualifications to teach English, including a minimum of 12 hours in journalism.

4. Foreign Language, 30 hours in the particular language to be taught. (No credit may be allowed for high school language, unless such credit is approved by an institution of higher learning and is noted on the official transcript; in which case 1½ hours may be allowed for each unit of high school language, not to exceed 6 hours.)

**HEALTH INSTRUCTION** ........................................... 30 hours

Includes work in (1) school health education; (2) basic health sciences; and (3) applied health sciences.

**MATHEMATICS** .................................................. 30 hours

No credit may be allowed for high school mathematics, unless such credit is approved by an institution of higher learning, and it is noted on the official transcript; in which case 1½ hours may be allowed for each unit of high school mathematics, not to exceed 6 hours.

**MUSIC** ................................................................. 30 hours

Work in each of the following: (1) applied music; (2) music theory; (3) conducting; (4) history of music; and (5) methods and materials for general public school music.

**PHYSICAL EDUCATION** ........................................... 30 hours

Work in each of the following: (1) team sports; (2) individual activities; (3) rhythms; (4) body mechanics and basic exercises; (5) organization and administration of physical education classes; and (6) health education.

**SAFETY AND DRIVER EDUCATION** ............................... 24 hours

Two courses in driver education and one course in general safety, with remaining hours to be elected from the related field of health education, first aid, or general safety.

**SCIENCE (biological, physical, or general)** ....................... 36 hours

  *Biological Science.* 36 hours in the field, with the following minimum preparation in each subject taught: botany, 12 hours; zoology, 12 hours; physiology, 12 hours. Teachers of biology must have at least 12 hours of preparation in both botany and zoology, which includes at least one 7½-hour laboratory course in botany, and one 7½-hour laboratory course in zoology, or 15 hours of laboratory work in biology.

  *Physical Science.* 36 hours in the field with the following minimum preparation in each subject taught: astronomy, 7½ hours; chemistry, 15
hours;physiography,7½hours;geology,12hours;physics,15hours.Itis
recommendedthatateacherofastronomy,chemistry,orphysicshavemin-
imum preparation as a teacher of mathematics.

General Science. 36 hours in the field, including the following mini-
mum preparation: physical science, 12 hours; biological science, 12 hours.

SOCIAL STUDIES ........................................................................................................36 hours
Includes the following minimum preparation in each subject taught: civics-
political science, 12 hours; economics, 12 hours; sociology, 12 hours; geogra-
phy, 12 hours; American history, 12 hours; world history, 12 hours in Euro-
peanhistoryand7½hoursinAmericanhistory.Ateacherofanyhistory
course must have completed at least 24 hours of preparation in the field of

COURSE DESCRIPTIONS

315-4. HIGH SCHOOL METHODS. Various types of procedures used for ef-
efective classroom teaching constitute the basis of study and discussion.
The problem approach and unit method are stressed. Prerequisite: Guidance 305 or consent of instructor.
352D-8 to 12. SECONDARY STUDENT TEACHING.
352E-4 to 8. SECONDARY STUDENT TEACHING. Prerequisite: 352D-8.
407-4. THE JUNIOR HIGH SCHOOL. The place of the junior high school in
the organizational pattern, with major emphasis upon the areas of organ-
ization, administration, and curriculum.

SPECIAL METHODS COURSES. In some fields of study special methodology
courses are offered by the faculty of that subject area. See these listings
in the fields of art education, business education, English, foreign lan-
guages, history, mathematics, music education, physical education and
health, science, and social studies.

487-4. TEACHING THE NATURAL SCIENCES IN SECONDARY SCHOOLS.
Objectives of science education; instruction methods and techniques ap-
propriate for teaching science; desirable equipment, audio-visual aids,
and instructional material; development of a course outline and at least
one instruction unit. Prerequisite: 315 or consent of instructor.

488-4. TEACHING THE SOCIAL STUDIES IN SECONDARY SCHOOLS.
Social studies objectives for grades 7 through 12; methods and procedures
for most effective instruction; useful textbook references and audio-visual
materials; preparation of a course outline and detailed plans for one or
more instruction units. Prerequisite: 315 or consent of instructor.

490-4. WORKSHOP IN ECONOMICS EDUCATION. (Same as Economics
490.) Designed to assist elementary and secondary school teachers in
promoting economic understanding through the translation of economic
principles and problems into classroom teaching materials.

505-4. Improvement of Reading Instruction.
507-2 to 4. Readings in Reading.
521-3 to 4. Diagnosis and Correction of Reading Disabilities I.
570-4. Extra-Class Activities.
575-2 to 4. Individual Research (parts a–j)

SPECIAL EDUCATION

The Education Division offers undergraduate work leading to the Bachelor of Science in Education degree in special education. Completion of the degree requirements qualifies one for certification as a teacher of the educable mentally handicapped child.

A student in this curriculum should (1) meet all requirements pertaining to prerequisites to student teaching and should study the section in this bulletin which lists such requirements: (2) have at least 24 hours in each of these fields: language arts, natural science, social science: and (3) satisfy the general requirements of the University and of the Education Division.

REQUIREMENTS FOR THE BACHELOR OF SCIENCE IN EDUCATION DEGREE WITH A CONCENTRATION IN SPECIAL EDUCATION

Language Arts ...........................................................................................................................................24 hours
GSC 251–6, GSD 101–6, 103, English 300 or 391, Speech Correction 428, plus elective hours to total 24.

Natural Science ...........................................................................................................................................24 hours
GSA 101a,b,c, 201a,b,c (GSA 200 substitutes for 201b or 201c), plus 6 hours.

Social Science ...........................................................................................................................................24 hours
GSB 101a,b,c, 201a,b, plus 8 or 9 hours from History 201 and Government 210 or the General Studies equivalents.

Mathematics ................................................................................................................................................9 hours
GSD 112a,b,c, Mathematics 310 or equivalent.

Fine and Applied Arts .................................................................................................................................18 hours
GSC 100 or 101, plus electives to equal 18.

Health and Physical Education ..................................................................................................................10 hours
GSE 201, plus 3 hours in physical education activity; plus Physical Education 350.

General Psychology .................................................................................................................................3 hours
GSB 201c

Education ....................................................................................................................................................31 hours
GSB 331; Elementary Education 314, 337, 351–8, Guidance 305; Instructional Materials 417, Educational Administration 355.

**Special Education** ................................................................. 24 hours
Special Education 410, 413, 414, 420, 8 hours of student teaching in special education.

This program fulfills all the requirements for an elementary teaching certificate in Illinois plus a certificate to teach educable mentally handicapped children.

Information relative to programs leading to a master’s degree appears in the Graduate School bulletin.

**COURSE DESCRIPTIONS**

351D–8. ELEMENTARY STUDENT TEACHING.
410–4. PROBLEMS AND CHARACTERISTICS OF THE MENTALLY RETARDED. Objectives, curriculum, methods, and materials of instruction for slow learners. Emphasis upon the principles of learning as they can be applied to this group. Observations. Prerequisite: Guidance 305 or Psychology 301 or 303.

412–4. EDUCATION OF GIFTED CHILDREN. Designed to help teachers in the identification of, and programming for, gifted and talented children. Prerequisite: Guidance 305 or Psychology 301 or 303.

413–4. DIRECTED OBSERVATION OF EXCEPTIONAL CHILDREN. Taken concurrently with a problem course in a specific area which provides student observation and participation in individual work with exceptional children. Prerequisite: consent of instructor.

414–4. THE EXCEPTIONAL CHILD. Physical, mental, emotional, and social traits of all types of exceptional children. Effects of handicaps in learning situations. Methods of differentiation and techniques for rehabilitation. Individual case studies used; observations and field trips. Prerequisites: Guidance 305, Psychology 301 or 303.

418–4. WORKSHOP IN SPECIAL EDUCATION. Designed to promote better understanding of the psychological and educational problems of atypical children. Specialists used as consultants. Open to seniors and graduate students majoring in education, guidance, or special education.

420–4. METHODS AND MATERIALS FOR TEACHING EXCEPTIONAL CHILDREN. Offered in conjunction with practice teaching, dealing with methods and materials needed in teaching specific types of exceptional children.

428–4. SPEECH CORRECTION FOR THE CLASSROOM TEACHER. (Same as Speech Correction 428.) Etiology and therapy of common speech defects. Open to in-service teachers, seniors, and graduate students in education.

481–4. SEMINAR.

513–4. Organization, Administration, and Supervision of Special Classes.
577–4 to 12. Practicum in Special Education.
STUDENT TEACHING

Application for student teaching should be completed at least two quarters prior to enrollment in the student teaching program. The student will be officially accepted upon receipt of all completed application forms by the Student Teaching Office. Students usually are placed according to their preference. Application to the Student Teaching Office as early as one year in advance will do much to ensure receiving first preference.

The Education Division recommends that a September experience in the classroom should precede student teaching whether it be in the fall, winter, or spring quarter. Request for a September experience and application for student teaching should be submitted to the Student Teaching Office before April 1.

The student's schedule should allow a full morning or afternoon for student teaching. It is recommended that elementary student teaching be done mornings. Consult your adviser in the Education Division to determine the number of quarter hours (between 4 and 16) to be taken.

PREREQUISITES

The student teacher should meet the following requirements prior to enrollment in student teaching:

1. At least 144 quarter hours with a C average.
2. Satisfactory completion of GSD 103 or an equivalent public speaking course.
3. One quarter of residence at the Edwardsville Campus or completion of a minimum of 15 hours.
4. Conference with and approval of adviser in teaching field and adviser in professional education.
5. The state of Illinois requires that all students doing student teaching take a physical examination including a tuberculin test or a chest X-ray. Forms for these examinations can be obtained from the University Health Service office and should be returned to the same office at least two months prior to the student entering the public school classroom.

SECONDARY

1. At least 24 quarter hours in teaching field.
2. At least 11 quarter hours in professional education courses prior to enrollment in student teaching. It is recommended that Secondary Education 315 be taken the quarter prior to student teaching.
ELEMENTARY

1. Guidance 305 and Elementary Education 314 and 337. At least 24 quarter hours recommended.

EARLY CHILDHOOD

1. Meet elementary requirements with exception of Elementary Education 316 instead of 314.
2. Additional 4 hours of student teaching at the kindergarten level.
3. Three terms of Music 010e or pass proficiency in piano.

SPECIAL EDUCATION

1. Meet elementary requirements.
2. Additional courses: Special Education 410 and 413.
3. Eight quarter hours of student teaching in elementary education.
Fine Arts Division

Art and Design; Music; Speech and Theater

The objectives of the Fine Arts Division are to broaden and intensify experiences in the fine arts in the area served by the University; to impart to students an awareness of the cultural values of the arts through formal courses of instruction, exhibitions, concerts, and performances; to provide facilities for the creative and scholarly pursuit of the arts; and to offer specialized programs to serve the ends of liberal and professional education.

FACULTY OF ART AND DESIGN
Associate Professors William F. Freund (M.S., Wisconsin), David C. Huntley (M.A., North Carolina), John A. Richardson (Ed.D., Columbia; chairman).
Assistant Professors Evelyn T. Buddemeyer (B.S., Missouri), Glen E. Howerton (M.S., Fort Hays Kansas State), Catherine E. Milovich (M.A., Columbia).
Instructor John D. Randall (B.S., Illinois Inst. of Tech.).
Term Instructors and Lecturers Walter Kemper, Lawrence L. Marcell.

FACULTY OF MUSIC
Associate Professors Lloyd G. Blakely (Mus.A.D., Boston; chairman), Dorothy E. Tulloss (Mus.A.D., Boston).
Assistant Professors Kenwyn G. Boldt (M.M., Indiana), Clinton D. Fjerstad (M.M., Indiana), Assen D. Kresteff (Ph.D., Munich), George K. Mellott (Ph.D., Iowa), Leonard W. VanCamp (Mus.A.D., Missouri, Kansas City).

FACULTY OF SPEECH AND THEATER
Professor Andrew J. Kochman (Ph.D., Wisconsin).
Associate Professors Robert B. Hawkins (Ph.D., Northwestern), Harry M. Lyle (Ph.D., Southern California), James L. Robinson (M.A., Northwestern), Hollis L. White (Ph.D., Missouri; chairman).
Assistant Professors Clifton Cornwell, Jr. (M.A., Missouri), Calvin L. Pritner (M.A., Illinois).
DIVISIONAL REQUIREMENTS

Because of the diverse nature of the instructional areas of the Fine Arts Division and because of the varying requirements of the bachelor's degrees whose concentrations fall within the division, no attempt is made to list divisional requirements; instead under each area of instruction are listed the requirements within the Fine Arts Division leading to the Bachelor of Arts, Bachelor of Science in Education, and Bachelor of Music degrees.

ART AND DESIGN

Undergraduate offerings in art provide both introductory and specialized experiences. Curricula are planned for those desiring a concentration in art and for those interested in art as an avocation.

The Fine Arts Division reserves the right to withhold an example of the work of each student in each class. Such works become a part of a permanent collection from which exhibitions may be prepared.

During the last quarter of his junior year, any art student may petition the art faculty to grant him the privilege of an exhibition of his work. Such an exhibit may be comprised of the work of an individual or may be composed of the works of several seniors. Participation is not required for graduation; permission to participate is extended in recognition of industry and ability.

SUGGESTED CURRICULA

BACHELOR OF ARTS DEGREE

<table>
<thead>
<tr>
<th>Description</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Studies Requirements (See page 5.)</td>
<td>87</td>
</tr>
<tr>
<td>Bachelor of Arts Degree Requirements (See page 7.)</td>
<td>(9)</td>
</tr>
<tr>
<td>Art Concentration Requirements</td>
<td>58</td>
</tr>
<tr>
<td>General Studies Area C 351-12</td>
<td>(9) + 3</td>
</tr>
<tr>
<td>Art 100-15, 201-8, 203-8, 310-8, 358-8, 8 hours from these: 305, 310, 324, 325, 358</td>
<td>55</td>
</tr>
<tr>
<td>Secondary Concentration Requirements</td>
<td>24-27</td>
</tr>
<tr>
<td>Electives</td>
<td>20-23</td>
</tr>
<tr>
<td>Total</td>
<td>192</td>
</tr>
</tbody>
</table>

BACHELOR OF SCIENCE IN EDUCATION DEGREE

For this degree in the Education Division, the following courses consti-
tute a concentration in art: 100–15, 201–8, 203–8, 300–4, 310–8, 358–8, 365–4, GSC 351–12. They total 67 hours.

SECONDARY CONCENTRATION

A secondary concentration in art requires 100–15, 201–8 or 203–8, and 8 hours from the following: 300, 305, 310, 324, 358, 365, GSC 101, 351.

COURSE DESCRIPTIONS

The prefix GSC indicates a General Studies course which involves the discipline of art and which is listed here for convenience. The description of such a course appears in the General Studies bulletin.

100–15 (5,5,5). BASIC STUDIO. A comprehensive survey of various technical areas of art. First-hand experience with a number of different media. Required of all students concentrating in art and recommended for others interested in basic studio experience. Must be taken in a,b,c sequence. Prerequisite to all studio courses other than 300.

GSC 101–3. ART APPRECIATION.
201–8 (4,4). DRAWING AND COMPOSITION. An extension and intensification of Basic Studio experiences with emphasis on draughtsmanship and composition. Must be taken in a,b sequence. Prerequisite: 100–15.

203–8 (4,4). BEGINNING CERAMICS. An exploration of the technical and aesthetic possibilities of the potter’s craft. Must be taken in a,b sequence. Prerequisite: 100–15.

300–12 (4,4,4). ART EDUCATION. Theory and practice of art activities in the elementary schools with attention to teaching methodology. Designed primarily to meet the needs of elementary education students. Must be taken in a,b,c sequence. No prerequisite.

305–12 (4,4,4). ADVANCED CERAMICS. Intensive study of ceramics as an art form. Must be taken in a,b,c sequence. Prerequisite: 203–8.

310–12 (4,4,4). OIL PAINTING. Intensive study of oil painting as a medium of expression. Individual rather than group problems are engaged. Must be taken in a,b,c sequence. Prerequisite: 201–8.

324–4. WATERCOLOR. Intensive study of watercolor painting as a medium of expression. Transparent watercolor, gouache, casein, and tempera techniques may be explored. Prerequisite: 201–8.

325–12 (4,4,4). STUDIO. Advanced independent study and research. Work may be undertaken in painting, sculpture, jewelry, drawing, printmaking, pottery, weaving and other crafts. (Media of the student’s selection.) May be taken in any sequence. Prerequisites: 8 hours in medium of choice (except where such courses do not exist) and consent of instructor.

350–6 (3,3). LECTURES IN AMERICAN ART. A survey of American painting, sculpture, and architecture from the early 18th century to the present. May be taken in either sequence. Prerequisite: GSC 101, GSC 351a, or consent of instructor.

GSC 351–12 (4,4,4). HISTORY OF WORLD ART.
358–12 (4,4,4). PRINTS. An introduction to printmaking as a medium. Studio projects in intaglio, relief, and planographic processes. Must be taken in a,b,c sequence. Prerequisite: 201–8.
365-4. ART EDUCATION IN THE SECONDARY SCHOOLS. For art education majors preparing to teach on secondary level; includes studio projects designed to develop awareness of technical and aesthetic needs of high school students, reading and discussion of literature, planning of curriculum, and instructional facilities. Winter quarter only.

393-12 (4,4,4). SCULPTURE. Problems in modeling, carving, casting, and construction. Must be taken in a,b,c sequence. Prerequisite: 100-15.

401-8 (4,4). RESEARCH IN ART. Projects undertaken combine academic research of a historical nature with technical experimentation on the part of the artist. May be taken in either sequence. Prerequisite: consent of the art faculty.

406-8 (4,4). STUDIO IN ART. Advanced independent study. May be taken in either sequence. Prerequisite: 401-8.

MUSIC

During the academic year the music staff of the Fine Arts Division brings to the campus a series of distinguished musicians who join the faculty and students for a period of workshops, seminars, and performances. The series has included such artists as Sigurd Rascher, saxophonist; Leonard Smith, cornetist; Sidney Foster, pianist; the Ritter-Allen Duo (violin-piano); Reginald Kell, clarinetist; John Barrows, french horn; Vincent Abato, clarinet-saxophone; and Paul Price, percussion.

The music staff offers service courses in music to students in the other divisions of the University and curricula leading to the following baccalaureate degrees: Bachelor of Music, for students in the Fine Arts Division with specialization in music performance or in music education, and Bachelor of Arts, for students in other divisions but desiring concentration in music as part of their general cultural education.

SUGGESTED CURRICULA

Detailed requirements in music are stated in a handbook provided by the music faculty.

BACHELOR OF ARTS DEGREE

This curriculum is designed for students who wish to specialize in music as part of their general cultural education. It is also designed to provide a background training for those who may plan to pursue advanced studies in music.

General Studies Requirements (See page 5.) ........................................... 87
Bachelor of Arts Degree Requirements (See page 7.) ......................... (9)
FINE ARTS DIVISION—MUSIC

Music Concentration Requirements ................................................................. 51
  GSC 255, 357–9 (9) + 3
  Music 105–12, 205–9 21
  Music performance major (2 hours per quarter) 12
  Music major ensemble 6
  Music electives 9

Secondary Concentration Requirements ......................................................... 24–27
Electives ............................................................................................................. 27–30
Total .................................................................................................................. 192

BACHELOR OF MUSIC DEGREE

Music Performance

General Studies Requirements (See page 5.) .................................................... 87
Music Performance Concentration Requirements .......................................... 108
  Music 105–12, 205–9, 309a, 312a, 318a, 326a, 442a 36
  Music, private applied (major instrument) 45
  Music, major ensemble (1 hour per quarter) 12
  Music, class piano or secondary instrument/voice 6
  Music, electives 9

Total .................................................................................................................. 195

Voice concentrations in music performance include one year each of French and German. Students in performance specializations other than voice and those with probable future specializations in music theory-composition, music history-literature, or church music, should consult with their adviser as to the sequence to be followed in languages.

Music Education

American history or government is required of the student with specialization in music education.

One year of French or German is recommended for the student with vocal-choral emphasis in music education. Modern language is not required of the student with instrumental or combined choral-instrumental emphasis in music education.

General Studies Requirements (See page 5.) .................................................... 87
Music Education Concentration Requirements .............................................. 81–90
  Music 105–12, 205–9, 309–3, 318–6, 326–3 33
  Music, private applied (major instrument) 24
  Music, major ensemble (1 hour per quarter) 12
  Music, class piano or secondary instrument/voice 12–21
Professional Education Requirements .......................................................... 25

Music 301-9 .................................................................................................... 9
Guidance 305 ................................................................................................. 4
Elementary Education 351E and Secondary Education 352D 12
GSB 331 .......................................................................................................... (3)

Total ................................................................................................................ 193-202

SECONDARY CONCENTRATION

A secondary concentration in music includes 105-12, 1 hour of credit per quarter for six quarters in performance major, 6 hours in a major ensemble, GSC 100, 255. Total: 30 hours.

COURSE DESCRIPTIONS

The prefix GSC indicates a General Studies course which involves the discipline of music and which is listed here for convenience. The description of such a course appears in the General Studies bulletin.

THEORY COURSES

105-12 (4,4,4). THEORY OF MUSIC. Fundamentals of music through sight singing, dictation, written, and keyboard harmony. Must be taken in a,b,c sequence. Prerequisite: Piano proficiency or concurrent enrollment in 010e.

200-3. FUNDAMENTALS OF MUSIC. Rudiments of music for those with little or no musical background. Recommended as a course preliminary to 300. (not for music curricula). May be taken concurrently with 010e.

205-9 (3,3,3). THEORY OF MUSIC. Advanced harmonic techniques, modulation, altered chords, chromatic harmony, counterpoint, and introduction to contemporary harmonic principles. Must be taken in a,b,c sequence. Prerequisite: 105c.

309-6 (3,3). ORCHESTRATION. The techniques of writing for orchestral instruments. Must be taken in a,b sequence. Prerequisite: 205c.

312-6 (3,3). COMPOSITION. (a) Original composition in the smaller forms for piano, voice, string quartet, and other small combinations. (b) Original composition in the larger forms. Must be taken in a,b sequence. Prerequisite: 205c.

326-6 (3,3). ANALYSIS. (a) Analysis of the important musical forms and styles from plain song through the 12-tone technique with emphasis on forms of the 18th and 19th centuries. (b) Analysis of the larger homophonic and contrapuntal forms from the 18th century to the present. Must be taken in a,b sequence. Prerequisite: 205c or consent of instructor.

442-6 (3,3). CONTRAPUNTAL FORMS. (a) Analysis and creative writing in the style of Palestrina and his contemporaries and the contrapuntal-harmonic technique of Bach. (b) Analysis and creative writing of the larger imitative forms. Must be taken in a,b sequence. Prerequisite: 205c.
HISTORY AND LITERATURE COURSES
GSC 100-3. MUSIC UNDERSTANDING.
GSC 255-3. MUSIC IN HISTORY.
GSC 357-9 (3,3,3). MUSIC HISTORY AND LITERATURE.
411-9 (3,3,3). MUSIC LITERATURE. (a) Symphonic: A study of the development of the symphony and symphonic poem. (b) Choral: The literature of the larger vocal forms such as the cantata and oratorio. (c) Chamber Music: Study of chamber music from the Renaissance to the present. May be taken in any sequence. Prerequisite: consent of instructor.

MUSIC EDUCATION COURSES
300-3. MUSIC EDUCATION—ELEMENTARY. Teaching music in the elementary grades. (Not for music curricula.) Prerequisite: 200 or equivalent.
301-9 (3,3,3). MUSIC EDUCATION. (a) Music in the elementary school curriculum, grades K–6. Analysis of instructional materials, development of rhythmic and melodic expressions, creative, instrumental, listening activities. Creating a musical environment in the classroom. (b) Junior high school: Curriculum, organization, and administration of choral, instrumental, and general music classes; resource units; the adolescent voice. (c) Senior high school: Curriculum, organization, and administration of choral, instrumental, and general music classes. Must be taken in a,b,c sequence. (For music concentration only).
307-4. RECREATIONAL MUSIC. For those interested in the less formal approach to music and for prospective leaders of recreational activities.
318-6 (3,3). CONDUCTING. (a) General: Fundamental conducting patterns, size of beats, use of each hand; conducting experience with laboratory groups both choral and instrumental; discussion and study of musical terminology. (b) Choral and Instrumental: Continued conducting experience through laboratory group; study of rehearsal techniques, balance, blend, and the relationship of parts to the total ensemble; evaluation and analysis of literature suitable for school groups of all levels of ability. Must be taken in a,b sequence.
451-3. THE TEACHING OF GENERAL CLASSROOM MUSIC IN THE JUNIOR AND SENIOR HIGH SCHOOL.
455-4. WORKSHOP FOR ELEMENTARY MUSIC EDUCATION.
461-6 (3,3). TEACHING TECHNIQUES AND MATERIALS. Designed to meet the needs of piano or voice specializations in the Bachelor of Music or the Master of Music degree programs. Problems of private studio teaching and college level teaching are studied. (a) For the intermediate levels. (b) For the advanced levels. Must be taken in a,b sequence. Prerequisite: Senior or graduate standing in music or consent of instructor.
465-3. DEVELOPMENT AND TEACHING OF STRINGS. Place and function of string education in the elementary and secondary schools. Techniques of heterogeneous and homogeneous string teaching. Developing and sustaining interest in the string program. Resource aids. Given each quarter. May be repeated for credit up to 9 hours. Prerequisite: senior standing.
MUSIC PERFORMANCE COURSES

001-1 (1,0,0). UNIVERSITY BANDS. (a) Symphonic Band, (b) Stage Band, (c) Instrumental Laboratory. May be taken in any sequence. Any part may be repeated for 12 quarters. Prerequisite: (a,b) by audition, (c) consent of instructor.

002-6 (1,1,1,1,1). CHORAL ENSEMBLES. (a) Collegiate Singers, (b) University Chorus, (c) Male Chorus, (d) Women’s Chorale, (e) Southern Illinois University Community Choral Society, (f) Madrigal Singers. May be taken in any sequence. Any part may be repeated for 12 quarters. Prerequisite: none, except audition for (a,f).

010-6 (1,1,1,1,1). CLASS APPLIED MUSIC. Class instruction is offered in all areas of applied music, except organ. These courses include the minimum instruction required for passing the proficiency examinations in piano and voice, and they offer practical training in the basic principles of playing the instruments of the orchestra and band. They also include introductory techniques and methods for teaching instrumental and vocal groups in the elementary and secondary schools. Assignment to specific instrument study is made on the first day of class. (a) Strings, (b) Woodwinds, (c) Brass, (d) Percussion, (e) Piano, (f) Voice. May be taken in any sequence. A student with a music concentration should consult his adviser as to the required sequences. Prerequisite: none.

140-2 or 4, 240-2 or 4, 340-2 or 4, 440-2 or 4, 540-2 or 4. PRIVATE APPLIED MUSIC. Private instruction is offered at five levels in the areas listed below. Credit is given at two or four hours on each level. Consult with adviser for details of credit and requirements. May be repeated for three quarters at each level. Performance majors usually take 4 hours. Music education majors and all music minors usually take 2 hours. Prerequisite for 140: music concentration or secondary concentration or consent of music faculty. Prerequisite for higher levels: three quarters at the previous level on the same instrument or consent of the instructor. (a) Violin, (b) Viola, (c) Cello, (d) String Bass, (e) Flute, (f) Oboe, (g) Clarinet, (h) Bassoon, (i) Saxophone, (j) Percussion, (k) Piano, (l) French Horn, (m) Trumpet, (n) Trombone, (o) Tuba, (p) Baritone, (q) Voice, (r) Organ.

355-3 (1,1,1). CHAMBER MUSIC ENSEMBLES. (a) Brass, (b) Woodwinds, (c) Strings. May be taken in any sequence. Any part may be repeated for 12 quarters. Prerequisite: consent of instructor.

MUSIC COURSES FOR GRADUATE STUDENTS ONLY

502-9 (3,3,3). History and Analysis of Musical Style.
515-3. Twentieth Century Literature.
550-8 (4,4). Organization and Administration of the Music Education Program.
553-6 (3,3). Seminar in Materials and Techniques.
556-3. Advanced Conducting.
560-3. Seminar in Music Education.
SPEECH AND THEATER

The success of the American system of representative democracy depends largely upon the effectiveness with which men use oral communication to formulate and implement decisions. The success of a liberal education depends largely upon the effectiveness with which men use oral communication in their pursuit of truth, justice, and beauty. Thus, the basic objectives are (1) to help students to prepare themselves for more effective participation in the making and implementing of democratic decisions, and (2) to show students how speech can help them obtain a liberal education.

The study of speech is essential in preparing students for careers in law, business, education, engineering, journalism, medicine, and the ministry. Students with special interests in broadcasting, speech science, speech therapy, audiology, theater, public address, or speech education may plan concentrations from the course offerings in speech to further their professional interests.

SUGGESTED CURRICULA

BACHELOR OF ARTS DEGREE

Three curricula are offered: (1) general speech, (2) speech education, and (3) theater. Students who expect to be certified as teachers on the secondary education level must fulfill the professional education requirements as outlined in the Education Division section of this bulletin.

Every student who concentrates in speech must participate in the Speech Arts Performance Program for three quarters by enrolling in Speech 230 or 330. He must also present a special graduation project in his senior year before an examining committee of speech faculty members. The committee shall certify the candidate’s performance only if his project meets certain minimum standards of excellence. The kind of project shall be determined by the student and his adviser. Examples include the following: preparing and delivering an extensive and thoroughly documented paper on some national or international problem; writing and producing a one-act play; writing and producing a radio or television play. Unlike the Speech Arts Performance Program, in which students may work together (e.g., in theatrical productions or on debate teams), the graduation project is to be performed by the student alone. Seniors must take the initiative early in their senior year for arranging the project with their advisers and for setting the time of the performance.
The student will consult with his major adviser for an appropriate, cognate, secondary concentration.

**General Speech and Speech Education**

*General Studies Requirements* (See page 5.) ........................................ 96
*Bachelor of Arts Degree Requirements* (See page 7.) ............................... (9)
*Speech Concentration Requirements* ....................................................... 48

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSD 103-3</td>
<td>(3)</td>
</tr>
</tbody>
</table>
| Speech 102, 104, 202, 224, 230 or 330 | 18

Speech electives in at least three of the four speech areas listed below under “Course Descriptions” (306 is required for certification in secondary education) 30

*Secondary Concentration Requirements* .................................................. 24

A secondary concentration of at least 24 hours in one of the social sciences is strongly recommended for General Speech, in a social science or English literature or a foreign language for Speech Education.

<table>
<thead>
<tr>
<th>Electives</th>
<th>24</th>
</tr>
</thead>
</table>

**Total** ........................................................................................................ 192

**Theater**

*General Studies Requirements* (See page 5.) ............................................. 96
*Bachelor of Arts Degree Requirements* (See page 7.) ............................... (9)
*Speech Concentration Requirements* ......................................................... 61

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSC 100, 101, 203, 354-6</td>
<td>(12) + 3</td>
</tr>
<tr>
<td>GSD 103-3</td>
<td>(3)</td>
</tr>
<tr>
<td>Art 100</td>
<td>5</td>
</tr>
<tr>
<td>English 365, 460a, 460b, 460c, 460d, 468, 471-4 (any 4)</td>
<td>16</td>
</tr>
<tr>
<td>Philosophy 360</td>
<td>4</td>
</tr>
<tr>
<td>Speech 104, 224, 230-3 or 330-3</td>
<td>11</td>
</tr>
<tr>
<td>Theater 121-6, 203, 204, 402, 439</td>
<td>22</td>
</tr>
</tbody>
</table>

*Secondary Concentration Requirements* .................................................... 24

<table>
<thead>
<tr>
<th>Electives</th>
<th>11</th>
</tr>
</thead>
</table>

**Total** ........................................................................................................ 192

**SECONDARY CONCENTRATION**

It is recommended that a student who desires a 27-hour concentration in speech take courses based upon his interest and faculty advisement. For secondary education certification, 306 must be included.
COURSE DESCRIPTIONS

Courses are listed numerically in 4 categories: general speech, radio and television, speech correction, and theater.

The prefix GSC or GSD indicates a General Studies course which involves the discipline of speech and which is listed here for convenience. The description of such a course appears in the General Studies bulletin. General Studies courses meet the requirements of both the General Studies program and the speech concentration.

GENERAL SPEECH

102-4. PUBLIC SPEAKING. Analysis of audience motives and reactions stressed in the approach to speech preparation for typical public speaking situations. Prerequisite: GSD 103.

GSD 103-3. ORAL COMMUNICATION OF IDEAS.

104-4. TRAINING THE SPEAKING VOICE. Designed for those students who desire to improve their voice and articulation. Prerequisite: GSD 103.


205-3. PRINCIPLES OF ARGUMENTATION AND DEBATE. Principles of argument, analysis, evidence, reasoning, fallacies, briefing, and delivery. Prerequisite: GSD 103.

224-4. COMMUNICATIVE READING. Study of and practice in the analysis of literature and its oral communication to an audience. Prerequisite: GSD 103.

230-6 (1 per quarter). SPEECH ACTIVITIES. Directed public performance in one or more of the following: Speaking, communicative reading, theater, radio, and television. Kind of activity to be determined by student and his adviser. Open to all students. Prerequisite: consent of instructor.

301-4. PERSUASION. Psychological principles involved in influencing individuals and groups. Prerequisite: GSD 103.

303-4. BUSINESS AND PROFESSIONAL SPEAKING. Speaking needs of business and professional people. Technical reports and lighter types of speaking included in the types studied. Primarily for adult and extension classes. Prerequisite: none.

306-4. TEACHING SPEECH IN SECONDARY SCHOOLS. Philosophy of speech education, and effective teaching of speech through curricular and extracurricular work. Required of speech students working for a secondary education degree in Education Division. Prerequisite: 16 hours of speech.

330-6 (1 per quarter) SPEECH ACTIVITIES. (Same as 230.)

407-8 (4,4). HISTORY OF AMERICAN PUBLIC ADDRESS. Critical studies of American speakers; a study of selected speakers and speeches which reflect the dominant social and political ideas in American history. May be taken in either sequence. Prerequisite: none.
408–4. PSYCHOLOGY OF SPEECH. Nature and development of speech, its basic psychology, and the part speech plays in personality development. Prerequisite: GSD 103.

449–4. GENERAL SEMANTICS. Study of the relationships between spoken language and reality and case studies of communications breakdowns.

RADIO AND TELEVISION

251–3. SURVEY OF BROADCASTING. Examination of the United States system of broadcasting with emphasis on industry, network structure, and local station organization and economics. The various systems of foreign broadcasting. This course is a foundation for 368.

257–4. FUNDAMENTALS OF BROADCAST WRITING. Oral and visual forms of writing for radio and television. Short continuity forms and commercial presentations. Prerequisite: GSD 103.

368–8 (4,4). FUNDAMENTALS OF RADIO AND TELEVISION PRODUCTION. (a) Production of various types of radio programs from conception through completion, including writing, direction, and performance. Station operational procedures. (b) Use of equipment and basic techniques in production of television programs of all types. Three one-hour lectures and three one-hour scheduled laboratory periods per week. May be taken in either sequence. Prerequisite: consent of instructor.

393–3. RADIO, TELEVISION, AND SOCIETY. The interrelation of radio and television with social habit patterns and with economic and political systems. Case studies. Prerequisite: consent of instructor.

SPEECH CORRECTION

100–4 (0–2 per quarter). SPEECH CLINIC. For students with speech and hearing deviations who need individual help.

200–4. PHONETICS. Instruction in the use of phonetic symbols to record the speech sounds of American English, with emphasis on ear training, and a description of place and manner of production of these sounds.

203–4. INTRODUCTION TO SPEECH SCIENCE. An introduction to the science of general speech including the history of research in the field and significant experimental trends in the future. Open to all students.

212–4. ARTICULATORY PROBLEMS AND DELAYED SPEECH. Designed to acquaint the student with articulatory speech defects. Diagnostic and therapeutic techniques stressed. Prerequisite: 200 or concurrent.

428–4. SPEECH CORRECTION FOR THE CLASSROOM TEACHER. (Same as Special Education 428.) Etiology and therapy of common speech defects. Open to in-service teachers, seniors, and graduate students in education. Prerequisite: GSD 103.

THEATER

121–6 (3,3). PRODUCTION TECHNIQUES. Lectures and practical experiences in stagecraft, lighting, costuming, make-up, property construction and stage movement. May be taken in either sequence. No prerequisite.

GSC 203–3. DRAMA AND THE ARTS OF THE THEATER.

203–4. SCENIC DESIGN. A basic course employing graphic and plastic media,
intended to acquaint students with solutions to the problems encountered by the director, scene designer, costumer, and lighting director.

204-4. ACTING. Theory and practice. Application of modern principles to the performance of various theatrical styles. Prerequisites: GSC 203 and consent of instructor.

306-4. INTRODUCTION TO PLAYWRITING. Analysis of dramatic structure; the study of scriptwriting techniques. The student will be required to write scenes or a short play. Prerequisite: consent of instructor.

310-3. CHILDREN'S THEATER. Creative dramatics; dramatization of children's literature; play production for elementary schools. Recommended for education concentrations.

GSC 354-6 (3,3). HISTORY OF THE THEATER.

402-4. DIRECTING. Selection of plays, casting, and methods of rehearsal. Development of characterization, control of tempo, and similar problems studied. Students to direct or to aid in directing one-act plays and major productions.

439-4. CONTEMPORARY THEATRICAL THEORY AND PRACTICE. The development of modern theatrical production; study of recent ideas in theater architecture, staging and performance. Consideration of the film and television as dramatic media. Prerequisite: 121-3.
Humanities Division

American Studies; Comparative Literature; English Language and Literature; Foreign Languages and Literature; Humanities (Honors Program); Journalism; Philosophy

The Humanities Division provides instruction in the intellectual disciplines of English and other languages, of literature, and of ideas. The division is concerned with instruction in the reading, writing, and speaking of English and other languages, the development of an understanding and appreciation of literature, and the concomitant recognition of its civilizing values. The division guides advanced students in methods of studying the works, men, and movements that make up literary and intellectual history. All students are encouraged to think and to write rationally, imaginatively, and responsibly as they learn to identify persistent human problems and their classic and current solutions.

FACULTY
Research Professor John Francis McDermott (A.M., Washington University).

FACULTY OF ENGLISH LANGUAGE AND LITERATURE
Professors James C. Austin (Ph.D., Western Reserve), William T. Going (Ed.D., Michigan), Nicholas Joost (Ph.D., North Carolina), Gordon R. Wood (Ph.D., Princeton; chairman).
Associate Professors Robert W. Duncan (Ph.D., Cincinnati), Marion A. Taylor (Ph.D., Iowa), W. Bryce Van Syoc (Ph.D., Michigan), Jules Zanger (Ph.D., Washington University).

Instructor Robert G. Stanley (M.S., Kansas State).

Term Instructors and Lecturers Richard O. Bell, Herman A. Dreifke, Richard L. Hopkins, Richard W. Lee, Garry N. Murphy, Barbara Quinn, Major D. Regain, Bruce V. Roach, Harley L. Sachs, Sanford M. Schmidt.

FACULTY OF FOREIGN LANGUAGES AND LITERATURE

Professor Alfred G. Pellegrino (Ph.D., Montreal; chairman).

Associate Professors James Etmekjian (Ph.D., Brown), Paul F. Guenther (Ph.D., North Carolina), Alice M. Pool (Doctora en Letras, Mexico), Raymond J. Spahn (Ph.D., Northwestern).

Assistant Professors Ieva Asmyte (Ph.D., North Carolina), Helen D. Goode (Ph.D., Kansas), Josef E. Ryberg, Jr. (Ph.D., Illinois).

Term Instructors and Lecturers Nelvin W. Heisner, Sonja M. Lind, Michael N. Smith.

FACULTY OF PHILOSOPHICAL STUDIES

Professor Gerald J. T. Runkle (Ph.D., Yale).

Associate Professors Walter R. Goedecke (Ph.D., Chicago), George W. Linden (Ph.D., Illinois; chairman), Paul G. Morrison (Ph.D., Chicago).

Assistant Professors Robert Murdoch (M.A., Washington University), W. Winslow Shea (Ph.D., Yale).

DIVISIONAL REQUIREMENTS

A student who plans to concentrate in one of the disciplines of the Humanities Division should work closely with his adviser. An adviser is assigned after a student has accumulated 64 hours and has filed the "Declaration of Concentration" form. Such a student must first present no single grade lower than C (3.0) in General Studies areas C and D. A concentration in the Humanities Division is recognized as completed only with a grade of C or higher in each course.

Candidates for the Bachelor of Arts degree electing a concentration in the Humanities Division must have two years of college-level foreign language. Ordinarily no General Studies requirements may be waived by one electing a concentration in the Humanities Division.

AMERICAN STUDIES

The concentration in American studies consists of 64 quarter hours, of which not less than 24 and not more than 28 will be in any one discipline. Of the 64 hours, 32 are required as follows: American Studies 398–4, English 309–8, History 201–8, Philosophy 381b–4, 381c–4, 386–4. The remaining 32 hours will be selected from approved courses in history, social sciences, literature, philosophy, fine arts, and other subjects. At least two of these courses must be in speech or fine arts. At least two years of a foreign language are required; three are strongly recommended.
COURSE DESCRIPTION

398-4. SEMINAR IN AMERICAN STUDIES. Helps the student to integrate his knowledge of American culture and to undertake scholarship that crosses the boundaries of traditional disciplines. Prerequisite: senior standing.

COMPARATIVE LITERATURE

The secondary concentration in comparative literature is 37 hours, prescribed as follows: 300a,b,c; 310a,b,c; two years of foreign-language study on the college level; Philosophy 360 or any single 300- or 400-level foreign-language course is acceptable as an alternate for any one of the electives in comparative literature (310d, 310e, or 399). Prerequisite for all courses: second-level General Studies requirement.

COURSE DESCRIPTIONS

300-12. (4,4,4). SURVEY OF COMPARATIVE LITERATURE. (a) from Homer to Dante. (b) from Rabelais to Racine. (c) from Voltaire to Kafka.

310-20 (4,4,4,4,4). COMPARATIVE LITERATURE: GENRES. (a) lyric and epic poetry. (b) drama. (c) prose. (d) tragedy. (e) novel.

399-4. TRADITIONAL THEMES OF WORLD LITERATURE. Prerequisites: any course in comparative literature and a course in English, foreign, or comparative literature.

ENGLISH

SUGGESTED CURRICULA

BACHELOR OF ARTS DEGREE

General Studies Requirements (See page 5.) ..................................................... 96
Bachelor of Arts Degree Requirements (See page 7.) ........................................... (9)
Humanities Division Requirements (See page 63.) ..............................................(9) + 9
English Concentration Requirements ................................................................. 44
  English 300, 302-12, 309-8, 365, 499-2 ......................................................... 30
  English electives numbered above 299 (485, 486, 487 do not count.) .......... 14
Secondary Concentration Requirements ......................................................... 24–27
Electives ........................................................................................................... 16–19
Total .................................................................................................................. 192
The student concentrating in English who intends to teach in secondary school is required to take English 485 in addition to the concentration requirements.

SECONDARY CONCENTRATION

A 24-hour concentration in English consists of the following courses: English 300, 302-12, 309-8.

COURSE DESCRIPTIONS

Students beyond the freshman level who desire additional instruction in understanding and writing the English language should consider either auditing or repeating for credit English Composition (GSD 101a and 101b) or enrolling in English 390 or 391. The student should be guided by the descriptions of these courses and by the advice of the English staff.

The prefix GSC or GSD indicates a General Studies course which involves the discipline of English and which is listed here for convenience. The description of such a course appears in the General Studies bulletin.

Students can proceed to the 300 level only after completing the 200-level requirements.

GSD 101–6 (3,3). ENGLISH COMPOSITION.
GSC 151–3. INTRODUCTION TO POETRY.
GSC 251–9 (3,3,3). LITERARY AND PHILOSOPHICAL MASTERPIECES.
300–4. PRINCIPLES OF ENGLISH GRAMMAR. Required for English students. Others should take 391. Credit not allowed for both courses.
302–12 (4,4,4). ENGLISH LITERATURE. Required for primary and secondary concentration in English. Does not have to be taken in sequence.
309–8 (4,4). AMERICAN LITERATURE. Required for primary and secondary concentration in English. Does not have to be taken in sequence.
320–4. EARLY NINETEENTH-CENTURY POETRY.
GSC 335–3. STUDIES IN SHORT FICTION.
365–4. SHAKESPEARE.
390–3. ADVANCED COMPOSITION. Expository writing.
391–3. USAGE IN SPOKEN AND WRITTEN ENGLISH. The essentials of grammar and the "common decencies." Prerequisite to student teaching, except in English curricula, which require 300.
392–3. PROFESSIONAL WRITING I. Introductory course for undergraduates. Prerequisite: consent of instructor.
400–4. INTRODUCTION TO ENGLISH LINGUISTICS. An analysis of the structure of modern English, to supplement the student's traditional approach to grammar with a knowledge of the contemporary structural approach to language. Prerequisite: 300 or 391 or consent of instructor.
403–4. HISTORY OF THE ENGLISH LANGUAGE. Prerequisite: 300 or 391 or consent of instructor.
404–8 (4,4). MIDDLE ENGLISH LITERATURE. (a) contemporaries and successors of Chaucer. (b) Chaucer. Either part may be taken alone.
412–12 (4,4,4). ENGLISH NONDRAMATIC LITERATURE. (a) 16th cen-
tury. (b) 17th century. (c) 18th century. Any part may be taken alone.

417-4. VICTORIAN LITERATURE. Ideas, forms, and personalities in English literature from 1830 to 1900. Prerequisite: 317.

420-8 (4,4). AMERICAN POETRY. (a) to 1900. (b) modern. Either part may be taken alone.

421-16 (4,4,4,4). ENGLISH POETRY. (a) early romantics. (b) later romantics. (c) Victorian poetry. (d) modern British poetry. Any part may be taken alone.


447-4. AMERICAN HUMOR AND SATIRE. A consideration of the writers and forms of nineteenth and twentieth century humor.

454-12 (4,4,4). ENGLISH FICTION. (a) eighteenth-century novel. (b) Victorian novel. (c) contemporary British fiction. Any part may be taken alone.

458-8 (4,4). AMERICAN FICTION. (a) the novel. (b) contemporary fiction. Either part may be taken alone.

460-16 (4,4,4,4). ENGLISH DRAMA. (a) Elizabethan drama. (b) Jacobean drama. (c) Restoration and eighteenth-century drama. (d) modern British drama. Any part may be taken alone.

468-4. AMERICAN DRAMA. The rise of the theater in America, with readings of plays, chiefly modern. Prerequisite: 309-4.

471-8 (4,4). SHAKESPEARE. Either part may be taken alone.

473-4. MILTON.

485-4. PROBLEMS IN THE TEACHING OF ENGLISH. Aims, methods, materials, tests, programs, and other aspects of English instruction in the high school.

486-2 to 8. WORKSHOP IN HIGH SCHOOL ENGLISH. Intensive workshop study in lectures, laboratory, conferences on the teaching of English in high school. Curriculum, materials, methods, aims. Directed by competent authorities in the field.

487-2 to 8. WORKSHOP IN JUNIOR HIGH SCHOOL ENGLISH. Intensive workshop study in lectures, laboratory, conferences on the teaching of English in junior high school. Curriculum, materials, methods, aims. Directed by competent authorities in the field.

492-4. PROFESSIONAL WRITING II. Prerequisites: 392, consent of instructor.

495-8 (4,4). LITERARY CRITICISM. (a) history of criticism. (b) modern criticism. Either part may be taken alone.

499-2 to 6. READINGS IN ENGLISH. For English concentrations only. Only four hours may be taken in any one quarter. Prerequisite: consent of division.

500-2. Materials and Methods of Research in English.

501-4. Old English Grammar.


505-36. Studies in English Literature. (a–i)


FOREIGN LANGUAGES

SUGGESTED CURRICULA

BACHELOR OF ARTS DEGREE

General Studies Requirements (See page 5.) ................................................. 96
Bachelor of Arts Degree Requirements (See page 7.) ...................................... (9)
Humanities Division Requirements (See page 63.) ........................................... (9)
Foreign Languages Concentration Requirements .............................................. 48

A minimum of 42 hours beyond the 100-level courses, including the seminar in the field of concentration (French, Spanish, or German). 42

English (one course above 299, related to the concentration) 3

History (one course above 299, related to the concentration) 3

Secondary Concentration Requirement ...................................................... 24–27

Electives ........................................................................................................ 21–24

Total ............................................................................................................. 192

BACHELOR OF SCIENCE IN EDUCATION DEGREE

For this degree in the Education Division, the Foreign Languages Concentration Requirements are 38 hours (exclusive of General Studies courses and elementary education concentration courses) in a language, plus one English and one history course numbered above 299.

SECONDARY CONCENTRATION

A secondary concentration consists of 24 hours (exclusive of General Studies) in a language.

COURSE DESCRIPTIONS

The student who has completed one year of foreign language in high school will usually begin with the first quarter of the first year course. The student who has completed two years of high-school foreign language will usually begin with the intermediate course.

The prefix GSD indicates a General Studies course which involves the discipline of foreign languages and which is listed here for convenience. The description of such a course appears in the General Studies bulletin.
GENERAL FOREIGN LANGUAGE COURSES

399–3 to 9. READINGS. Readings in selected works of representative writers. Offered in French, Spanish, and German. May be taken for one, two, or three quarters. Primarily for non-majors, but may be taken for major credit with consent. Prerequisite: 201.

435–4 to 8. WORKSHOP IN ELEMENTARY SCHOOL FOREIGN LANGUAGE INSTRUCTION. (Same as Elementary Education 435.) Designed to assist elementary school teachers in integrating foreign languages into their teaching program as well as to encourage high school teachers to introduce or supervise foreign languages at the elementary level. Prerequisite: basic language credit.

486–8 (4,4). MATERIALS AND METHODS FOR TEACHING FOREIGN LANGUAGES. Application of language learning principles to classroom procedures at different levels. Theory and practice of the audio-lingual approach, the language lab, applied linguistics. Required for all students intending to teach foreign languages. Prerequisite: one quarter of any 300-level sequence, or consent.

FRENCH COURSES

GSD 123–9 (3,3,3). ELEMENTARY FRENCH.

123–3 (1,1,1). FRENCH CONVERSATION. Conversation and oral drill, taken with GSD 123 by students who wish additional oral training. Elected only by students enrolled in the corresponding beginning sections. Each quarter may be taken separately.

201–9 (3,3,3). INTERMEDIATE FRENCH. Development of listening, speaking, reading, and writing skills on the intermediate level, with special attention to the role of French culture in world civilization. Prerequisite: GSD 123 or two years of high school French, or equivalent.

220–2 to 6. INTERMEDIATE FRENCH CONVERSATION. Development of oral skill on the intermediate level. Offered for 3 quarters at 2 hours per quarter; may be taken for credit each time. Prerequisite: 201c or concurrent registration in any quarter of 201.

301–12 (4,4,4). FRENCH LITERATURE FROM THE 18TH CENTURY TO THE CONTEMPORARY PERIOD. (a) Montesquieu, Voltaire, Diderot, Rousseau, and others, with reference to the social, political, and philosophic environment of the 18th Century. (b) Nineteenth Century Romanticism, Realism, and Naturalism. (c) Representative works of the 20th Century with special emphasis on the novel and drama. Parts may be taken separately. Prerequisite: 201 and one quarter of 220.

311–9 (3,3,3). FRENCH CULTURE AND CIVILIZATION. Analysis of significant aspects of French culture designed to improve intercultural understanding and to develop language skills. Oral discussions, readings, written reports, and laboratory practice. Prerequisite: 201 and one quarter of 220. Parts may be taken separately.

338–12 (4,4,4). FRENCH LITERATURE FROM THE MIDDLE AGES THROUGH THE 17TH CENTURY. (a) French Literature from La Chanson de Roland to Francois Villon with special reference to the social, political, and cultural development of the Middle Ages. (b) Representative works of the Renaissance: Rabelais, Montaigne, Marot, Ronsard,
and others. (c) Corneille, Racine, Moliere, Pascal and other writers of
the 17th Century with reference to the political and social environment
of the period. Parts may be taken separately. Prerequisite: 201 and one
quarter of 220.
351-6 (3,3). ADVANCED FRENCH CONVERSATION AND COMPOSI-
TION. (a) Oral work of a practical nature for advanced students. Pre-
requisite: 201 and one quarter of 220, or consent. (b) Rapid grammar
review, daily writing practice, controlled composition. Must be taken in
a,b sequence.
415-4. FRENCH STYLISTICS. Study of writing style in French and its ap-
lication to the development of skill in written expression. For those who
wish to do advanced work in the principles of French grammar and
composition. Prerequisite: 9 hours of 300 level courses.
451-6 (2,2,2). FRENCH SEMINAR. Integration of the specialized major courses
and the development of a comprehensive view of the major field in terms
of its relationship to the growth of Western Civilization. Entire course re-
quired of all French senior majors.
501-10. Seminar on a Selected French Author (a–e).
544-6. NDEA Institute for Teachers of French: French Language and Culture.
545-3. NDEA Institute for Teachers of French: Applied Linguistics and Reme-
dial Phonetics.
546-3. NDEA Institute for Teachers of French: Professional Preparation.

GERMAN COURSES

GSD 126-9 (3,3,3). ELEMENTARY GERMAN.
126-3 (1,1,1). GERMAN CONVERSATION. Taken with GSD 126 by stu-
dents who wish additional oral training. Elected only by students en-
rolled in the corresponding beginning sections. Each quarter may be
taken separately.
161-0. GERMAN FOR GRADUATE STUDENTS. Intensive study of grammar
and vocabulary. Designed for graduate students desiring a reading knowl-
dge of German.
201-9 (3,3,3). INTERMEDIATE GERMAN. Development of listening, speak-
ing, reading and writing skills on the intermediate level with special
attention to the role of German culture in world civilization. Prerequi-
site: GSD 126, or two years of high school German, or equivalent. A
student who has completed 251 may register for 201b.
220-6 (2,2,2). INTERMEDIATE GERMAN CONVERSATION. Development
of oral skill on an intermediate level. Prerequisite: German 201c, or
concurrent registration in any quarter of 201.
251-4. SCIENTIFIC GERMAN. Study of vocabulary and sentence construc-
tion as commonly found in German scientific writings. Prerequisite: one year
of college German or equivalent.
311-9 (3,3,3). GERMAN CULTURE AND CIVILIZATION. Analysis of sig-
nificant aspects of German culture designed to improve intercultural
understanding and to develop language skills. Oral discussions, readings,
written reports, and laboratory practice. Each quarter may be taken
separately. Prerequisite: 201 and one quarter of 220.
313-12 (4,4,4). GERMAN LITERATURE BEFORE ROMANTICISM. (a)
The Old High German and Middle High German periods. (b) From
the Ackermann in Bohmen to Johann Christian Gunther. (c) German
Literature from 1700 to the death of Schiller. Parts may be taken sepa-
rate]. Prerequisite: 201, 220–2.

316–12 (4,4,4). GERMAN LITERATURE FROM ROMANTICISM TO MOD-
ERN TIMES. (a) Introduction to the background, personalities and
works of the period from 1798 to Heine. (b) The leading 19th Century
Realists from Drost-Hulshoff to Fontane including the novel and drama
of the period. (c) German literary masterpieces from Naturalism to
the present. Parts may be taken separately. Prerequisite: 201, 220–2.

351–6 (3,3). ADVANCED GERMAN CONVERSATION AND COMPOSI-
TION. (a) Oral work of a practical nature for advanced students. Prer-
quise: 201 and one quarter of 220, or consent. (b) Rapid grammar review,
daily writing practice, controlled composition. Must be taken in a,b se-
quence.

401–4 FAUST. Analysis of both parts of Goethe’s masterpiece, its background,
meaning, and impact on world literature together with a general survey
of the life and times of the author. Prerequisite: 201 and one quarter of 220.

451–6 (2,2,2). GERMAN SEMINAR. Integration of the specialized major courses
and development of a comprehensive view of the major field in terms of
its relation to Western Civilization. Entire course required of all senior
German majors.

ITALIAN COURSES

GSD 144–9 (3,3,3). ELEMENTARY ITALIAN.
144–3 (1,1,1). ITALIAN CONVERSATION. Taken with GSD 144 by students
who wish additional oral training; elected only by students enrolled in
the corresponding beginning sections. Each quarter may be taken sepa-
rate].

201–9 (3,3,3). INTERMEDIATE ITALIAN. Development of listening, speak-
ing, reading and writing skills on the intermediate level, with special
attention to the role of Italian culture in world civilization. Prerquis-
tive: GSD 144, or two years of high school Italian, or equivalent.

220–6 (2,2,2). INTERMEDIATE ITALIAN CONVERSATION. Development
of oral skill on an intermediate level. Prerequisite: Italian 201c or con-
current registration in any quarter of 201.

RUSSIAN COURSES

GSD 136–9 (3,3,3). ELEMENTARY RUSSIAN.
136–3 (1,1,1). RUSSIAN CONVERSATION. Taken with GSD 136 by students
who wish additional oral training. Elected only by students enrolled in
the corresponding beginning sections. Each quarter may be taken sepa-
rate].

201–9 (3,3,3). INTERMEDIATE RUSSIAN. Development of listening, speak-
ing, reading and writing skills on the intermediate level with special at-
tention to the role of Russian culture in world civilization. Prerequisites:
GSD 136, or two years of high school Russian, or equivalent.

220–6 (2,2,2). INTERMEDIATE RUSSIAN CONVERSATION. Development
of oral skill on an intermediate level. Prerequisite: GSD 136c.
SPANISH COURSES

GSD 140–9 (3,3,3). ELEMENTARY SPANISH.
140–3 (1,1,1). SPANISH CONVERSATION. Taken with GSD 140 by students who wish additional oral training. Elected only by students enrolled in the corresponding beginning sections. Each quarter may be taken separately.

201–9 (3,3). INTERMEDIATE SPANISH. Development of listening, speaking, reading and writing skills on the intermediate level, with special attention to the role of Spanish culture in world civilization. Prerequisite: GSD 140 or two years of high school Spanish, or equivalent.

220–6. INTERMEDIATE SPANISH CONVERSATION. Development of oral skill on an intermediate level. Prerequisite: 201c or concurrent registration in any quarter of 201.

301–12 (4,4,4). SPANISH LITERATURE FROM THE MEDIEVAL PERIOD THROUGH ROMANTICISM. (a) Spanish Literature from the 12th to the 15th Century: the epic, El Cantar del Cid, ballads, lyric poetry, chronicles and other prose works. (b) Representative works of the 16th and 17th Century: Cervantes, Tirso de Molina, Lope de Vega, and others. (c) Romanticism in Spanish Literature during the 18th and 19th Centuries: Espronceda, Duque de Rivas, Jose Zorilla, and others. Parts may be taken separately. Prerequisite: 201 and one quarter of 220.

304–8 (4,4). MODERN SPANISH LITERATURE. (a) Spanish Literature of the 19th Century as influenced by trends of European thought of the period: Galdos, Bazan, Benavente, and others. (b) Spanish Literature of the 20th Century with emphasis on the novel, essay, and poetry: Unamuno, Ortega y Gasset, Garcia Lorca, and others. Parts may be taken separately. Prerequisite: 201 and one quarter of 220.

306–4. LATIN AMERICAN LITERATURE. Representative writers in Latin-American Literature from the Colonial to the Contemporary period with emphasis on the novel, essay, and poetry. Prerequisite: 201 and one quarter of 220.

311–9 (3,3,3). SPANISH CULTURE AND CIVILIZATION. Analysis of significant aspects of Spanish culture designed to improve intercultural understanding and to develop language skills. Oral discussions, readings, written reports, and laboratory practice. Each quarter may be taken separately. Prerequisite: 201 and one quarter of 220.

351–6 (3,3). ADVANCED SPANISH CONVERSATION AND COMPOSITION. (a) Oral work of a practical nature for advanced students. Prerequisite: 201 and one quarter of 220, or consent. (b) Rapid grammar review, daily writing practice, controlled composition. Must be taken in a,b sequence.

415–4. SPANISH STYLISTICS. Study of writing style in Spanish and its application to the development of skill in written expression. For those who wish to do advanced work in the principles of Spanish grammar and composition. Prerequisite: 9 hours of 300 level courses.

451–6 (2,2,2). SPANISH SEMINAR. Integration of the specialized major courses and development of a comprehensive view of the major field in terms of its relationships to the growth of Western Civilization. Entire course required of all seniors concentrating in Spanish.
HUMANITIES

The prerequisite for the Humanities (Honors) sequence is the completion of the second-level General Studies courses and invitation of the Humanities Honors Program Committee. For further information regarding the Honors program offered by the Humanities Division, refer to Individual Honors Work in the General Information issue of the Southern Illinois University Bulletin.

COURSE DESCRIPTION

301-3, 302-3, 303-3. HUMANITIES HONORS.

JOURNALISM

The 24-hour concentration in journalism consists of the following courses: 201-9, 340, English 300, 392, GSC 152, and an elective in journalism.

COURSE DESCRIPTIONS

103-3. NEWS. Study of the newspaper story with experience in writing and rewriting news; the fundamentals of copyreading.
201-9 (3,3,3). NEWS WRITING AND EDITING. How to cover assignments and write news stories; preparation of copy for publication; writing headlines, laboratory experiences.
330-3. EDITORIAL WRITING. The work and responsibility of the editor and editorial writer with emphasis upon editorial writing and thinking. Editorial problems, methods, policies, and style.
340-3. THE LAW OF JOURNALISM. Legal limitations and privileges affecting publishing, fair comment, criticism, contempt of court, right of privacy, copyright, and legal provisions affecting advertising.
345-3. HISTORY OF JOURNALISM. Development of American journalism with emphasis upon the struggle for freedom of the press, leading editors, outstanding newspapers and periodicals.
370-4. PRINCIPLES OF ADVERTISING. Advertising fundamentals in relation to modern business activities; economic and social aspects, research, media, appeals, production, schedules. Prerequisite: GSB 211a.
391-3. FEATURE WRITING. Planning and writing newspaper features and special articles.
PHILOSOPHY

SUGGESTED CURRICULUM

BACHELOR OF ARTS DEGREE

General Studies Requirements (See page 5.) .................................................. 96
Bachelor of Arts Degree Requirements (See page 7.) ....................................... (9)
Humanities Division Requirements (See page 63.) ........................................... (9) + 9

Philosophy Concentration Requirements ......................................................... 42

Philosophy 381-12 and 490 .............................................................. 14–16

Philosophy electives, including at least one course in each of these categories: epistemology and value theory.

GSA (or C) 363-6 and three hours of GSC 360-6 may be counted among these electives .................................................. 26–28

Secondary Concentration Requirements ......................................................... 24–27

Electives ............................................................................................... 18–21

Total .................................................................................................. 192

SECONDARY CONCENTRATION

A secondary concentration consists of 24 hours (exclusive of General Studies), including Philosophy 381-12.

COURSE DESCRIPTIONS

The prefix GSC indicates a General Studies course which involves the discipline of philosophy and which is listed here for convenience. The description of such a course appears in the General Studies bulletin.

GSC 152-3. LOGIC.

200-4. TYPES OF PHILOSOPHY: AN INTRODUCTION. Survey of the traditional branches and problems of philosophy, such as religion, metaphysics, epistemology, ethics, political theory, aesthetics, and history.

240-4. ETHICS. Study of significant ethical theories concerned with such problems as the nature of right and wrong, individual and social values.

300-4. ELEMENTARY METAPHYSICS. Presentation of answers to the most general problems of existence. An attempt to unify all scientific approaches to reality through the laying down of common principles.

301-4. PHILOSOPHY OF RELIGION. An analysis of problems in the psychology, metaphysics, and social effects of religion. Among topics discussed are the nature of mystical experience, the existence of God, and problems of suffering, prayer, and immortality.

302-4. WORLD RELIGIONS. An historical and comparative study of the prin-
principal religions of the world. Particular attention is given to such non-Christian faiths as Hinduism, Buddhism, and Islam.

324-4. SYMBOLIC LOGIC. Use of symbols as tools for analysis and deduction. Study of truth tables, Boolean Expansions, propositional calculus and quantifiers, logic of relations, and their functions in logistic systems.

342-4. SOCIAL AND POLITICAL THEORY. Philosophical analysis of social values and their expression in governmental organization.

355-4. PHILOSOPHY OF EDUCATION. Survey of theories of education and their relationships to educational policies and practices, as elucidated by the great teachers. Satisfies the education requirement, Education 355.

360-4. PHILOSOPHY OF ART. The significance of art as a human activity, its nature and standards as seen in the problems of criticism, and the relation of art to other forms of knowledge.

GSC 360-6 (3,3). ARTS AND IDEALS IN FAMOUS CITIES.
GSC or GSA 363-6 (3,3). PHILOSOPHY OF SCIENCE.

381-12 (4,4,4). HISTORY OF WESTERN PHILOSOPHY. (a) Greek and early Christian. (b) Medieval and early Modern. (c) Recent. Any part may be taken alone.

386-4. AMERICAN PHILOSOPHY. A survey of American philosophic thought from colonial days to the present, with emphasis on such recent thinkers as Pierce, James, Royce, Dewey, and Santayana. Prerequisites: 381b,c.

443-4. PHILOSOPHY OF HISTORY. Classical and contemporary reflection on the nature of history and historical knowledge.

484-12 (4,4,4). HISTORY OF WESTERN POLITICAL THEORY. (Same as Government 484.) (a) Ancient and Medieval. (b) Renaissance and Rationalist. (c) Contemporary. Any part may be taken alone.

487-4. AMERICAN POLITICAL IDEAS. An historical study of the political ideas of leading American statesmen and publicists, and their resulting influence upon our government system.

490-2 to 12. SPECIAL PROBLEMS. Hours and credits to be arranged. Courses for qualified seniors and graduates who need to pursue certain topics further than regularly titled courses permit. Special topics announced from time to time. Students are invited to suggest topics for individual study and papers or for group study. Consent of instructor in all cases required.
Science and Technology Division

Applied Science; Biology; Botany; Chemistry; Mathematics; Physics and Astronomy; Physiology; Science and Technology; Zoology

The Science and Technology Division offers a program designed to expand the student's knowledge and understanding of mathematics, basic scientific principles, and engineering applications. Every effort is made to stimulate the student's curiosity and implement his creativeness, thus enabling him to lead a more productive life and be a more useful member of the academic, industrial, or business community.

FACULTY OF APPLIED SCIENCE
Professor Kermit G. Clemans (Ph.D., Oregon; interim chairman).
Associate Professor Myron C. Bishop (M.A., Ohio State).
Assistant Professors Orville Goering (Ph.D., Iowa State), Robert B. Rutledge III (Ph.D., St. Louis).
Term Instructors and Lecturers George R. Shelton, Danny H. Sokolowski.

FACULTY OF BIOLOGICAL SCIENCES AND TECHNOLOGY
Associate Professors Harold E. Broadbooks (Ph.D., Michigan), Harry D. Brown (Ph.D., Columbia), Donal G. Myer (Ph.D., Ohio State; chairman).
Assistant Professors Ralph W. Axtell (Ph.D., Texas), Joseph S. Davis (Ph.D., Iowa) (on leave 1964-65), Justin N. Frost (Ph.D., California), Walter M. Hewitson (Ph.D., Washington University), Kermit O. Ratzlaff (Ph.D., California), David P. Wooldridge (Ph.D., Indiana).

FACULTY OF MATHEMATICAL STUDIES
Associate Professors William C. Bennewitz (Ph.D., Illinois), Clellie C. Oursler (Ph.D., Illinois Inst. of Tech.).

FACULTY OF PHYSICAL SCIENCES AND TECHNOLOGY
Professors Mohamed Abdul Hakeem (Ph.D., Louisiana State), William C. Shaw (Ph.D., Iowa State).
Associate Professors Marinus P. Bardolph (Ph.D., Iowa), Ferdinand H. Firsching (Ph.D., Syracuse), Laurence R. McAneny (Ph.D., Kansas), William J. Probst (Ph.D., Iowa), David G. Rand (Ph.D., Iowa), J. Edmund White (Ph.D., Indiana; chairman). Assistant Professors Richard R. Boedeker (Ph.D., St. Louis), Shu Hsiung Chang (Ph.D., Cincinnati), Ivan S. Cliff (Ph.D., Mass. Inst. of Tech.), Irwin H. Parrill (Ph.D., Iowa), Lionel K. Walford (Ph.D., Cambridge).

DIVISIONAL REQUIREMENTS

Candidates for the Bachelor of Arts degree concentrating in any of the disciplines in the Science and Technology Division must meet the following requirements:

1. At least 48 hours of credit in one area of concentration with the grade of C or higher in each course in the area (Specific courses, to be included in a particular concentration, are listed in the curriculum.);

2. At least 9 hours of credit in the area of concentration in courses numbered above 299 must be earned at Southern Illinois University within the two years preceding the completion of requirements for the degree.

Upon the completion of 64 hours of college credit, each student in the division must file a tentative program with his adviser in the division.

If a candidate for the Bachelor of Science in Education degree selects an area of concentration which is in the Science and Technology Division, then he must have at least 48 (or 36 if he also has two 27-hour concentrations in other areas) hours in that area with the grade of C or higher in each course.

A secondary concentration for a student in the Science and Technology Division must include at least 27 hours of credit with a grade of C or higher. Specific requirements, if any, are listed under the heading Secondary Concentration in the particular discipline.

APPLIED SCIENCE

At the present time, courses in applied science and engineering on the Edwardsville Campus are limited to minimum requirements for a pre-engineering program.
COURSE DESCRIPTIONS

101-9 (3,3,3). GRAPHICS. (a) Basic principles of graphic communications. Pictorial projection, sections and conventions, dimensioning, auxiliary views, freehand lettering, and sketching. (b) Graphical solution of problems involving the understanding of the space relationships of points, lines, and planes; intersections and developments. (c) Auxiliary views, threads and fasteners, dimensioning. Laboratory. Must be taken in a,b,c sequence. No prerequisite.

260-9 (3,3,3). ANALYTICAL MECHANICS. (a) Resultants of force systems, algebraic and graphical conditions of equilibrium of force systems; analysis of forces acting on members of trusses, forces due to friction; centroids. (b) Displacement, velocity, and acceleration of a particle; translation, rotation; plane motion. (c) Solutions using the principles of force, mass and accelerations, work and energy, and impulse and momentum. Must be taken in a,b,c sequence. Prerequisite: Physics 211a, Math 150b or concurrent enrollment.

263-12 (4,4,4). SURVEYING. (a) The use and care of surveying instruments. Fundamental principles of surveying, computations, land surveying, topographic surveying data processing. (b) Field astronomy, route surveying, introduction to photogrammetry, hydrographic surveying, and subsurface surveys. (c) Precise surveying, geodesy, altimetry, analysis of errors and error propagation, measurements conditioned and adjusted by method of least squares and other methods. Laboratory. Must be taken in a,b,c sequence. Prerequisites: GSD 114c or Math 111b.

300-9 (3,3,3). THERMODYNAMICS. (a) The study of fundamental energy concepts and the laws of thermodynamics, availability of energy, properties of gases, vapors and gas-vapor mixtures, flow and non-flow processes. (b) Engine cycles and applications to internal combustion engines, gas turbines, steam turbines, jet devices, air compressors, and air engines. Combustion refrigeration and air conditioning. Heat transfer principles. (c) Axiomatic thermodynamics, criteria for equilibrium; absolute temperature; Maxwell's relations; open systems; the phase rule; systems of one and two components; idealized systems; equations of state; systems involving chemical and electrochemical equilibrium. Must be taken in a,b,c sequence. Prerequisite: Math 150b, Physics 211b.

BIOLOGY

Students planning to concentrate in biology should consult with either a botany or zoology representative.

SUGGESTED CURRICULA

BACHELOR OF ARTS DEGREE

General Studies Requirements (See page 5.)
Bachelor of Arts Degree Requirements (See page 7.) ........................................ (9)
Science and Technology Division Requirements (See page 76.) ...................... (48)
Biology Concentration Requirements ......................................................................... 69
  General Studies Area A 201a ..................................................... (3)
  Botany 101, 202 .................................................................. 10
  Botany 225 or 320 or Physiology 209 ...................................... 5
  Electives in Botany, Physiology, and Zoology .......................... 13
  Chemistry 111–15 .................................................................. 15
  Physics (GSA 101a,b may be used for credit) ....................... 6
  Zoology 102, 103, 310, and 401 .......................................... 20
Secondary Concentration Requirement (not in botany or zoology)........... 27
Electives .................................................................................. 9

Recommended: organic chemistry, one additional quarter of physics, and three of mathematics.

Total .......................................................................................... 192

BACHELOR OF SCIENCE IN EDUCATION DEGREE

For this degree, the Biology Concentration Requirements are as listed above under the Bachelor of Arts Degree. Refer also to Secondary Education.

SECONDARY CONCENTRATION

The minimum biology secondary concentration is 27 hours including GSA 201–9 and electives in botany, physiology, and zoology.

BOTANY

Students considering a botany concentration are urged to consult with botany faculty representatives.

SUGGESTED CURRICULA

BACHELOR OF ARTS DEGREE

General Studies Requirements (See page 5.).................................................. 87
Bachelor of Arts Degree Requirements (See page 7.) ..................................... (9)
Science and Technology Division Requirements (See page 76.) .................. (48)
Botany Concentration Requirements ............................................................. 69
  General Studies Area A 201a,b .................................................. (6)
  Botany 101, 202, 203, 310, and 320 ....................................... 25
  Electives above 300 in botany .................................................. 23
Chemistry 111-15 15
Physics (GSA 101a,b may be used for credit) 6
German or Russian is recommended as the language.

Secondary Concentration Requirement (not in biology) 27
Electives 9
Recommended: organic chemistry, one additional quarter of physics, and three of mathematics.

Total 192

BACHELOR OF SCIENCE IN EDUCATION DEGREE

For this degree in the Education Division, the Botany Concentration Requirements are as listed above, under the Bachelor of Arts degree.

SECONDARY CONCENTRATION

The minimum botany concentration is 27 hours, including 101, 202, 310, and botany electives.

COURSE DESCRIPTIONS

The prefix GSA indicates a General Studies course which involves the discipline of botany and which is listed here for convenience. The description of such a course appears in the General Studies bulletin.

101-5. GENERAL BOTANY. An introductory study of the morphology, anatomy, and physiology of the seed plants including vegetative and sexual reproduction. Field Studies. Three lecture and four laboratory hours per week.

131-5. FIELD BIOLOGY. A course in methods of identification of various plants and animals and location of source material suitable for teaching nature study. Primarily for those planning to teach in primary and rural schools. Five Saturday field trips and laboratory studies. Approximate cost: $5.

GSA 201a,c-6. MAN'S BIOLOGICAL INHERITANCE.

202-5. GENERAL BOTANY. A study of representative plants of the major plant groups; classification; evolution of the plant kingdom. Three lecture and four laboratory hours per week, and one all-day (required) field trip. Cost: about $5. Prerequisite: 101.

203-5. TAXONOMY OF LOCAL SEED PLANTS. A study of the principles of classification and the use of manuals, with reference to local ferns and flowering plants. Three lecture and four laboratory hours per week. Cost: about $5. Prerequisite: 101 or 202.

225-5. CELLULAR PHYSIOLOGY. A discussion with laboratory illustration of basic physiological processes. Generally, plant materials will be used in the laboratory. Three lecture and four laboratory hours per week. Prerequisite: 101, organic chemistry.
310-5. PLANT ANATOMY. An introduction to cell division, development, and maturation of the structures of the vascular plants. Three lecture and four laboratory hours per week. Prerequisite: 101, 202.

311-5. GENERAL BACTERIOLOGY. An advanced treatment of cytology, theories and techniques of staining, physiology, enrichment cultures, and classification of microorganisms and their agricultural, industrial, and medical relationships. 3 hours lecture, 4 hours laboratory. Prerequisite: one course in biological science and organic chemistry.

315-3. PLANT GENETICS. A general course involving principles of evolution and heredity. Prerequisite: 101 or 202 or GSA 201a or consent of instructor.

320-5. ELEMENTS OF PLANT PHYSIOLOGY. A study of the functions of plants and their relation to the various organs. Three lecture and four laboratory hours per week. Prerequisite: 101, 202.

321-3. ELEMENTARY BOTANICAL MICROTECHNIQUE. Methods of preservation and preparation of plant materials for examination by the light microscope. One lecture and four laboratory hours per week. Prerequisite: consent of instructor.

325-5. METABOLISM. Intermediary metabolism of plants and animals with emphasis upon the newer knowledge. Laboratory organization will be adapted to the student's area of concentration (physiology, agriculture, medicine, etc.). Three lecture and four laboratory hours per week. Prerequisite: 101, organic chemistry.

350-4. PLANTS IN RELATION TO MAN. A study of the basic relationships of plants to man; the history, geography, crop ecology, production, consumption, and uses of plants and plant products of economic importance.

390-2 to 4. READINGS IN BOTANY. A course of individually assigned readings in classical botanical literature; both oral and written reports required; open only to undergraduate students. Prerequisites: concentration in botany, consent of instructor.

391-2 to 5. SPECIAL PROBLEMS IN BOTANY. Individual laboratory or field work under supervised direction. Both written and oral discussions required; open only to undergraduate students. Prerequisite: concentration in botany, consent of division.

403-3. HISTORY AND PRINCIPLES OF PLANT TAXONOMY. Important concepts in plant classification through the ages, and study of the International Code of Botanical Nomenclature. Consideration of the functions of genetics, evolution, morphogenesis, and ecology in taxonomy. Prerequisite: 203 or consent of instructor. May be repeated.

404-5. THE ALGAE. A study of the structure, development, and relationships of the algae. Three lecture and four laboratory hours per week. Prerequisite: 101, 202.

405-5. THE FUNGI. A study of the structure, development, and relationships of the fungi. Problems of economic and scientific interest stressed. Three lecture and four laboratory hours per week. Prerequisite: 101, 202.

413-5. COMPARATIVE MORPHOLOGY OF VASCULAR PLANTS. Comparative studies of representative groups of vascular plants, including origin, structure, developmental tendencies, embryology, and fossil evidence. Three lecture and four laboratory hours per week. Prerequisite: 101, 202.

526-5. Cytogenetics.
CHEMISTRY

Anyone considering a concentration in chemistry is urged to consult with a representative of the chemistry faculty.

SUGGESTED CURRICULA

BACHELOR OF ARTS DEGREE

General Studies Requirements (See page 5.) ................................................. 87
Bachelor of Arts Degree Requirements (See page 7.) .................................... (9)
Science and Technology Division Requirements (See page 76.) .................... (48)
Chemistry Concentration Requirements ...................................................... 95-111

Chemistry 111-15; 336-8; 336c-4 or 490-2; 341-14; 375-3;
461-12 .......................... 54-56

Students who desire to qualify as professional chemists
should add 10 hours from 311, 396, 412, 432, 446 ............... 0-10
Mathematics 111-10, 150-8, 252-8 .............................................. 26
Physics 211-15 ............................................. 15

German or Russian is recommended as the language
For professional chemists: one additional physics course 0-4

Secondary Concentration Requirements ............................................... (27)
Electives .................................................................................. 0-10

Total .................................................................................. 192-198

BACHELOR OF SCIENCE IN EDUCATION DEGREE

For this degree in the Education Division, a 37-hour concentration for students who also have two secondary concentrations must include Chemistry 111-15, 336-8, 341-9, 460. German or Russian is recommended as the foreign language. Candidates with only one secondary concentration must take 11 additional hours including 341c.

SECONDARY CONCENTRATION

A secondary concentration in chemistry includes 111-15 and at least 12 quarter hours in courses chosen from 336, 341.

COURSE DESCRIPTIONS

The prefix GSA indicates a General Studies course which involves the discipline of chemistry and which is listed here for convenience. The description of such a course appears in the General Studies bulletin.
110-4. GENERAL AND INORGANIC CHEMISTRY. A brief introduction to the structure of the atom and chemical bonding; acids, bases, salts, and pH; and a study of the properties and reactions of some of the more common elements. 3 lecture and 3 laboratory hours per week. Not applicable to a concentration or to a secondary concentration in chemistry. No prerequisite.

111-15 (5,5,5). CHEMICAL PRINCIPLES AND INORGANIC CHEMISTRY. (a,b) general chemical principles and inorganic chemistry, three lecture, one quiz, and three laboratory hours per week, (c) theory of qualitative identification of the cations, three lecture and six laboratory hours per week. Must be taken in a,b,c sequence. Prerequisite: high school algebra and geometry or equivalent.

240-4. ORGANIC CHEMISTRY. A survey course not open to those concentrating in chemistry. An introduction to aliphatic and aromatic compounds with emphasis on those of biological importance. Three lecture and three laboratory hours per week. Prerequisite: 110 or GSA 101c.

311-3. INTERMEDIATE INORGANIC CHEMISTRY. Modern inorganic chemistry involving atomic structure, chemical bonds, complexes and chelate structures, and chemistry of familiar and less familiar elements. Three lecture hours per week. Prerequisite: 27 hours of chemistry.

336-12 (4,4,4). ANALYTICAL CHEMISTRY. Theories and methods of qualitative detection of ions and volumetric and gravimetric quantitative analysis are treated as an integrated subject. Emphasis on ionization, equilibrium, and solubility theories. Two lecture and six laboratory hours per week. Prerequisite: 111c. Must be taken in a,b,c sequence.

341-14 (4,5,5). ORGANIC CHEMISTRY. (a) structure, general theories or organic reactions, aliphatic and aromatic hydrocarbons, (b) synthesis and properties of various classes of organic compounds, (c) stereochemistry, natural products, dyes. Three lectures per week. One three-hour laboratory per week in (a); two three-hour laboratories per week in (b) and (c). Prerequisite: 111-15. Must be taken in a,b,c sequence.

375-0 to 3. CHEMISTRY SEMINAR. One lecture hour per week. Prerequisite: senior standing.

396-2 to 6. SENIOR RESEARCH. Investigation of a chemical problem and preparation of a thesis under the direction of a staff member. Prerequisite: senior, concentrating in chemistry, 4.0 average in chemistry, and consent of faculty.

412-3. INORGANIC PREPARATIONS. A study of several important types of inorganic syntheses. One lecture and six laboratory hours per week. Prerequisite: 336b, 341c.

432-4. INSTRUMENTAL ANALYTICAL TECHNIQUES. Theory and practice of common instrumental analytical measurements. Two lecture and six laboratory hours per week. Prerequisite: 336b, 461a.

446-4. QUALITATIVE ORGANIC CHEMISTRY. Separation and identification of organic compounds by classical methods. Two lecture and six laboratory hours per week. Prerequisite: 341c.

451-8 (4,4). BIOCHEMISTRY. (a) Carbohydrates, fats and related substances, proteins and amino acids, enzymes, digestion, absorption, and detoxication. (b) The blood and lymph; acid-base regulation; metabo-
lism of carbohydrates, lipids, and proteins; urine; calorimetry and energy metabolism; nutrition and vitamins; and hormones. Analysis of blood and urine. Three lecture and three laboratory hours per week. Must be taken in a,b sequence. Prerequisites: 235 or 336b, and 341c.

460-5. THEORETICAL CHEMISTRY. A one-quarter course on the traditional aspects of physical chemistry without the requirement of calculus. Four lecture and three laboratory hours per week. Prerequisites: 336b, 341b, and one year of physics or consent of instructor.

461-12 (4,4,4). PHYSICAL CHEMISTRY. Three lecture and three laboratory hours per week. Must be taken in a,b,c sequence. Prerequisite: 336b, 341c, Math 252b, Physics 211c.

490-2. CHEMICAL LITERATURE. A study of the various sources of chemical information and the techniques for searching the literature. Two lecture hours per week. Prerequisite: 336b, 341c, reading knowledge of German or Russian or consent of instructor.

496-2 to 4. CHEMICAL PROBLEMS. Investigation of problems under the direction of a staff member. Prerequisite: senior, concentrating in chemistry with 4.0 average, and consent of faculty.

MATHEMATICS

 Anyone considering a concentration in mathematics is urged to consult with a representative of the mathematics faculty.

SUGGESTED CURRICULA

BACHELOR OF ARTS DEGREE

General Studies Requirements (See page 5.) ........................................... 87
Bachelor of Arts Degree Requirements (See page 7.) .......................... (9)
Science and Technology Division Requirements (See page 76.) .......... (48)
Mathematics Concentration Requirements ........................................ 55-74

Mathematics background for entering 300 .................................. 16-35
Mathematics 300, 320-6 .............................................................. 10
Mathematics 452-6 or 480-7 or two geometry courses above 299 ....... 6-8
Mathematics (additional courses above 299 to total 24 hours) ........ 8-6
Physics 211-15 ................................................................. 15
Recommended: French, German, or Russian
Recommended for prospective secondary teachers: 311 ............. (3)

Secondary Concentration Requirements .............................................. 27
Electives ................................................................. 4-23
Total ............................................................... 192
BACHELOR OF SCIENCE IN EDUCATION DEGREE

For this degree in the Education Division, a student with one secondary concentration has the Mathematics Concentration Requirements listed above, including 311 but exclusive of Physics 211b,c, and totaling 48 hours or its equivalent. A student with two secondary concentrations must have 36 hours in approved mathematics courses, including 300, 311, 320a. Physics 211a is required. French, German, or Russian is recommended as the language.

SECONDARY CONCENTRATION

A secondary concentration in mathematics includes courses through 150b and at least 9 hours selected from courses above 250. Courses 300 and 320 are recommended for prospective teachers.

COURSE DESCRIPTIONS

Students who have taken college preparatory mathematics and who rank high on the mathematics placement examination should normally enroll in 150 as their first college course in mathematics. Students with less preparation who plan to concentrate in a discipline of the Science and Technology Division should enroll in 111b, 111a, or 100 as advised by a representative of the mathematics faculty.

The prefix GSD indicates a General Studies course which involves the discipline of mathematics and which is listed here for convenience. The description of such a course appears in the General Studies bulletin.

100-0. ELEMENTARY MATHEMATICS. Remedial and review work in elementary mathematics, including arithmetic and beginning algebra. No prerequisite.

111-10 (5,5). ELEMENTARY ANALYSIS. Beginning course for students in mathematics, pre-engineering, etc., who cannot qualify for 150. Includes: (a) Sets, logic, real number system, and college algebra; (b) Functions and trigonometry. Must be taken in a,b sequence. Part (a) may not be taken for credit after GSD 114 a,b. Part (b) may not be taken for credit after GSD 114c. Prerequisite: (a) three semesters of high school algebra and satisfactory A.C.T. score. (b) Part a; GSD 114a,b; or advanced standing.

GSD 112-9 (3,3,3). INTRODUCTION TO MATHEMATICS.
GSD 114-9 (3,3,3). COLLEGE ALGEBRA AND TRIGONOMETRY.
GSD 114d-3. STATISTICS.

150-8 (4,4). ELEMENTARY CALCULUS AND ANALYTIC GEOMETRY. Beginning course for students in mathematics, pre-engineering, etc. Includes topics selected from analytic geometry, elementary differential calculus, and elementary integral calculus. Must be taken in a,b sequence. Prerequisites: College preparatory mathematics in high school and high score on placement exam or 111b or GSD 114c.
225–4. PROGRAMMING FOR DIGITAL COMPUTERS. An intensive course in digital computer programming. Topics include computer organization and characteristics, machine language coding, flow charts, sub-routine, symbolic coding, and compiler systems. Equipment of the University’s Data Processing and Computing Center is used for applications. Prerequisites: 111a or GSD 114b.

252–8 (4,4). CALCULUS AND ANALYTIC GEOMETRY. Continuation of 150. Includes differential and integral calculus, applications, introduction to solid analytic geometry, infinite series. Must be taken in a,b sequence. Prerequisite: 150b.

300–4. THE REAL NUMBER SYSTEM. An axiomatic study of the real number system by use of modern logic and elemental set theory. Prerequisite: 150b.

305–6 (3,3). APPLIED MATHEMATICS FOR THE PHYSICAL SCIENCES. (a) Ordinary differential equations, linear algebra, and applications. (b) Additional topics in applied mathematics such as finite difference methods, Laplace transforms, and Fourier series. Must be taken in a,b sequence. Prerequisites: 252b or concurrent enrollment and Physics 211c.

310–4. THE TEACHING OF ELEMENTARY MATHEMATICS. A professional treatment of the subject matter of arithmetic methods and a study of trends and current literature on the teaching of arithmetic. For elementary education concentration only. Prerequisite: GSD 112–9.

311–3. THE TEACHING OF SECONDARY MATHEMATICS. A study of the nature and objectives of the secondary mathematics curriculum. Particular attention is given to the means of introducing new ideas into the high school program. For students preparing to be certified teachers of secondary mathematics. Prerequisite: 320b, Secondary Education 315.

320–6 (3,3). FUNDAMENTAL CONCEPTS OF ALGEBRA. A two-quarter sequence course introducing abstract algebraic structures, including groups, rings, and fields. Attention is given to classical theory of numbers and polynomials. Sequence must be taken in a,b order. Prerequisite: 300.

324–3. VECTOR ANALYSIS. Prerequisites: 252b; Physics 211a.

335–6 (3,3). CONCEPTS OF GEOMETRY. An elementary introduction to various geometric systems to acquaint the student with the interrelationship between geometries of current interest. Topics include axiom systems, introduction to synthetic projective and analytic projective geometry, projective definition of coordinate systems, affine geometry, Euclidean geometry, and non-Euclidean geometry. Must be taken in a,b sequence. Prerequisite: 300 or concurrent enrollment.

395–2 to 8. READING IN MATHEMATICS. Supervised reading in selected subjects. Prerequisite: 12 hours of 300- or 400-level mathematics, 4.0 average in mathematics, and consent of division.

400–3. HISTORY OF MATHEMATICS. Prerequisite: 150b.

407–3. INTRODUCTION TO PARTIAL DIFFERENTIAL EQUATIONS. A continuation of 305. Topics in applied mathematics including linear partial differential equations, Bessel functions, and vector analysis. Prerequisite: 305b.

410–16 (4,4,4,4). STATISTICAL ANALYSIS. Statistics for students in fields using statistical methods but who are not required to take calculus. Includes (a) elements of probability, estimation, and testing hypotheses;
(b) the general linear model (multiple linear regression, analysis of variance, analysis of covariance) and nonparametric statistics; (c) design of experiments; (d) sample survey techniques. May not be used to satisfy requirements for a mathematics concentration. Three lectures and two laboratory hours per week. Must be taken in a, b, c, d or a, b, d, c sequence. Prerequisites: 111a or GSD 114a, b.

413-4. SOLID ANALYTIC GEOMETRY. An algebraic study of equations of the first and second degree in three variables, with applications to geometry. Systems of planes, equations of lines in symmetric and parametric form. Spheres, cylinders, surfaces of revolution. Matrix algebra; real orthogonal and symmetric matrices. Coordinate transformations; orthogonal similarity. Quadratic forms and quadric surfaces; invariants; principal axes and planes. Prerequisite: 252b.

415-4. NON-EUCLIDEAN GEOMETRY. An introduction to hyperbolic and elliptic plane geometry and trigonometry. Emphasis given to the nature and significance of geometry and the historical background of non-Euclidean geometry. Prerequisite: 252a.

421-6 (3,3). LINEAR ALGEBRA. The theory of determinants and systems of linear equations; vector spaces, linear independence, basis, dimension; linear transformations, change of base, similarity; quadratic and Hermitian forms, orthogonal and unitary transformations; triangular and diagonal form; eigenvalues and eigenvectors; normal matrices; nilpotent and idempotent matrices, the spectral theorem. Must be taken in a, b sequence. Prerequisite: 252b.

425-3. THEORY OF NUMBERS. Topics in elementary number theory, including properties of integers and prime numbers, divisibility, Diophantine equations, and congruence of numbers. Prerequisite: 320a.

430-4. PROJECTIVE GEOMETRY. Introduction to the fundamental concepts of projective geometry, including study of conics and polar systems of conics. Prerequisite: 320a.

433-3. THEORY OF POINT SETS. General properties of sets; topology of plane sets, closed sets, and open sets in metric spaces, homeomorphisms and continuous mappings, connectedness. Prerequisite: 300.

440-2 to 4. MODERN ALGEBRA FOR TEACHERS. An introduction to algebra as a logical system, including groups, rings, and fields (for secondary school teachers). Prerequisite: consent of instructor.

442-2 to 4. SURVEY OF GEOMETRY. A survey of geometry, including projective geometry, topology, etc., for secondary school teachers. Prerequisite: consent of instructor.

446-4. THE STRUCTURE OF ELEMENTARY SCHOOL MATHEMATICS. A course to assist experienced elementary school teachers in extending their understanding of mathematics. This course may not be taken for credit after credit has been received for 447 and does not count for credit toward a mathematics concentration. Prerequisite: experience in elementary teaching and consent of instructor.

447-4. THE STRUCTURE OF SECONDARY SCHOOL MATHEMATICS. A course to assist experienced secondary school teachers in extending their understanding of mathematics. This course may not be taken for credit after credit has been received for 446 and does not count toward a mathematics concentration. Prerequisite: experience in secondary teaching and consent of instructor.
452-9 (3,3,3). ADVANCED CALCULUS. Limits, continuity, differentiation, and integration. Major topics include partial differentiation, vector analysis, Riemann-Stieltjes integrals, multiple integrals, infinite series, improper integrals, uniform convergence, Fourier series, and line and surface integrals. Must be taken in a,b,c sequence. Prerequisite: 252b, 300, or concurrent enrollment.

456-6 (3,3). APPLIED MATHEMATICS FOR THE BEHAVIOR SCIENCES. Introduces students in the behavior sciences to general mathematical procedures as an aid to analyzing the structures of their study and to particular techniques that are in current use. Sets and propositional logic, partitioning and combinatorial analysis, probability theory, linear algebra, linear programming and game theory, difference equations. Must be taken in a,b sequence. Prerequisite: 150b.

460-4. MODERN GEOMETRY. Advanced topics in Euclidean geometry by the synthetic method. Topics including the nine-point circle, Simson line, theorems of Ceva and Menelaus, coaxal circles, harmonic section, poles and polars, similitude, and inversion. Prerequisite: 300.

475-9 (3,3,3). NUMERICAL ANALYSIS. An introduction to approximation methods including finite differences and interpolation, numerical differentiation and quadrature, least squares approximation, numerical solution of linear and non-linear systems, numerical integration of systems of ordinary and partial differential equations. Emphasis upon error analysis throughout. Must be taken in a,b,c sequence. Prerequisite: 305a or 252b and consent of instructor.

480-10 (4,3,3). PROBABILITY. An introduction to probability theory which includes such topics as the algebra of probabilities, discrete and continuous distributions, limit theorems, generating functions, and some elements of stochastic processes. Must be taken in a,b,c sequence. Prerequisite: 252b.


484-4. DESIGN OF EXPERIMENTS. A study of the mathematical and practical considerations involved in the statistical design and analysis of experiments. Consideration is given to the common experimental designs and such topics as missing plots, experimental constraints, efficiency of method, and separation of degrees of freedom. Prerequisite: 483.

501-9 (3,3,3). Real Variables.
520-8 (4,4). Modern Algebra.
530-3 to 6. Point Set Topology.
541-2 to 4. Sets and Probability.
542-2 to 4. Elementary Functions from an Advanced Standpoint.
550-1 to 10. Seminar.
555-6 (3,3). Complex Variables.
595-1 to 10. Special Project.
PHYSICS AND ASTRONOMY

Students desiring concentration in physics are urged to consult with the physics faculty representatives.

SUGGESTED CURRICULA

BACHELOR OF ARTS DEGREE

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Studies Requirements (See page 5.)</td>
<td>87</td>
</tr>
<tr>
<td>Bachelor of Arts Degree Requirements (See page 7.)</td>
<td>9</td>
</tr>
<tr>
<td>Science and Technology Division Requirements (See page 76.)</td>
<td>48</td>
</tr>
<tr>
<td>Physics Concentration Requirements</td>
<td>72-98</td>
</tr>
<tr>
<td>Physics 211-15, 300, 301-8</td>
<td>28</td>
</tr>
<tr>
<td>Physics electives, including 4 hours lab, to complete 48 hours</td>
<td>20</td>
</tr>
<tr>
<td>Mathematics, 9 hours beyond 252b</td>
<td>9-35</td>
</tr>
<tr>
<td>Chemistry 111-15</td>
<td>15</td>
</tr>
<tr>
<td>German or Russian is recommended.</td>
<td></td>
</tr>
<tr>
<td>Secondary Concentration Requirements (27)</td>
<td></td>
</tr>
<tr>
<td>Electives</td>
<td>7-33</td>
</tr>
<tr>
<td>Total</td>
<td>192</td>
</tr>
</tbody>
</table>

BACHELOR OF SCIENCE IN EDUCATION DEGREE

For this degree in the Education Division, the Physics Concentration Requirements are as listed above, under Bachelor of Arts Degree, except that 6 hours in the history and philosophy of science may be counted toward the physics electives.

A physics concentration for a student with two secondary concentrations must include Physics 211-15, 300, 301-8, 8 additional hours in physics courses above 299, Chemistry 111-15, Mathematics 252-8. German or Russian is recommended as the foreign language.

SECONDARY CONCENTRATION

A secondary concentration in physics includes 211-15, 300, and electives to total 27 hours.

COURSE DESCRIPTIONS

The prefix GSA indicates a General Studies course which involves the
discipline of physics and which is listed here for convenience. The description of such a course appears in the General Studies bulletin.

**PHYSICS**

**GSA 101–6 (3,3). INTRODUCTION TO PHYSICAL SCIENCE.**
211-15 (5,5,5). UNIVERSITY PHYSICS. A basic course for science, mathematics, and pre-engineering students. (a) Mechanics, (b) Light, sound, and heat, (c) Electricity and magnetism. Three lecture, two recitation, and two laboratory hours per week. Must be taken in a,b,c or a,c,b sequence. Prerequisite: (a) Mathematics 150b or concurrent enrollment; (b,c) 211a, Mathematics 252a or concurrent enrollment.

300-5. UNIVERSITY PHYSICS IV. A continuation of 211 covering modern physics. Three lecture, two recitation and two laboratory hours per week. Prerequisite: 211-15, Mathematics 252b or concurrent enrollment.

301-8 (4,4). MECHANICS. Intermediate mechanics using vector analysis. Prerequisite: 211a; Mathematics 324 or concurrent enrollment.

304-3. THERMODYNAMICS. A macroscopic study of the thermal properties of matter and laws of thermodynamics. Prerequisite: 211b and Mathematics 252b.

305-8 (4,4). INTRODUCTION TO ELECTRIC THEORY. Vector treatment of the theory: electrostatics in vacuum and in matter, steady currents, magnetism, alternating currents, complex number analysis of a-c circuits, electromagnetic radiation. Must be taken in a,b sequence. Prerequisite: 211c and Mathematics 324.

307-2. ELECTRIC MEASUREMENTS. A laboratory course illustrating basic electrical and magnetic properties and emphasizing precision in their measurement. Prerequisite: 305b or concurrent enrollment.

309-4. ELECTRIC CIRCUITS. Electron tube and transistor circuit principles and applications. Three lecture and three laboratory hours per week. Prerequisite: 211c.

310-4. LIGHT. Light propagation and optical instruments: reflection, refraction, interference, diffraction, and polarization of light. Prerequisite: 211b.

311-1. OPTICS LABORATORY. Advanced experiments in geometrical and physical optics. Two laboratory hours per week. Prerequisite: 310 or concurrent enrollment.

316-5. HISTORY OF PHYSICS. A study of the development of physical concepts and theories, and of contemporary physical research. Designed particularly for students planning to teach.

GSA 358-6 (3,3). ANALYSIS OF PHYSICAL SYSTEMS.

GSA 361-3. PHYSICS OF MUSIC AND ACOUSTICS.

375-0 to 6. SEMINAR. Topics selected from a wide range of physical theories and applications (maximum credit per quarter 2 hours). Prerequisite: consent of instructor. Junior or senior standing recommended.

404-3. INTRODUCTION TO STATISTICAL MECHANICS. A microscopic study of the thermal properties of matter and the laws of thermodynamics. Prerequisite: 301b, 304.

415-12 (4,4,4). MODERN PHYSICS. Elements of wave mechanics, atomic and nuclear physics, fundamental particles, superconductivity, and solid state. Must be taken in a,b,c sequence. Prerequisite: 300; 9 hours of mathematics numbered 300 or above.
418-1 to 4. MODERN PHYSICS LABORATORY. Experiments in modern physics. Prerequisite: 415 or concurrent enrollment and consent of instructor.

420-2 to 6. SPECIAL PROJECTS. Each student is assigned a definite investigative topic. Adapted to advanced undergraduate students. Prerequisite: 301, 305, and permission of division.

430-2. PHYSICAL LITERATURE. A study of source materials in the field of physics. Also, library search on special projects. Prerequisite: Integral calculus, three advanced physics courses and permission of instructor.


ASTRONOMY

201-4. INTRODUCTION TO ASTRONOMY. Uses of astronomy, reference systems, time, instruments, solar and galactic systems and satellites. Includes evening observations in addition to lecture-demonstrations.

GSA 356-3. ASTRONOMY.

PHYSIOLOGY

COURSE DESCRIPTIONS

209-4. PRINCIPLES OF PHYSIOLOGY. A comprehensive introductory analysis of the functional machinery of the human body. Three lectures and two laboratory hours per week. Prerequisite: GSA 201b and either Zoology 103 or Physiology 300. No credit toward a concentration in zoology.

300-4. HUMAN ANATOMY. The anatomy of the principal systems of the human body. Two lectures and four laboratory hours per week. Prerequisite: GSA 201b. No credit toward a concentration in zoology.

315-15 (5,5,5). COLLEGE PHYSIOLOGY. Lectures emphasize mammalian and human physiology. Laboratory involves function throughout the vertebrate classes. Must be taken in a,b,c or a,c,b sequence. Three lecture and four laboratory hours per week. Prerequisites: GSA 201b and 5 hours of chemistry.

430-12 (4,4,4). CELLULAR PHYSIOLOGY. The nature and mechanism of the living cell. Chemical and physical aspects of vital activity. Recommended for students interested in biochemistry and biophysics. 3 hours lecture, 2 hours laboratory. Prerequisite: one course in biological science, organic chemistry.

433-4. COMPARATIVE PHYSIOLOGY. Fundamental physiological processes and the manner in which they vary in various groups of animals. Three lecture and two laboratory hours per week. Prerequisites: Chemistry 111c, Zoology 102, 103.

460-12 (4,4,4). MAMMALIAN PHYSIOLOGY. For graduate students who need a knowledge of human or mammalian function. Identical with 315 which runs concurrently.

SCIENCE AND TECHNOLOGY

To qualify for honors in an area of Science and Technology, one must
complete at least 57 hours of credit or the equivalent in that area including successful completion of 9 hours of the corresponding honors program. For further information regarding the Honors program offered by the Science and Technology Division, refer to Individual Honors Work, in the General Information issue of the Southern Illinois University Bulletin.

**COURSE DESCRIPTION**

390-1 to 15. SCIENCE AND TECHNOLOGY HONORS. Honors work in the biological sciences, chemistry, mathematics, or physics. Entrance to this course is by invitation of the Science and Technology Honors Program Committee. Prerequisite: junior or senior standing.

**ZOOLOGY**

Students planning to concentrate in zoology should consult with the zoology faculty representatives.

**SUGGESTED CURRICULA**

**BACHELOR OF ARTS DEGREE**

General Studies Requirements (See page 5.) ........................................... 87
Bachelor of Arts Degree Requirements (See page 7.) ................................. (9)
Science and Technology Division Requirements (See page 76.) .................... (48)
Zoology Concentration Requirements ......................................................... 69
  GSA 201a,c  ......................................................... (6)
  Chemistry 111–15  .................................................. 15
  Physics (GSA 101a,b may be used for credit)  ........................................ 6
  Zoology 102, 103, 202, 300, 382–1.5, 401  ............................................. 26
  Electives above 300 to complete 48 hours in zoology and physiology including at least one field course and at least one physiology course 22
Secondary Concentration Requirement ....................................................... 27
Electives ......................................................................................... 9
  Recommended: organic chemistry, three quarters of physics, three of botany, and three of mathematics
Total .................................................................................................. 192

**BACHELOR OF SCIENCE IN EDUCATION DEGREE**

For this degree in the Education Division, the Zoology Concentration Requirements are as listed above, under Bachelor of Arts Degree.
BACHELOR OF SCIENCE DEGREE

Students planning to become medical technologists should consult with an appropriate faculty representative.

General Studies Requirements (See page 5.) ........................................... 87
Science and Technology Division Requirements (See page 76.) ............. (48)
Zoology (Medical Technology) Concentration Requirements ...................... 54

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSA 201a,c</td>
<td>(6)</td>
</tr>
<tr>
<td>GSD 114-9</td>
<td>(9)</td>
</tr>
<tr>
<td>Physics (GSA 101a,b may be used for credit)</td>
<td>6</td>
</tr>
<tr>
<td>Zoology 102, 103, 202, 300, 382-1.5, 401</td>
<td>26</td>
</tr>
<tr>
<td>Electives above 300 in physiology and zoology (At least one field course and at least one physiology course must be included.)</td>
<td>22</td>
</tr>
</tbody>
</table>

Secondary Concentration Requirement (chemistry) .................................. 27
Chemistry 111-15, 336-8, and organic chemistry

Electives ........................................................................................................ 24

Medical Technology (one year at an affiliated Medical Technology School) ........................................... (48)

Total .............................................................................................................. 192

Upon successful completion of the year of study and laboratory work at a school of medical technology affiliated with the Science and Technology Division, the student will usually be credited with 48 hours towards the Bachelor of Science Degree (of which 16 will count towards the 64 quarter hours of senior college credit needed for graduation). These hours may be used for hours indicated above in Electives (general) and Electives above 300 in physiology and zoology.

Schools of medical technology approved by the Council on Medical Education and Hospitals of the American Medical Association require for entrance completion of three years (135 quarter hours) from an accredited college or university, with credit for 24 hours in biological science and 24 in chemistry. Students successfully completing the year of study and laboratory training at an approved school of medical technology are eligible to take the national registry examination conducted by the Board of Registry of Medical Technology for certification as a registered technologist MT (ASCP).

SECONDARY CONCENTRATION

The minimum zoology secondary concentration is 27 hours including 102, 103 and electives in physiology and zoology.
COURSE DESCRIPTIONS

The prefix GSA indicates a General Studies course which involves the discipline of zoology and which is listed here for convenience. The description of such a course appears in the General Studies bulletin.

100-5. PRINCIPLES OF ANIMAL BIOLOGY. Introduction to the major principles of biology, including classification, organization of matter into cells, tissues, organs, and organ systems, heredity, ecology, distribution, organic evolution, economic biology, and conservation. Three lecture and four laboratory hours per week.

102-5. GENERAL INVERTEBRATE ZOOLOGY. Studies of representatives of the various kinds of invertebrate animals. Relationships, structure, and natural history are emphasized. Two lecture and six laboratory hours per week. Prerequisite: 100 or GSA 201b.

103-5. GENERAL VERTEBRATE ZOOLOGY. Studies of representatives of the various kinds of vertebrate animals, with special emphasis on the amphibian type. Evolutionary development, structure, and natural history are emphasized. Two lecture and six laboratory hours per week. Prerequisite: 100 or GSA 201b.

GSA 201a-3, 201b-3. MAN'S BIOLOGICAL INHERITANCE.

202-5. COMPARATIVE ANATOMY. Comparative studies of the organ systems of vertebrate animals, with emphasis on the phylogeny and evolution of these organs. Two lecture and six laboratory hours per week. Prerequisite: 103.

300-5. VERTEBRATE EMBRYOLOGY. Development of the individual with the frog, chick, and pig as types. Two lecture and six laboratory hours per week. Prerequisite: 202.

303-4. GENERAL ORNITHOLOGY. Natural history, identifications, and taxonomic groups of birds. Cost of field trips may be $5 to $10 per student. Two lecture and four laboratory hours per week. Prerequisite: 100 or GSA 201b.

306-4. ENTOMOLOGY. Principles of the structure, classification, and life histories of insects. Two lecture and four laboratory hours per week. Prerequisite: 102.

310-5. ANIMAL ECOLOGY. Habitats, communities, and population dynamics of animals. Cost of field trips may be $5 or $10 per student. Three lecture and four laboratory hours per week. Prerequisite: 102, 103.

313-3. EVOLUTION. Principles and processes of the evolution of living things, including the development of present-day man. Prerequisite: one year of biological science.

314-4. HEREDITY AND EUGENICS. Principles of heredity in relation to man. Prerequisite: 100 or Botany 101 or GSA 201h or c.

321-5. HISTOLOGICAL TECHNIQUE IN ZOOLOGY. Methods of preparing material for microscopic study. Two lecture and six laboratory hours per week. Prerequisite: one year of biological sciences or consent of instructor.

322-2 to 5. PROBLEMS IN ZOOLOGY. Research on zoological problems. Prerequisite: 4.25 grade-point average, senior standing, and consent of the
335–5. FIELD ZOOLOGY. Taxonomy, natural history, and distribution of local animals. Cost of field trips may be $10–$25 per student. Prerequisites: 102, 103.

382–1.5 (1/2, 1/2, 1/2). ZOOLOGY SEMINAR FOR SENIORS. Required each quarter of seniors concentrating in zoology. Prerequisite: one year of biological sciences.

400–3. ANIMAL TAXONOMY. The concepts of taxonomy and their use in zoology. Two lecture and two laboratory hours. Prerequisites: 1 year of biological science or consent of instructor.

401–5. GENETICS. Principles of inheritance, including genetic mechanisms, mutation, and selection. Two lecture and six laboratory hours per week. Prerequisite: 12 hours of biological science and consent of instructor.

402–4. NATURAL HISTORY OF INVERTEBRATE ANIMALS. Observation, identification, and life histories. Designed for teachers. Not for students specializing in invertebrate zoology. Two lecture and four laboratory hours per week. Prerequisite: one year of zoology.

403–4. NATURAL HISTORY OF VERTEBRATE ANIMALS. Observation, identification, and life histories. Designed for teachers. Not for students specializing in vertebrate zoology. Two lecture and four laboratory hours per week. Prerequisite: one year of zoology.

404–4 to 8. ZOOLOGY FIELD STUDIES. An extended trip of four to eight weeks to study animals in various environments. Arrangements made spring term. Costs per individual will be approximately $25 per week. (4 hours may be used for undergraduate credit and 4 hours for graduate credit.) Prerequisite: consent of faculty.

406–4. PROTOZOOLOGY. Taxonomy, cytology, reproduction, and physiology of unicellular animals. Laboratory methods of culturing and studying. Two lecture and four laboratory hours per week. Prerequisite: one year of zoology.

407–5. PARASITOLOGY. Collection of parasitic animals, identification, morphology, life history, and control measures. Two lecture and six laboratory hours per week. Prerequisite: 102.

408–4. HERPETOLOGY. Taxonomic groups, identification and natural history of amphibians and reptiles. Cost of field trip may be $5 to $10 per student. Two lecture and four laboratory hours per week. Prerequisite: one year of zoology.

412–4. ADVANCED ENTOMOLOGY. Morphology, physiology, systematics, and distribution of insects. Two lecture and four laboratory hours per week. Prerequisite: one basic course in entomology.

461–4. MAMMALOGY. Taxonomic groups, identification, and natural history of mammals. Two lecture and four laboratory hours per week. Prerequisite: 103.

480–3. ZOOGEOGRAPHY. Concepts and principles relating to patterns of animal distribution on a continental and world-wide basis. Prerequisite: 103 or consent of instructor.

520–5. Advanced Invertebrate Zoology.


The Social Sciences Division offers courses designed to enable the student to achieve an understanding and appreciation of civilization viewed in historical perspective, and to gain, through the various social sciences disciplines, an awareness of the society of which he is a part and of his role in it. His studies give him insights and understandings which enable him to live more constructively with others in his family, community, and nation and provide him with a better understanding of social organizations, technologies, and the nature and variety of human beliefs and attitudes.

FACULTY OF BEHAVIORAL SCIENCES
Professor Donald L. Taylor (Ph.D., Duke).
Associate Professors Robert B. Campbell (Ph.D., Wisconsin), Lynn M. Irvine, Jr. (M.A., Indiana), Douglas M. More (Ph.D., Chicago), Gunter W. Remmling (Ph.D., Berlin), Elliott M. Rudwick (Ph.D., Pennsylvania), Ernest L. Schusky (Ph.D., Chicago; chairman), Jack Bruce Thomas (Ph.D., Indiana).
Assistant Professors Thomas P. Culbert (Ph.D., Chicago), Martin L. Dosick (A.M., Boston), Virgil L. Seymour (M.S., Southern Illinois).
Term Instructors and Lecturers John W. Rawlin, Jane Ann Schusky, Steven Vago.

FACULTY OF EARTH SCIENCES
Professors James E. Collier (Ph.D., Nebraska), Melvin E. Kazeck, (Ed.D., Columbia; chairman).
Associate Professors William B. Baker (Ph.D., Nebraska), John W. Snaden (Ph.D., Michigan).
Assistant Professors Carl S. Lossau (Ph.D., Northwestern), Philip E. Vogel (Ph.D., Nebraska).
Instructor Richard E. Guffy (M.S., Northwestern).
Visiting Associate Professor Sitanshu Mookerjee (Ph.D., Indiana).
Term Instructors and Lecturers Harold H. Channer, Robert L. Koepke, Carroll J. Schwartz.

FACULTY OF GOVERNMENT AND PUBLIC AFFAIRS
Professors William Goodman (Ph.D., Ohio State; chairman), Seymour Z. Mann (Ph.D., Chicago).
Associate Professors Kurt Glaser (Ph.D., Harvard), S. D. Lovell (Ph.D., Ohio State).
Assistant Professors James R. Kerr (Ph.D., Stanford), George R. Mace (Ph.D., Claremont).
Instructor Eleanor A. Schwab (A.M., New York).
Term Instructors and Lecturers Arthur A. Stahnke, Robert D. Stetten.

FACULTY OF HISTORICAL STUDIES
Professor Herbert H. Rosenthal (Ph.D., Harvard).
Associate Professors Robert F. Erickson (Ph.D., Illinois), John G. Gallaher (Ph.D., St. Louis), Stanley B. Kimball (Ph.D., Columbia) (on leave 1964-65), Allan J. McCurry (Ph.D., Cornell; chairman), Patrick W. Riddleberger (Ph.D., California),
Assistant Professors James M. Haas (Ph.D., Illinois), Ronald A. Steckling (M.A., Wisconsin), Stuart L. Weiss (Ph.D., Chicago).
Term Instructors and Lecturers Edward P. Keleher, Nedra Reames.

ANTHROPOLOGY

A secondary concentration in anthropology consists of 27 hours including 300-4, 310-4, 409-4, GSB 201a-3, and GSB 351b-3. English 400-4 may be counted as part of the concentration.

COURSE DESCRIPTIONS

The prefix GSB indicates a General Studies course which involves the discipline of anthropology and which is listed here for convenience. The description of such a course appears in the General Studies bulletin.

GSB 201a-3. CULTURE, SOCIETY, BEHAVIOR.
300-4. MAN’S PLACE IN NATURE. Man as a biological being, his relationships to other living things, human origins and development, the concept of race and races of mankind, human genetics, and normal human variation.
304-4. THE ORIGINS OF CIVILIZATION. The conditions that produced the early high culture of both Old and New Worlds. A study of the complex environmental and cultural factors that led to the rise and fall of early civilizations.
309-4. PEOPLES AND CULTURES OF ASIA AND OCEANIA. The varieties of people and customs in Asia, and the Pacific Islands. The biological and cultural history of man in Asia and Oceania from the earliest known times to the present day.
310-4. MAN AND CULTURE. The nature of culture and cultural process. The interrelationships between culture and man as an individual and as a group, with emphasis on the cultural point of view as an aid in understanding human actions and reactions in the world today.
314-4. INDIANS OF NORTH AMERICA. A survey of North American Indian cultures as they have existed within historic times.

GSB 351b-3. GEOGRAPHIC AND CULTURAL BACKGROUND OF DEVELOPING AFRICA.
409-4. ANTHROPOLOGY AND MODERN LIFE. The uses of anthropology in the present-day world. How the anthropologist aids the administrator, businessman, government official, and other specialists.
430-4. ARCHAEOLOGY OF NORTH AMERICA. An introduction to the
methods of archaeology and a survey of prehistoric Indian cultures north of Mexico, with particular emphasis upon the cultures of the Mississippi Valley.

470-4. SOCIAL ANTHROPOLOGY. Theory and method in community study; functional analysis, cultural themes and values in both primitive and modern cultures.

GEOGRAPHY

In the field of geography, the student may work toward either a Bachelor of Science in Education degree or a Bachelor of Arts degree depending upon his objective:

1. Bachelor of Science in Education—for preparation to teach geography in the elementary or secondary schools, or (with further preparation) in the junior college; or as a part of preparation to teach either social science or physical science in the elementary or secondary schools.

2. Bachelor of Arts—for a thorough knowledge of geography, in preparation for civil service appointment as a geographer, or for demands of private organizations requiring the services of geographers, meteorologists, cartographers, or planners.

SUGGESTED CURRICULA

BACHELOR OF ARTS DEGREE

| General Studies Requirements (See page 5.) | 96 |
| Bachelor of Arts Degree Requirements (See page 7.) | (9) |
| Geography Concentration Requirements | 45 |
| Secondary Concentration Requirements | 27 |
| Electives | 24 |
| **Total** | 192 |

Areas of Specialization

Planning: 302, 304, 306, 308, 310a, 470a,b,c, and 471.
Cartography: 302, 304, 306, 308, 310a,b, 410a,b, 416a,b, 417, and mathematics minor.

The B.A. degree cartography specialty may be earned by a Work-Study Plan which permits students to work part time at the St. Louis Aeronautical Chart and Information Center. The General Studies advisement office or the geography staff has complete information on this plan. General Studies courses GSB 101a and GSA 330 are required in the above
specializations; one additional General Studies course in geography may be counted.

BACHELOR OF SCIENCE IN EDUCATION DEGREE

In addition to the General Studies Requirements and the Education Division Requirements, a geography specialization must include the following courses, GSB 101a, GSA 312, 330, Geography 302, 304, 306, 310a and additional courses to complete 45 or 36 hours in geography, (depending on whether the student has one or two secondary concentrations).

SECONDARY CONCENTRATION

A secondary concentration in geography consists of 27 hours and must include 302, 304, 306. Nine hours may be counted from the following: GSA 200, 312, 330, 331, GSB 101a, 351a, and 354.

COURSE DESCRIPTIONS

The prefix GSA or GSB indicates a General Studies course which involves the discipline of geography and which is listed here for convenience. The description of such a course appears in the General Studies bulletin.

GSB 101a-3. SURVEY OF THE WESTERN TRADITION.
GSA 200-3. EARTH SCIENCE.
302-4. INTRODUCTION TO PHYSICAL GEOGRAPHY. A study of the earth's physical surface, world distribution patterns of the physical elements, their relationship to each other and their importance to man. Field trip and laboratory work.
304-4. INTRODUCTION TO ECONOMIC GEOGRAPHY. A study of economic production designed to show the relationships between the physical environment and the economic activities in selected areas.
306-4. INTRODUCTION TO CULTURAL GEOGRAPHY. A world survey course which stresses man's relationship to his physical environment.
308-3. INTRODUCTION TO GEOGRAPHIC METHODS. Designed to introduce the geographic methods of integrating physical, economic and cultural elements in the study of areas. Cartographic and quantitative techniques utilized.
310-6 (3,3). INTRODUCTION TO CARTOGRAPHIC METHODS. Properties of maps and air photos, their uses and sources. Introduction to map symbols, map projections and map construction. Laboratory.
GSA 312-3. CONSERVATION OF NATURAL RESOURCES.
324-4. RESTORATION AND CONSERVATION OF NATURAL RESOURCES.
GSA 330-3. WEATHER.
GSA 331-3. CLIMATE.
343-4. TEACHING OF GEOGRAPHY. Presentation and evaluation of geography teaching methods, Geographic literature, illustrative materials, and teaching devices are emphasized.
GSB 351a-3. GEOGRAPHIC AND CULTURAL BACKGROUND OF DEVELOPING AFRICA.
GSB 354-3. INDUSTRIAL ECONOMIC GEOGRAPHY.

All 400-level courses require 6 hours of geography as prerequisites.


403-7 (4,3). ADVANCED PHYSICAL GEOGRAPHY II. A study of geomorphology and physiography.

404-7 (4,3). ADVANCED ECONOMIC GEOGRAPHY I. A study of the resource base and agricultural production.

405-7 (4,3). ADVANCED ECONOMIC GEOGRAPHY II. Industrial geography, transportation and locational theory.

406-7 (4,3). ADVANCED CULTURAL GEOGRAPHY I. Population and settlement geography.

407-7 (4,3). ADVANCED CULTURAL GEOGRAPHY II. Political and Historical geography.

410-6 (3,3). ADVANCED GEOGRAPHIC TECHNIQUES. Quantitative techniques and map intelligence. Prerequisite: 310.

416-8 (4,4). CARTOGRAPHY. Instruction and practice in the techniques of map-making and problems in map reproduction. Laboratory. Prerequisite: 310.

417-3. AIR PHOTO INTERPRETATION. Techniques in the use of air photos as source material for research in physical and social sciences. Prerequisite: 310.

424-4. REGIONAL PROBLEMS IN CONSERVATION. The distribution, use and interrelationship of the resources of the United States and the conservation techniques applied to them.

450-3 to 15. TRAVEL STUDY COURSE. Enrichment through travel, supervised study and readings on areas visited.

461-7 (4,3). ADVANCED REGIONAL GEOGRAPHY OF ANGLO-AMERICA. A regional coverage followed by an intense study of selected geographic factors.

462-7 (4,3). ADVANCED REGIONAL GEOGRAPHY. EUROPE. A regional coverage followed by an intense study of selected geographic factors.

463-7 (4,3). ADVANCED REGIONAL GEOGRAPHY. MEDITERRANEAN LANDS. A regional coverage followed by an intense study of selected geographic factors.

464-7 (4,3). ADVANCED REGIONAL GEOGRAPHY. SOVIET WORLD. A regional coverage followed by an intense study of selected geographic factors.

465-7 (4,3). ADVANCED REGIONAL GEOGRAPHY. AFRICA. A regional coverage followed by an intensive study of selected geographic factors.

466-7 (4,3). ADVANCED REGIONAL GEOGRAPHY. ASIA. A regional coverage followed by an intensive study of selected geographic factors.

467-7 (4,3). ADVANCED REGIONAL GEOGRAPHY. LATIN AMERICA. A regional coverage followed by an intensive study of selected geographic factors.

468-7 (4,3). ADVANCED REGIONAL GEOGRAPHY. OCEANIA. A regional coverage followed by an intensive study of selected geographic factors.

470-12 (4,4,4). URBAN PLANNING. (See Government 470.) (a) Planning Concepts and Methods, (b) Planning Administration and the Planning Function in Public Process, (c) Field Problems.
471–3 to 6. REGIONAL PLANNING. Area and regional development, theory and practices.
475–4 to 8. METHODS OF FIELD GEOGRAPHY. Application of geographic field techniques.
490–6 (2,2,2). TUTORIAL IN GEOGRAPHY. Individual and small group conferences dealing with geographic topics and concepts.
522–2 to 6. Seminar in Regional Geography.

GOVERNMENT

A concentration in government is recommended for persons planning to teach civics or government courses, and for those planning to qualify for the study of law or for the public service.

SUGGESTED CURRICULA

BACHELOR OF ARTS DEGREE

General Studies Requirements (See page 5.) ........................................... 96
Bachelor of Arts Degree Requirements (See page 7.) .............................. (9)
Government Concentration Requirements ............................................. 45

A minimum of 45 hours including 210 and at least 3 hours in each of the six areas of specialization listed below.

Secondary Concentration Requirements ............................................. 27
Electives ........................................... 24
Total ....................................................... 192

BACHELOR OF SCIENCE IN EDUCATION DEGREE

For this degree in the Education Division, the Government Concentration Requirements include 45 or 36 hours (including 210) in government depending on whether the student has one secondary concentration or two. At least 3 hours (but no more than 20 hours) should be taken in each of the areas of specialization listed below.

AREAS OF SPECIALIZATION

Public Law 315, 495.
Public Administration 360, 361, 440, 461, 465, 470, 473.
International Relations 243, 370, 371, 373.
Political Theory 484, 487.
SECONDARY CONCENTRATION

A secondary concentration is 27 hours and must include 210 and at least one course in three of the six areas of specialization listed above.

COURSE DESCRIPTIONS

The prefix GSB indicates a General Studies course which involves the discipline of government and which is listed here for convenience. The description of such a course appears in the General Studies bulletin.

210-4. AMERICAN GOVERNMENT. A general survey of national, state, and local governments. Includes the national and state constitutional principles as required by Illinois law.

GSB 211b,c-6. POLITICAL ECONOMY.

232-4. STATE AND LOCAL GOVERNMENT. A survey of the structure and functions of American state and local governments. Prerequisite: 210 or equivalent.

243-3. INTRODUCTION TO AMERICAN FOREIGN POLICY. The significance of foreign policy as related to American citizens. Prerequisite: 210 or equivalent.

315-3. ADMINISTRATION OF JUSTICE. The organization and work of the American judicial system. Recommended for pre-law students. Prerequisites: 210 or equivalent.

321-1 to 6. READINGS IN GOVERNMENT. Consent of instructor required.

330-2. ILLINOIS GOVERNMENT. The development and functioning of government in Illinois. Prerequisite: 210 or equivalent.

340-3. THE LEGISLATIVE PROCESS. A study of the principles, organization, and work of American legislative bodies. Prerequisite: 210 or equivalent.

GSB 359a,b-6. SOCIETY AND STATE: SOCIAL AND POLITICAL THEORIES.

360-4. INTRODUCTION TO PUBLIC ADMINISTRATION. Nature of public administration in the United States; basic administrative practices, the peculiar governmental systems; major issues in public administration. Prerequisite: 210 or equivalent.

361-3. SELECTED PROBLEMS IN PUBLIC ADMINISTRATION AND POLICY FORMULATION. Intensive examination of problem areas illustrating administrative and management practices in public service and demonstrating linkages between politics and administration in our political system. Prerequisite: 360.

370-4. INTERNATIONAL RELATIONS. A study of world politics—the causes of international conflict and the conditions of peace. Prerequisite: 243.

371-4. PROBLEMS OF AMERICAN FOREIGN POLICY. An analysis of selected problems in the field of American foreign policy. Prerequisite: 243.

373-3. INTERNATIONAL POLITICS OF EUROPE. Nation-state system in Europe; foreign politics of major states; nationalism as a source of conflict; Soviet expansionism; progress toward European security and unification. Prerequisite: 370.

379-3. THE DEVELOPMENT OF POLITICAL PARTIES. A study of the historical development of American political parties. Prerequisite: 210 or equivalent.
380-4. POLITICAL PARTIES. An analysis of contemporary American political parties. Prerequisite: 210 or equivalent.

390-8 (4,4). COMPARATIVE EUROPEAN GOVERNMENT. (a) The Constitutional and Liberal Systems: A comparative study of Great Britain, France (liberal and constitutional phases) and the nontotalitarian phases of German government. Other states may be included at the option of the instructor. (b) The Authoritarian and Totalitarian Systems: An examination of the authoritarian systems of Fascist Italy, Nazi Germany and the U.S.S.R. Also included is a comprehensive comparison of these two types of government.

406-4. AMERICAN CHIEF EXECUTIVE. President and governor. A study of the origin and background of the presidency and the governorship; qualifications, nomination and election, succession and removal, the organization of the executive branch and the powers and functions of the president and governor. Prerequisite: 210 or equivalent.

415-3 POLITICAL BEHAVIOR. An analysis of the nature of public opinion and methods of influencing political behavior. Major attention given to studying basic psychological attitudes and behavior. Prerequisite: 210 or equivalent.

420-3. PRESSURE GROUPS AND POLITICS. An analysis of interest groups and their techniques of political propaganda. Prerequisite: 210 or equivalent.

435-4. GOVERNMENT AND BUSINESS. General survey of regulation of business by government; regulatory measures and procedures; regulation of labor and agriculture; public ownership; impact of pressure groups on government. Prerequisite: 210 or equivalent.

440-4. PUBLIC PERSONNEL MANAGEMENT. An analysis of some of the central problems encountered by the government executive in recruiting, maintaining, and developing personnel, such as political neutrality, leadership and motivation, career development, security regulations, and the role of personnel in policy planning and execution. Prerequisite: 210 or equivalent.

453-12 (4,4,4). THE GOVERNMENT AND POLITICS OF THE SOVIET UNION. An intensive study and research exercise in the government and politics of the Soviet Union. Prerequisite: 390 or consent of instructor.

456-4. GREAT BRITAIN AND THE BRITISH EMPIRE. An intensive study and research exercise in the governments and politics of the British Commonwealth of Nations. Prerequisite: 390 or consent of instructor.

457-4. GOVERNMENT AND POLITICS IN THE NEAR AND MIDDLE EAST. Iran, Iraq, Syria, Lebanon, Egypt, Jordan, Saudi Arabia, etc. Prerequisite: 210 or equivalent.

458-8 (4,4). GOVERNMENT AND POLITICS OF ASIA. (a) Southeast Asia. Prerequisite: Consent of instructor. (b) China and Japan. Prerequisite: Consent of instructor.

461-4. ORGANIZATIONAL THEORY AND PUBLIC ADMINISTRATION. Examination of sociology of organizations, the significance of bureaucracy and large scale organizations, administrative theories and their application and relevance to public administration. Prerequisite: 360 or concurrent registration with 360.

465-3. LOCAL GOVERNMENT AND PUBLIC ADMINISTRATION. Problems and issues at local governmental level. Emphasizes administrative
approaches, special problems in intergovernmental relationships, and the developing tasks related to urban expansion. Prerequisite: 360.

470-12 (4,4,4). URBAN PLANNING. (Same as Geography 470.) (a) Planning Concepts and Methods. An introduction to the planning processes, stressing the physical aspects. Lectures, discussions, demonstrations and laboratory sessions covering historical background of planning; planning methods including land use studies and special distribution of functions in the urban area and region; research methods in planning; introduction to design elements; and instruments for plan implementation. (b) Planning Administration and the Planning Function in Public Processes. The study of the planning process as it relates to public policy formulation and implementation processes. Particular emphasis will be given to the urban government setting and to emerging regional arrangements. Will examine problems in planning administration, fiscal planning, the co-ordinative role of planning, and land use controls. (c) Field Problems in Urban and Regional Planning. Principally designed as a workshop where problems would be pursued by the student on an individual or group basis. Topics for investigation would be selected to serve the student's competence and interest in the sociological, economic, administrative, design or general political aspects of the planning process. Problems selected would be related to this bi-state metropolitan area as a natural laboratory and would be tied, wherever feasible or desirable, to on-going current area studies. Prerequisite: consent of instructor.

470D-2. URBAN PLANNING SEMINAR: PLANNING IN A FREE SOCIETY. Individual and group consideration of a philosophy of planning compatible with a free society. Seminar will devote itself to a review of the significant related literature and to the consideration of the contributions and limitations of planning as an element in public decision-making. (May be taken concurrently with 470c.) Prerequisite: 470a and 470b.

473-3. METROPOLITAN STUDIES AND RESEARCH. Examination of the reorganization movement related to improvement and restructuring of government in metropolitan areas. Review and evaluation of special problems in research methodology. Prerequisite: 360 or 465 or consent of instructor.

484-12. (4,4,4). HISTORY OF WESTERN POLITICAL THEORY. The major theories and theorists of the Western heritage and their relevance to political values and institutions. (a) The teachings of Plato, Aristotle, the major Skeptics, Cynics, and Stoics (with emphasis upon the later Stoa—Cicero), Augustine, and Aquinas. (b) The teachings of Machiavelli, Hobbes, Rousseau, Locke, and Burke. (c) The theories of Publius, Bentham, Hegel, Tocqueville, Mills, Marx, and Nietzsche.

487-6 (3,3). AMERICAN POLITICAL IDEAS. (a) An analysis of American political theory and ideas from Puritan America to Tocqueville with emphasis upon the continuous development of basic political values and institutions. (b) An analysis of American political ideas from Calhoun to present currents in American political and social thought with emphasis upon the continuous development of basic political values and institutions.

495-12 (4,4,4). AMERICAN CONSTITUTIONAL LAW. (a) A study of the development of American constitutional law chiefly through judicial opinion. Emphasis is placed on the analysis of federalism and the dis-
tribution of powers. Prerequisite: 210 or equivalent. (b) A study of government power and the rights of property. Special attention is directed to tension between the public welfare and private rights, the extent of government power to regulate property rights, and state versus federal power over commerce and taxation. Prerequisite: 210 or equivalent. (c) A study of the nature and extent of civil rights and liberties in the United States. Special attention is given to freedom of speech, press, and association, separation of church and state, equal protection of the laws, and the rights of persons accused of crime. Prerequisite: 210 or equivalent.

530-1 to 12. Internship in Public Affairs.

HISTORY

Students who intend to concentrate in history should consult with a member of the history faculty at the time of registration. Formal declaration of a concentration in history should not be made before the end of the sophomore year. Students are urged to complete their General Studies program as soon as possible in order to concentrate on history during the junior and senior years.

SUGGESTED CURRICULA

BACHELOR OF ARTS DEGREE

General Studies Requirements (See page 5.) ........................................... 96
Bachelor of Arts Degree Requirements (See page 7.) .............................. (9)
History Concentration Requirements ....................................................... 43
GSB 101b,c ................................. (6)
History 100, 201-8, 452 ................................................................. 14
History electives above 299 (Anthropology 304 may be counted) to complete 45 hours (including GSB 101b,c) distributed as evenly as possible among Ancient-Medieval-Asiatic, Modern European, and American history. 25
Philosophy 200 ................................................................................. 4
Secondary Concentration Requirements ................................................. 27
Electives ......................................................................................... 26
Total ............................................................................................ 192

BACHELOR OF SCIENCE IN EDUCATION DEGREE

For this degree in the Education Division, the History Concentration
Requirements are 48 hours or 36 hours depending on whether the student has one secondary concentration or two. Requirements for either concentration are 100, 201–8, 452, GSB 101b,c, and Philosophy 200. The remaining portion of the concentration must be on the 300 and 400 levels, and care should be taken to distribute the work as evenly as possible among the three fields of Ancient-Medieval-Asiatic, Modern Europe, and American history. A year of work in a foreign language is required.

SECONDARY CONCENTRATION

Twenty-seven hours are required for a secondary concentration in history and must include 100, 201–8, GSB 101b,c. Anthropology 304 may be counted for a history concentration.

COURSE DESCRIPTIONS

The prefix GSB indicates a General Studies course which involves the discipline of history and which is listed here for convenience. The description of such a course appears in the General Studies bulletin.

100–3. SURVEY OF WESTERN CIVILIZATION. Ancient Period to 1000 A.D.
GSB 101b–3, 101c–3. SURVEY OF WESTERN TRADITION.
201–8 (4,4). HISTORY OF THE UNITED STATES. (a) U.S. to 1865, (b) U.S. since 1865.
304–3. HISTORY OF THE ANCIENT NEAR EAST. Political, social, and religious history from the earliest times to the 4th Century B.C. Prerequisite: 100 or equivalent.
306–9 (3,3,3). HISTORY OF ROME. (a) The Republic. (b) The Western Empire. (c) The Eastern Empire. Prerequisite: 100 or equivalent.
308–3. HISTORY OF ILLINOIS. Political, social, economic, and cultural history of the state from 1818 to the present. Recommended for prospective teachers. Prerequisites: 201–8.
309–4. THE NEGRO IN AMERICA. The role of the Negro in America from the seventeenth century to the present with emphasis on the period since 1865. Prerequisite: 201–8.
312–4. CENTRAL EUROPE IN THE NINETEENTH CENTURY. An analysis of the rise of nationalism with emphasis on Germany and Italy and of the problems of the Austro-Hungarian Monarchy. Prerequisites: GSB 101b,c.
330–4. THE REVOLUTION AND THE CONSTITUTION. A detailed examination of the period 1763 to 1789 in United States history. Prerequisite: 201a.
332–8 (4,4). MEDIEVAL HISTORY. (a) Early Middle Ages. (b) Later Middle Ages. Prerequisite: sophomore standing.
338–6 (3,3). HISTORY OF GREECE. (a) Hellenic history. (b) 401–133 B.C. Prerequisite: sophomore standing.
352–9 (3,3,3). HISTORY OF LATIN AMERICA. (a) Colonial Latin America. (b) Independent Latin America. (c) Latin America in World Affairs.
365–4. HISTORY OF CHINESE CIVILIZATION. A survey of the development
of Chinese civilization from prehistoric times to the present. Prerequisites: GSB 101b,c.

367-9 (3,3,3). HISTORY OF THE FAR EAST. (a) Introduction, to 1800. (b) 1800–1945. (c) 1945 to the present. Prerequisite: GSB 101b,c.

372–8 (4,4). HISTORY OF RUSSIA. (a) To 1905. (b) Since 1905. Prerequisite: GSB 101b,c.

401–8 (4,4). HISTORY OF THE SOUTH. (a) The Old South. (b) The New South: Prerequisite: 201–8.

405–3. CIVIL WAR AND RECONSTRUCTION. The political and economic background of the war, the military aspects of the conflict, and the course and consequences of reconstruction. Prerequisites: 201–8.

410–2 to 5. SPECIAL READINGS IN HISTORY. Limited to exceptionally well-qualified students.

411–9 (3,3,3). INTELLECTUAL HISTORY OF THE UNITED STATES. (a) 1607–1789. (b) 1789–1900. (c) 1900 to present. Prerequisite: 201–8.

415–12 (4,4,4). HISTORY OF EARLY MODERN EUROPE. (a) The Renaissance. (b) The Reformation. (c) Age of Absolutism and the Enlightenment. Prerequisite: GSB 101b,c.

420–4. THE FRENCH REVOLUTION. An intensive study of the period 1789 to 1815. Prerequisite: GSB 101b,c.

425–4. AMERICAN COLONIAL HISTORY. Founding of the American colonies and development of their institutions to 1763. Prerequisite: 201a.

428–4. THE AGE OF JACKSON. Origins, background, and development of that phase of American democracy associated with the Jacksonian era. The political, social, and economic history of the years 1815–44 are considered in detail.

432–12 (4,4,4). ADVANCED ENGLISH HISTORY. (a) Tudor England. (b) English Culture in the Age of American Colonization. (c) Constitutional History. Prerequisite: GSB 101b,c.

435–9 (3,3,3). POST CIVIL WAR AMERICA. (a) 1865–1900. (b) 1900–1929. (c) 1929 to present. Prerequisite: 201–8.

440–6 (3,3). HISTORY OF AMERICAN DIPLOMACY. (a) To 1898. (b) Since 1898. Prerequisite: 201–8.

450–4. EUROPE SINCE 1914. Political and cultural developments in twentieth century Europe with emphasis on international relations. Prerequisite: GSB 101b,c.

451–3. HISTORIOGRAPHY. Development of history as a written subject, including works and philosophy of the various outstanding historians in ancient, medieval, and modern periods. Prerequisite: GSB 101b,c.

452–3. RESEARCH AND THESIS WRITING. A methods course in research principles which requires the preparation of a research paper. Prerequisite: senior standing or consent of instructor.

454–3. BIOGRAPHY IN AMERICAN HISTORY. Outstanding leaders and their contributions to the history of the United States. Attention to historical writers who specialize in biography. Prerequisite: a course in United States history.

481–3. ROME: THE EARLY EMPIRE. The civilization of the first two centuries of the Roman Empire. Against a background of general political history, attention is directed to the philosophical schools, pagan religions, and other factors affecting the rise and extension of Christianity. Prerequisite: 100 or equivalent.
SUGGESTED CURRICULUM

BACHELOR OF ARTS DEGREE

General Studies Requirements (See page 5.) ........................................ 96
Bachelor of Arts Degree Requirements (See page 7.) ........................... (9)
Public Administration and Planning Concentration Requirements ....... 72

Economics 330-4 and one other course ............................. 8
Geography 302-4, 304-4, 416-4; and/or 470-12 ......................... 12-24
Government 232-4, 360-4, 361-3, 465-3, 473-3; and/or
470-12, 470d-2 .......................... 14-31

Government and/or geography courses to yield at least
18 hours in one and 38 in the other. Each of 470a,b, and c may count as either geography or government but not both 13–30
Sociology 335–4 and one other course 8
Electives .................................................. 24
Total .................................................. 192

SOCIOLOGY

Sociology offers concentrations for those working for a Bachelor of Arts degree and a Bachelor of Science in Education degree. A sociology concentration with a specialization in social welfare is also offered.

SUGGESTED CURRICULA

BACHELOR OF ARTS DEGREE

General Studies Requirements (See page 5.) .............................................. 96
Bachelor of Arts Degree Requirements (See page 7.) ................................ (9)
Sociology Concentration Requirements ................................................. 53
  Anthropology, psychology (one course in each) 8
  Sociology 101, 308 (or GSD 114d or Mathematics 410a), 312, 321, 405, 451 23
  Sociology electives to complete 45 hours 22
  A background course in physical anthropology is also recommended.
Secondary Concentration Requirements .................................................. 27
Electives .............................................................................. 16
Total ............................................................................ 192

Social Welfare

General Studies Requirements (See page 5.) .............................................. 96
Bachelor of Arts Degree Requirements (See page 7.) ................................ (9)
Sociology Concentration Requirements ................................................. 63
  Anthropology, economics, psychology (one course in each) 12
  Government (two courses in the area of American national, state, and local government) 9
  Sociology 101, 102, 308 (or GSD 114d or Mathematics 410a), 321, 340, 380, 481, 482 31
  Sociology electives 11
Secondary Concentration Requirements ........................................... 27
Electives .......................................................................................... 6
Total ............................................................................................... 192

BACHELOR OF SCIENCE IN EDUCATION DEGREE

For this degree in the Education Division, the Sociology Concentration Requirements include 101, 102, 321, 333, 340, 374, and sociology electives to complete 48 or 36 hours depending on whether the student has one or two secondary concentrations. One (but not two) secondary concentration should be in another social science.

SECONDARY CONCENTRATION

A secondary concentration in sociology consists of 27 hours and may include GSB 201–9 and 359–6.

COURSE DESCRIPTIONS

The prefix GSB indicates a General Studies course which involves the discipline of sociology and which is listed here for convenience. The description of such a course appears in the General Studies bulletin.

101-4. INTRODUCTORY SOCIOLOGY. Scientific study of human society and the various means by which individuals and groups adjust to each other and to their physical and social environment.

102-4. SOCIAL PROBLEMS. An analysis of selected contemporary social problems in their social and cultural setting such as crimes, suicide, mental illness, the vices, family disorganization, with emphasis upon their extent and significance.

GSB 201b-3. CULTURE, SOCIETY, BEHAVIOR.

241-4. MARRIAGE AND PARENTHOOD. The social psychology of dating, courtship, and family relations; evaluation of research findings; problems of applying scientific principles to changing overt behavior.

306-4. SOCIAL CONTROL. The means and principles of social controls; social institutions as factors in control; techniques of directing social action. Prerequisite: 101.

308-3. STATISTICS FOR SOCIAL SCIENCE. Methods and application of statistics in the social sciences. Statistical methods in demography, ecology, testing and guidance, social problems. Examination of empirical studies in these and related areas. Prerequisite: junior standing or consent of instructor.

312-4. SOCIOLOGICAL RESEARCH. Part played by research in the development of sociology as a science. Application of scientific method to social data. Types of research. Prerequisite: 101.

320-4. RACE AND MINORITY GROUP RELATIONS. Racial and cultural contacts and conflicts, causes of prejudice; status and participation of minority groups; national and international aspects of minority problems.
321-4. SOCIALIZATION OF THE INDIVIDUAL. The process of socialization in infancy, childhood, and adolescence; development of habits; attitudes, sentiments; emergence of the self; integration of the individual and society. Prerequisite: 101.

322-4. PROPAGANDA AND PUBLIC OPINION. Techniques and characteristics of propaganda; methods of measuring public opinion. Prerequisite: 101.

323-4. SOCIAL ORGANIZATION. An examination of the determinants of social organization; intensive analysis of institutional configurations, social stratification, and systems of social control; review of significant writing. Prerequisite: 101.

324-4. COMMUNITY ORGANIZATION. Factors involved in community organization; types, aims, and objectives; community diagnosis; individual case study of specific community. Prerequisite: 101.

335-4. URBAN SOCIOLOGY. The rise, development, structure, culture, planning, and problems in early and modern cities. Prerequisite: 101.

338-4. INDUSTRIAL SOCIOLOGY. Social organization and processes within the formal and informal structure of the industrial unit; research and experimental materials concerning social determinants of morale, status, and role of the worker. Prerequisite: 101.

340-4. THE FAMILY. The family in historic and contemporary society; evolution of the modern family; changes in family functions, structures, and roles. Prerequisite: 101.

351-4. SOCIOLOGY OF RELIGION. Function of religious institutions in society and their relationship to other major social institutions; role in social control and group solidarity. Prerequisite: 101.

GSB 359a,b–6. SOCIETY AND STATE: SOCIAL AND POLITICAL THEORIES.

371-4. POPULATION AND MIGRATION. Characteristics of population, problems of growth, composition, distribution differential fertility, international and internal migration. Prerequisite: consent of instructor.

372-4. CRIMINOLOGY. The nature of crime; criminal statistics; causal factors; theories and procedures in prevention and treatment. Prerequisite: consent of instructor.

373-4. JUVENILE DELINQUENCY. Nature of juvenile delinquency; factors contributing to delinquent behavior; treatment and prevention.

374-4. SOCIOLOGY OF EDUCATION. Methods, principles, and data of sociology applied to the school situation; relation of the school to other institutions and groups. Prerequisite: consent of instructor.

380-4. INTRODUCTION TO SOCIAL WORK. The historical development, philosophy, and theory forming the basis for the professional practice of social work; processes developed and the specialists within each of them; personal and educational requirements for the career opportunities available. Prerequisite: 101.

388-3. WORKSHOP IN INTER-GROUP RELATIONS. Designed to provide theoretical and practical understanding of cultural, social, and psychological factors associated with inter-group tension. Participants concentrate their efforts on problem-solving activities related to their occupational, professional, or civic interests. Resource and consultative staff from the academic areas of education, psychology, sociology, and social work. Prerequisite: consent of instructor.
396-1 to 5. READINGS IN SOCIOLOGY. Supervised reading in selected subjects. Prerequisite: consent of division head.

405-4. CURRENT SOCIOLOGY. A survey of important trends in contemporary social thought. Students read, report on, and evaluate content of leading sociological journals. Prerequisite: 12 hours of sociology.

406-4. SOCIAL CHANGE. Processes of social change in the modern world; culture lag and conflict of norms; individual and social problems arising from conflicting systems of social values and cultural norms. Prerequisite: 101.

407-4. INTEGRATED SOCIOLOGY. For seniors in sociology. Integration of sociological concepts and principles: society and culture, the human group, social norms and patterns, status and roles, organization, structure and function, and social change. Prerequisite: 15 hours of sociology.

424-4. COLLECTIVE BEHAVIOR. The behavior of people in large groups; collective interstimulation and emotions; crowds, audiences, and publics; mass stimuli and mass response. Prerequisite: 321 or 322 or consent of instructor.

426-4. SOCIAL FACTORS IN BEHAVIOR AND PERSONALITY. How group situations and values affect behavior and shape personality; development of concepts, role-concepts, attitudes, values; theories of motivation; self-concepts; conflicting social values in relation to individual motivation. Prerequisite: 321 or Psychology 305 or consent of instructor.

427-4. PERSONALITY AND SOCIAL ADJUSTMENT. Basic mechanisms of adjustment behavior; concepts and criteria of personal integration and social adjustment; varieties of adjustment and non-adjustive behavior; theories of personal organization and disorganization; selected problems. Prerequisite: 321 or Psychology 305 or consent of instructor.

435-4. SOCIAL STRATIFICATION. A comparative study of social class systems, with emphasis on the American systems. Relationships of class position to behavior in areas such as family, religion, politics. Prerequisite: 101.

450-4. SOCIAL THOUGHT I: BEFORE 1800. Ancient background of Western social thought; development of modern social thought. Prerequisite: general background in history.

451-4. SOCIAL THOUGHT II: THE SOCIOLOGICAL MOVEMENT. Rise and development of scientific social thought in Western society. Prerequisite: consent of instructor.

453-4. SOCIAL MOVEMENTS. A sociological study of modern social movements; social and cultural backgrounds, forms of expression and organization; social structure of social movements, their role and function in modern society. Prerequisite: eight hours of sociology.

470c-4. URBAN PLANNING. (See Government 470c.)

472-4. TREATMENT AND PREVENTION OF CRIME. Principles of penology; history of punishment and prisons; criminal law, police function, criminal courts; the prison community; the juvenile court and related movements. Prerequisite: 372.

481-4. PROCESSES IN SOCIAL WORK. Theory, rationale, and practice of casework, group work, social welfare organization, and the roles of supervision, administration, and research in relation to each. Case material study and discussion with field observation and practice. Prerequisite: 380 or consent of instructor.
482-4. SOCIAL WORK IN SELECTED AGENCIES. Study of representative literature on casework in family, psychiatric, medical, school, military, child welfare, correctional settings, and others. Case material study and discussion with field observation and practice. Prerequisite: 481.

483-3. CURRENT PROBLEMS IN CORRECTIONS. Organization, administration, and functions of the correctional institution. The content and integration of special programs including classification, professional services, custody, and professional training and architectural design. Current trends in correctional research.

484-4. SURVEY COURSE IN MARRIAGE COUNSELING. Survey and analysis of the field of marriage counseling; assessment of current practices and techniques in terms of contemporary sociological theory. Prerequisite: consent of instructor.

485-6. COMMUNITY PROGRAMS FOR THE PREVENTION OF JUVENILE DELINQUENCY. Analysis of delinquency prevention in community programs administered by the public schools, social welfare, governmental agencies. A study of the categories of juvenile delinquency is applied to a critique of existing programs and to the development of experimental programs. The roles of professional workers pertinent to such programs is delineated with special reference to the public school administration, counselor, the social workers, the court, probation officers, and police. Prerequisite: consent of instructor.

489-7 (3,4). THE AMERICAN CORRECTIONAL SYSTEM; PROBATION, CLASSIFICATION, AND PAROLE. (a) A survey of the correctional field covering probation, institutions, and parole; their historical development, organizational structure, program content, and current problems. Some attention given to recent developments in foreign countries. (b) A review of the organizational patterns of probation and parole departments, the application of casework and counseling principles to the treatment of the individual offender, the use of community resources, and the results of recent research.

Department of Nursing

FACULTY OF NURSING

Professors Virginia H. Harrison (M.A., St. Louis University), Margaret T. Shay (M.A., New York University; chairman).
Associate Professor Mable G. Burton (M.P.H., Minnesota University).
Assistant Professors Carmin Jimison (M.S., Western Reserve), Mary R. Lenny (M.S., Washington University), Dorris C. Lippert (M.E., Illinois), Mary Joyce Parker (M.S., Indiana University).

The Bachelor of Science degree program in nursing is designed for students who wish to become registered nurses and for registered nurses, graduates of diploma or associate degree programs, who wish (1) to strengthen their scientific basis for nursing practice, (2) to broaden and deepen their general educational and cultural background, and (3) to obtain a baccalaureate degree to qualify for further study on the graduate level. Several hospitals, public health facilities, day care centers, public schools, and other agencies in the vicinity of the East St. Louis Center provide clinical experience for student nurses.

The Department of Nursing is approved by the Illinois Department of Registration and Education. Details concerning the bachelor's degree program in nursing at Southern appear in the Department of Nursing issue of the Southern Illinois University Bulletin.
Division of Technical and Adult Education

The Division of Technical and Adult Education is represented on the Edwardsville Campus by the office of Industrial and Technical Programs. This office co-ordinates noncredit courses and the associate degree program offered by the University in the area. Its purpose is to serve the needs of the community for educational programs for adults. Special attention is given the needs of industry and business though, to a certain extent, general adult education courses are provided upon demand.

Faculty of Technical and Adult Education
Assistant Professor Emery R. Casstevens (B.S.E.E., U.S. Naval Academy; supervisor).
Instructor Dale F. Blount (B.S., Rockhurst).

Associate in Business Degree Programs

Each candidate for the Associate in Business degree must complete at least 96 hours of approved courses. Some programs may require more.

Each program is designed to give the student the skills he needs to perform a specific job or type of job in accounting, management, or secretarial work. These programs are for students who wish to prepare for initial positions in business, industry, and governmental offices. They include a combination of general-education and skill-building courses which provide a high degree of occupational competence.

Except for the specialization in management, which is available only in evenings, both a day program and an evening program are scheduled. Although a student may take courses at any time he chooses, the day program is planned for full-time students and the evening program is planned for part-time students.
ACCOUNTING

These courses, available both in the day program and in the evenings, offer thorough and practical training for a position as bookkeeper, payroll clerk, junior accountant, or assistant to senior accountants or to auditors. Positions with governmental agencies and in public accounting may also be filled by graduates.

<table>
<thead>
<tr>
<th>Political Economy</th>
<th>GSB 211a-3</th>
<th>States Constitution and State of Illinois Constitution</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Composition</td>
<td>GSD 101-6</td>
<td>Introduction to Business Administration</td>
</tr>
<tr>
<td>Oral Communication of Ideas</td>
<td>GSD 103-3</td>
<td>Business Writing</td>
</tr>
<tr>
<td>Elementary Accounting</td>
<td>Acct 251-12</td>
<td>Corporation Finance</td>
</tr>
<tr>
<td>Tax Accounting</td>
<td>Acct 331-5</td>
<td>Business Organization and Management</td>
</tr>
<tr>
<td>Cost Accounting</td>
<td>Acct 341-3</td>
<td>Business Law I</td>
</tr>
<tr>
<td>Advanced Accounting</td>
<td>Acct 351-12</td>
<td>Business Law II</td>
</tr>
<tr>
<td>Auditing</td>
<td>Acct 356-5</td>
<td>Credits and Collections</td>
</tr>
<tr>
<td>Advanced Cost Accounting</td>
<td>Acct 442-4</td>
<td>Data Processing Mathematics</td>
</tr>
<tr>
<td>Principles of Economics</td>
<td>Econ 210-5</td>
<td>Calculating Machines</td>
</tr>
<tr>
<td>American Government</td>
<td>Govt 210-4</td>
<td>VTIE 100-5</td>
</tr>
<tr>
<td>or the required examination on United Constitution</td>
<td></td>
<td>VTI K 101-3</td>
</tr>
</tbody>
</table>

MANAGEMENT

The specialization in management is designed for adults who have had some experience in work situations. It prepares its participants for positions such as unit supervisor, assistant superintendent, section head, and branch manager of small organizations. Applicants must be at least twenty-five years of age and have at least two years of full-time work experience at the time of entrance into the program.

<table>
<thead>
<tr>
<th>Political Economy</th>
<th>GSB 211a-3</th>
<th>Business Writing</th>
<th>Mgt 271-4</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Composition</td>
<td>GSD 101-6</td>
<td>Corporation Finance</td>
<td>Mgt 320-5</td>
</tr>
<tr>
<td>Oral Communication of Ideas</td>
<td>GSD 103-3</td>
<td>Business Organization and Management</td>
<td>Mgt 340-4</td>
</tr>
<tr>
<td>College Algebra</td>
<td>GSD 114a-3</td>
<td>Business Report Writing</td>
<td>Mgt 361-3</td>
</tr>
<tr>
<td>Elementary Accounting</td>
<td>Acct 251-12</td>
<td>Business Law I</td>
<td>Mgt 371-4</td>
</tr>
<tr>
<td>Principles of Economics</td>
<td>Econ 210-5</td>
<td>Business Law II</td>
<td>Mgt 372-4</td>
</tr>
<tr>
<td>Labor Problems</td>
<td>Econ 310-4</td>
<td>Production Management</td>
<td>Mgt 380-4</td>
</tr>
<tr>
<td>American Government</td>
<td>Govt 210-4</td>
<td>Time and Motion Study</td>
<td>Mgt 382-3</td>
</tr>
<tr>
<td>or the required examination on United Constitution</td>
<td></td>
<td>Personnel Management</td>
<td>Mgt 385-4</td>
</tr>
<tr>
<td>States Constitution and State of Illinois Constitution</td>
<td></td>
<td>Small Business</td>
<td>Mgt 472-4</td>
</tr>
<tr>
<td>Introduction to Business Administration</td>
<td>Mgt 170-4</td>
<td>Principles of Marketing</td>
<td>Mktg 230-5</td>
</tr>
<tr>
<td>Introduction to Data Processing</td>
<td>Mgt 240-4</td>
<td>Data Processing</td>
<td>VTIE 100a-5</td>
</tr>
</tbody>
</table>
GENERAL OFFICE SECRETARY

For students who wish to prepare for positions as secretaries in business, industrial, and governmental offices, these courses combine general education and skill-building to provide a high degree of occupational competence. They are offered in the day and evening programs.

Political Economy  GSB 211a-3  Introduction to Business  Mgt 170-4
English Composition  GSD 101-6  Administration  Mgt 271-4
Oral Communication of Ideas  GSD 103-3  Business Writing  Mgt 371-4
Elementary Accounting  Acct 251a-4  Business Law I  Mgt 371-4
Typewriting III  Bus Ed 201c-3  Business Report Writing  Mgt 385-4
Shorthand (or Stenograph)  Bus Ed 221-12  Personnel Management  Mgt 385-4
Typewriting IV  Bus Ed 304-3  Transcription  VTI S 105-4
Shorthand (or Stenograph)  Bus Ed 324-8  Filing and Duplicating  VTI S 107-2
Office Machines  Bus Ed 341-4  Co-operative Secretarial
Office Management  Bus Ed 407-4  Experience  VTI S 214-10
Records Administration  Bus Ed 427-4  (except for those with approved work
American Government  Govt 210-4  experience)
or the required examination on United  Secretarial Office Procedures  VTI S 223-5
States Constitution and State of Illinois
Constitution

LEGAL SECRETARY

These courses provide a proper balance in the secretarial skills and in the special and general knowledge a trained legal secretary needs. Participants are prepared for positions as legal secretaries with attorneys, judges, and legal consultants. Courses are offered in both day and evening programs.

Political Economy  GSB 211a-3  Business Writing  Mgt 271-4
English Composition  GSD 101-6  Business Law I  Mgt 371-4
Oral Communication of Ideas  GSD 103-3  Business Law II  Mgt 372-4
Elementary Accounting  Acct 251a-4  Two-Voice Testimony  VTIH 210-4
Typewriting III  Bus Ed 201c-3  Transcription  VTI S 105-4
Shorthand (or Stenograph)  Bus Ed 221-12  Filing and Duplicating  VTI S 107-2
Typewriting IV  Bus Ed 304-3  Co-operative Secretarial
Shorthand (or Stenograph)  Bus Ed 324-8  Experience  VTI S 214-10
Office Machines  Bus Ed 341-4  (except for those with approved work
Records Administration  Bus Ed 427-4  experience)
American Government  Govt 210-4  Secretarial Office Procedures  VTI S 223-5
or the required examination on United  Legal Dictation Shortcuts  VTI S 224-5
States Constitution and State of Illinois
Constitution
Introduction to Business  Mgt 170-4
Administration

Medical Dictation I  VTI S 225a-5
Medical Transcription I  VTI S 226a-2
Legal Transcription  VTI S 230-2
MEDICAL SECRETARY

These courses, offered evenings and days, lead 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.

Man’s Biological Inheritance  GSA 201-6
Political Economy  GSB 211a-3
English Composition  GSD 101-6
Oral Communication of Ideas  GSD 103-3
Elementary Accounting  Acct 251a-4
Typewriting III  Bus Ed 201c-3
Shorthand (or Stenograph)  Bus Ed 221-12
Typewriting  Bus Ed 304-3
Shorthand (or Stenograph)  Bus Ed 324-8
Office Machines  Bus Ed 341-4
Records Administration  Bus Ed 427-4
American Government  Govt 210-4
or elective plus the required examination
on United States Constitution and State
of Illinois Constitution

Introduction to Business  Mgt 170-4
Administration  Mgt 271-4
Business Writing  Mgt 271-4
Introduction to Physiology  VTI G 141-5
Transcription  VTI S 105-4
Filing and Duplicating  VTI S 107-2
Co-operative Secretarial Experience  VTI S 214-10
(except for those with approved work experience)

Industrial Safety
Material Handling
Practical Psychology for Quality Control for Foremen
Supervisors I and II Basic Industrial Metallurgy I and II
Effective Speaking for Supervisors Industrial Engineering for Foremen
I and II

COURSE DESCRIPTIONS

Descriptions of courses appear in this bulletin in the section devoted to the Business Division, except that all GS courses are described in the General Studies bulletin, and VTI courses are described in the Division of Technical and Adult Education bulletin.

TYPICAL ADULT EDUCATION PROGRAMS

INDUSTRIAL MANAGEMENT PROGRAM

Designed to give present and future foremen and supervisors some of the skills and information they need for improved job performance, this program of noncredit evening courses leads to the two-year certificate in industrial management. Successful completion of eight of the following courses is required. They are offered once each week for ten to twelve weeks.

Industrial Safety
Practical Psychology for
Supervisors I and II
Effective Speaking for Supervisors
I and II

Material Handling
Quality Control for Foremen
Basic Industrial Metallurgy I and II
Industrial Engineering for Foremen
Motion Analysis and Time Study
The Supervisor and His Job
Labor-Management Relations
Current Labor Law
Industrial Report Writing
Economics of Industry
Cost Control for Foremen

Reading Improvement
Effective Management
Logic
Illinois Labor Law
Basic Supervision in the Meat Industry

IN-PLANT PROGRAM

On request from industry, courses from the industrial management program may be offered in-plant to accommodate foremen or supervisors who cannot attend the evening program because of shift work or other reasons. Special programs may be developed to meet the unique problems of a particular industry or present courses or programs may be adapted for presentation in-plant. Consultation and advice on the total training needs of plants is given on request.

In addition to adaptations of courses from the industrial management program, the following courses have been presented:

Creative Literature
Metallurgy of Steelmaking
Coaching and Counseling
Coaching for Staff Supervisors
Safety Programs
Safety Meeting Procedures

Management Problems
Management Planning
Management Practices
Economic Background for Citizenship
Speech Techniques
Foremen Development

TRAFFIC MANAGEMENT PROGRAM

The traffic management program is a course of study whose purpose is to prepare candidates for the examinations leading to certification by the American Society for Traffic and Transportation and for the Interstate Commerce Commission Practitioners examination.

Noncredit courses included in the program are:
Rates and Tariffs I, II
Interstate Commerce Law I, II
Traffic Management

Credit courses included in the program are:
Management 170-4,
Government 210-4,
Economics 210-5,
General Studies Area B 211a-3,
Geography 304-5,
Marketing 230-5,
Management 340-4,
Marketing 341-4,

Introduction to Business Administration
American Government
Principles of Economics
Political Economy
Economic Geography
Principles of Marketing
Business Organization and Management
Transportation
DEVELOPMENT PROGRAM FOR MIDDLE MANAGEMENT

This is a program for department heads, superintendents, general foremen, and the heads of small businesses which are production-oriented. These men meet for dinner once per week having a one-and-one-half-hour discussion with a recognized authority on a given subject before dinner and a different one after dinner. The subjects are grouped into four broad categories and are tied together by a co-ordinator into an integrated program. Categories are fundamentals of management, manpower management, business conditions and the manager, and administrative policy and procedure. Enrollment is limited.

MISCELLANEOUS SHORT COURSES

To meet special needs for adult education, additional courses are sometimes developed.

One category of these miscellaneous programs is radio-television. The following subjects have been covered in this category.

- Goals for Americans — WIBV, Belleville
- Reading Improvement — WSIU-TV, Carbondale and KETC-TV, St. Louis

In addition, the Reading Improvement course has been taped for future presentation.

Workshops are arranged on occasion. The following are representative of the workshops presented in the past:

- Junior Art Workshop
- Summer Theater Workshop
- Waterworks Operators Workshop
- Home Helpers Workshop

Special purpose programs help organizations meet their specific needs. Usually these programs are specially developed for the unique requirements of individual organizations. Typical are:

- One Day Conference for Small Business
- One Day Conference on Coaching and Counseling
- Conference Leadership—League of Women Voters
- One Day Conference on Industrial Safety
- Training Employees on the Job—City of Alton
- Parent-Child Relationships
- Creative Selling
- Union Leadership—United Steel Workers
Index

Academic advisement, 4-5
Accounting: faculty, 8; defined, 9-10;
areas of study in, 10; curriculum in,
10; courses in, 10-11; program in, 115;
mentioned, 8
Accounting systems, program in, 10
Accounting theory, program in, 10
Administration: areas of study in, 26;
program in, 26; courses in, 26-27
Administration and supervision, program
in, 3
Admission to the University, 3-4
Adult education: programs in, 3; industrial
management program, 117-18; traffic
management programs, 118; in-plant
program, 118; development program for
middle management, 119; short courses,
119. See also Technical and Adult Edu-
cation, Division of
Advertising, program in, 22
Advisement, academic, 4-5
Agriculture, 2-3
Alton Center, 1, 2
American studies, concentration in, 63;
courses in, 64; mentioned, 62
Anthropology: courses in, 96-97; men-
tioned, 95
Applied science: courses in, 77
Art: minimum standards for secondary
school certificate in, 42; mentioned, 49
Art and design: program in, 50; curricula
in, 50-51; courses in, 51-52
Art education, 40
Associate degree programs, 3, 114-17
Astronomy. See Physics and astronomy
Auditing, program in, 10
Bachelor’s degree: programs, 2; require-
ments for, 5-8
Bachelor of Arts Degree: requirements, 8
Bachelor of Science in Education Degree:
requirements for, 39-40
Biology: minimum standards for secondary
school certificate in, 43; curricula in,
77-78; mentioned, 40, 75
Botany: curricula in, 78-79; courses in,
79-80; mentioned, 40, 75
Business-teacher education: curricula in,
11-12, 14; mentioned, 40
Business Division: areas of study in, 8;
objectives of, 8; faculty, 8-9; require-
ments of, 9; accounting, 9-11; business
education, 11-16; economics, 17-19;
management, 19-22; marketing, 22-24
Business education: areas of study in,
11-12; curricula in, 12-13; courses in,
15-16; minimum standards for second-
ary school certificate in, 42; mentioned,
8
Certified public accounting, 10
Chemistry: curricula in, 81; courses in,
81-83; mentioned, 40, 75
Comparative literature: secondary concen-
tration in, 64; courses in, 63; mentioned,
62
Cost accounting, program in, 10
Course descriptions: accounting, 10-11;
business education, 15-16; economics,
18-19; management, 20-22; marketing,
23-24; administration, 26-27; education,
28-30; guidance, 30-31; health educa-
tion, 31-32; instructional materials, 32-
33; physical education, 35-37; psycholo-
gy, 38-39; secondary education, 44-45;
special education, 46; art and design,
51-52; music, 54-56; speech and theater,
59-61; American studies, 63-64; compar-
ative literature, 65; English, 65-66; for-
eign languages, 67-71; philosophy, 73-
74; applied science, 77; botany, 79-80;
chemistry, 81-83; mathematics, 84-87;
physics and astronomy, 89-90; physi-
ology, 90; zoology, 93-94; anthropology,
96-97; geography, 98-100; government,
101-4; history, 105-7; sociology, 109-12;
Division of Technical and Adult Educa-
tion, 117
Curricula: accounting, 10; Business edu-
cation, 12-13; economics, 17-18; man-
agement, 19-20; marketing, 23; physical
education, 34-35; psychology, 37-38;
art and design, 50-51; music, 52-54;
English, 64; foreign languages, 67; phi-
losophy, 73; botany, 78-79; chemistry,
81; mathematics, 83; physics and astron-
omy, 88; zoology, 91-92; geography, 97-
98; government, 100; history, 104-5;
public administration and planning,
107-8; sociology, 108-9

Degree requirements: for bachelor’s degree
5-8, 39-40
Dentistry: preprofessional program in, 2
Design, 49. See also Art and design
Driver education: minimum standards for
secondary school certificates in, 43
Early childhood education: requirements for student teaching in, 48
East St. Louis Center, 1-2
Economics: areas of study in, 17; curricula in, 17-18; courses in, 18-19; mentioned, 8
Education: state minimum requirements for, 28; courses in, 28-30
Education, early childhood. See Early childhood education
Education, elementary. See Elementary education
Education, health, 25
Education, secondary. See Secondary education
Education, special. See Special education
Education administration, 25
Education Division: areas of study in, 25; objectives, 25; faculty, 25-26; requirements of, 26; administration, 26-27; elementary education, 27-30; guidance, 30-31; health education, 31-32; instructional materials, 32-33; physical education, 33-34; psychology, 37-39; secondary education, 39-45; special education, 45-46; student teaching, 47-48
Edwardsville Campus, history of, 1
Elementary education: requirements for, 27-28; courses in, 28-30; requirements for student teaching in, 48; mentioned, 3, 25
English: minimum standards for secondary school certificate in, 42-43; curricula in, 64; courses in, 65-66; mentioned, 40
English language and literature, 62
English language arts: standards for secondary school certificate in, 42-43
Faculty: Business Division, 8-9; Education Division, 25-26; Fine Arts Division, 49; Humanities Division, 62-63; Science and Technology Division, 75-76; Social Sciences Division, 95-96; Department of Nursing, 113; Division of Technical and Adult Education, 114
Fees, tuition and, for one quarter, 4
Finance, program in, 19
Fine Arts Division: areas of study in, 49; objectives of, 49; faculty, 49; divisional requirements, 50; music, 52-56; speech and theater, 57-61
Foreign languages: curricula in, 67; courses in, 67-71; mentioned, 40
Foreign languages and literature, 62
French: courses in, 68-69
General business, 19
General office secretary, program in, 116
General science: minimum standards for secondary school certificate in, 44; mentioned, 40
General speech: curriculum in, 58; mentioned 57
General Studies requirements: outline, 6
Geography: curricula in, 97-98; courses in, 98-100; mentioned, 41, 95
German: courses in, 69-70
Government: curricula in, 100; courses in, 101-4; mentioned, 41, 95
Governmental accounting, program in, 10
Graduate programs, 3
Graduate School, the: history of, 1
Graduation: requirements for, 5-8; application for, 7
Guidance: courses in 30-31; mentioned, 3, 25
Health education: courses in, 31-32; mentioned, 25
Health instruction: minimum standards for secondary school certificate in, 43
History: curricula in, 104-5; courses in, 105-7; mentioned, 41, 95
Home economics, 3
Honors programs: humanities, 62, 72; science and technology, 90-91
Humanities Division: areas of study in, 62; faculty, 62-63; requirements, 63; English, 64-66; foreign languages, 67-71; honors program, 62, 72; philosophy, 73-74
Humanities honors program, 62, 72
Industrial management program, 117-18
Intramural activities, 37
Instruction, programs of, 2-3
Instructional materials: program in, 32; courses in, 32-33; mentioned, 25
Italian: courses in, 70
Journalism: minimum standards for secondary school certificate in, 42-43; secondary concentration in, 72; courses in, 72; mentioned, 62
Language and literature, 62
Law: preprofessional program in, 2
Legal secretary: program in, 116
Library science, 32
Literature, comparative. See Comparative literature
Literature, English language and, 62
Literature, foreign languages and, 62
Management: areas of study in, 19; curricula in, 19-20; courses in, 20-22; program in, 115; mentioned, 8
Marketing: areas of study in, 22; curricula in, 23; courses in, 23-24; mentioned, 8
Marketing management, program in, 22
Market research: program in, 22
Mathematics: minimum standards for secondary school certificate in, 43; curricula in, 83; courses in, 84-87; mentioned, 40, 41, 75
SOUTHERN ILLINOIS UNIVERSITY BULLETIN

Medical secretary, program in, 117

Medicine: preprofessional program in, 2

Music: minimum standards for secondary school certificate in, 43; curricula in, 52–54; courses in, 54–56; mentioned, 49

Music education: requirements for specialization in, 53–54; mentioned, 41

Nursing, Department of, 2, 113

Office management: program in, 11, 12; secondary concentration in, 13–14

Personnel management, program in, 19

Philosophy: curriculum in, 73; courses in, 73–74; mentioned, 62

Physical education: program in, 33–34; curricula in, 34–35; courses in, 35–37; intramural activities, 37; minimum standards for secondary school certificate in, 43; mentioned, 41

Physical Education Club, 34

Physical education for men, 25

Physical education for women, 25

Physical science: minimum standards for secondary school certificate in, 43–44

Physics, 41

Physics and astronomy: curricula in, 88; courses in, 89–90; mentioned, 75

Physiology, 75

Planning, public administration and. See Public administration and planning

Preprofessional programs, 2–3

Programs of instruction, 2–3, 114–17

Psychology: objectives of, 37; curricula in, 37–38; courses in, 38–39; mentioned, 25, 41

Public administration and planning: curriculum in, 107–8; mentioned, 95

Registration: advisement for, 4–5; for classes, 5

Residence centers: history of, 1–2

Retailing, program in, 22

Russian: courses in, 70

Safety education: minimum standards for secondary school certificate in, 43

Sales, program in, 22

Science: minimum standards for secondary school certificate in, 43–44

Science, applied. See Applied science

Science, general, 40

Science and Technology Division: areas of study in, 75; objectives, 75; faculty, 75–76; requirements of, 76; applied science, 76–77; biology, 77–78; botany, 78–80; chemistry, 81–83; mathematics, 83–87; physics and astronomy, 88–90; physiology, 90; honors program, 90–91; zoology, 91–94

Secondary education: requirements for bachelor of science in education degree, 39–40; teaching fields in, 40–41; minimum standards for secondary school certificate, 41–44; courses in, 44–45; requirements for student teaching in, 47–48; mentioned, 3, 25

Secretarial programs, 116–17

Secretarial studies: program in, 11, secondary concentration in, 13–14

Short courses, adult, 119

Social Sciences Division: areas of study in, 95; objectives of, 95; faculty, 95–96; anthropology, 96–97; geography, 97–100; government, 100–4; history, 104–7; public administration and planning, 107–13

Social studies: minimum standards for secondary school certificate in, 44; mentioned, 41

Sociology: curricula in, 108–9; courses in, 109–12; mentioned, 41, 95

Spanish: courses in, 71-72

Special education: requirements for, 46; courses in, 46; requirements for student teaching in, 48; mentioned, 41, 25

Speech: minimum standards for secondary school certificate in, 42–43; mentioned, 41, 49

Speech, general. See General speech

Speech and Theater: areas of study in, 57; curricula in, 57–58; courses in, 59–68

Speech education: curriculum in, 58; mentioned, 41, 57

Student teaching: prerequisites for, 47–48; mentioned, 25

Supervision, administration and, 3

Supervision, program in, 26

Tax accounting, program in, 10

Technical and Adult Education, Division of: purpose of, 114; associate in business degree program, 114–17; courses in, 117. See also Adult education

Theater: curriculum in, 58; mentioned, 49, 57

Theater. See Speech and Theater

Traffic management program, 118

Transportation, program in, 22

Tuition, for one quarter, 4

University, the: history of, 1–2

Veterinary science: preprofessional program in, 2

Wholesaling, program in, 22

Workshops. See Short courses

Zoology: curricula in, 91–92; courses in, 93–94; mentioned, 75
Southern Illinois University Foundation

The Southern Illinois University Foundation is a nonprofit corporation chartered by the state and authorized by the Board of Trustees to receive gifts for the benefit of the University, to buy and sell property, and otherwise serve the University.

It respectfully asks alumni and other citizens of Southern Illinois to consider making gifts and bequests to benefit the University. Such gifts should be conveyed to the Foundation, with proper stipulation as to their uses. The Foundation, through its officers and members, will be glad to confer with intending donors regarding suitable clauses to insert in wills and suitable terms of gifts and memorials, including bequests by means of life insurance. Large or small gifts to the library will be appreciated; likewise, gifts for special equipment, buildings, endowment of professorships in particular subjects, gifts to student loan funds and scholarship funds, gifts for the use of foreign students, and endowments for particular sorts of research. Any gifts or bequests can be given suitable memorial names.

The staff members of the Foundation are

Mr. Kenneth R. Miller, Executive Director, Carbondale, Illinois
Mrs. Lois H. Nelson, Secretary, Carbondale, Illinois
Mr. Robert L. Gallegly, Treasurer, Carbondale, Illinois
Mr. C. Eugene Peebles, Assistant Treasurer, Edwardsville, Illinois
Mr. C. Richard Gruny, Legal Counsel, Carbondale, Illinois
Mr. Donald Leavitt, Patent Counsel, St. Louis, Missouri
Mr. Warren Stookey, Field Representative, Edwardsville, Illinois.