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Southern Illinois State Normal University

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SOUTHERN ILLINOIS NORMAL UNIVERSITY



BULLETIN

1946

1947

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STATE OF ILLINOIS
DWIGHT H. GREEN, GOVERNOR

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VOLUME XL

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NUMBER 3

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WITH
ANNOUNCEMENTS
FOR
1946-1947
GRADUATE AND UNDERGRADUATE COURSES

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STATE OF ILLINOIS
DWIGHT H. GREEN
GOVERNOR

DEPARTMENT OF REGISTRATION AND EDUCATION

SOUTHERN ILLINOIS NORMAL UNIVERSITY
Established 1874

TEACHERS COLLEGE BOARD

Frank G. Thompson.....Director of Registration and Education
Ex-Officio Chairman

Vernon L. Nickell.....Superintendent of Public Instruction
Ex-Officio Secretary

APPOINTED MEMBERS

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Mr. Robert W. Davis.....Carbondale
Mr. Lewis M. Walker.....Gilman
Mr. Ira M. Means.....Macomb

* * *

Mr. Charles G. Lanphier, Coordinator.....Springfield

CALENDAR

1946-47

Fall Term, 1946

1946

Sept. 16-17	Monday-Tuesday	Registration
Sept. 18	Wednesday	Instruction begun
Nov. 28-29	Thursday-Friday	Thanksgiving recess
Dec. 3-6	Tuesday-Friday	Final Examinations

Winter Term, 1946-47

Dec. 9	Monday	Registration
Dec. 10	Tuesday	Instruction begun
Dec. 21	Saturday	Christmas recess begun

1947

Jan. 6	Monday	Instruction resumed
March 11-14	Tuesday-Friday	Final Examinations

Spring Term, 1947

March 24	Monday	Registration
March 25	Tuesday	Instruction begun
June 9-12	Monday-Thursday	Final Examinations
June 13	Friday	Seventy-Second Annual Commencement

Summer Term, 1947

June 16	Monday	Registration
June 17	Tuesday	Instruction begun
Aug. 7-8	Thursday-Friday	Final Examinations

SOUTHERN ILLINOIS NORMAL UNIVERSITY

College of Education

College of Liberal Arts and Sciences

College of Vocations and Professions

The Graduate School

Southern is fully accredited by the North Central Association (as a University), by the American Association of Teachers Colleges, and by the American Association of University Women.

OFFICES AND SERVICES OF THE UNIVERSITY

Office of the President

Chester F. Lay, Ed.B., M.A., C.P.A., Ph.D.....President
Charles D. Tenney, Ph.D...Administrative Assistant to the President
Mary Anna Robertson, M.A.....Secretary to the President
Minnie Mae Pitkin, M.A.....Assistant in Personnel

College of Education

Eugene R. Fair, Ph.D.....Dean
Willis E. Malone, M.A.....Acting Assistant to the Dean

College of Liberal Arts and Sciences

T. W. Abbott, Ph.D.....Dean

College of Vocations and Professions

H. J. Rehn, Ph.D.....Dean

Student Life Offices

Marshall S. Hiskey, Ph.D.....Acting Dean of Men
Helen A. Shuman, M.A.....Dean of Women

Business Offices

Edward V. Miles, Jr., M.A.....Business Manager
Cornelia L. Beach, B.Ed.....Purchasing Agent
Robert Gallegly, B.Ed.....Chief Accountant
Mabel Penry Howell, B.Ed., Leave of Absence.....
Aileen Davis, B.S. in Ed.....Secretary to the Business Manager

Registrar's Office

Marjorie Shank, M.A.....Registrar
Mary Lou McNeill, B.S. in Ed.....Assistant Registrar

Information Service

Lorena Drummond, B.A.....Director

Alumni Services

Orville Alexander, Ph.D.....Director

Extension and Placement Service

Raymond H. Dey, M.S.....Director

Ruby Matthews, B.S. in Ed.....Assistant to the Director

Housing Service

Mabel Pulliam.....Executive Assistant

Health Service

Marie A. Hinrichs, Ph.D., M.D.....University Physician

Florence E. Denny, M.A.....

Edna Bradley, R.N.....Nurse

Naomi Manering, R.N.....Nurse

Veterans Services

Ledford J. Bischof, B.Ed.....Counselor

Lawrence E. Clark, Ph.D.....Counselor

Laird T. Hites, Ph.D.....Counselor

Glenn J. McGowan, M.S. in Ed.....

William Randle, B.Ed.....Counselor

Bookstore

Carl TrobaughManager

FACULTY

1946-47

Date indicates first year of service with the Faculty.

University

- CHESTER F. LAY (1945) *President,
Professor of Educational and Personnel Administration*
Ed.B., Illinois State Normal University; M.A., University of
Chicago; C.P.A., Texas; Ph.D., University of Chicago.
- T. W. ABBOTT (1928) *Professor of Chemistry, Dean of the
College of Liberal Arts and Sciences*
A.B., Indiana University; A.M., Harvard University; Ph.D., Uni-
versity of Illinois.
- ELIZABETH ABRAM (1946) *Faculty Assistant*
B.S., University of Illinois.
- ORVILLE ALEXANDER (1938) *Professor of Government, Director of
Alumni Services*
B.Ed., Southern Illinois Normal University; M.A., Ph.D., Uni-
versity of Iowa.
- JOHN W. ALLEN (1942) *Instructor, Acting Director of the Museum*
- LELAH ALLISON (1946, Spring and Summer) *Instructor in English*
B.A., Southern Illinois Normal University; M.A., University of
Missouri.
- GLADYS W. BABCOCK (1939) *Assistant Professor of Home Economics*
B.S., M.S., University of Minnesota; Colorado State College.
- LOUISE BACH (1934) *Assistant Professor, University High School*
A.B., Illinois Wesleyan; A. M., University of Illinois.
- WILLIAM M. BAILEY (1914) *Professor of Botany
Chairman of Department, Emeritus (1946)*
A.B., B.S., Campbell College; M.S., Ph.D., University of Chicago.
- HELEN A. BALDWIN (1918) *Associate Professor of Foreign
Languages, Emerita (1945)*
A.B., Denison; A.B., University of Chicago; A.M., Denison.
- JULIA MINNETTE BARBER (1936) *Assistant Professor of English,
Director of Anthony Hall*
B.A., M.A., University of Illinois; Northwestern University; Uni-
versity of Chicago; University of Arizona.

- FRANCES BARBOUR (1925) *Associate Professor of English*
A.B., A.M., Washington University; Kings College, University of London; Radcliffe College; University of Texas.
- MARY LOUISE BARNES (1929) *Assistant Professor of Home Economics*
A.B., University of Illinois; M.S., Iowa State College; George Peabody College for Teachers; University of Illinois.
- MARY EILEEN BARRY (1946) *Assistant Professor of Foreign Languages*
B.A., M.A., University of Manitoba; Ph.D., University of Chicago.
- THOMAS F. BARTON (1935) *Professor of Geography,
Chairman of Department*
B.Ed., Illinois State Normal University; Ph.M., University of Wisconsin; Ph.D., University of Nebraska.
- HOWARD E. BOSLEY (1937) *Associate Professor of Education,
Director of the Library*
B.Ed., Southern Illinois Normal University; M.A., D.Ed., Teachers College, Columbia University.
- EMMA L. BOWYER (1912) *Professor of English,
Chairman of Department*
A.B., A.M., University of Chicago.
- GEORGE BRACEWELL (1931) *Associate Professor, Director,
Rural Education*
B.Ed., Southern Illinois Normal University; A.M., University of Michigan.
- A. FRANK BRIDGES (1943) *Instructor, University High School*
B.Ed., Southern Illinois Normal University; M.A., University of Iowa.
- HAROLD E. BRIGGS (1945) *Professor of History,
Chairman of Department*
A.B., M.A., University of South Dakota; Ph.D., University of Iowa.
- V. A. BUBOLTZ (1937) *Assistant Professor of Business*
B.S., Iowa State Teachers College; M. A., Northwestern University.
- WINIFRED BURNS (1939) *Assistant Professor of English*
A. B., M.A., University of Illinois; Bread Loaf School of English; University of Chicago.
- NORMAN CALDWELL *Assistant Professor of History*
B.Ed., Southern Illinois Normal University; A.M., Ph.D., University of Illinois.
- ROBERT C. CASSELL (1938-45; 1946) *Professor of Agriculture,
Chairman of Department*
B.S., Iowa State College; M.S., University of Idaho; Ph.D. University of Minnesota.

- STEWART C. CHANDLER (1940) *Consulting Entomologist*
B.S. in Agriculture, University of Wisconsin; Field Entomologist, Illinois Natural History Survey.
- W. G. CISNE (1916) *Professor, Director of Placements*
Emeritus (1945)
Southern Illinois Normal University; Ph.B., University of Wisconsin; A.M., University of Chicago.
- LAWRENCE E. CLARK (1945) *Associate Professor*
A.B., Drake University; A.M., Ohio State University; Ph.D., Columbia University; Harvard University; Teachers College, Columbia University.
- LULU R. CLARK (1917) *Assistant Professor, Allyn Training School*
Emerita (1940)
Southern Illinois Normal University; University of Chicago; Teachers College, Columbia University.
- MAURICE CLARK (1946, Spring) *Faculty Assistant in Government*
B.Ed., Southern Illinois Normal University; University of Illinois.
- E. C. COLEMAN (1946) *Associate Professor of English*
A.B., University of Illinois; A.M., University of Wisconsin; Ph.D., University of Illinois.
- JAMES E. COLLIER (1946, Summer) *Instructor in Geography*
B.S., Western Kentucky State Teachers College; M.A., University of Missouri; University of Nebraska.
- ELIZABETH A. COX (1920) *Assistant Professor of English*
A.B., A.M., University of Kansas.
- FLEMIN W. COX (1929) *Associate Professor of Geography*
Emeritus (1945)
A.B., A.M., University of Illinois; Clark University.
- C. H. CRAMER (1931) *Associate Professor of History*
A. B., B.S. in Ed., A.M., Ph.D., Ohio State University.
Entered Government Service, September, 1942.
- ZELLA CUNDALL (1946, Summer) *Faculty Assistant in the Library*
B.A., University of Illinois; B.S. in L.S., University of Illinois Library School.
- DOROTHY R. DAVIES (1939) *Associate Professor of Physical Education for Women, Chairman of Department*
B.S., University of Cincinnati; M.A., Teachers College, Columbia University; Ed.D., University of Cincinnati.
- J. CARY DAVIS (1930) *Associate Professor of Foreign Languages*
B.Ed., Southern Illinois Normal University; the Sorbonne; A.M., Ph.D., University of Chicago.

- FLORENCE E. DENNY (1929) *Assistant Professor of Physiology and Hygiene, School Nurse*
B.Ed., Southern Illinois Normal University; graduate, School of Nursing, Beth-El Hospital, Colorado Springs; M.A., Teachers College, Columbia University.
- VINCENT G. DIGIOVANNA (1929) *Associate Professor of Physical Education for Men*
B.P.E., Springfield College; M.A., Ph.D., New York University. Entered U. S. Armed Forces, June, 1943.
- J. W. DILLOW (1934) *Assistant Professor of Rural Education*
B.Ed., Southern Illinois Normal University; M.A., University of Illinois; Teachers College, Columbia University.
- N. W. DRAPER (1946, Summer) *Instructor in English*
B.Ed., Southern Illinois Normal University; M.A., University of Michigan.
- ROBERT W. ENGLISH (1940) *Assistant Professor of Industrial Education*
B.S., James Millikin University; M.A., University of Illinois; University of Pennsylvania.
- MARY E. ENTSMINGER (1922) *Associate Professor, Allyn Training School*
Southern Illinois Normal University; Ph.B., University of Chicago; M.A., Teachers College, Columbia University.
- RAYMOND W. ESWORTHY (1946, Summer) *Assistant Professor of Business and Economics*
B.S., in Ed., M.S., Ph.D. in Accountancy, University of Illinois.
- FRANCES D. ETHERIDGE (1925) *Assistant Professor of Physical Education for Women*
A.B., B.S., University of Illinois; M.A., Ohio State University. Entered U. S. Armed Forces, 1942.
- EUGENE R. FAIR (1945) *Professor and Dean of the College of Education*
B.S., Northeast Missouri State Teachers College; M.A., Columbia University; Ph.D., State University of Iowa; University of Minnesota.
- ROBERT DUNN FANER (1930) *Associate Professor of English*
A.B., Allegheny College; M.A., University of Iowa; University of Pennsylvania.
Leave of absence, 1946-1947.
- JEAN FLIGOR (1941) *Instructor, Rural Training School*
B.Ed., Southern Illinois Normal University; M.A., Northwestern University.
Leave of absence, 1946-1947.

- LUCILLE HARTLEY FLIGOR (1944) *Faculty Assistant in Education*
B. S. in Ed., Southern Illinois Normal University.
- WILLIAM FREEBERG (1942) *Instructor, Physical Education for Men*
B.Ed., Southern Illinois Normal University; M.S., University of Illinois.
- ELBERT FULKERSON (1932) *Assistant Professor, University High School*
B.Ed., Southern Illinois Normal University; M.A., University of Illinois.
- WILLARD M. GERSBACHER (1936) *Associate Professor of Zoology, Chairman of Department*
B.Ed., Southern Illinois Normal University; A.M., Ph.D., University of Illinois.
- M. ALBERTA GIBBONS (1921-3; 1928) *Assistant Professor University High School*
A.B., University of Illinois; A.M., Columbia University; University of Chicago; Northwestern University.
- DILLA HALL (1924) *Assistant Professor, University High School*
B.Ed., Southern Illinois Normal University; M.S., University of Chicago; St. Louis University.
- EARL R. HALL (1946) *Assistant Professor of Education*
B.S. in Ed., Western Illinois State Teachers College; M.A., University of Illinois; D.Ed., Teachers College, Columbia University.
- GOLDA D. HANKLA (1938) *Instructor, Librarian*
B.Ed., Southern Illinois Normal University; M.A., B.S. in L.S., University of Illinois.
- MARY JANE HANTZ (1945) *Instructor in Music*
B.Mus., M.Mus., Eastman School of Music of the University of Rochester.
- WILLIAM H. HARLAN (1946) *Assistant Professor of Sociology*
A.B., A.M., University of Nebraska; University of Iowa; University of Chicago.
- J. W. HARRIS (1939) *Associate Professor of English*
B.S., M.A., Ph.D., University of Illinois.
- ANNE PLACKO HEDGES (1945) *Faculty Assistant in Education*
B.S. in Ed., Southern Illinois Normal University.
- MARIE A. HINRICHS (1935) *Professor of Physiology and Hygiene, Chairman of Department, College Physician*
A.B., Lake Forest College; Ph.D., University of Chicago; M.D., Rush Medical College.

- MARSHALL S. HISKEY (1946) *Associate Professor of Psychology*
B.S., M.S., Kansas State Teachers College; Ph.D., University of Nebraska.
- LAIRD T. HITES (1945) *Associate Professor*
A.B., William Jewell College; A.M., D.B., Ph.D., University of Chicago.
- LYNN C. HOLDER (1946) *Instructor in Physical Education for Men*
B.Ed., Southern Illinois Normal University; M.S. in Ed., Indiana University.
- JOHN JACOBS (1945-46) *Faculty Assistant in Education*
B.S., University of Illinois.
- LEONARD J. KEEFE (1940) *Assistant Professor of Business*
B.Ed., Illinois State Normal University; M.A., Colorado State College of Education.
- MAURITS KESNAR (1946) *Professor of Music, Chairman of Department*
M.A., Ph.D., University of Iowa.
- THELMA L. KELLOGG (1929) *Associate Professor of English*
B.A., M.A., University of Maine, A.M., Ph.D., Radcliffe College.
- FLORENCE R. KING (1911) *Instructor, Allyn Training School,*
Emerita (1936)
State Normal and Training School, Oswego, New York; University of Minnesota; University of Chicago.
- GRACE E. KITE (1941) *Instructor, Librarian*
B.S., Northwestern University; M.A., Teachers College, Columbia University; B.S. in L.S., University of Illinois.
- FRANK L. KLINGBERG (1946) *Associate Professor*
of Government
A.B., A.M., University of Kansas; Ph.D., University of Chicago.
- EDITH SMITH KRAPPE (1929) *Assistant Professor of English*
A.B., A.M., University of Iowa; Indiana University; University of Minnesota.
- ANNEMARIE E. KRAUSE (1930) *Assistant Professor of Geography*
B.S. University of Minnesota; M. S., University of Illinois; University of Chicago.
- MABEL SICKMAN LANE (1943) *Instructor in Rural Education*
B.Ed., Southern Illinois Normal University; M.S. in Ed., University of Illinois.
- DOUGLAS E. LAWSON (1935) *Professor of Education*
A.B., M.A., Colorado State Teachers College; Ph.D., University of Chicago.

- E. G. LENTZ (1946) *Professor of History*
Clint Clay Tilton Library
 A.B., Indiana University; A.M., University of Illinois.
- IRENE LIEBIG (1945) *Faculty Assistant in Home Economics*
 B.Ed., Illinois State Normal University; M.S., Iowa State College;
 Northwestern University; Colorado State College.
- FRED LINGLE (1946, Summer) *Instructor in English*
 B.Ed., Southern Illinois Normal University; M.A., University of
 Illinois; University of Wisconsin, New York University, Univer-
 sity of Southern California.
- LELAND P. LINGLE (1927) *Associate Professor of Physical*
Education
 B.Ed., Southern Illinois Normal University; M.A., University of
 Iowa.
- BONNIE A. LOCKWOOD (1945) *Faculty Assistant in University*
High School
 B.Ed., Southern Illinois Normal University.
- C. C. LOGAN (1923) *Assistant Professor, University*
High School, Emeritus (1946)
 B.S., University of Illinois.
- MARGARET SHAW LYNCH (1946, Fall) *Faculty Assistant in Physical*
Education for Women
 B.S. in Ed., Southern Illinois Normal University.
- THELMA LYNN (1945) *Instructor, Librarian*
 B.A., University of Texas; B.S., School of Library Service,
 Columbia University.
- WILLIS E. MALONE (1941) *Assistant Professor of Education*
 B.Ed., Southern Illinois Normal University; M.A., Northwestern
 University; Ohio State University.
- WILLIAM M. MARBERRY (1939) *Assistant Professor of Botany*
 B.Ed., Southern Illinois Normal University; M.A., University of
 Illinois.
- FRANK A. MARSCHIK (1946, Summer) *Faculty Assistant in*
Industrial Education
 B.Ed., Illinois State Normal University; graduate study Uni-
 versity of Illinois.
- GLENN MARTIN (1938) *Associate Professor of Physical Education*
for Men, Director of Athletics
 B.Ed., Southern Illinois Normal University; M. A., University
 of Iowa.
- HELEN E. MATTHES (1920) *Instructor in Music*
 Chicago Musical College.

- LEWIS A. MAVERICK (1946) *Professor of Economics*
B.S., Washington University; Ed.D., Harvard University; Ph.D.,
University of California.
- JOHN R. MAYOR (1935) *Professor of Mathematics,*
Chairman of Department
B.S., Knox College; M.A., University of Illinois; Ph.D., Uni-
versity of Wisconsin.
- WALTER MAZUREK (1946) *Faculty Assistant in*
Physical Education
B.A., Westminster College.
- W. C. MCDANIEL (1939) *Associate Professor of Mathematics*
B.S., Kansas State College; M.Ph., Ph.D., University of Wis-
consin.
- DAVID C. MCINTOSH (1927) *Associate Professor of Music*
B.M.E., Northwestern University; M.A., University of Iowa.
- EVELYN MCKINLEY (1946, Summer) *Assistant Professor of Physiology*
and Hygiene
B.A., Simpson College; M.Ed., Marquette University.
- J. STUART MCNAIR (1946, Summer) *Instructor in Mathematics*
B.S., Knox College; M.S., University of Chicago; University of
Wisconsin.
- ELSIE PARRISH MCNEILL (1933) *Instructor in Rural Education*
B.Ed., Southern Illinois Normal University; M.A., University
of Illinois.
- ROBERT MCNICOLL (1946) *Associate Professor of Latin*
American Culture
A.B., University of Miami; M.A., Ph.D., Duke University.
- ELIZABETH MEEHAN (1941) *Instructor, Allyn Training School*
B.Ed., Southern Illinois Normal University; M.A., University of
Illinois.
- JOHN D. MEES (1946) *Assistant Professor,*
Principal, University High School
B.Ed., Southern Illinois Normal University; M.S., University of
Illinois; Indiana University; University of Chicago; University
of Missouri.
- BRUCE W. MERWIN (1927) *Professor of Education*
A.B., B.S. in Education, A.M., Ph.D., University of Kansas.
Leave of Absence, 1946-1947.
- EDWARD V. MILES, JR. (1919) *Associate Professor of Economics,*
Business Manager
B.Ed., Southern Illinois Normal University; M.A., St. Louis Uni-
versity.

- SINA M. MOTT (1936) *Associate Professor of Pre-School Education*
A.B., Iowa State Teachers College; M.A., Ph.D., New York University.
- R. E. MUCKELROY (1911) *Professor of Agriculture,*
Chairman of Department, Emeritus (1945)
B.S., University of Illinois; M.S., University of Wisconsin.
- DOROTHY M. MUZZEY (1928) *Assistant Professor of Physical*
Education for Women
B.A., Iowa State Teachers College; A.M., University of Iowa; Columbia University.
- HELEN LOUISE NARBER (1945) *Assistant Professor,*
Allyn Training School
B.S., M.S., State University of Iowa; University of Chicago.
- J. W. NECKERS (1927) *Professor of Chemistry,*
Chairman of Department
A.B., Hope College; M.S., Ph.D., University of Illinois.
- JULIA NEELY (1926) *Associate Professor of English*
A.B., A.M., Washington University; Kings College, University of London; New York University; St. Louis University.
- ANNA KLASSEN NEUFELD (1945) *Assistant Professor of*
Foreign Languages
B.A., Bethel College; M.A., University of Kansas; University of Chicago.
- SUSIE OGDEN (1931) *Assistant Professor of Business*
B.Ed., Southern Illinois Normal University; M.A., University of Illinois; Columbia University; University of Tennessee.
- CHARLES J. PARDEE (1929) *Assistant Professor of History*
A.B., Hiram College; B.D., Union Theological Seminary; A.M., University of Chicago.
- JOHN B. PARRISH (1938) *Assistant Professor of Economics*
A.B., Ph.D., University of Illinois.
Entered Government Service, August, 1942.
- CHARLES PATERSON (1936) *Assistant Professor*
University High School
Carnegie Conservatory of Music, Dunfermline, Scotland; Chicago Conservatory of Music; Cincinnati Conservatory of Music; B.Ed., Southern Illinois Normal University.

- VERA LOUISE PEACOCK (1930) *Professor of Foreign Languages*
Chairman of Department
 A.B., A.M., Ph.D., Cornell University; University of Grenoble;
 University of Perugia; National University of Mexico.
- LOUIS PETROFF (1942) *Assistant Professor of Sociology*
 B.A., University of Wisconsin; M.A., Ph.D., University of Southern California.
- WILLIAM NEAL PHELPS (1941) *Associate Professor, Dean of Boys,*
University High School
 B.Ed. Southern Illinois Normal University; M.A., University of Illinois; Ed.D., Colorado State College of Education.
- RALPH R. PICKETT (1946, Summer) *Professor of Business*
 A.B., Missouri Wesleyan College; M.A., Ph.D., University of Chicago.
- FRANCES PHILLIPS (1944) *Instructor in Physiology*
and Hygiene
 B.Ed., Southern Illinois Normal University; M.A., Teachers College, Columbia University; University of Kansas.
- J. M. PIERCE, A.B., A.M. (1892-4; 1899) *Associate Professor of*
German, Emeritus-(1935)
 A.B., Washington University; A.M., Harvard.
- WILLIAM A. PITKIN (1945) *Associate Professor of*
Social Sciences
 A.B., DePauw University; M.A., University of Colorado; Ph.D., University of Texas.
- J. R. PURDY (1929) *Associate Professor of Mathematics*
 B.S., M.A., Kenyon College; Ph.D., University of Illinois.
- TED R. RAGSDALE (1925) *Professor of Education*
Acting Principal, Allyn Training School
 B.Ed., Southern Illinois Normal University; M.A., University of Illinois; Ph.D., St. Louis University.
- VICTOR RANDOLPH (1935) *Associate Professor of Education*
 B.Ed., Southern Illinois Normal University; A.M., Teachers College, Columbia University; Ph.D., George Peabody for Teachers.
- ALICE PHILLIPS RECTOR (1946) *Instructor*
 B.Ed., M.S. in Ed., Southern Illinois Normal University.
- ALEX REED (1946) *Instructor, University High School*
 B.S., M.S., University of Illinois.
- HENRY J. REHN (1945) *Professor, Dean of the*
College of Vocations and Professions
 B.S., Oregon State College; M.B.A., University of Oregon; Ph.D., University of Chicago; C.P.A., Washington.

- EVELYN DAVIS RIEKE (1937) *Assistant Professor, Dean of Girls
University High School*
B.S., A.M., University of Illinois.
- LULU D. ROACH (1930) *Assistant Professor of Art*
Southern Illinois Normal University; Ph.B., University of Chicago; Fine Arts School, Washington University.
- ORA ROGERS (1928) *Assistant Professor
Allyn Training School*
B.Ed., Southern Illinois Normal University; A.M., University of Illinois.
- MADGE TROUTT SANDERS (1924) *Assistant Professor
University High School*
B.Ed., Southern Illinois Normal University; A.M., University of Chicago; University of Southern California; St. Louis University; New York University.
- MAY SARTON (1946, Summer) *Poet-in-Residence*
Author: *Encounter in April* (verse); *Inner Landscape* (verse);
The Single Hound (fiction); *The Bridge of Years* (fiction).
- WILLIAM B. SCHNEIDER (1936) *Professor of English*
A.B., A.M., University of Illinois; Ph.D., University of Chicago.
- J. HENRY SCHROEDER (1923) *Professor of Industrial Education*
B.Ed., Southern Illinois Normal University; M.S. University of Iowa. Leave of Absence, 1946-1947.
- MARTHA SCOTT (1929) *Assistant Professor of Zoology*
A.B., Park College; M.S. University of Chicago; University of California.
- R. A. SCOTT (1923) *Professor of Chemistry*
B.S., M.S., Ph.D., University of Illinois.
- SHELBY S. SHAKE (1944) *Assistant Professor
University High School*
B.S., Indiana State Teachers College; M.S. Indiana University.
- MARJORIE SHANK (1923) *Associate Professor of Geography;
Registrar*
A.B., University of North Dakota; A.M., Clark University; University of Chicago; London School of Economics; St. Louis University.
- ESTHER SHUBERT (1940-42, 1943) *Assistant Professor, Librarian*
B.Ed., Eastern Illinois State Teachers College; B.S. in L.S., M.S., University of Illinois.

- HELEN A. SHUMAN (1945) *Associate Professor, Dean of Women*
B.Ed., Illinois State Normal University; M.A., University of Illinois; Northwestern University.
- GLADYS L. SMITH (1931) *Assistant Professor*
University High School
B.Ed., Southern Illinois Normal University; M.A., Teachers College, Columbia University; University of Iowa.
- MADELEINE M. SMITH (1929) *Assistant Professor of*
Foreign Languages
A.B., A.M., Northwestern University; University of Chicago; Middlebury College French School.
- MAE TROVILLION SMITH (1919-1931; 1943) *Instructor in English*
A.B., A.M., Indiana University; George Peabody College for Teachers.
- LUCY MAE RUSHING SMYTHE (1946) *Faculty Assistant in*
Home Economics
B.S. in Ed., Southern Illinois Normal University.
- ZITA SPRADLING (1944) *Instructor, University High School*
B.S., M.S., University of Illinois.
- HELEN RUTH STARCK (1944) *Instructor, University High School*
B.S., University of Illinois; Colorado State College.
- JEAN STEHR (1944) *Instructor in Physical Education for Women*
B.S., M.A., Texas State College for Women.
- HILDA A. STEIN (1925) *Associate Professor of Zoology*
B.Ed., Southern Illinois Normal University; M.S., University of Illinois; Ohio State University; Oceanographic Laboratory, University of Washington.
- ELIZABETH OPAL STONE (1929-1936; 1946) *Assistant Professor,*
Librarian
B.S., Northwest Missouri State Teachers College; B.S. in L.S., M.S. in L.S., University of Illinois.
- HAL STONE (1946, Summer) *Instructor in Chemistry*
B.Ed., Southern Illinois Normal University; M.S., University of Alabama.
- MARJORIE W. STULL (1942) *Instructor, Librarian*
B.Ed., Southern Illinois Normal University; B.S. in L.S., University of Illinois.
- DOROTHEA SWAN (1945) *Assistant Professor of Art*
A.A., Stephens College; B.F.A., Art Institute of Chicago; M.A., University of Chicago; Stephens College, Pennsylvania Academy of Fine Arts, Art Institute of Chicago, University of Chicago.

- WILLIS G. SWARTZ (1930) *Professor of Government
Chairman of Department*
B.A., M.A., Ph.D., University of Iowa; Clark University.
- HARLEY R. TEEL (1935) *Assistant Professor as Principal
of Brush Training School*
B.Ed., Southern Illinois Normal University; A.M., University of Illinois.
- CHARLES D. TENNEY (1931) *Administrative Assistant to the
President; Professor of English
and Philosophy*
A.B., Gooding College; A.M., University of Oregon; Harvard University; Ph.D., University of Oregon.
- WELLINGTON A. THALMAN (1929) *Professor of Education*
A.B., Ellsworth College; A.M., Ph.D., Cornell University; University of Chicago.
- MADelyn SCOTT TREECE (1937-38; 1940) *Instructor, Allyn Training
School*
B.Ed., Southern Illinois Normal University; M.A., University of Chicago.
- K. A. VAN LENTE (1931) *Professor of Chemistry*
A.B., Hope College; M.S., Ph.D., University of Michigan.
- RUBY VAN TRUMP (1928) *Assistant Professor, Allyn Training
School*
B.S. in Education, Southwest Missouri State Teachers College; A.M., George Peabody College for Teachers; Leave of Absence, 1946-47.
- FLOYD V. WAKELAND (1939) *Associate Professor of Music*
M.Mus., Bush Chicago Conservatory; Westminster Choir College.
- F. G. WARREN (1913) *Professor of Education,
Chairman of Department*
A.B., McKendree College; A.M., University of Chicago; St. Louis University.
- BEN P. WATKINS (1946) *Assistant Professor of Art*
A.A., Whitworth College; A.B., M.A., Louisiana State University; Tulane University; Phillips University.
- WALTER B. WELCH (1938) *Associate Professor of Botany,
Chairman of Department*
A.B., Wabash College; M.S., Ph.D., University of Chicago.
- FLORENCE A. WELLS (1927) *Assistant Professor, University
High School, Emerita (1946)*
B.Ed., Southern Illinois Normal University; A.M., University of Illinois.

- JOHN S. WHARTON (1945) *Instructor in Music*
B.Mus., Oberlin Conservatory of Music; M.Mus., American Conservatory of Music.
- CONRAD WHITE (1946) *Assistant Professor of Agriculture*
B.S. in Ed., Northeast Missouri State Teachers College; B.S., M.A., University of Missouri.
- HENRY L. WILSON (1946) *Assistant Professor of English*
B.A., University of Iowa; M.A., University of Colorado; Ph.D., University of Iowa.
- LUCY K. WOODY (1911) *Professor of Home Economics*
Chairman of Department
B.S., M.A., Teachers College, Columbia University.
- ALICE KELSEY WRIGHT (1925) *Assistant Professor of Mathematics*
A.B., Indiana University; A.M., University of Illinois.
- C. E. WRIGHT (1946) *Faculty Assistant in Business*
B.Ed., Southern Illinois Normal University; LL.B., Washington University School of Law.
- JOHN I. WRIGHT (1925) *Associate Professor of History*
Ph.B., A.M., University of Chicago.
- O. B. YOUNG (1929) *Professor of Physics and Astronomy*
Chairman of Department
A.B., Wabash College; A.M., Ph.D., University of Illinois.
- CHARLOTTE ZIMMERSCHIED (1927) *Assistant Professor of*
Physics and Astronomy
A.B., A.M. University of Minnesota; University of Chicago, Columbia University, St. Louis University.

AFFILIATED PRACTICE SCHOOL

Responsibility of employment is that of the local board with assistance as to salary provided by S.I.N.U.

Brush

- MAE L. FOX (1924) *Instructor, Brush Training School*
B.Ed., Southern Illinois Normal University; M.A., Teachers College, Columbia University; University of Chicago.
- TINA GOODWIN (1925) *Instructor, Brush Training School*
B.Ed., Southern Illinois Normal University; M.A., Teachers College, Columbia University; University of Chicago; University of Tennessee.
- MAUDE MAYHEW (1924) *Instructor, Brush Training School*
Ph.B., University of Chicago; M.A., Teachers College, Columbia University.

JEWELL TRULOVE (1930) *Instructor, Brush Training School*
B.Ed., Southern Illinois Normal University ; M.A., Teachers College, Columbia University.

GRACE WILHELM (1924) *Instructor, Brush Training School*
B.Ed., Southern Illinois Normal University ; M.A., Teachers College, Columbia University.

Graduate Assistants, 1945-1946

BESSIE M. ALLEN
B.S. in Ed., Southern Illinois Normal University.

EDWARD L. ALLEN
B.Ed., Southern Illinois Normal University.

HELEN BLACKBURN
B.S., Southern Illinois Normal University.

HELEN W. BOATMAN
B.S. in Ed., Southern Illinois Normal University.

ELIZABETH L. BRAZIER
B.S., Mankato State Teachers College (Minnesota).

HELEN ROSALIE BROWN
B.Ed., Southern Illinois Normal University.

LOLA DAVIS
B.S. in Ed., Southern Illinois Normal University.

BILLIE RUTH GILL
B.Ed., Southern Illinois Normal University.

EDWARD C. GOODNIGHT
A.B., Howard Payne College (Texas).

HERBERT E. JOHNSON
B.Ed., Southern Illinois Normal University.

AMY MAE JONES
B.Ed., Southern Illinois Normal University.

ATTIE BELL LA BOTTE
B.S. in Ed., Southern Illinois Normal University.

ALICE P. RECTOR
B.Ed., Southern Illinois Normal University.

BERNICE SICKMAN
B.S. in Ed., Southern Illinois Normal University.

WILLIAM W. TOWNES
B.Ed., Southern Illinois Normal University.

LORAIN L. WATERS
B.A., Southern Illinois Normal University.

GENERAL INFORMATION

Location and Campus

Southern Illinois Normal University is located in Carbondale, one of the leading towns of Southern Illinois. The city of Carbondale is a railroad center of some importance and is easily accessible from all directions by either rail or highway facilities. Moreover, the town is situated in the great fruit-growing area of the section; and the orchards, south of Carbondale in particular, in blossom time present scenes of surpassing beauty. In normal times travellers come from far and near to see them.

The University campus proper, at present, occupies twenty acres on the southern fringe of the city. Here are located eight large buildings in which the work of the University is carried on. On the southeast side of the campus is the McAndrew Memorial Stadium, which affords splendid athletic and recreational grounds.

The University operates an attractive dining-room, the University Cafeteria, where excellent meals may be obtained.

The University Farm occupies seventy-two acres south of the campus. Here a regular program of scientific and enlightened farming is carried on under the direction of the Department of Agriculture of the University.

Not to be overlooked are the more recent extensions of land. These include Thompson Woods, the plot for the new Training School, the Alexander Conservation Unit, and certain properties along Harwood and Grand Avenues. Accordingly the University campus proper and all of its accessions cover something over 180 acres, and some 400 acres are now being acquired.

Academic Standing

Scholastic standards at the University have been maintained throughout the years so that Southern is now recognized and approved by several educational agencies. Southern is accredited by the Commission on Colleges and Universities of the North Central Association in Group IV (as a University), and is on the approved list of the American Association of Teachers Colleges.

Women graduates of Southern are eligible for national membership in the American Association of University Women.

History

Southern Illinois Normal University was founded as an institution of higher learning to encourage teacher training in downstate Illinois in the years following the Civil War. No group realized the essential value of such a school more than the teachers themselves.

Consequently school teachers, principals, and superintendents played an active part in the establishing of the school.

In 1869 the State Legislature authorized the establishing of the school, and in the next year an appropriation was made for the construction of a building. The legislative grant was augmented by contributions from the citizens of Jackson County, where the College was to be located.

By 1874 the three-story structure that was to house the new normal school was finished, and on July 1 the history of state-supported higher education in Southern Illinois began, with the dedication of the building and the inauguration of Dr. Robert Allyn as first president. A summer session in 1874 opened the instructional work of the school. Fifty-three students attended. The first regular term, starting on September 7, had approximately 150 students enrolled.

Recognition for the University was attained during the administration of Henry W. Shryock (1913-35). In 1928 Southern Illinois Normal University was accredited by the American Association of Teachers Colleges, and three years later it was placed on the accredited list of the North Central Association of Colleges and Secondary Schools as a degree granting institution.

Important advances were made by the University under the administration of Roscoe Pulliam (1935-44). His leadership witnessed a revision of the curriculum, an enlargement of the faculty, the creation of a department of sociology, a revitalization of the Museum, the expansion of the Library, the landscaping of the University campus, and the dedication of a new stadium. The University was honored in 1939 by being named to cooperate with the Commission on Teacher Education in the national project for the improvement of teacher training.

During this same period the University acquired additional land, received an appropriation by the State Legislature for the proposed new Training School, and was authorized to expand its functions in the fields of liberal arts and sciences and vocational training with the appropriate degrees, in addition to the training of teachers. With the beginning of the summer session of 1944, Southern inaugurated a program of graduate work leading to the Master of Science in Education degree.

Through the war years Southern served its country well. Hundreds of its students went from the campus into the armed forces; and on the home front Southern aided in the nationwide university training program for the Army Air Corps Cadets. During 1943-44, 1019 cadets along with their commanding officers were housed by the University and trained by the resident faculty.

In January, 1945, Dr. Chester F. Lay, Professor of Business Administration at the University of Texas, accepted the presidency of Southern. Under his leadership, the University looks forward to an even greater usefulness to the people of Southern Illinois.

STUDENT LIFE

Assembly

An all-student assembly is held once each week, on Thursday at ten o'clock. The programs are widely varied, including lectures, short dramatic offerings, movies, and music. Faculty members, students, and guest speakers participate. The University Orchestra plays regularly at these assemblies.

Dramatics and Forensics

Little Theater offers interested students opportunities for practical experience in play production under capable faculty direction. In addition to two plays each year, this group is called upon frequently for productions suitable for special occasions.

Tau Delta Rho, campus discussion group, welcomes students who are interested in seeking truth and seeing it prevail. Students making significant contributions to campus speech activities may also be eligible for membership in the local chapter of Pi Kappa Delta, national speech fraternity, first organized on the local campus in 1942. The Debate Club, suspended during the war, may be reorganized at an early date on student request.

Community Concert Series

Each year a portion of the funds received from activity fees is contributed by the University to the budget of the Carbondale Community Concert Association, so that all students are admitted to the excellent series brought annually to Shryock Auditorium by that organization.

In 1945-46 the list of artists included Nadine Connor, Paul Draper and Larry Adler, the Bari Ensemble, and Sascha Gorodnitzki. For the coming year the Concert Association announces Igor Gorin, Vronsky and Babin, the Fox-Hole Ballet, and William Primrose.

Campus Musical Activity

Student musical presentations at Southern have risen to a genuinely professional artistic standard. The entire region knows and enjoys the performances of the Orchestra, the Band, the Chorus, and the Madrigal Singers. Concerts given at the University at Christmas time, at Easter, and on other occasions afford opportunity for the students to appear in public and for the community to benefit from the Music Department's work. Any student may have an audition for membership in the Orchestra, the Band, or the Chorus.

During the summer sessions festivals of choral, instrumental, and folk music are held in the Giant City State Park. For these occasions outstanding conductors are brought to Southern.

Radio Programs

A radio studio is located on the campus. Programs originating at this studio are broadcast by remote control over radio stations WJPF in Herrin and WEBQ in Harrisburg. A weekly program is broadcast on Wednesday at 2:00 P.M. over WEBQ. Known as "The SINU Hour," this feature has become an important voice for the campus since 1939. The Rural Education Department sponsors a weekly program, "Education Time," which is broadcast over WJPF each Friday at 2:00 P.M.

Film Service

For more than a decade the Film Service has been enriching the classroom routine at Southern.

Still projectors, silent-movie projectors, and filmslides were first used. Later on sound projectors and a small collection of textbook classroom films were added, and each year more films are purchased. At present the collection consists of 175 titles, all of which are among the finest obtainable. It is planned to add forty new titles during the coming year.

About 100 of the current films deal with problems of human living—that is, they are useful for the social sciences. About forty relate to the fields of human, plant, and animal biology. About thirty cover problems in the physical sciences, while the remainder apply in the fields of fine arts, industrial arts, aeronautics, music, physical education, and recreation. Five deal specifically with problems of teaching.

These films have all been written and produced professionally by specialists in their respective subject-matter fields and are used in connection with classes at various times during the year. They provide authentic factual information in visual form.

In addition the Film Service provides by loan or rental large numbers of other fine films from many different sources as requested by teachers.

The Film Service staff consists of one full-time director, one student research worker, and four student helpers.

Athletics

The Department of Physical Education for Men sponsors a full program of intercollegiate competition in football, basketball, track, and tennis. The University is a member of the Illinois Intercollegiate Athletic Conference.

The 1945-46 basketball team participated in the National Intercollegiate Tournament held in Kansas City at the end of the season and won the championship.

An extensive intramural program makes it possible for all students to enjoy exercise and recreation through sports.

Student Publications

The student publications are the *Egyptian*, a weekly newspaper, the *Obelisk*, a yearbook, the *Scarab*, which is the annual literary magazine, and the *Sphinx*, a student directory. The editors are student journalists, and staff memberships are open on trial to all students. The *Sphinx* is published by the campus YWCA.

Student Social Life and Self-Government

Each year the student body elects members from each class to serve on the Student Council. The Council acts as a policy-making body for student activities, dealing with such problems as elections, social functions, student health, and permanent improvements. Through the Council, members of the student body are recommended to serve on some standing committees of the University, thereby integrating student and administration points of view. The Council is active also in public affairs affecting the University.

Other student organizations include national and local professional fraternities, religious groups, literary societies, student cooperatives, social fraternities, departmental or special-interest clubs, and honorary organizations. These are listed and described in detail in the "Southern Style" booklet issued to each student upon his first enrollment.

Student Religious Life

Students are urged to identify themselves at an early date after entering the University with some church of the city. It is assumed, of course, that the student will affiliate with the church to which he belongs at home, or with which he is most in sympathy as to doctrine and mode of worship.

While Southern Illinois Normal University is a non-sectarian institution, there are two religious foundations maintained by churches especially for students of various denominations. The foundations carry on extensive programs of social and educational activities, including some courses of study for which the University has accepted credit toward graduation.

Alumni Association

The Alumni Association is the general organization of the alumni of Southern Illinois Normal University. Any graduate or former student is invited to become a member. The *Southern Alumnus* is the quarterly publication of the Association. For information concerning the organization, address the Secretary of the Alumni Association, Southern Illinois Normal University, or Dr. Orville Alexander, Director of Alumni Services.

A directory of all alumni was issued in the spring of 1946 and will be reissued in revised form at intervals.

Southern Illinois Normal University Foundation

At the meeting of the Teachers College Board on December 15, 1941, the Board approved the establishment of the Southern Illinois Normal University Foundation, a non-profit corporation affiliated with the University, authorized by law to receive gifts, buy and sell and administer property, and otherwise serve the University.

All gifts to Southern should be conveyed through the Foundation, and any stipulations concerning them should be stated in writing to its directors.

Under the constitution of the Foundation the Executive Committee of the Alumni Association appoints nine of the directors of the new Foundation; three are chosen from the membership of the Teachers College Board; and the President of the University, and the chairman of the Teachers College Board are ex-officio members.

SPECIAL SERVICES

Services to Veterans

These services have been arranged to meet the special needs of students who are veterans, to assist them in filing claims, to advise them during training, and to help obtain employment when the educational program has been completed.

The veteran should first go to the Office of the Dean of Men for information concerning his benefits under Federal and State Laws, and to receive necessary directions for securing these benefits, for entering the school, and for consulting persons who will be concerned with his progress thereafter.

Federal Assistance for Veterans of World War II

The G. I. Bill or Servicemen's Readjustment Act, Public Law Number 346. This bill provides for eligible veterans free training generally equal to one year plus the time of military service, provided the total does not exceed four years. It allows all such essential school expenses as tuition; books and supplies; and in addition a subsistence allowance, if the applicant is without dependents, of \$65 a month, or, if he has dependents, of \$90 a month.

Public Law 16, Rehabilitation for Disabled Veterans. This bill provides up to four years of free training, including all essential school expenses, necessary medical assistance, and a subsistence allowance of \$92 a month, plus \$11.50 for a wife and \$5.75 for each child. The training goal is adapted to the individual veteran, and expert assistance is given in determining his aptitudes. The University furnishes four full-time faculty members for the purpose of testing and appraising at the Guidance Center.

State Aid for Veterans

The Military Scholarship. Any person who served in the Army, Navy, or Marine Corps of the United States, not including members of the Student Army Training Corps, during World War I or any time between September 16, 1940, and the termination of World War II, who, at the time of entering upon such service, was a resident of this State, and who has been honorably discharged from such service, and who possesses all necessary entrance requirements, will, upon application and proper proof, be awarded a Normal School Scholarship.

Any person who served as above stated, and who at the time of entering upon such service was a student of any State Normal School, and who was honorably discharged from such service, will, upon application and proper proof, be entitled to finish and complete his course of study at such institution without tuition and matriculation charges,

but such person shall not be entitled to more than four years of gratuitous instruction, a maximum of \$320.00.

The Governor's Committee for Veterans Rehabilitation and Employment. This Committee will assist any veteran but gives maximum aid to the ex-service man or woman with impaired health or with limited physical abilities. Such a person may receive at State expense vocational training and education, plus health restoration and prosthetic appliances. After proper training, employment assistance is given.

Any further information concerning services to veterans may be obtained from the Dean of Men, Southern Illinois Normal University.

Veterans Administration Guidance Center

Southern has been chosen as the location for the Veterans Administration Guidance Center in Southern Illinois because of its excellent facilities in testing and its convenient location in the thirty-four counties involved. The purpose of the center is to offer vocational guidance to the veteran of this region eligible for training under Public Law 16, and to assist him in planning his vocational rehabilitation. All veterans discharged with a vocational handicap are eligible for this service. All other veterans who are eligible under Public Law 346 may have this service if they so desire. Mr. Ernest R. Wolfe of the Veterans Administration has been placed in charge of the office. The University furnishes four full-time faculty members for the purpose of testing and appraising at the Guidance Center.

University Credit for Military Service

Southern Illinois Normal University is following the policies recommended by the American Council on Education relative to college credit for military experience and for experience in civilian activities related to the war as set forth in the "Guide to the Evaluation of Educational Experiences in the Armed Forces."

Credit not to exceed fifteen quarter hours may be granted to an individual for the basic training course ordinarily consisting of thirteen weeks in the Armed Forces. This credit is to be assigned to physical education, hygiene, military training, or electives. If a student already has credit in these subjects, the amount will be somewhat less.

Credit may be allowed through the United States Armed Forces Institute in several ways: by correspondence, by examination, and by overseas university study centers.

Upon completion of an extension course given by a recognized college or university in cooperation with the Institute, credit will be allowed in the usual manner.

The Institute has provided a wide offering of regular college subjects. Subject examinations are given at the close of the courses, and have been standardized for a considerable number of subjects.

Credit will be allowed toward graduation on the basis of these examinations as recommended in the above-mentioned guide.

Competence in technical or vocational fields may be demonstrated by examinations by the United States Armed Forces Institute, provided the fields correspond to the vocational and technical subjects for which credit is regularly granted on the campus. An individual may take examinations also for credit in a subject field such as mathematics, physics, mechanics, or a foreign language, and secure appropriate credit.

Credit for military experience may be obtained only by regularly enrolled students or those who have been in attendance before entering the armed services.

Student Employment

The *Student Employment Service* is conducted to assist students to earn a part of their expenses, although it is impossible to guarantee work to every applicant. Prospective students who expect to earn any part of their expenses, and who do not have definite appointments to positions before coming to college, should have means of support for at least one term. Two programs of work are available: state and private.

State employment provides some part-time work in the following projects: clerical and stenographic work; assistance in offices, libraries, laboratories, the museum, and the engineering department; campus beautification; research and economic surveys. Previously enrolled students who have proved their ability are usually chosen for these positions.

Private employment is sometimes secured by the students themselves, but requests for student help often come to the campus. These calls are continuous throughout the year and usually require immediate placement. Students interested in this kind of work must register with the Student Employment Service in the Office of the Dean of Men at the beginning of each term.

Requests for application forms should be made either to the Dean of Men or to the President's Office. Each applicant is urged to call at the Student Employment Service for an interview and to learn about employment possibilities.

For information as to graduate assistantships, see page 42.

Placements

The *Placements Office* is maintained as a service for students, former students, and graduates of the University who desire to find teaching positions. Public-school officials who have teaching vacancies to fill are assisted in finding well-qualified candidates.

The office is a member of the National Institutional Teacher Placement Association and of the Teacher Placement Association of Illinois Colleges and Universities.

University Health Service

Special attention is given to the health of students. The Health Department was established in 1920-21, and was placed in the hands of a graduate physician of wide experience in general practice and research. The physician is assisted by three registered graduate nurses who aid in caring for cases of illness in the school and in helping to carry out such quarantine measures as are necessary.

All possible precautions are taken to prevent illness, and every provision is made for the comfort of the sick. The physician in charge has offices in the school, keeping office hours during which any student may have the benefit of diagnosis and advice on any medical point. Instruction will be given about the care of health and methods of treating cases of simple illness. A limited amount of hospitalization and medical care is provided for all resident students.

Every effort is made to guard against communicable diseases. But when such cases are detected they are promptly excluded from school, in accordance with the requirements of the State Department of Public Health.

A thorough annual physical examination is given every student who registers in the University. This is a required part of the school work. A complete health record is kept for each student. The record includes the health history, the result of physical examinations, and information concerning the health during the residence of the student at the University.

Related to the University's Health Service is the regular work in Physical Education and participation in supervised games required of all students. The provision of the well-equipped gymnasium and athletic field is of great value in promoting the health and physical vigor of the University students.

Awards, Benefits and Loans

State scholarships are awarded each year through the Office of the State Superintendent of Public Instruction. Graduates of recognized high schools who are in the highest quarter of their graduating classes are certified by their principals or county superintendents to the Superintendent of Public Instruction, who may award scholarships to the highest ranking graduates who signify their intentions to prepare to teach. Each of these scholarships is valued up to \$80 annually, or \$320 for four years, and is acceptable at any Illinois Normal University or Teachers College. This covers the student's tuition, activity and other fees, but does not include laboratory, supplies, and materials fees. Holders of these scholarships must apply for admission to the College of Education not later than August 15 of the year in which the scholarship is awarded.

The *Illinois Educational Benefit Act* provides academic fees, board, room, book rental, and supplies for children in the State of Illinois of veterans of World War I or II who were killed in action

after December 1, 1941, or who died from other causes in World War I or World War II. The maximum allowance is \$150 a year. Orphans of Soldiers, Sailors, and Marines who are not less than sixteen or more than twenty-two years of age are eligible to receive these benefits. Applications should be made to Mr. Frank G. Thompson, Director of the Department of Registration and Education, Springfield, Illinois.

For information as to Military Scholarships and rehabilitation, see "Veterans Service," page 28.

Vocational Rehabilitation—Under the State Board for Vocational Education is a division for the vocational rehabilitation and placement in remunerative employment of persons whose capacity to earn a living is or has been impaired. This includes those with physical handicaps of various kinds. Approved students receive all registration and tuition fees, book rental, and school supplies for nine months a year.

Persons who wish to consult with a representative are welcome to call at the Carbondale Field Office located at 219½ West Main Street. Students from other parts of the State now receiving training through the State of Illinois Division of Vocational Rehabilitation may consult with the local Field Agent by appointment. Phone, Carbondale 324. The services of this office are also available to returning service men and women.

The University Loan Fund. A maximum loan of \$35 is available to any student who has established a satisfactory record for at least one term. This fund is controlled by the Business Manager, the Dean of Women, and the Dean of Men.

A *Student Investment Fund* has been created by the *Carbondale Rotary Club* for the benefit of Southern Illinois Normal University men who may be in urgent need of money for the completion of their university course. Loans are available in units of \$30 per term and repayable without interest within five months after the applicant has secured gainful occupation. Selection of applicants is based upon financial need, character, scholastic standing, and qualities of leadership.

The *Carbondale Lions Club* has made available through its *Student Loan Fund* financial aid sufficient to pay the tuition of four male students for each term of the regular school year. These loans are made without interest for a period not exceeding one year. The recipient need not be a senior, but must signify his intention to secure employment not later than the September following the date of the loan.

The Charles Neely Scholarship Award. The local chapter of the American Association of University Professors awards annually a prize of \$25 to a member of the junior class who has a high scholastic average.

The Betty Rhodes Memorial Scholarship. The Alpha Delta Chapter of Delta Sigma Epsilon sorority and its alumnae established the Betty Rhodes Memorial Scholarship of \$30 in the fall of 1937. It is awarded annually to a sophomore non-sorority girl having qualities of personality, leadership, and high scholastic standing.

The Elizabeth Martin Gift. The American Association of University Women has a loan fund of \$600, of which \$100 is called the Elizabeth Martin Gift to the A. A. U. W. Loan Fund. This money may be borrowed without interest the first year and after that at three per cent. Upperclassmen and graduate students have preference. Application should be made to Miss Minnette Barber, of the English Department.

The June Vick Memorial Fund. Chapter 878 of Beta Sigma Phi Sorority has established the June Vick Memorial Fund open to junior and senior girls to the extent of tuition for three to six months. The applicant must not be a member of a sorority. The legal note, which covers tuition only, is to be repaid beginning six months after the student secures a position. If it is not repaid within one year, interest will be added at 4%.

Parent-Teachers Scholarship Fund. The Illinois Congress of Parents and Teachers has provided a fund of \$200 to be known as the Congress Scholarship Fund and to be awarded to a junior or senior on the basis of scholastic standing, character, and financial need. A condition of the award is that the recipient must come from a high school which maintains an active Parent-Teachers Association recognized by the Congress. Application for this scholarship should be made to the Dean of Women or the Dean of Men.

Student Health Loan Fund. Through the generosity of a local physician, a loan fund has been established from which an emergency loan may be secured for the payment of emergency medical or surgical bills. Applicants should apply personally to the Student Health Service.

Housing of Students

Students of the University are housed in Anthony Hall, a women's dormitory; private homes in Carbondale; and in organized houses. All unmarried undergraduate students not residing with their parents, guardians, or relatives are required to live in places approved by the University. Exceptions to this rule can be made only by the Dean of Men and the Dean of Women.

Anthony Hall

Anthony Hall, the women's building, was opened in 1913. Every possible provision has been made for the comfort, safety, and well-being of the residents. The Hall has been newly redecorated and refurnished.

The residence hall will accommodate 120 women. There is an almost equal number of double and single rooms. Each room is provided with hot and cold water. All linens are furnished, but the student may supply her own curtains, spreads, and one pair of double blankets. A fully equipped infirmary is located on the first floor.

A charge of \$8 a week is made for room and board at Anthony Hall. The University reserves the right to change to a higher rate if it becomes necessary. A reservation fee of \$5 must accompany each application for a room, and this deposit will under no circumstances be refunded. This fee is applied on the first month's room and board. Applications for rooms should be sent to the Director of the Hall.

Other Student Homes

Listing of approved rooms for both men and women and of apartments for married couples is centralized in the Dean of Women's office under the supervision of the Housing Chairman, Mrs. Mabel Pulliam. All requests for information concerning living accommodations should be addressed to her.

Houses accommodating students are subject to inspection at any time during the school year and may be removed from the approved list by action of the Housing Committee. A set of regulations designed to protect the interest of both householders and students alike is furnished to each householder, and a copy should be secured by each student from one of the offices of the Personnel Deans. The Deans and Housing Chairman keep in touch with the householders of all rooming places and cooperate with them. Many serious complications will be avoided if all students will consult the Housing Chairman before engaging rooms.

The majority of students living in the private homes of Carbondale, pay, on an average, a room rental of \$2.50 per week with two students in a room.

Meals at low cost may be secured in several boarding houses, in private homes near the campus, and in the college-owned cafeteria. The cost of meals varies from \$5.00 to \$8.00 a week.

Because of economic conditions and changes in food prices, these figures are only approximate estimates of costs.

In addition to the supply of rooms in the homes of Carbondale citizens, room and board for some of Southern's students is provided for by a number of organized houses. These organized houses include four fraternities, three sororities, and seven cooperative girls' houses.

All persons accepted as students at the Southern Illinois Normal University are subject to the house rules and social rules approved by the University's Student Life committee, and to all other University regulations.

REGULATIONS AND STANDARDS

Admission to the University

Graduates of any recognized four-year high school or academy with fifteen units of secondary work may be admitted to any curriculum of any college. The recognized schools of Illinois are listed in the School Directory, published annually by the Office of the Superintendent of Public Instruction. A graduate of a high school outside of the State may be admitted to Southern Illinois Normal University if the high school is accredited by the university of the state in which it is located. Persons under twenty-one years of age may not be admitted to the University without high-school graduation.

A student with an incomplete high school record may complete admission requirements by means of the General Education Development Tests administered by the University.

A person who has attended another college or university must present a complete transcript of his record and a statement of good standing before he may be admitted to Southern Illinois Normal University. He is not eligible for admission if he has an average below C. The transcript will be evaluated and a statement of advanced standing will be given before registration in case the student is from a college which is a member of a recognized accrediting agency.

Official credentials should be sent to the Registrar directly from each institution previously attended. Students are admitted at the beginning of each quarter and the summer session. By attending summer sessions also, a student may complete his work in three years.

For admission to the Graduate School, see "General Rules Governing Graduate Study," page 43.

Notice to New Students—All credentials must be filed in advance of registration.

Fees

The State Teachers College Board has established uniform registration and student activity fees to be paid by students enrolled in any of the State Teachers Colleges of Illinois. This applies to all freshmen and sophomores and to all undergraduate students in the College of Education.

Schedule of fees for a term of three months:

Registration fee.....	\$10.00
Student activity fee.....	5.00
Book rental fee.....	2.50
Total	\$17.50

In addition to these there is a federal tax of about 25c a term.

Juniors and seniors in the College of Liberal Arts and Sciences and the College of Vocations and Professions pay a registration fee of \$20.00 instead of \$10.00, making a total of \$27.50. A student who takes his degree in one of these colleges must have registered there the last two years or pay back tuition.

Graduate student fees include the registration fee of \$10.00, the student activity fee of \$5.00, and a matriculation fee of \$5.00 for new students.

All students holding State scholarships and registered in the College of Education and all students holding military scholarships are exempt from the registration fee.

The general activity charge includes the fee for limited hospitalization, entertainment, athletics, *The Obelisk*, *The Egyptian*, and such other activities as the Advisory Council shall set up.

A registration fee of \$2.00 a quarter hour is charged for extension and part-time students, but none of the activity benefits are included.

Additional special fees include the following:

Late registration fee	\$ 1.00
Chemistry laboratory breakage deposit.....	1.00
Botany 101 laboratory breakage deposit.....	2.00
Private music courses, 1 lesson a week.....	12.00
Completion of incomplete course.....	1.00
Graduation, Bachelor's degree.....	5.00
Graduation, Master's degree.....	10.00

Additional fees are charged for library fines, breakage, failure to report for physical examination, etc. The first transcripts of college records are furnished free, provided the student has fulfilled all his financial obligations to the University. There is a charge of \$1.00 for each additional transcript.

Students withdrawing from the University within ten days after the beginning of the term may secure a full refund of all fees. In order to receive this, a student must make application to the Business Office within ten days following the last day of the regular college registration period. No refunds are made after that time.

Schedule of Periods

Each class period is fifty minutes in length beginning on the hour. The first classes are at eight o'clock. Ten minutes are allowed between periods.

No classes are scheduled to meet Thursday at 10 o'clock, the regular University assembly hour.

Grading System

Grades are expressed in letters as follows:

A, Excellent	5 grade points
B, Good	4 grade points
C, Fair	3 grade points
D, Poor, but passing.....	2 grade points
E, Failure	1 grade point
Fld, Failing at time of withdrawal within term, course not completed.....	1 grade point
N. C., Passing at time of withdrawal but course not completed.	

Any change of grade, such as completing an N.C., must be made within a year after the close of the term in which the course was taken. A fee of one dollar is charged for the completion of a course marked N.C., unless the student presents a certificate from the University physician. A complete record of all changes in grades appears on the official transcript. Students who for some reason must miss a final examination may not take the examination before the one regularly scheduled for the class. In this case, an N.C. should be recorded by the instructor, and the final examination be taken at a later date, some time within a year.

Scholarship

The normal load for a student is sixteen quarter hours with a maximum of eighteen hours. A student with a 4.25 average the preceding term may take up to twenty hours. A student with a 4.5 average the preceding term may take additional hours. Students with an average 2.75 or lower may take a maximum of fourteen hours.

Before a student may be graduated he must have a 3.0 average. Any student whose grade-point average falls below 3.0 is automatically placed on probation. He must attain a 3.0 average the succeeding term in order to have the probationary status removed and to be eligible for registration the succeeding term.

Any student who feels he has justifiable reasons for not having fulfilled the general scholarship requirement may present his case to the Dean of Men or the Dean of Women, who in turn may refer his case to the Scholarship Committee for consideration.

Students may be required to remove deficiencies, as shown by the freshman tests, before the end of the sophomore year. The deficiency may be removed by passing a college credit course, by taking a remedial course, or by passing another freshman test or a special test given by the testing bureau.

Any student who has attended another college or university and has an average below C is not eligible for admission to Southern Illinois Normal University. A student may appeal his case to the Scholarship Committee, and in rare instances appeal it again to the President, for permission to register.

Honors

In recognition of high scholarship, an Honors Day Convocation is held each spring. Candidates for the Bachelor's degree who have maintained a grade-point average of 4.25 or more for all of their work through the winter term of their senior year receive honor pins. In the case of a transfer student, he must have entered Southern Illinois Normal University by the beginning of the junior year and have maintained the 4.25 average.

A number of students in the junior class in the College of Education are elected each year to Kappa Delta Pi, National Honor Society in Education.

For information concerning Honors courses open to high-ranking students, see page 59.

Graduating seniors are recognized at Commencement on the graduation program, and their diplomas designate honors granted on the following basis:

Highest Honors	Point average of 4.90 or higher
High Honors	Point average of 4.75-4.89
Honors	Point average of 4.50-4.74

Wheeler Library

The main library of the University contains a collection of 44,710 books, 5280 public documents, and 10,069 bound periodicals. The library receives eleven metropolitan newspapers, and many local, county, and city newspapers of Southern Illinois. The total number of current periodicals received by subscription, gift, and exchange is 809.

Branches of the main library include the Allyn Elementary library and the University High School library, which contain a total of 4,628 volumes.

The University library has long been officially designated as one of the libraries to receive publications of the United States government. It has recently been made a depository for the Army Map Service, from which source the library will receive a total of 50,000 maps and related materials.

In addition to the collection of books, periodicals, pamphlets, and maps, the resources of the library are being augmented by phonograph records, microfilms, filmstrips, and musical scores. From time to time various alumni and friends have enriched the library's holdings through gifts of books, periodicals, and pamphlets.

The University library is open on school days from 7:45 a.m. to 10:00 p.m. except on Fridays when it closes at 5:00 p.m.; on Saturdays the library is open from 8:30 a.m. to 4:30 p.m. Special hours are announced for summer terms and holiday periods.

Clint Clay Tilton Library of Lincolnia and Americana

A gift to the University from Mr. Clint Clay Tilton of Danville, former newspaper publisher and former president of the Illinois State Historical Society, is the nucleus of a research library which is being developed in the field of history. To the original gift from Mr. Tilton comprising 2000 volumes are being added by gift and by purchase works in the history of Illinois and regional history. The additions to date bring the total to approximately 2500 volumes.

This collection is housed in Room 206 Old Main, a room temporarily used for a seminar in history. Its books may be used freely by students, faculty, and the general public; but no books are subject to loan.

Child Guidance Clinic

The Child Guidance Clinic was established in 1936 for the primary purpose of aiding teacher education. With special aid and guidance given by the Illinois Institute of Juvenile Research, it has continued to expand its services to many communities and schools in Southern Illinois. The Clinic works in close cooperation with the State Department of Public Welfare including the Division for Delinquency Prevention, the State Division for Handicapped Children, the Division of Child Welfare, and the Illinois Children's Home and Aid Society, as well as with the different teacher-educating units of the University, with executives and teachers of the public schools, judges, and with the parents of children who ask for assistance. Its personnel consists of faculty members from several different departments of the University. The staff includes psychologists, clinicians, social workers, medical doctors and nurses, specialists in diagnostic and remedial reading and mathematics, and experts from two of the divisions of the State Department of Public Welfare.

The objectives of the Child Guidance Clinic are to aid teacher education; to aid the training school units in the study of individual children; to expand the studies of psychology and clinical psychology; to train some of the most capable students for positions as child technicians in public schools; to train students for positions as clinical technicians in state institutions; to examine and diagnose individual clinical cases and to aid teachers and parents in understanding the therapy that may be used; to arrange for traveling clinics to go out into the public schools; and to offer consultative services to public schools, county judges, and various civic organizations in different communities.

This University has the distinction of being the only institution within a rather large area having a Child Guidance Clinic, although there are now more than eight hundred child guidance clinics throughout the United States.

Specific information regarding prerequisites and descriptions of the courses offered by the Clinic may be secured by writing to the Director of the Child Guidance Clinic, Room 101-A, Main Building.

DEGREES

Southern Illinois Normal University offers one graduate degree, the Master of Science in Education. In addition to this are the three undergraduate degrees.

The College of Education grants the Bachelor of Science in Education degree.

The College of Liberal Arts and Sciences grants the Bachelor of Arts degree. A student may have the Bachelor of Science degree instead on application to and approval by the Dean of the College and the Graduation Committee.

The College of Vocations and Professions grants the Bachelor of Science degree. A student may have instead the Bachelor of Arts degree on application to and approval by the Dean of the College and the Graduation Committee, provided he has fulfilled the general education and major requirements of the College of Vocations and Professions.

A student requesting a second bachelor's degree must complete forty-five hours in addition to the hours required for his first degree and must fulfill the requirements for the second degree.

Every candidate for a degree should file written application with the Registrar not less than three months before the date on which the degree is to be granted.

Students must attend Commencement exercises to receive their diplomas, unless they are granted permission to be graduated "in absentia".

Requirements for the Bachelor's Degree in all Colleges

Each candidate for the degree must secure 192 quarter hours credit in approved courses. At least sixty-four must be in senior college courses, of which forty-eight must be made in residence. Each student must have a C average, and grades not lower than C in subjects aggregating at least three-fourths of the work. C average is required in the major subject before the student may be graduated.

The following list of requirements should be met by degree candidates of all colleges within the first two years of attendance.

Social Studies—20 quarter hours (work in 4 departments required)

Economics, 5 hours

Geography, 5 hours

Government, 5 hours

History, 5 hours

Sociology, 5 hours

Humanities—18 quarter hours

English 101, 102, 103—9 hours

English 205, 209, 211, 212—6 hours from this group

Art 120 or Music 100—3 hours

Note: The student is also advised to complete the foreign language requirement within the first two years (see pages 54 and 55).

Biological Sciences—9 quarter hours

Physiology and Hygiene 202—4 hours

Botany 101, 202, or Zoology 101, 105—5 hours from this group.

Mathematical and Physical Sciences—12 quarter hours

Chemistry, Mathematics, Physics (12 hours selected from two departments)

Practical Arts and Crafts—3 quarter hours

Agriculture, Business and Economics, Home Economics, Industrial Education (not required if the student has had any of this work in high school)

Physical Education—6 quarter hours.

Students may be excused from any of the above requirements by passing attainment tests. Credit toward the degree, however, is not allowed for such tests. In some cases more advanced work may be substituted for the required courses listed.

Students may be required to remove deficiencies as shown on the freshman tests. Such deficiencies may be removed by passing a college credit course, by taking a remedial course, or by passing a special test given by the testing bureau.

THE GRADUATE SCHOOL

Southern Illinois Normal University is entering upon its third year of graduate work. In the past two years, more than 100 individual graduate students have been enrolled, not including a large number of post-graduate students. The first Master's degree was conferred in June, 1945; several others were conferred at the June, 1946, Commencement.

Although the graduate program was originally planned for part-time enrollment of in-service teachers and administrators, the majority of the graduate students enrolled in the academic year 1945-46 were engaged in full-time residence work. This change in emphasis was due in considerable measure to the large number of ex-service men and women taking advantage of their educational opportunities under the G. I. Bill. Under the accelerated graduate program, it is possible for the student enrolled in full-time graduate work to complete the work for the degree in one year. During the fall, winter, and spring terms, however, most of the graduate courses are scheduled evenings and on Saturdays.

The degree Master of Science in Education is obtainable in three general fields: in educational administration, in elementary education, and in secondary and college education. A graduate student wishing to take a Master's degree in secondary and college education may elect an academic major in one of the following teaching fields: English, Foreign Languages, Mathematics, Biological Sciences, Physical Sciences, Commerce and Business Administration, and Social Sciences. In addition, a minimum of 16 hours of graduate work must be taken in the field of Education.

For more detailed information concerning graduate work, write to the Registrar or to Dr. W. G. Swartz, Chairman of the Graduate Studies Committee.

Graduate Assistantships and Scholarships

Since 1945, a number of graduate assistantships have been made available to graduate students of exceptional scholarship and promise of success. The assistantships permit the graduate student to take half-time or three-quarters-time class work, depending upon the amount of the stipend and the work load expected. Half-time assistantships carry a stipend of approximately \$675 and three-quarters-time assistantships \$450 for the academic year.

Graduate assistants are assigned to special research activities, teaching, or activities related to teaching and administration.

Any student interested in applying for a graduate assistantship should get in touch with the chairman of his major department, with the dean of the college concerned, or with Dr. W. G. Swartz, Chairman of the Graduate Studies Committee.

General Rules Governing Graduate Study At Southern Illinois Normal University

It should be noted that these rules are subject to further study and change, since the development of Southern's graduate program is in process.

Admission. Students are admitted to the Graduate School only upon the approval of the Graduate Studies Committee. Graduates of Southern Illinois Normal University and graduates of other educational institutions maintaining standards equal to those of this institution are eligible for admission to the Graduate School.

To be eligible for admission to the Graduate School, a graduate student must have a three-point undergraduate average. Admission to the Graduate School is not equivalent to admission to candidacy for the degree of Master of Science in Education.

Transcript. Graduates of other educational institutions must present an official transcript of high school and college or university courses previously taken. This transcript should be filed with the Chairman of the Graduate Studies Committee at least one month before matriculation.

Application. Written application for admission to the Graduate School should be made to the Chairman of the Graduate Studies Committee on blanks secured at his office or from the Registrar.

Tuition and Fees. Tuition and fees for graduate students are the same as for the undergraduate students in the College of Education with the following exceptions: matriculation fee, \$5.00 (for other than graduates of Southern Illinois University); graduation fee, \$10.00. (The graduate student must purchase any textbooks used in graduate courses.)

Part-Time Enrollment. Opportunity is given to those admitted to the Graduate School who are within easy reach of the University to enroll in resident graduate classes on late afternoons and Saturdays. However, at least half of a student's graduate credit must be earned in full-time residence work.

Opportunity may also be given for graduate students to take up to 8 quarter hours credit in graduate extension courses, provided such courses meet the teaching, library, and laboratory standards of similar campus courses.

Additional Requirements. A student desiring to do work for which he has not the proper foundation may be required to complete the necessary undergraduate work.

Transfer of Credit. A maximum of sixteen quarter hours of acceptable graduate credit earned on campus or in extension in another institution may be applied toward a Master's degree. The transfer of credit from another institution is subject to the approval of the Gradu-

ate Studies Committee after consultations with representatives of the department or departments concerned.

The Graduate Studies Committee may recommend specialized work to be done in another institution.

Seniors. A senior who is in the last quarter of his undergraduate study, who has completed his residence requirement for the Bachelor's degree, and whose schedule is not completely filled with undergraduate courses, may be permitted to register for graduate courses upon application to the Graduate Studies Committee at the time of enrollment.

Advisory Committees. The Graduate Studies Committee will appoint an advisory committee for each graduate student, upon matriculation in the Graduate School.

Each graduate student may indicate his preference of persons to serve on his advisory committee, but the Graduate Studies Committee's judgment will prevail.

The advisory committee will represent the graduate student's major and minor fields, and will include at least one member of the Graduate staff in the College of Education.

Requirements for the Master's Degree in Education

Residence. Candidates for the degree are required to spend at least two quarters in residence.

Course Requirements. Forty-eight quarter hours of acceptable graduate credit are required for the Master's degree. At least 24 of these hours must be in courses for graduates only. At least half of the graduate work culminating in the Master's degree must be done in full-time residence work.

A grade average of B is required for the degree. Not more than four hours of C will be given graduate credit, and no grade below B will count toward a major.

Courses on the 400 level are open to seniors and graduate students. Occasionally juniors of superior scholarship may be admitted at the advisor's discretion.

Dissertation or Thesis. No formal thesis of the traditional type will be required; however, each candidate for the Master's degree will be required to present evidence of ability to do a satisfactory quality of research, and to submit it in a form to be filed for future reference.

A maximum of four quarter hours of credit may be given for a special research project which is not prepared as part of a regular course requirement.

Admission to Candidacy. Each student shall make personal application to the Graduate Studies Committee for admission to candidacy not later than the last week of the term preceding the one in which the degree is to be conferred.

Prior to admission to candidacy, each student must pass a preliminary comprehensive examination covering the essentials of both undergraduate and graduate study in his major field. This examination may be oral, written, or both.

Application for the Degree. Each candidate for the Master's degree must file written application for the degree with the Registrar not later than one month before the date for granting the degree.

Final Examination. Each candidate must pass a final examination covering all work he has completed. Special emphasis will be given to individual studies and research projects. (The preliminary and final examinations together must include both oral and written examination.)

The War Veteran and the Graduate School

Veterans of World War II will be returning to school in numbers in the years immediately ahead. Those who are interested in the Graduate School will find an agency set up and ready to serve at Southern. Requests for information should be addressed to

The Veterans Service
Southern Illinois Normal University
Carbondale, Illinois

Federal and State provisions for veteran training and education apply to any academic level, and so include the graduate school. These provisions have four chief sources, two in the Federal Government and two in the State of Illinois. The Federal Government has set up the "G.I. Bill", the Servicemen's Readjustment Act, or Public Law 346, and Public Law 16, for the Rehabilitation of Disabled Veterans. For the State of Illinois there are the Military Scholarship, and the Governor's Committee for Veteran Rehabilitation and Employment.

The eligible disabled veteran may receive free training for a maximum of four years. The veteran in good health generally is allowed a free educational period of one year, plus the equivalent of his time in service, provided that the total time does not exceed four years. Free training includes all essential school expenses plus an adequate subsistence allowance.

Housing and Meals

The University is glad to assist entering graduate students to secure satisfactory living accommodations. For information about rooms and apartments requests should be addressed to Mrs. Mabel Pulliam, Chairman, the Committee on Housing. For those who may not wish to set up housekeeping, the University Cafeteria provides excellent meals.

THE THREE COLLEGES OF THE UNIVERSITY

In 1943 the General Assembly passed the following act (chapter 122, section 421 of the *Revised Statutes of Illinois, 1945*):

The objects of the Southern Illinois Normal University shall be to qualify teachers for the schools of the state in all branches of study which pertain to a common school education; to offer such courses of instruction as shall best serve to provide liberal and vocational education customarily offered at the college level; and to offer such other courses as the college determines; provided no professional courses culminating in degrees in law, medicine, dentistry, pharmacy, engineering, or agriculture may be offered by such university.

In accordance with this legislation, Southern Illinois Normal University has been organized into three colleges, the College of Education, the College of Liberal Arts and Sciences, and the College of Vocations and Professions. Information relating to the separate colleges will be found in the pages immediately following.

COLLEGE OF EDUCATION

The College of Education is for men and women who are already members of the teaching profession and for young people who intend to enter the field of teaching or of educational administration, or some related field. Its aim is to provide a fully-rounded program of pre-service and in-service instruction and study. Its undergraduate and graduate curricula are intended to prepare students for teaching in the rural and elementary fields, high school and college, and for positions as school administrators, supervisors, and supervising teachers. Opportunity for in-service growth is provided on a graduate or an undergraduate basis and also on a credit or a non-credit basis.

The program of academic and professional study, including student teaching, is built upon a fundamental belief in the highest standards for preparing teachers who will have adequate knowledge of their respective special fields, who will understand professional theory and how to apply it, and who will have attained a degree of skill such as to enable them to enter and serve successfully in the profession.

The courses of study in the College of Education lead to the Bachelor of Science in Education degree.

All students in the College of Education are required to take American History and Government (ordinarily History 201 or 202 and Government 200 or 300); and to demonstrate a reading knowledge of one foreign language. The latter ordinarily requires nine quarter hours of university study, or its equivalent.

Students preparing for high school teaching should take the following:

Education 206, 310, 315, 331, and 345 or 305 or 306—20 hours.

English—advanced rhetoric or speech—3 hours.

Practice teaching—12 hours, of which at least four hours must be in the student's major and at least eight hours on the high school level.

A major of at least 36 hours and two minors; or a major of 48 hours and a minor, in two separate fields of study. In the latter case, field minors are not recognized. The college recognizes a major in any department which offers as much as 36 hours of work. A student may obtain also a field major in biological sciences or social studies. Field minors are accepted in biological sciences, social studies, and Latin-American relations. The following is an example of a field major:

Social Studies Field Major in the College of Education

The major consists of 72 quarter hours in the social studies, to be divided as follows:

24 hours in History—12 European, 12 American.

12 hours each in Economics, Geography, Government, and Sociology.

Required courses, 45 quarter hours:

Economics 205 and 355

Geography 100 and 324

Government 200 and 300

History 211 or 212 and 201 or 202

Sociology 101 and 202

Electives, to a total of 27 hours, to be chosen from:

Economics 206, 310, 317, 370

Geography 210, 314, 315, 319, 345

Government, any courses

History, any courses, providing some are in American and some in European

Sociology 310, 355

The major is to be supplemented with a minor in some subject outside the field of the social studies.

Students preparing for elementary teaching should take the following:

Art and Music—15 hours (in addition to the 3 hours required of all students)

Education 311, 331, 355, 206, and 305 or 306 or 340; plus others to a total of 32 hours.

Mathematics—8 hours

Physical Education, methods course—3 hours

Student Teaching—12 hours (8 on elementary level)

Sociology 201—3 hours

Minors of 24 hours in language arts, social science, and natural science areas.

STUDENT TEACHING AND OBSERVATION

The College of Education requires twelve hours of student teaching for the degree Bachelor of Science in Education. Usually, eight hours are assigned in the student's major field and the remaining hours in a minor.

Student teaching applications are made not later than the beginning of the term preceding the term in which student teaching is desired. Application blanks may be secured in the Office of the Dean, College of Education.

Prerequisites for Student Teaching

1. A student must have a total of 128 quarter hours credit with a 3.0 average or better.
2. A student must have at least sixteen quarter hours in the subject to be taught.
3. A student must have at least twelve hours of credit in education courses.

Note: No university credit is allowed for past experience in teaching.

Certification by Examination

The Limited Elementary Certificate and Kindergarten-Primary Certificate will be granted by examination to those who have completed two years of college work. To be eligible to take this examination a student must have met the requirements of the State Examining Board, pages 52-54. These requirements include eight quarter hours of credit in student teaching, which may be secured by teaching one-half day in the elementary, kindergarten-primary, or rural fields.

Student teaching may be done in the Campus Laboratory Schools, the Brush Training School, and the affiliated rural schools.

*Student Teaching Facilities**Campus Laboratory Schools*

The Campus Laboratory Schools offer work from the nursery school through the senior high school. They are made up of the kindergarten-nursery school, a six year elementary school (Allyn), and a six year high school (University High).

The Campus Laboratory Schools carry out the following important functions:

1. Providing a superior educational opportunity for the boys and girls enrolled.
2. Illustrating to prospective teachers, through demonstration teaching, a skillful application of educational principles.
3. Offering of facilities for apprentice teaching.
4. Exemplifying to the public schools of Southern Illinois that which is best in school organization, curriculum, equipment, and methods of instruction.

University High School

The University High School includes grades seven through twelve. The six year high school has come to be recognized as a better type of organization for the smaller school, and is, therefore, well adapted to the needs of Southern Illinois.

The University High School has a staff of experienced teachers with fine professional preparation. Certain areas of the curriculum are being gradually adjusted and revised in terms of the preparation of adolescents for effective participation in our democratic society. In addition to a fairly large number of subject matter offerings, the

high school has a well-rounded program of extra-class activities, which include band, chorus, dramatics, athletics, (inter-scholastic and intramural), debating, Future Farmers of America, Girls' Athletic Association, assembly, a student council, a weekly newspaper, a yearbook, a library council, a variety of clubs, and a home room organization for the entire school. The home room teachers throughout the school year provide personal, educational, and vocational guidance for all students.

For the high school, an activity fee of \$8 a semester is charged. This fee entitles the student to the following: textbooks; use of the college library; a subscription to a current affairs weekly newspaper; admission to high school and university athletic contests; and university entertainment numbers presented in the evening.

The requirements for high school graduation are 16 year-credits, including three of social studies, three of English, two of physical and biological sciences or mathematics, and one in physical education.

Allyn Elementary School

Student teaching from the nursery school through the sixth grade may be taken in the Allyn Elementary School. In each grade there is a well-trained supervising teacher. Special activities, such as music and art, are supervised by teachers from the regular University departments. Student teachers serve a full half-day and receive eight quarter hours credit for a twelve weeks' term.

Student teachers are gradually introduced to various activities which include supervising study, planning for individual differences, carrying out testing programs, and planning and directing extra-class activities.

The training school is organized, as nearly as possible, like our best public schools. The curriculum, the socializing agencies employed, the testing program, the library, and other facilities for carrying out the program are comparable to those of our better city schools.

Fees for grades one to six are \$4 each term or \$12 a year. For the nursery school and kindergarten, the fees are \$10 a term.

Brush Training School

The Brush School is located in the best residential section of the city and is a little over a half-mile from the University campus. The school includes grades one to six in twelve rooms, several of which are devoted to student teaching, with regular supervising teachers in charge.

Student teachers spend half of each day at Brush and receive eight quarter hours credit. They plan and work under the guidance of supervising teachers. Directed observation is carried on each week during the entire term. Weekly teachers' meetings are held throughout the term, which afford an opportunity for discussing the work of the school and for the presentation and discussion of subjects of general interest.

Rural Training Schools

Rural student teaching is carried on in two affiliated schools under the supervision of the Director of Rural Education and supervising teachers in each school. The following Jackson County Schools will be included for the year 1946-47: Buckles, District No. 98, and Buncombe, District No. 139. Rural student teaching affords varied and extensive contacts with the important aspects of rural school teaching. Experiences in the following areas are emphasized:

1. Instructional activities dealing with curriculum study, child study, and guidance, setting up criteria for the selection of pupil activities in terms of their needs, interests, ability and experience; selection and organization of unit content and experiences; and techniques and methods of instruction.
2. Pupil guidance and room organization concerned with the management of routine matters, administrative problems in individual and group guidance, and reports and records.
3. The wider extension of school experiences into community life.
4. Activities relating to professional and personal development.

Student teachers spend half of each day in a rural school and receive eight quarter hours for the term. Transportation to the Rural Schools is furnished by the University without cost to the student.

Internship

During the past few years, outstanding seniors have been given an opportunity to serve as interns in cooperating schools throughout Southern Illinois. Not more than one or two students are assigned to any school system. The student receives his principal supervision from one teacher, but the off-campus principals and superintendents, and supervisors from the campus departments, provide further supervision.

Consultative Service on School District Reorganization

As a part of the Field Service of the College of Education, selected members of its faculty are carrying on studies of possible school district reorganization and are assisting the various county survey committees and county superintendents in the details of their work.

Inquiries regarding the availability of these consultative services should be addressed to the Dean of the College of Education.

OPPORTUNITIES AHEAD IN THE TEACHING PROFESSION

Young men and women preparing for the teaching profession can look forward to more and better opportunities in the profession as a result of favorable legislation adopted at the 1945 session of the General Assembly.

Perhaps the most promising legislation provides for and encourages school district reorganization in Illinois. Ninety-three counties voted to undertake school surveys and are now making thoroughgoing

studies of existing school districts, looking toward larger administrative attendance and financial school units. Final recommendations for changing district boundary lines are to be made by the various survey committees and voted upon by the people not later than 1948. There is reason to believe that Illinois will see much school reorganization during the next few years.

In addition to providing better educational opportunities for boys and girls, school district reorganization will open up many challenging opportunities for well-trained teachers, supervisors, and administrators.

Teachers can also look forward to better salaries. School reorganization will bring better salaries because schools will be able to pay more for competent people. At the 1945 session of the General Assembly, a floor was placed under teachers' salaries. Effective July, 1946, every teacher in Illinois is guaranteed eight or nine months' salary of at least \$1200, and there is much evidence that this figure will be revised upward in the near future. The average salary for teachers in Illinois is well above that figure now.

Many excellent teaching positions in the rural, elementary, and secondary fields will open up during the next few years. Now is the time to prepare for good positions as teachers, supervisors, and administrators.

Certification

The present certification law became effective July 1, 1943. It revises upward some of the former requirements. No one shall be certified to teach in the common schools of this State who is not of good character, who is not of good health, who is not at least twenty years of age, and who is not a citizen of the United States. The following limited certificates will be issued:

First. A limited elementary school certificate shall be valid for four years for teaching in the lower nine grades of the common schools. It shall be issued to persons who have graduated from a recognized higher institution of learning with a bachelor's degree and with not fewer than one hundred twenty semester hours and with a minimum of sixteen semester hours in education, including five semester hours in student teaching under competent and close supervision. The academic and professional courses offered as a basis of the limited elementary school certificate shall be in elementary training courses approved by the State Examining Board. It shall be renewable in periods of four years upon successful teaching experience and professional growth.

Second. A limited kindergarten-primary certificate shall be valid for four years for teaching and supervising in the kindergarten and in the first, second, and third grades of the common schools. It shall be issued to graduates of a recognized higher institution of learning with a bachelor's degree and with not fewer than one hundred twenty semester hours including sixty semester hours of work in a recognized

kindergarten-primary training school and with a minimum of sixteen semester hours in education, including five semester hours in student teaching under competent and close supervision. It shall be renewable in periods of four years upon successful teaching experience and professional growth.

Third. A limited special certificate shall be valid for four years for teaching and supervising the special subject or subjects named in the certificate in any and all grades of the common schools. It shall be issued to persons who have graduated from a recognized higher institution of learning with a bachelor's degree and with not fewer than one hundred twenty semester hours including a minimum of sixteen semester hours in education, five semester hours of which shall be in student teaching under competent and close supervision. The extent of training shall vary according to the subject and the minimum amount of training shall be determined by the State Examining Board. It shall be renewable in periods of four years upon successful teaching experience and professional growth.

These three certificates shall also be issued upon a successful examination to applicants who have completed sixty semester hours of work in training courses in a recognized higher institution of learning including ten semester hours in education, five semester hours of which shall be in student teaching. The examination shall include such subjects as may be prescribed by the State Examining Board.

Fourth. A limited vocational certificate shall be valid for four years for teaching the vocational subject or subjects named in the certificate in grades seven to twelve inclusive of the common schools. It shall be issued to persons who have met the requirements of the State Examining Board.

Fifth. A limited high school certificate shall be valid for four years for teaching in grades seven to twelve inclusive of the common schools. It shall be issued to persons who have graduated from a recognized higher institution of learning with a bachelor's degree and with not fewer than one hundred twenty semester hours including sixteen semester hours in education, five semester hours of which shall be in student teaching under competent and close supervision. The courses in education and student teaching shall be approved by the State Examining Board. It shall be renewable in periods of four years upon successful teaching experience and professional growth.

Sixth. A limited supervisory certificate shall be valid for four years for teaching and supervising in any and all grades of the common schools. It shall be issued to persons who have graduated from a recognized higher institution of learning with a bachelor's degree and with not fewer than one hundred twenty semester hours including a minimum of sixteen semester hours in education, as may be approved by the State Examining Board, and who have taught successfully for four years. It shall be renewable in periods of four years upon successful teaching experience and professional growth.

Seventh. A limited junior college certificate shall be valid for four years for teaching and supervising in the thirteenth and fourteenth grades of the common schools. It shall be issued to persons who have graduated from a recognized higher institution of learning with a Master's degree, including twenty semester hours in education and a major in the field in which the teacher is teaching. It shall be renewable in periods of four years upon successful teaching experience and professional growth.

The State Examining Board for Teachers' Certificates has set up the following requirements for admission to examination for the Limited State Elementary Certificate for students who have only two years of college credit:

	Semester Hours or Quarter Hours	
	45	67.5
I. General Education		
a. Language Arts	9	13.5
b. Natural Science	9	13.5
c. Social Science	9	13.5
d. Mathematics	3	4.5
e. Health and Physical Education (Must include 2 semester hours in Materials and Methods of Instruction)	2 to 4	3 to 6
f. Fine and Applied Arts (music and art)	6	9
g. General psychology	3	4.5
h. American Public Education	3	4.5
II. Education (Professional)	10	15
a. Educational psychology, child psychology, human growth and development	2 or 3	3 or 4.5
b. Teaching and learning techniques in the modern elementary school and curriculum problems...	2 or 3	3 or 4.5
c. Student Teaching	5	7.5
III. Electives	5	7.5
Total	60	90

COLLEGE OF LIBERAL ARTS AND SCIENCES

Entrance Requirements

Graduates of any recognized four-year high school or academy with fifteen units of secondary work are eligible for admission.

Degrees Granted

The College of Liberal Arts and Sciences grants the degree of Bachelor of Arts. A student may receive the degree of Bachelor of Science upon approval of the Dean of the College and of the Graduation Committee.

Requirements for Graduation

Each candidate for the bachelor's degree must meet the following requirements:

192 quarter hours credit in approved courses.

(64 quarter hours must be in courses numbered 300 and above, of which 48 must be in residence).

A grade average of C, and grade not lower than C in subjects aggregating at least three-fourths of the work. C average is required in the major subjects.

General education requirements as listed on page 40.

4 hours in psychology or philosophy.

A reading knowledge of a foreign language. This ordinarily requires 9 hours of university study or its equivalent.

A major of at least 42 hours and a minor of at least 24 hours in the following subjects (some departments require more):

Art	Foreign	Home	Physiology and
Botany	Language	Economics	Health Educa-
Chemistry	Geography	Mathematics	tion
Economics	Government	Music	Sociology
English	History	Philosophy	Zoology
		Physics	

All work offered in the College of Liberal Arts and Sciences is approved by the North Central Association.

COLLEGE OF VOCATIONS AND PROFESSIONS

The College of Vocations and Professions was established by action of the Illinois Teachers College Board under Legislative authorization given by Senate Bill No. 6, approved on July 15, 1943. The purpose of this College, as set forth in Section 2 of that bill, is "to offer such courses of instruction as shall best serve to provide.... vocational education customarily offered at the college level." Its name, in the present form, was authorized by the Board in May, 1945. The work of the new college is carried on in the following seven departments:

1. Agriculture
2. Art
3. Business
4. Economics
5. Home Economics
6. Industrial Education
7. Journalism
8. Music
9. Speech

In each of the departments except Agriculture and Journalism it now offers four-year curricula leading to the Bachelor of Science degree. Entrance requirements are the same as in the other colleges of the University. The enabling act of the State Legislature states, "No professional courses culminating in degrees in...agriculture may be offered". The College of Agriculture therefore gives three years of work in its field. The offerings in the Department of Journalism are still meager, but rapid development may be expected.

It is the purpose of the College of Vocations and Professions to provide curricula that develop initial competence in particular occupations and professions. In most cases, its work is arranged to serve two distinct student groups:

1. Those who wish a broader and more complete preparation which requires four years' attendance at the University and leads to a University degree.
2. Those who must sacrifice breadth of training in order to acquire more rapidly some specific occupational competence. Such training does not lead to a University degree. The chairman of the department in which such a student plans to do his work will help build a program fitted to the student's particular needs. Such a program may extend over a few weeks or over several years, the time depending upon the student's particular needs. Students wishing such particular vocational programs are strongly urged to confer with the chairman of the department concerned several weeks before regular registration time, so that proper care and time may be taken to devise the most satisfactory program.

SOUTHERN ILLINOIS
UNIVERSITY LIBRARY
PRE-PROFESSIONAL COURSES
PRE-MEDICAL AND PRE-DENTAL

Dr. Marie Hinrichs is the general adviser for all students who plan to enter medical school or dental school, or to train themselves for careers in any related field.

All such students should plan their curricula very carefully, in consultation with her. They will all need at least two years' work in chemistry, including some qualitative and some organic chemistry, and one year of biology (zoology). Since they are not expecting to receive a degree from Southern, they will not necessarily be held to all the requirements for the Bachelor's degree at this school; they must, on the other hand, keep constantly in mind the requirements for admission and the later required courses in the special schools which they wish to attend.

PRE-PHARMACY

Pre-pharmacy students should consult Dr. Hinrichs for suggestions for courses. Any student who plans to become a *medical technician* should also obtain advice from Dr. Hinrichs, since the requirements for this type of work vary greatly.

General laboratory technical assistants need at least two years of college work by way of preparatory training, and preference is given to university graduates.

PRE-LEGAL STUDY

American law schools have no specific pre-legal requirements. Some law schools require a two-year pre-legal background; some require three years of pre-law; and a few of the leading schools now require four years.

A number of universities permit law students, if they take their third year of pre-legal work at those universities, to receive both the B.A. and the LL.B. upon completion of their legal training.

In general, pre-law students should take as much work as possible in the following subjects: English, speech, economics, government, history (especially English and American), sociology, geography, psychology, philosophy, and logic.

If a foreign language is recommended or required by the law school which the student plans to attend, or if the student is uncertain as to his choice of law school, French or Latin is suggested.

Outside of the above-mentioned departments and courses, the pre-legal student is free to take the electives of his choice.

EXTENSION DIVISION

Southern Illinois Normal University maintains the Extension Division as a part of its services to the in-service teachers and adults generally in that part of Illinois served by the University. Since its beginning eighteen years ago, the Division has developed with the increasing demands for extension work throughout Southern Illinois. Only those courses that are given in residence are offered as extension work; and when satisfactorily completed, are given the same credit as residence courses. All instructors of extension courses are members of the regular University faculty, and the work offered meets all the requirements of the American Association of Teachers Colleges and the North Central Association of Colleges and Secondary Schools.

A maximum of one-fourth of the total number of credits required for the bachelor's degree may be earned through extension work, and up to eight quarter hours on the masters degree.

Extension courses are not regularly scheduled for less than twenty persons. The regular charge is \$2.00 a quarter hour. Specific inquiries should be addressed to Mr. Raymond H. Dey, Director of Extension.

COURSES OF INSTRUCTION

Course Numbers

The course numbering system is as follows:

100-199.....	for freshmen
200-299.....	for sophomores
300-399.....	for juniors and seniors
400-499.....	for seniors and graduates
500 and above.....	for graduates only.

Ordinarily students are not permitted to take courses above their classification; that is, a freshman should register for freshman courses, and only in rare instances for sophomore courses.

Unit of Credit

One quarter hour represents the work done by a student in a course pursued for a term of twelve weeks, one hour a week, and, in the case of the laboratory courses, the usual additional time. It is equivalent to two-thirds of a semester hour.

Honors Courses

A student with a 4.5 average at the end of the sophomore year may be granted permission to do a limited amount of specialized work in his chief field of interest. This may be a strictly departmental interest or it may cut across two or more departmental fields.

A qualified student who wishes to take special Honors courses should consult with the faculty member concerned and ask for the appointment of a Special Honors Committee to supervise his Honors work.

The amount of credit which a student may receive for Honors work and the type of comprehensive examination to be given will be determined by a Governing Honors Committee representing the various Divisions of the University.

AGRICULTURE

Professor Cassell (Chairman), Assistant Professor White

The Department of Agriculture offers approximately three-fourths of the work usually required for the degree Bachelor of Science in Agriculture. After taking the work offered here, many students transfer to the University of Illinois or some other institution for further work and the degree in agriculture.

The Department of Agriculture also offers programs suited to the individual needs of students not interested in working toward a University degree. These programs may consist of one course or of many courses during one or several terms. They should be worked out with the chairman of the department in ample time before registration, so that the needs of the student can be given careful consideration.

102. **Cereal Crops.** Production, harvesting, and marketing of the common cereal grain crops; factors leading toward high yields, high quality, and profit; crop improvement, control of enemies, and judging for market quality. Prerequisite, Botany 101. 5 hours.
103. **Forage Crops.** Production, harvesting, and utilizing of crops used chiefly for forage. Emphasis on grasses and legumes best adapted for hay and pasture. Pasture improvement. Field trips. Prerequisite, Botany 101. 4 hours.
105. **Introduction to Animal Husbandry.** A general survey of the livestock industry for agriculture majors who have not had livestock judging in high school. Origin and adaptation of the common breeds of livestock; principles of judging and their relation to production. 4 hours.
112. **Small Fruit Culture.** Site, variety, propagation, and production problems in planting, cultivation, enemy control, and pruning; harvesting and marketing. Emphasis on the brambles fruits, strawberries, grapes, and the miscellaneous small fruits. Field trips. 4 hours.
125. **Poultry Husbandry.** A general course in poultry production. Breeds, methods of improvement, incubation, housing and feeding, disease control, and marketing. Emphasis on chickens. Field trips. 4 hours.
131. **Dairy Husbandry.** A survey of the industry; breeds of dairy cattle; selection, feeding, methods of improving, and management of herd. Field trips. 4 hours.

160. **Vegetable Gardening.** Adaptation, soils and soil treatment, production, quality factors, enemy control, harvesting, preservation, and marketing of the vegetables commonly grown in home and commercial gardens. Field trips. 3 hours.
202. **Farm Soils—the Properties of.** This course is designed for rural and elementary-school teachers, extension and other students interested in agriculture; it answers the need for a practical application of soil fundamentals. The course covers formation of soils, soil-conservation, crop rotation, farm manure, farm drainage, soil acidity and liming; phosphorus, potassium, and nitrogen deficiencies; soil-testing, legumes and nitrogen-fixing bacteria, fertilizers and their application, home mixing of fertilizers and the practical use of fertilizers for individual crops. 4 hours.
204. **(Economics 204) Agricultural Economics.** A survey course in farm management, finances, prices, marketing, taxation, land use, and social relationships. 5 hours.
205. **Principles of Feeding.** Composition of common livestock feeds; principles of digestion and nutrition; balanced rations. Prerequisites, Agriculture 105 or equivalent, and Chemistry 102. 4 hours.
212. **Orcharding.** The course deals mainly with apples and peaches. Varieties, cultivation, spraying, pruning, harvesting, and marketing problems. Field trips. 5 hours.
265. **Swine Husbandry.** Breeds, feeding, management, marketing, and market classes of commercial swine; considerations affecting the purebred business. Field trips. Prerequisites, 105 or equivalent and 205. 4 hours.
275. **Agricultural Engineering.** Introduction to problems in power, machinery, land surveying, drafting, and farm buildings. 4 hours.
280. **Sheep Husbandry.** Breeds, principles of mutton and wool production, breeding, feeding, housing, and management of commercial and purebred sheep. Field trips. Prerequisites, 105 or equivalent and 205. 4 hours.
285. **Beef Production.** Breeds, breeding, feeding, care, management, marketing, and market classes and grades. Field trips. Prerequisites, 105 or equivalent and 205. 4 hours.
325. **Diseases of Fruits and Vegetables.** Life history, identification, and practical methods of control of important diseases of commercial fruits and vegetables. Prerequisites, Botany 101, Agriculture 160 and 212. 4 hours.
326. **Diseases of Cereal Crops.** Life history, identification and practical methods of control of important diseases of common cereal crops. Prerequisites, Botany 101, Agriculture 102. 4 hours.

- 330. Advanced Problems in Dairy Husbandry.** Systems of breeding, study of production records, and feeding problems. Prerequisites, Agriculture 102, 105, and 131, and Zoology 315. 4 hours.

ART

Assistant Professors Roach, Swan, Watkins.

Forty-eight hours are required for a major in Art. At least twenty-four hours must be in 300 courses. Minors must have a total of twenty-four hours, with not less than twelve in 300 courses.

- 100. Introduction to Materials.** Open to all students as recreation. Experience in several media, such as pottery and weaving. 3 hours.
- 105. Sketching.** Open to all students as recreation. Introduction to charcoal, pencil, pen and ink. 3 hours.
- 110, 111, 112. Beginning Design.** A study of the principles of design and the theory of color-harmony. 4 hours each.
- 120. Art Appreciation.** A survey course illustrated with lantern slides and colored prints, and treating painting, sculpture, and architecture. This course fills the requirement in Art for non-majors. 3 hours.
- 125. Lettering.** The study and practice of advertising and the graphic arts. 3 hours.
- 135, 136, 137. Pottery.** A year's sequence in ceramics. The study and practice of various techniques in the use of clay and glazes. 3 hours each.
- 150. Beginning Composition.** Charcoal and pen and ink. 4 hours.
- 151 (131). Intermediate Composition.** Water-color painting. 4 hours.
- 152. Advanced Composition.** Still-life painting in oil. 4 hours.
- 215, 216, 217. Advanced Design.** Block-printing, modeling, wood engraving, and other graphic materials. 4 hours each.
- 225. History of Architecture.** 4 hours.
- 226. History of Sculpture.** 4 hours.
- 227. History of Painting.** 4 hours.
- 245, 246, 247. Figure Drawing.** A study of the human figure for proportion and design. Action sketches. Charcoal, pen and ink, and watercolor. 4 hours each.
- 250, 251, 252. Composition in Various Media.** A year's work in composition, including landscapes and still life. 4 hours each.

- 275. Advanced Advertising.** Layouts for newspapers and magazines. Prerequisite, 125. 5 hours.
- 280. Descriptive Drawing.** Designed for biology, geography, and history students. Maps, relief drawings, museum materials, etc. 3 hours.
- 300. Art Education in the Public Schools.** Studies in art curricula and methods of presenting the principles of art to children at the various age-levels. 4 hours.
- 302, 303, 304. Advanced Ceramics.** Individual problems in pottery, figurines, and terra cotta pieces. Prerequisite, 135, 136, or 137. 3 hours each.
- 315. Interior Decoration.** Lectures in the history of period furniture and the theory of decoration, with practical work in planning color elevations and floor plans. 5 hours.
- 320, 321, 322. Advanced Composition.** Landscape, landscape and figure, and portrait. 4 hours each.
- 325, 326, 327. Composition Studio Course.** The student chooses his own project in a selected medium of painting. Prerequisite, consent of the instructor. 4 hours each.
- 331. Theories and Techniques of Renaissance Art.** It is recommended that this course be taken concurrently with History 315. 2 or 3 hours.
- 341, 342, 343. History of Art.** A year's sequence. 4 hours each.
- 345. Nineteenth and Twentieth Century French Painting and Sculpture.** The modern movement in art. It is recommended that this course be taken in conjunction with Philosophy 345. 2 or 3 hours.
- 346. Contemporary American Painting and Sculpture.** 3 hours.
- 350, 351, 352 (405). Advanced Studio.** The student chooses his own field and his own instructor, with whom he outlines his term project. The special instruction is given to the student as he works on his special project in a class engaged in similar activity. Fourth-year majors only. Hours to be arranged.
- 355. Applied Esthetics.** Applications of different modern theories to practice. Prerequisite, 345. 3 hours.
- 360, 361, 362 (410). Seminar in the History of Art.** Hours to be arranged.
- 371, 372, 373 (400). Portrait Painting.** Offered only on request. Prerequisite, any composition course in oil and 245. Fourth-year majors only. 5 hours each.
- 375. Advertising Illustration.** Layouts and finished advertising illustrations. Prerequisites, 245, 355. 5 hours.

- 385, 386, 387. **Weaving.** 3 hours each.
390. **Ceramic Sculpture.** Various methods in constructing clay sculptures, firing, and glazing. Prerequisite, 302. 3 hours.
391. **Stone Sculpture.** 3 hours.
392. **Architectural Modeling.** Suggested for art and industrial education majors. Offered on request. Hours to be arranged.
- 393, 394, 395. **Applied Materials.** Applications of materials to practical campus problems. 5 hours each.

BOTANY

Associate Professor Welch (Chairman),
Assistant Professor Marberry

For a major in botany, nine courses are required, including 101, 202, 203, 210, 320; for a minor, six courses, including 101, 202, 203.

101. **General Botany.** Study of the vegetative and reproductive organs of the higher seed plants, with emphasis on the general biological phases of the subject. Identification and recognition of common trees by leaf and stem characters, or bud and stem characters in season; their economic importance. Laboratory, recitation, and field studies. Fall, Winter, and Spring. 5 hours.
131. **Field Biology.** A course for those who are planning to teach in the rural or elementary schools. Methods for the identification of various types of plants and animals, such as trees, weeds, birds, and insects. The location of source material suitable for teaching nature study in the grades will be stressed. Laboratory, lecture, and field work. Fall and Spring. 5 hours.
202. **General Botany.** A brief study of representative plants of the great plant groups, the general classification of plants, and the evolution of the plant kingdom. Laboratory, lecture, and recitation. Prerequisite, 101. 5 hours.
203. **Systematic Botany.** A study of the principles of classification and use of manuals, and work in classifying and identifying seed plants and ferns of the local flora. Field work and lecture. Prerequisite, 101. Spring. 4 or 5 hours.
210. **Plant Anatomy.** A general course, introduced by a detailed study of cell division, and dealing with the origin, development and maturation of the structures of the vascular plants. Laboratory, discussion, and lecture. Prerequisites, 101, 202. 5 hours.

301. **The Algae.** A study of the structure, development, and relationships of the algae, evolution of the plant body, origin and evolution of sex in plants. Laboratory, lecture, recitation, and some field work. Prerequisites, 101, 202. 5 hours.
302. **The Bryophytes and Pteridophytes.** A study of the structure, development and relationships of the liverworts and mosses and the ferns and fern allies. The problems of the evolution of the sporophyte, alternation of generations, and heterospory. Laboratory, lecture, and recitation. Prerequisites, 101, 202. 5 hours.
303. **The Spermatophytes.** A study of the structure, development and relationships of the gymnosperms and angiosperms, the vascular anatomy of these plants, the development of flowers, gametophytes, embryology, and the development and structure of seeds. Laboratory, lecture, and recitation. Prerequisites, 101, 202, 203. 5 hours.
314. **Heredity and Development.** A study of the principles of heredity and variation in relation to plants and animals, including the human being; a review of the principles of eugenics as practiced in the United States; a study of the development of the relationship of animals and plants of the past. This course is usually given by extension. Lecture only. 4 hours.
315. **Genetics.** A study of heredity and variation as illustrated by the use of breeding tests with drosophila. This course is designed to meet the needs of students in Botany, Zoology, and Agriculture. Prerequisite, approval of the Chairman of the Department. Lecture, laboratory, and discussion. 5 hours.
320. **Elements of Plant Physiology.** A study of the functions of the plants and their relation to the various organs. Laboratory, lecture, and discussion. Prerequisites, Botany 101, 202. Desirable antecedents, Botany 210 and a course in Physics. 5 hours.
340. **Plant Ecology.** A general course, consisting of a study of the ecology of individual plants and plant communities. Lecture, recitation, field, and laboratory studies. Prerequisites, 101, 202, 203. 5 hours.
350. **Plants in Relation to Man.** A study of the basic relationships of plants to the life of man, and the history, geography, crop ecology, production, consumption, and uses of plants and plant products of economic importance. Lecture and recitation. Not to be taken by students who have had Botany or Zoology 351. 4 hours.
351. **Economic Biology.** Effects of plants and animals upon the economic welfare of Man. Lecture and recitation. Not to be taken by students who have had Botany or Zoology 350. 4 hours.

- 380. History of Biology.** A short history of the biological sciences from the early Greek philosophers to the present time. The various theories and philosophies, and their influence upon the rise of morphology, embryology, comparative anatomy, genetics, and ecology. Prerequisites, one year of Botany and Zoology. 4 hours.
- 406. Fungi.** A study of the structure and development of the fungi. Attention is given to pathological forms, as well as to the other fungi in Southern Illinois. Lecture, laboratory, and field work. Prerequisites, 101, 202, 203, 301. 5 hours.
- 421. Histological Technique.** A study of the latest methods of preparing histological material in Botany. The development of a certain skill and technique is required. Laboratory and discussion. Prerequisites, 101, 202, 210. 5 hours.
- 425. Advanced Plant Physiology I.** A study of the water relations, mineral nutrients, and colloidal phenomena in plants. Laboratory, lecture, discussion. Prerequisites, 101, 202, 210. Desirable antecedents, courses in Chemistry and Physics. 5 hours.
- 430. Advanced Plant Physiology II.** A study of photosynthesis, plant pigments, plant foods, enzymes, respiration, growth, and movement. Prerequisites, 101, 202, 210. Desirable antecedents, courses in Chemistry and Physics.
- 470. Methods in Biology.** A study of objectives and of different types of courses; the scientific method, the project method, the laboratory method; field work, measurement, and evaluation in teaching. Lecture, laboratory, discussion and field work. Prerequisite, approval of the Chairman of the Department. 5 hours.
- 510. Bio-Ecology.** A study of the composition and development of biotic communities and the relationships of the plants and animals to their environment. Prerequisites, Botany 101, 203; Zoology 335. 4 hours.
- 522. Advanced Histological Technique.** A study in the preparation and presentation of research materials. Prerequisite, approval of the Chairman of the Department. Credit on the basis of work completed.
- 590. Seminar.** Assignments involving research and individual problems. Prerequisite, approval of the Chairman of the Department.

BUSINESS

Professor Rehn; Assistant Professors Buboltz, Ogden, Keefe.

The Department of Business which was formerly the Department of Business and Commerce aims to meet effectively the needs

of young men and women preparing themselves, through vocational and professional training, for entry into the various fields of business. Four-year curricula are provided in the fields of Accounting, General Business, and Secretarial Work for those who intend to work toward the degree of Bachelor of Science. In addition, the department welcomes those students who are interested in only one or a few courses. Such students should confer with the Chairman of the Department in advance of the registration date, so that a program suited to their particular needs can be worked out for them.

The four-year curricula include in addition to the technical subjects, cultural studies designed to develop useful and intelligent members of society as well of successful businessmen and women.

ACCOUNTING

- 205, 206, 207. Elementary Accounting.** Study of principles and practices in handling simple transactions in books of original entry and books of accounts, trial balances, adjustments and financial statements. The application of accounting principles in various types of business organizations through problems and practice sets, in laboratory work. 3 hours each.
- 305, 306, 307. Advanced Accounting.** Study of accounting principles and procedures for the preparation of adequate financial statements in business organization, with emphasis on the corporate form. Special attention to depreciation, appraisals, investments, and intangibles. Adaptation of accounting records to installment sales, consignments, branch accounts. Study of fundamentals of compound interest tables in relation to accounting for sinking funds, annuities, leaseholds and bonds. The preparation and use of special statements: application of funds; statement of affairs and consolidated statements. Prerequisite, 207. 3 hours each.
- 338. Cost Accounting.** Study of departmental, job order, and process cost. Accumulation of material and labor costs; factory burden and its allocation; cost reports to executives—their preparation and use. Prerequisite, 207. 5 hours.
- 340. Auditing.** Study of procedures and practices of public accountants in verifying accounts and supplementary data; training in preparation and analysis of reports. The laboratory method is used. Prerequisite, 307. 3 hours.
- 355. Governmental Accounting.** Study of budgeting and operating fund accounts, with emphasis on accounting control as a means of improving administration of public enterprises. 3 hours.

- 445. 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 reports. 3 hours.

GENERAL BUSINESS

- 210, 211, 212. Business Law.** Study of normal business relations in their legal aspects, including the law of contracts, agency, sales, bailments, negotiable instruments, insurance, private property and business organizations. 4 hours each.
- 221. Business English.** Study and practice in writing typical kinds of business correspondence. Prerequisites, English 101, 102, 103. 4 hours.
- 320. Financial Management.** Study of varieties of financial structures in industry, defects in financial structures; analysis and control of working capital; influence of business conditions on financial operations and budget; sources of capital, promotion of corporation; regulation of securities by stock exchanges and Security and Exchange Commission; dividend policies; organization and operation of the credit department, including sources and analysis of credit information; collection methods. Interpreting corporation reports and evaluating securities through factual and critical analyses of financial statements. Types of securities are studied from the standpoint of the issuing organization and from that of the investor. 5 hours.
- 321. Production Management.** Study of plant location, design and construction; internal organization for operations; production control, stores control, routing materials, job analysis and time study; wage systems; subdivision of executive responsibilities and duties; methods of coordination and planning. Prerequisite, Economics 205. 5 hours.
- 325. Transportation.** Study of the evolution of American transportation systems and of the current problems of transportation facilities in connection with governmental control and regulation. Prerequisite, Economics 205. 3 hours.
- 326. Business Administration.** Study of the various types of business organizations and relationships that make up our modern economic world. 4 hours.
- 336. Marketing Management.** Marketing functions, diversity of marketing methods; price factors and price policies; policies as to service, distributions, and brands; market research, sales analysis and forecasting; ethics of buying and selling. Prerequisite, Economics 205. 5 hours.
- 337. Principles of Salesmanship.** Study of the history, scope, and importance of selling in modern business and the sales department; salesman's part in the selling process. 4 hours.

- 345. Insurance.** Study of the underlying principles, and the functions of insurance in the economic life of the individual and of business. 3 hours.
- 360. Retail Store Management.** Study of the history and the functions of the retailer and of the factors in the efficient operation of retail establishments. The latter part of the course deals with the actual problems of managing a retail store and with the control and measurement of efficiency. Prerequisite 336, 4 hours.
- 465. Personnel Management.** Study of the relation of the human element to production; the art of securing understanding and cooperation; employee organizations and outside activities; work of the personnel department; wage standards and working conditions. Prerequisites, Economics 205 and 310. 3 hours.
- 475. Budgeting and System.** Study of budgeting and systems as aids in coordinating and directing business operation. Prerequisites, Accounting 206 and General Business 320. 3 hours.
- 499. Problems in Business and Economics.** An application of economic theory to practical business problems. The course is open to majors in Business and Economics who have senior standing. 4 hours.

SECRETARIAL

- 102. Typewriting I.** A course for beginners. Control of the entire keyboard by the touch method is developed. A copying rate of 25-40 words a minute is acquired. The writing of a few simple business and personal papers is taught. All typing courses require three hours a week in classroom work and six hours a week of outside practice. 3 hours.
- 103. Typewriting II.** This course aims to develop speed and control in straight typing, letter writing, tabulating, and the production of other business and personal typewritten papers. A straight copying speed of 35-50 words a minute is attained. Prerequisite, 102 or its equivalent. 3 hours. (Credit is allowed for graduation only to Secretarial majors and minors.)
- 104. Typewriting III.** The purposes of this course are to develop increased typing power in straight copying work and in typing all common business and personal papers. A straight copying speed of 45-60 words a minute is attained. Attention is given to rough drafts, centering, tabulation, syllabication, and other practical typewriting work. Prerequisite, 103 or one year of typewriting in high school, or its equivalent. 3 hours. (Credit is allowed for graduation only to Secretarial majors and minors.)
- 105. Shorthand I.** A beginning course in Gregg Shorthand. Approximately one half of the theory of Gregg Shorthand is presented. Initial skill in reading and writing shorthand from dictation is developed. 3 hours. (Shorthand credit is allowed for graduation only to Secretarial majors or minors.)

- 106. Shorthand II.** All the principles of Gregg Shorthand are covered in this course and refinements and speed-building are begun. A shorthand reading rate equal to the student's print-reading rate is developed. Increased speed and legibility in writing shorthand from dictation are emphasized. Prerequisite, 105. 3 hours. (Credit is allowed for graduation only to Secretarial majors and minors.)
- 107. Shorthand III.** A complete review of all the principles (including phrasing) of Gregg Shorthand is given. Rapid meaningful reading is emphasized. "Taking" rates from 80 to 100 words a minute on new material are developed. Pre-transcription training is given. Prerequisite, 106 or one year of shorthand in high school, or its equivalent. 3 hours. (Credit is allowed for graduation only to Secretarial majors and minors.)
- 213. Typewriting IV.** This course aims to develop high vocational competency on the expert level. Straight copying speeds of 55-70 words a minute are attained. The most complex formats of business papers, including business letters, tabulations, statistical reports, manuscripts, legal documents, etc., are typewritten. The preparation of various types of master copies for duplicating, as well as other practical applications of typewriting, are given attention. Prerequisite, 104, or two years of typewriting in high school, or its equivalent. 3 hours.
- 216. Shorthand IV.** This course develops "taking" speeds of 90-120 words a minute. A complete review of all the principles of Gregg Shorthand is given. Prerequisite, 107 or its equivalent. 3 hours.
- 217. Shorthand V.** Dictation speeds of 100-130 words a minute are given. Improved penmanship and fluent reading and writing habits are developed. Transcription practice is provided. Prerequisite, 216, or two years of shorthand in high school or its equivalent. 3 hours.
- 218. Shorthand VI.** Sustained writing rates of 110-140 words a minute are developed. A complete review of the principles of Gregg Shorthand is given. Transcription practice is provided. Prerequisite, 217 or its equivalent. 3 hours.
- 314. Transcription.** This course integrates previously acquired abilities in shorthand, typewriting, and English into a functional whole. It develops skill (including speed, accuracy, and correctness of style) in the production of typewritten transcripts from shorthand notes. Prerequisites, 104 and 107 or their equivalents. 3 hours.
- 315. Typewriting Methods.** This course covers the latest methods in the teaching of typewriting. Prerequisite, ability to type at a rate of 45 net words per minute. 4 hours.
- 318. Shorthand Methods.** This course covers the latest methods in the teaching of Gregg Shorthand. Prerequisite, ability to take dictation at 80 words a minute. 4 hours.

- 341. Office Practice and Machines.** This course emphasizes the non-stenographic knowledge and skills commonly used in the modern business office. Vocational competency in using such business machines as key-driven calculators, crank-driven calculators, 10-key adding-listing machines, full-bank adding-listing machines, bookkeeping machines, Mimeographs, Dittos, and Standard Duplicating machines is developed. Theory and practice of business filing is also included. Prerequisite, 104 or its equivalent. 3 hours.
- 350. Secretarial Science.** This is a finishing course for secretaries. It deals with topics that will help the stenographer advance to the rank of private secretary, such as effective business personality and assuming responsibilities. Previously acquired stenographic skills are strengthened. Prerequisite, 213, and 217 or their equivalent. 3 hours.

CHEMISTRY

Professors Abbott, Neckers (Chairman), Scott, VanLente

- 101. General Chemistry.** A chemistry survey course for students wishing to satisfy the general education requirement in physical science. Lecture and laboratory. A study is made of the general composition of matter, then of valence and specific substances, such as water, oxygen, hydrogen, and other non-metals. Fall, Winter, and Spring. 4 hours.
- 102. General Chemistry.** Lecture and laboratory. A continuation of 101, completing a survey of the non-metals, followed by a study of the metals and of simple organic and biological chemistry. Prerequisite, 101. Winter and Spring. 4 hours.
- 109. Inorganic Chemistry.** A course for Home Economics students. A study of the composition of matter; the structure of the atom, valence, formulas and the writing of equations; ionization, acids, bases, and salts. The more common non-metals and amphoteric elements. Four lectures and one 3-hour laboratory period per week. Fall. 5 hours.
- 111. Inorganic Chemistry.** A course for chemistry majors and minors, pre-medical, pre-dental, pre-engineering and agriculture major students. Lecture and laboratory. An introduction to the science of chemistry through a study of atomic structure, valence, formulas, simple equations, the general properties of gases, liquids, and solids; gram molecular weights of gases; the preparation and properties of oxygen, hydrogen, and water. Fall. 5 hours.

- 112. Inorganic Chemistry.** Lecture and laboratory. A continuation of 111 with the study of solutions, electrolytes, acids, bases, and salts; normal solutions; the chemistry of halogens, sulfur, nitrogen, phosphorus, carbon, silicon, and boron. Prerequisite, 111. Winter. 5 hours.
- 113. Inorganic and Qualitative Chemistry.** Lecture and laboratory. A continuation of 112, including a study of the common metals, their metallurgy, properties, and compounds, as well as their qualitative detection in simple unknowns. Prerequisite, 112. Spring. 5 hours.
- 221 (201). Qualitative Analysis.** Theory and method of the analytical detection of cations and anions. Simple, water-soluble, acid-soluble salts and more complex mixtures, including alloys, analyzed in the laboratory. Prerequisites, Chemistry 113, Mathematics 113. Fall. 5 hours.
- 231 (252). Quantitative Analysis.** Gravimetric determinations of silica, chloride, iron, sulfate, copper, and limestone in the laboratory; accompanied by calculations and discussion of methods of determination. Prerequisites, Chemistry 221, Mathematics 113. Winter. 4 hours.
- 232 (253). Quantitative Analysis.** Volumetric analysis with stoichiometrical accompaniments, including calibration of apparatus, acid-base, permanganate, dichromate, and iodometric titrations, and a discussion of methods and their application to the various elements. Prerequisites, Chemistry 113, Mathematics 113. Spring. 4 hours.
- 249. Inorganic and Organic Chemistry.** A course for Home Economics students. A continuation of 109, including a study of the common metals and alloys (2 hours). Beginning with the sixth week a study of the chemistry of carbon and its compounds, including nomenclature and properties of the hydrocarbons and halogen derivatives; alcohols and ethers, aldehydes and ketones, and acids (3 hours). Four lectures and one 3-hour laboratory period per week. Prerequisite, 109. Winter. 5 hours.
- 259. Organic and Biological Chemistry.** A course for Home Economics students. A continuation of the study of organic chemistry begun in 249, including acid derivatives and substituted acids, optical isomerism, amines, amino acids, and proteins; esters and lipides, carbohydrates, heterocyclic and aromatic compounds; enzymes, digestion and fermentation; vitamins and nutrition; dyes. Four lectures and one 3-hour laboratory period per week. Prerequisite, 249. Spring. 5 hours.

- 305 (325). **Organic Chemistry.** A course for pre-medical and pre-dental students. A study of the chemistry of the common aliphatic compounds, with particular emphasis upon nomenclature and properties as related to biological processes. 2 hours of lecture and 4 hours of laboratory per week. Prerequisite, 10 hours of inorganic chemistry. Fall. 4 hours.
- 306 (326). **Organic Chemistry.** A course for pre-medical and pre-dental students. A continuation of 305, including a study of heterocyclic and aromatic compounds; enzymes, digestion, and fermentation; vitamins and hormones. 2 hours of lecture and 4 hours of laboratory per week. Prerequisite, 305. Winter. 4 hours.
- 341 (301). **Organic Chemistry.** A lecture and laboratory course for the study of the hydrocarbons, alcohols, ethers, ketones, and acids in the aliphatic field. Prerequisite, 113. Fall and Spring. 4 hours.
- 342 (302). **Organic Chemistry.** A continuation of 341 through amides, amines, complex acids, stereoisomerism, sugars, starches, and proteins: followed by an introduction to the chemistry of aromatic compounds. Prerequisite, 341. Winter. 4 hours.
- 343 (303). **Organic Chemistry.** A completion of the study of the chemistry of aromatic compounds begun in 342. Prerequisite, 342. Spring. 4 hours.
- 365 (425). **Physical Chemistry.** A course intended to meet the needs of pre-medical students. It includes a study of gases, liquids, solids, solutions, homogeneous and heterogeneous equilibria. Chemical kinetics, measurement of pH, and other phases of electrochemistry in both lecture and laboratory. Prerequisites, 232 and 306 or 342. 5 hours.
451. **Biological Chemistry.** A study of proteins, fats, carbohydrates, tissues, digestion, and metabolism, accompanied by appropriate laboratory preparations and analyses of blood, urine, gastric contents, etc. Prerequisite, 342. Fall. 4 hours.
452. **Biological Chemistry.** A continuation of the course of study outlined for the preceding course. Prerequisite, 451. Winter. 4 hours.
- 461 (401). **Physical Chemistry.** Lecture and laboratory. A study of gases, liquids, solids, solutions, homogeneous and heterogeneous equilibria. Prerequisites, Chemistry 232 and 343, Mathematics 252, Physics 206, 207, and 208. Fall. 4 hours.
- 462 (402). **Physical Chemistry.** Lecture and laboratory. A continuation of 461 to include a study of chemical kinetics, electrical conductance, electromotive force, and electrolytic equilibrium. Prerequisites, Chemistry 461, Physics 306. Winter. 4 hours.

- 463 (403). Physical Chemistry.** Lecture and laboratory. A continuation of 462, including chemical thermodynamics, the quantum theory, photochemistry, nuclear structure, atomic structure, and molecular structure. Prerequisite, 462. Spring. 4 hours.

ECONOMICS

Professors Rehn, Maverick; Associate Professors Miles, Pitkin.

A major in Economics consists of 36 quarter hours, a minor of 24 hours.

A major or minor is recommended to those wishing to enter government or business and to those wishing to teach Economics.

Students majoring in Economics are urged to take as much as possible in the social science departments, with at least one minor in a related field.

Advice as to courses recommended in Economics and related fields can be obtained from members of the departmental staff.

- 204. Agricultural Economics** (Agriculture 204). Intended for agriculture students only. 5 hours.
- 205. Introduction to Economics.** This course is designed to acquaint the student with the more general features of our present economic system. Included is a study of the various problems and principles of economics relating to industrial organization, finance, transportation, monopolies, proposed changes in the economic system, and allied subjects. 5 hours.
- 206. Economic Problems.** This course is a continuation of 205 with special reference to a thorough study of the principles of price determination and the distribution of wealth. Prerequisite, 204 or 205. 3 hours.
- 310. Labor Problems.** This course deals with the problems of labor, including wages, hours, insecurity, industrial conflict, and sub-standard workers. The last part of the course is concerned with the attempts to solve these problems, special emphasis being placed on the activities of government. Prerequisites, 205, 206. 4 hours.

- 415 (315.) Money and Banking.** A study is made of the principles of money and banking and the development of the present monetary and banking systems, including an analysis of the relationship of money and prices and of the recent monetary legislation in the United States. Included also is a study of the development of the banking procedure in the United States, covering the State banking system, the national banking system, the Federal Reserve System, and recent banking legislation. Prerequisites, 205 and 206. 4 hours.
- 317. Economic History of the United States.** In this course an economic analysis is made of the colonial development, the westward movement, industrialization, and the United States as a world power. The historical background of the economic problems of agriculture, transportation, banking, manufacture, and labor is stressed. Prerequisites, 205 and 206. 3 hours.
- 328. International Trade.** Present day problems of international economic relations are treated against a background of history, economic theory, and factual information about the world's population, its resources, and its industries. Emphasis is given to the position of the United States in the world economy. Prerequisites, 205 and 206. 3 hours.
- 340. Public Utilities.** Included in this course is a study of some of the principles of rate-making and valuation of public utilities. Studied, also, are sound policies of public regulation, control, or ownership of natural monopolies. Prerequisites, 205 and 206. 3 hours.
- 355. The Economics of Consumption.** The purpose of this course is to show the importance of the consumer as the center about which our economic system revolves; and to discuss the principles and philosophy underlying consumers' choices. Prerequisites, 205 and 206. 3 hours.
- 370. Business Cycles.** In this course an economic analysis is made of the major business fluctuations in the United States, including an examination of the price changes, inflation, deflation, and governmental action during the cycles. Prerequisites, 205, 206, 317. 3 hours.
- 430 (330). Public Finance and Taxation.** A survey is made of the principles affecting public expenditures, budgetary legislation, and the use of public credit. Included also is a study of the methods of raising of revenue, direct and indirect taxation, and the incidence of taxation. Prerequisites, 205 and 206. 3 hours.
- 450 (350). History of Economic Thought.** A study of the development of various economic theories and their influence upon the economic system. Prerequisite, 206. 3 hours.

451. **Economic Theory.** A study of the theories of leading economists of the day. 3 hours.
481. **Comparative Economic Systems.** A study of capitalism, socialism, communism, fascism, and cooperation. 3 hours.
500. **Economic Seminar.** This Seminar is organized for the purpose of considering such matters as economic research and writing, sources of material, the literature of economics, and economic criticism. Recommended for students who plan to do graduate work or specialize in the teaching of economics. Open only to seniors who are majoring in economics and to such juniors as receive the special permission of the Chairman of the Department. 3 or 4 hours.

EDUCATION

Professors Fair, Lawson, Merwin, Ragsdale, Thalman, Warren (Chairman); Associate Professors Bosley, Bracewell, Randolph; Assistant Professors Dillow, Earl Hall, Malone.

206. **General Psychology.** This course is fundamental, giving a description and a basis for the study of human behavior. It includes a brief statement regarding the development of psychology; it describes inner mental states such as motivation, feelings and emotions, and conflicts and frustrations; it acquaints the student with the ways in which he comes to know the world around him through perceptual experiences; it gives an understanding of attention and how it may be developed; it describes the learning process and its relationship to thinking and reasoning; it gives a description of native intelligence, and discusses the relationship of the individual to his social world; the final discussions deal with the physiological processes involved in brain activity. 4 hours.
230. **Rural Education.** The functions of the school in rural society; the growth and development of the child in his environment; curriculum evaluation and organization; materials of instruction; organization and management of the school; use of community resources. Prerequisite, 206. 4 hours.
235. **Primary Education.** The child mind, phenomena of growth, and the instinctive interests of childhood. Detailed consideration is given to materials and methods. Prerequisite, 206. 4 hours.
237. **Rural Education Seminar.** Designed to accompany rural student-teaching. Discussions and readings, in the main, grow out of problems encountered in actual student-teaching. Groups work on special problems of mutual interest. 4 hours.

305. **Advanced Educational Psychology.** The bodily organs and mechanisms upon which behavior depends; instinctive activities and capacities; the general laws of learning and their applications to teaching; individual differences. Prerequisite, 206. 4 hours.
306. **Child Development.** A course paralleling student teaching, treating physical, mental, social and educational growth of elementary school children. Attention is given to implications of recent child growth data for developmental experiences provided by school and home. 4 hours.
310. **Principles of Secondary Education.** A study of such topics as adolescence, the history and aims of secondary education, high school courses of study, high school equipment, and the problems of organization, management, and discipline peculiar to the high school. Prerequisite, 305. 4 hours.
311. **The Work of the Elementary Teacher.** Discussions are centered around the professional and community relationships of the teacher, an analysis of teaching materials, and present day trends in curriculum procedures. Prerequisite, 206. 4 hours.
312. **Safety Education.** Preparation for teaching safety education in public schools. Traffic safety is given major consideration, but other phases of safety education are also treated. 4 hours.
313. **Literature in the Kindergarten-Primary Grades.** A course for students majoring in Kindergarten-Primary Education, emphasizing principles of selection and presentation, rather than content, of literature for young children. Actual practice in selecting and presenting the literature to children in the training school is an essential part of the course work. Prerequisite, English 213. 3 hours.
- 314 (215) (210). **Elementary School Methods.** A brief study of the fundamental principles of education, and their application in the interpretation of current and proposed educational theory and practice. A detailed study of the processes of teaching and learning involved in elementary education. Prerequisite, 206. 4 hours.
315. **High School Methods.** A detailed study of the processes of learning and teaching involved in high school education. Prerequisite, 305. Not open to those who have had 314. 4 hours.
316. **Kindergarten-Primary Methods and Curriculum.** This course is designed to aid the teacher in the placement of subject matter according to age levels and environment and in integrating this material with the child's experiences. The students plan a unit of experience and help a school group to develop it. 4 hours (3 hours theory plus 2 hours laboratory).

- 323. School Law.** Offered jointly with the Department of Government. The constitutional and statutory provisions for education and the basic principles governing court decisions concerning the rights and status of teachers, boards, and school officers. Chief emphasis is placed upon Illinois school law. The teacher's contractual status and obligations, problems in school finance, and the legal requirements for certification, bonding, and organization are studied with specific relation to conditions and needs in Illinois. 4 hours.
- 330. History of Education.** The chief aim is to afford the teacher the sanity of judgment that comes only by seeing present-day education in perspective against its historical background. It traces the evolution of educational ideals and practice in response to social needs and to the contributions of philosophic and scientific thought. Prerequisite, 305. 4 hours.
- 331. American Public Education.** This course is a history of administrative progress and curriculum change and expansion, rather than a history of theories about education. Prerequisite, 305. 4 hours.
- 333. Field Work in Elementary Education.** Special problems in the teaching, supervision, or administration of elementary or rural schools. Admission by consent of instructor. 4 hours.
- 335. Problems in Rural Education.** Persistent problems of rural teachers in Southern Illinois. Plans of action are considered under the following headings: organization and management; curriculum adjustment to meet local conditions; selections and use of materials and equipment; intra-school, home, and community relationships; evaluating pupil progress; the teacher's own growth and work. Prerequisites, one course in Psychology and one other course in Education. 4 hours.
- 337. Reading in the Elementary School.** The principles of reading instruction and the factors that condition reading, together with grade placement of aims and materials; approved techniques of approach, diagnostic and remedial treatment. Problem cases in reading are studied. Methods developed by recent research and practice are brought to the class. Prerequisites, Education 206, 305, 314, and 315. 4 hours.
- 338. Problems of Remedial Reading in the High School.** This course deals with characteristic weaknesses in reading ability of high school students and suggests remedial methods. Prerequisite, senior classification. 2 hours.
- 338a. Laboratory Practice in Secondary School Remedial Reading.** This course is taught in conjunction with or following Education 338 and gives actual practice in applying diagnostic and remedial techniques. Prerequisites, senior classification and Education 338. 2 hours.

- 338b. Reading Case Studies and Clinical Practice.** Individual case diagnoses are made by the students, and direct corrective aids administered. Students learn to use reading tests, interest surveys, the telebinocular, metronoscope, ophthalmograph, audiometer, and other diagnostic and corrective devices. Prerequisite, 337 or 338. 2 hours.
- 338c. Diagnostic and Remedial Treatment for Retarded Readers.** This course provides training for elementary or high school teachers in service who must deal with seriously retarded readers. Practice is given in using approved diagnostic approaches, including reading tests and devices used in public school reading clinics. The students learn to use the telebinocular and other tests of vision, the audiometer, the ophthalmograph and the metronoscope. Remedial techniques and reading improvement programs are emphasized. 4 hours.
- 339. The School and the Community.** A consideration of the place of the school in the community, the implications of out-of-school agencies, and educational needs growing out of the environment. Surveys of educational resources in the community are made and effective use of these resources in developing a school curriculum is discussed. Open to juniors and to others by permission of instructor. 4 hours.
- 340. Child Psychology.** The original nature, the activities, the development, and the personality of normal and abnormal children through early adolescence. Critical evaluation of methods, theories, and interpretations. Prerequisite, 305. 4 hours.
- 343. Child Development.** Offered jointly with the Department of Physiology and Hygiene. Studies are made of child development, including pregnancy, prenatal care, post-natal care, and physical development from birth to school age, and of social, mental, and emotional development from infancy to adolescence. This course also includes the psychology of parent-child and teacher-child relationships. Prerequisite, 206. 2 hours. Physiology and Hygiene and 2 hours Education.
- 345. Adolescent Development.** Development of the individual through adolescence and correlation of adolescence with childhood. Adolescence in its physical, mental, emotional, social, moral, and religious aspects, its motivations, drives, and interests. Personality development, including behavior patterns; mental variations such as amnesia, disintegrations, psychopathy, dementia praecox, and some psychoses; hygiene of adolescence; juvenile delinquency; guidance. Prerequisite, 305. 4 hours.
- 351. The School Library and the School Program.** The integrated use of library materials in the school program; reading interests and habits of children and adolescents; principles of book-selection; reading guidance. 4 hours.

- 352, 353. School Library Organization and Management.** Two courses giving techniques in organizing the small school library, and in making it function. Equipment, records, library activities; acquisition, classification, and simplified cataloging of books. Prerequisite, 351. These courses must be taken in sequence: 352, Winter, 353, Spring. 4 hours each.
- 355. Philosophy of Education.** A consideration of the philosophical principles of education, and of the educational theories and agencies involved in the work of the schools. Prerequisite, 305. 4 hours.
- 361, 362. Rural and Elementary Curriculum.** Field laboratory courses, designed especially for in-service rural teachers. The classes meet as ordinary extension classes. The instructor however, visits the schools represented and makes their curriculum problems the basis of discussions in the classes. Teachers are expected to improve and enrich the curriculum of their schools as a result of these discussions. College subject matter specialists assist the classes in curriculum revision. Extensive readings. 4 hours each.
- 364 (450). Foundations of Elementary Education.** This course involves (1) an analysis of societal conditions and trends and the responsibility of the educational system; (2) a survey of child characteristics and needs, and their influence on the program of the school; (3) the desirable content of the school curriculum in the light of items 1 and 2. 4 hours.
- 365. Psychology of Elementary School Subjects.** Scientifically established principles of teaching elementary school subjects, with some attention to the diagnostic and remedial teaching of these subjects. Prerequisites, 206, 305, and 215 or 315. 4 hours.
- 367. Structure and Operation of American Public School System.** A functional overview of American education today; future possibilities as indicated by present trends and recognized needs. The scope of American education, the function of the school in the modern democratic state, conditions requisite to the development of adequate education in the typical mid-western community, and typical practices and characteristics of the modern school. 4 hours.
- 371. Foundations of Education.** An overview of the various areas of education. Problems in educational philosophy, educational sociology, psychology, administration and curriculum development are discussed with emphasis on recent trends. Diversified readings in each area. Prerequisites, two courses in education, and junior standing. 4 hours.
- 380. Kindergarten Education.** The mechanisms and functional changes in the development of the pre-school child. The two hours in the kindergarten are used in the study of a few children and in checking these observations with the literature in the field. Designed to accompany student teaching. Prerequisite, consent of instructor. 4 hours.

381. **Educational Sociology.** The methods, principles, and data of sociology as applied to the study and practice of education. The course centers about the socializing process, and those social institutions that are closely related to education in a democracy. 4 hours.
390. **Workshop in Rural Education.** Group and individual problems related to meeting child and community needs. The work includes class discussion of general problems, individual and group conferences, observation in a rural demonstration school, excursions, and participation in other activities with the guidance of specialists in these fields. Special consideration is given to ways of utilizing environmental resources in providing for child growth and development. Arrangements for enrollment should be made by May 1, with the Director of Rural Education. 6 or 8 hours, Summer.
401. **Problems in Public School Reading.** Requirements are attendance at all sessions of a reading conference, and preparation of a paper showing practical applications of theory to the student's own teaching situation. 2 hours, Summer.
402. **Planning the Small School Plant.** A consideration of latest authoritative recommendations concerning school plant design, with stress on planning the small school building to meet educational and social needs in rural communities. Sources of standards and evaluative criteria now available are reviewed, together with trends in school plant design in progressive communities. Each member of the class incorporates the results of his research into floor plans and specifications for a small school building. 2 hours.
420. **Educational Statistics.** Definitions and objectives of statistical procedures; methods of securing and arranging educational data; methods of tabulation; study of the median, mean, mode, and range; mean deviation; standard deviation; variability; coefficient of correlation; measures of reliability; graphic methods; problems of school publicity; application of statistics in educational work. The laboratory method is employed. Prerequisites, 206, 305, 310, and 421. 4 hours.
- 421 (320) (321). **Tests and Measurements.** Tests of intelligence, achievement and personality; their administering, scoring, and interpretation. Diagnosis, by psychological tests and techniques, of children's school difficulties. Methods and actual preparation of objective tests in various fields, both elementary and high school. Development of a critical attitude toward all analysis and test procedures is stressed. 4 hours.

- 424. School Administration.** This course is designed primarily for those who look forward to positions as supervisors, principals, or superintendents. Prerequisite, 305. 4 hours.
- 425. Diagnosis and Treatment of School Behavior Problems.** Etiological factors, differential diagnosis and methods of treatment of behavior problem children. The maladjusted child in relation to problems of individual differences, and the education of exceptional children. Methods of diagnosis employed in various clinics and schools; intra-community and extra-community facilities available in treatment programs. The attacking of behavior problems through liaison of school, home, and community is emphasized. The course includes in-service field work in the students' schools and communities. 4 hours.
- 426. Symposium on Procedures in Individual Guidance.** Weekly seminars on individual guidance techniques: administration, scoring and interpretation of intelligence, achievement and personality tests; procedures for studying behavior and maladjustment problems; home visitations; practice in special techniques in corrective reading and mathematics; practical, objective experiences in physical and mental health problems. Each student follows through with one child as a "subject" in the learning of these techniques. Prerequisites, Education, 206, 306, or 340 or 345; 421; 377 or 338 or other special courses in diagnostic reading. Sociology 101. Physiology and Hygiene 202. 4 hours.
- 428. Therapeutic Treatment of the Individual Student.** A continuation of 426. Problems characteristic of patients studied, include those of normal and exceptional children and adolescents in classroom and home adjustments. Students both study and use techniques for determining progress made in treatment. Prerequisites, Education 426 or 526. Note: A knowledge of genetics and zoology is also urged as preparation.
- 432. Public Opinion, Propaganda and Education.** The purpose of the course is to analyze, classify, and give means of combating propaganda. It is designed to show how public opinion is formed, using current materials from the different channels of communication. The differences between propaganda and indoctrination. 4 hours.
- 436 (336). Techniques in Individual Measurement.** Students in this course receive theory and practice in administering individual intelligence tests such as the Stanford Binet and Cornell-Coxe Performance Ability Scale. Teachers contemplating qualifying as clinicians, remedial teachers, or adjustment teachers in their school systems need this work. Each student administers the tests to pupils of varying ages and interprets the results. Prerequisites, 206; 306 or 340 or 345; 421. 4 hours.

- 437 (537). Problems in Reading.** Newer practices and trends in the teaching of reading; recent materials of instruction in reading, particularly the remedial materials; modern techniques and materials for prevention of reading difficulties; diagnosis and remediation of reading difficulties. Graduate students will be required to do extra work. 4 hours.
- 445 (350). Mental Hygiene.** Mental habits, attitudes, and ideals which prevent or promote healthy-mindedness. Practical procedures for administrators and teachers in dealing with the emotional and personality problems of school children. Prerequisite, 305. 4 hours.
- 446. Practicum in Psychology (Studentship).** Students are given clinical experiences at the State Hospital at Anna and required to participate in numerous staffings, clinics, and conferences, covering psychiatric, neurological, and pathological findings, and in staff medical meetings. Some opportunities for research are given under the direction of the hospital's psychologist. Up to 16 quarter hours of undergraduate credit is allowed for the practicum studentship. This study is offered only during the three summer months and arrangements must be made by May 1 with the Director of the Child Guidance Clinic, in order to be sure that all necessary requirements have been met.
- 456. 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. The course is for present and prospective principals or supervisors who wish to familiarize themselves with accepted principles of supervision in elementary and secondary schools. Prerequisites, three courses in education, and teaching experience. 4 hours.
- 460 (360). Curriculum.** Modern practices and procedures in curriculum development; principles of evaluation; practice in evaluation and construction of curriculum areas, with attention to the professional, social, economic and other major factors in curriculum planning. 4 hours.
- 500-510. Graduate Seminar in Education.** For majors and minors in Graduate Education. How to choose research topics and how to conduct research activities. Each student selects a subject for research and presents it, when completed, before the seminar group. 4 hours.
- 505. Seminar in Social Psychology.** Problems arising from the interplay of society and the individual, with particular attention to the problem of socialization of the individual, to revolution, conflict, mass movements, mental epidemics, public opinion, propaganda and the like. Each member of the class works out a specific problem in the light of psychological principles governing social action. 4 hours.

515. **Seminar in Advanced Educational Psychology.** A review of the various schools of psychology. Special emphasis on the learning process, mental fatigue, and personality adjustment. Psychological principles are studied in the light of educational procedures. 4 hours.
523. **The Theory and Legal Basis of American Education.** Present-day objectives and principles of education in the light of the social theory upon which they rest. Guided reading and library research, with individual and group conferences. Special reports on selected problems. 4 hours.
525. **School Finance and School Plant Facilities.** One phase of this course deals with the fiscal administration of the school, the other with the requirements of the school plant facilities. Accounting, budget making, budget administration, bonding, insurance, school building, school sites, costs, scoring, financing, equipment, maintenance, operation, and custodial service. 4 hours.
526. **Symposium on Techniques and Therapy in Individual Guidance.** The student is encouraged to use his initiative and to bring together ideas, concepts, and learning which have been acquired in previous courses. Various intelligence, personality and achievement tests are used. Interviews are held with a patient, his parents, and his teachers; and various opportunities for direct observation are provided. Each patient is given a physical examination by a physician. Students are trained to operate technical machines such as the telebinocular, the audiometer, the dermohmometer, and others. The student diagnostician works with one individual throughout the term, and the carrying out of technical research under the direction of members of the staff is included. Prerequisite, as for 426. 4 hours.
527. **Administrative Problems of Small Schools (A Field Laboratory Course).** A course for principals and superintendents, both elementary and secondary, focused upon specific problems presented by the students. Two days a week are devoted to visiting schools in the area, and the remaining days are spent in research and in the seminar. Problems of plant construction and maintenance, budgeting, evaluation, curriculum and classroom organization, office practice, and administration. Specialists are used as consultants where possible. Limited to administrators. 6 hours.
528. **Group Methods in Therapy.** Individual research upon the interactions between the group and the individual as related to treatment. Prerequisites, as for 428. 4 hours.

535. **Research in Problems of Administration.** An intensive four-week course for school principals, on theory and principles of administration for small schools, special administrative problems, school plant evaluation, curriculum revision, class scheduling, budgeting and school accounting, community relationships, supervision; pupil accounting, and evaluation of instructional services. 4 hours.
539. **Community Development through the School.** This course requires a comprehensive survey of community resources in a particular community. The material gathered is cataloged for use by the teachers of the community. This survey is to be used to help determine needed curriculum changes. 4 hours.
554. **Contrasting Philosophies of Education.** This course deals, both historically and contemporaneously, with the ideologies which have developed, or developed from, differing concepts of education. Comparative education receives some attention, but emphasis is given to the alternatives facing American educators in the immediate future. 4 hours.
555. **Philosophical Foundations of Education.** This course examines, in the primary sources, the basic concepts which have influenced and are influencing modern education. The students do research in tracing down and reporting the development of these concepts, and in addition are tested on their general reading. 4 hours.
556. **Seminar in Educational Supervision.** The major objectives of the course are to guide the student in research on present practice and experiment in supervision; to acquaint the student with the theory and principles of supervision; to familiarize him with the courses of authoritative opinion and theory in the field; and to relate the theory and principles of supervision to those of teaching and administration. 4 hours.
561. **Curriculum Adjustments.** This course offers a thorough study of curriculum trends in the United States and also a thorough study of the curriculum of some school, with recommendations for a program of changes to be made. 4 hours.
565. **Seminar in the Psychology of Elementary School Subjects.** Psychological principles of learning applied to the learning of materials used in the elementary school subjects. Each student chooses his area of interest in the elementary school field, and studies the literature pertaining to learning—and therefore to teaching—in that area. Individual conferences and library reports are held regularly. 4 hours.

ENGLISH

Professors Bowyer (Chairman), Schneider, Tenney; Associate Professors Barbour, Coleman, Faner, Harris, Kellogg, Neely; Assistant Professors Barber, Burns, Cox, Krappe, Wilson; Instructor Smith.

English majors should, in their junior year, complete English 302, 316 and 317, which in sequence constitute a required survey of English literature from the beginning to 1900. They should also take English 300, the methods course, in the spring of either the junior or senior year. An English major is 32 hours, all in courses numbered 300 and above. Rhetoric 300 is the only rhetoric that may be counted on a major. Three of these advanced courses should come from the following table and should be so selected that they fall both in different types and in different periods:

	Poetry	Prose	Drama
Elizabethan			360 366
17th and 18th Century	370	354	361
19th Century	320 321	326 355	
20th Century	305 330	308 335	306 363

An English major should choose at least two History courses from the following: 322, 323, 324, and at least one Philosophy course, preferably 345.

The following Speech courses may count toward an English major: 210 or 311 and 230 or 328, but they will not count on a minor. English majors should know that a requirement for graduate work in English is a reading knowledge of French or German.

English minors should have a total of 24 hours, 12 of which should be distributed among the courses numbered 300 and above. Only Rhetoric 300 will count toward an English minor. Especially recommended courses are 316, 317, 366, and a modern course.

0. Sub Freshman Rhetoric. No credit.

- 101. Freshman Rhetoric.** Informal essay. Freshman rhetoric must be taken every term until the requirement is fulfilled. 3 hours.
- 102. Freshman Rhetoric.** Use of the library as preparatory work for the research paper. 3 hours.
- 103. Freshman Rhetoric.** Emphasis on the writing of a research paper. 3 hours.

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104. **Modern Readings with Practice in Composition.** 3 hours.
205. **Masterpieces of English and American Poetry.** Emphasis on technique, type, and period. 3 hours.
209. **Masterpieces of World Literature.** An examination of masterpieces of various national literatures in various periods. 3 hours.
211. **Introductory Course in Fiction.** An examination of readable novels designed to acquaint the student with all aspects of artistic excellence in this form. 3 hours.
212. **Readings in Modern Literature.** Principal forms, ideas, and writers of contemporary America and England. Occasional excursions into the literature of other countries. Emphasis on the manner in which modern literature touches upon the many problems of twentieth century life. Especially recommended to majors in other fields than English. 3 hours.
213. **Children's Literature.** Fairy stories, fables, myths, romance cycles, and legends, with analysis of the literary qualities of the selections, instruction in methods of teaching literature in the grades, and some observation of such methods in the training school. Does not count on English major. 3 hours.
214. **Sophomore Rhetoric.** A review of English grammar and composition for rural and elementary schools. 3 hours.
217. **English Grammar for Teachers.** A review of elementary school grammar. 3 hours.
218. **Composition for Elementary School Teachers.** A study of the problems of composition in grade schools. 3 hours.
290. **Creative Writing.** Prerequisite, consent of the instructor. 3 hours.
291. **Business Writing.** Does not count on rhetoric requirement. 3 hours.
300. **Advanced Course in Principles of English Grammar and Composition.** A review of grammar and a study of the principles of grammar and composition. Required for majors. 3 hours.
302. **A Survey of English Literature from the Beginning to 1550.** Required of majors. 3 hours.
305. **American Poetry.** 4 hours.
306. **American Drama.** Rise of the theatre in America with a survey of the drama of the early period and intensive reading of contemporary plays. 4 hours.
308. **American Novel.** Emphasis on the works of Hawthorne, Melville, Crane, Lewis, and Cather. 4 hours.

314. **Ideas in Seventeenth Century Literature.** Religious, scientific, political, and aesthetic trends in seventeenth century literature. 4 hours.
315. **Eighteenth Century Literature.** Neo-classicism and the genesis of the Romantic movement in poetry. In prose selected masterpieces with emphasis on the satirical and critical essay. 4 hours.
- 315a. **English and French Literature in the Eighteenth Century.** This course is offered jointly with the French department. Students may elect it as English 315A with five hours' credit in English; as English 315A with three hours' credit in English; or as French 315A with three hours' credit in French.
316. **A Survey of English Literature from 1550 to 1750.** Required of majors. Credit for 316 is not given to students who already have credit for 201. 3 hours.
317. **A Survey of English Literature from 1750 to 1900.** Required of majors. Credit for 317 is not given to students who already have credit for 202. 3 hours.
318. **A Survey of American Literature.** 4 hours.
320. **English Romantic Poetry, 1780 to 1830.** A survey of Romantic poetry, with emphasis on the poetry of Wordsworth, Coleridge, Byron, Shelley, and Keats. 4 hours.
321. **Victorian Poetry, 1830 to 1880.** A survey of Victorian poetry, with intensive study of Tennyson, Browning, and Arnold. 4 hours.
324. **Elizabethan Poetry and Prose.** A survey of sixteenth century literature, exclusive of plays, with special attention to general Renaissance background in England and on the continent. 4 hours.
326. **Nineteenth Century Prose.** Representative writings of England's great prose age and, exclusive of fiction, their relationship to nineteenth century life and thought. 4 hours.
330. **Modern British Poetry.** The tendencies in British poetry from 1880 to the present. 4 hours.
335. **The Short Story.** A comparative study of the growth of the short story as a literary form. 4 hours.
354. **Development of the English Novel.** Representative novels from Defoe through Scott. 4 hours.
355. **Victorian Novel.** Backgrounds of the Victorian era and the work of the major novelists from Dickens to Hardy, including a survey of numerous less important figures. Ten novels are read and special short reports given on additional material. 4 hours.

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357. **The British Novel from 1895 to 1920.** The course emphasizes in particular Conrad, Gissing, Galsworthy, and Bennett. 4 hours.
360. **English Drama to 1642.** Representative plays showing the development of the drama from the Greek and Roman to 1642. 4 hours.
361. **Restoration and Eighteenth Century Drama.** Intensive reading of plays and special reports. 4 hours.
362. **The Development of Tragic Drama from Aeschylus to the Present Time.** Principal tragic dramas and the shifting conceptions of tragic form and matter in the following ages: Ancient Greek, Roman, Renaissance, French Classical, Restoration, eighteenth and early nineteenth centuries, and the contemporary. 4 hours.
363. **Modern British Drama.** A survey of the drama since 1830 with intensive study of the most important plays after Ibsen. 4 hours.
366. **Shakespeare.** A selection of plays for intensive study and for outside reading. 4 hours.
368. **English Social Literature of the Nineteenth Century.** English prose and poetry which touches the principal social, political, economic, and religious problems of the century, designed to furnish a background for understanding twentieth century questions of a similar nature. 4 hours.
369. **Criticism of Literature.** The study, appreciation, and criticism of literature and literary techniques. 4 hours.
370. **Milton.** The poetry of Milton, with emphasis on the forms, influences, and ethical values. 4 hours.
377. **Comparative Literature, Twentieth Century.** Development of naturalism in the novel. Twelve novels are read, six European and six American. 4 hours.
378. **Comparative Literature to the Renaissance.** The lectures will provide a background for the appreciation of early European literature with special emphasis on the classics of Greece and Rome. The readings will be selected from translations of the works of Homer, Aeschylus, Sophocles, Euripides, Aristophanes, Plato, Vergil, Terence, Dante, and others. 4 hours.
379. **Comparative Literature from the Time of the Renaissance** Recent literature other than English and American in translations of the works of Rabelais, Cervantes, Voltaire, Rousseau, Goethe, Heine, Turgenev, Dostoevsky, and others. 4 hours.
385. **A Study of Recent Trends in the Teaching of Literature in the Junior and Senior High Schools.**

390, 392. Advanced Composition. Credit will not be given for both 300 and 390. 3 hours.

500. Seminar.

508. The Rise of Realism in American Fiction. Extensive reading in American literature after the Civil War, with emphasis on local color, early realists, major realistic novelists, and early naturalists. 3 or 4 hours.

522. Robert Browning. Extensive reading in Browning's poetry, and study of his life and times, of the scholarship relating to him, and of the critical opinions that have been passed upon him. 3 or 4 hours.

SPEECH

To obtain a minor in Speech, a student must complete the following courses: 210 (or 311), 220, 330, 315, 328, and 350 (if the student expects to teach), plus additional hours, totaling 24.

210. Fundamentals of Speech. 3 hours.

220. Public Discussion and Debate. Largely a laboratory course. Prerequisite, Speech 210 or equivalent. Fall. 4 hours.

224. Inter-Collegiate Debate. 2 hours per year; 8 hours maximum.

250. Acting. Prerequisite, 210 and 230. 3 hours.

311. Fundamentals of Speech. Not open to students who have taken 210. 3 hours.

315. Radio Speech. Prerequisite, 210 or equivalent. 3 hours.

328. Play Production. 4 hours.

330 (230). Oral Interpretation. Prerequisite, 210 or equivalent. 3 hours.

336. Creative Dramatics for Children. Speech 230 or Speech 328 is recommended as a prerequisite. 3 hours.

341. Advanced Speech. Prerequisite, Speech 210 or equivalent. 4 hours.

350. Teachers' Problems. 3 hours.

FOREIGN LANGUAGES

Professor Peacock (Chairman); Associate Professors Davis, McNicoll; Assistant Professors Barry, Neufeld, Smith.

For a major in a language, a student in the College of Education must complete 36 hours; a student in the College of Liberal Arts and Sciences, 42 hours, exclusive of 101, 102, and 103. At least one English and one History course numbered 300 or above should supplement the language major.

A minor consists of 24 hours of the language exclusive of 101, 102, and 103.

101 and 102 will not be counted as electives toward graduation for any students unless 103 is also completed.

FRENCH

101, 102, 103. Elementary Course. Grammar; pronunciation; composition; conversation; reading of modern prose. 101 is open to students who have had no previous work in French. Prerequisite for 102 is 101 or one year of high school French. 3 hours each.

151, 152, 153. Intermediate Composition and Reading. Grammar; composition; oral practice; rapid reading of modern authors. Prerequisite, 103 or two years of high school French. 3 hours each.

201, 202, 203. Survey of French Literature. A study of the important currents of French literature from the beginning to the present time. Outside reading reports. One hour each week will be devoted to French composition. Prerequisite 153. 4 hours each.

220. French Conversation. Conversation based largely on topics of current interest chosen from French newspapers and reviews. Prerequisite, 151 or three years of high school French. 2 hours.

301. The French Novel of the Eighteenth and Nineteenth Centuries. Lectures, collateral reading and reports. Prerequisite, 203. 3 hours.

302. Seventeenth and Eighteenth Century Drama. Intensive study of Corneille, Racine, Molière, Lesage, Voltaire, Marivaux, and Beaumarchais. Outside reading of minor dramatists. Prerequisite, 203. 3 hours.

303. French Lyric Poetry. French versification; Romantic, Parnassian, and Symbolist schools; contemporary poets. Weekly reports on outside reading. Prerequisite, 203. 3 hours.

304. **French Contemporary Novel.** Study of the novel from 1889 to the present, with emphasis on the symbolistic, regional, psychological, and sociological novels. Detailed study of Proust or Gide. Prerequisite, 203. 3 hours.
305. **French Contemporary Drama.** Study of French Drama from Dumas *fils* to the present, with emphasis on the *pièce à thèse*, the *théâtre libre*, symbolistic drama, and the drama of modern social problems. Prerequisite, 203. 3 hours.
- 315a. **French and English Literature in the Eighteenth Century.** Offered jointly with the English department. See English 315a. 5 hours.
340. **French Literature of the Sixteenth Century.** Rabelais, Montaigne, the memoir writers, Marot, the Pléiade, and d'Aubigny. Prerequisite, 203. 2 hours.
351. **Advanced Composition.** Rapid grammar review; study of idiomatic construction; weekly themes. Course conducted in French. Prerequisite, 203. 4 hours.
352. **French Conversation and Phonetics.** A thorough study of the phonetic alphabet and of the formation of French sounds. Course conducted in French. Prerequisite, 203. 5 hours.
353. **Advanced Composition and Conversation.** Oral and written composition of a practical nature for advanced students. Intensive study of idiomatic expression and current usage. Prerequisites, 351 and 352. 4 hours.
500. **Seminar in Contemporary French Literature.** Intensive study of the "roman fleuve" as exemplified in the works of Duhamel, Martin du Gard, and Romain Rolland. 2 hours.
501. **Seminar on a Selected French Author.** Intensive study of one author—his life, his work, and his place in the literary and cultural developments of civilization. 2 hours.
510. **French Literature from 1850-1900.** 4 hours.
520. **Graduate Composition and Diction.** Composition based on study of contemporary French authors. Individual work in pronunciation and diction to be determined by entrance tests. 4 hours.

GERMAN

- 101, 102, 103. **Elementary Course.** Pronunciation; grammar; conversation; composition; class and collateral reading. 101 is open to students who have had no previous work in German; 102 is open to those who have had 101 or one year of high school German. 3 hours each.

- 151, 152, 153. Intermediate Course.** Grammar review and expansion; reading in modern prose; conversation and composition. Two periods a week are devoted to literature and one to grammar and composition. 3 hours each.
- 201, 202. Introduction to German Classical Literature.** Lessing, Goethe, Schiller. Reading and discussion of representative works. One hour a week is devoted to German composition. Courses conducted in German if preferred. 4 hours each.
- 203. German Drama in the Nineteenth Century.** Kleist, Grillparzer, Hebbel. Reading and discussion of representative works. One hour is devoted to German composition. Course conducted in German. 4 hours.
- 251. Scientific German.** Study of vocabulary and sentence constructions as found in the German readings on popular sciences. Prerequisite, 152 or equivalent. 4 hours.
- 301, 302. Survey of German Literature to 1800.** The historical development of German literature. Lectures; reading of representative authors; discussion; themes. Courses conducted in German. 4 hours each.
- 303. German "Novelle" in the Nineteenth Century.** A study of representative works from 1826 to 1890, with emphasis on the literary movements of that time. Prerequisite. 202. 4 hours.
- 304. Aufsätze und Sprechübungen.** Advanced composition and conversation. Required for prospective teachers of German. 5 hours.

LATIN

- 101, 102, 103. Elementary Course.** Grammar, composition, reading of simple prose. English derivatives and cognates are stressed. 101 is open to students who have had no previous work in Latin. Prerequisite for 102 is 101 or one year of high school Latin. 3 hours each.
- 151. Advanced Composition.** This is useful for teachers and is a convenient review for students. Prerequisite, 103 or two years of high school Latin. 4 hours.
- 152. Cicero's Essays.** De Senectute and part of De Amicitia. Prerequisite as for 151. 4 hours.
- 153. Livy.** Books I and XXI. Prerequisite as for 151. 4 hours.
- 201. Phormio of Terence.** Prerequisite, 153 or equivalent. 4 hours.
- 202. Horace's Odes and Epodes.** Prerequisite, 153 or equivalent. 4 hours.
- 203. Letters of Pliny.** Prerequisite, 153 or equivalent. 4 hours.

301. **Cicero's Letters.** Emphasis is laid on the history of the times and the personality of Cicero. Prerequisite, 203 or equivalent. 4 hours.
302. **Vergil's Eclogues and Georgics.** The hexameter is carefully studied, and Vergil's spirit and contribution to Rome are considered. Prerequisite as for 301. 4 hours.
303. **Tacitus.** The *Agricola* and *Germania*. Prerequisite as for 301. 4 hours.
- 340A, 340B. **Private Life of the Romans.** Two courses, comprising a personal study of the average family; housing, food, and clothing; marriage, education, and amusements, slaves and freedom; means of livelihood; death and burial. Open to all students, whether they have had Latin or not. Either course may be taken separately. 340A, 3 hours. 340B, 2 hours.

The following courses are given in the summer, the selection being rotated to suit the needs of the students.

125. **Selections from Historians.** 4 hours.
126. **Ovid's Metamorphoses.** 4 hours.
127. **Orations of Cicero.** Supplementary to high school work. 4 hours.
335. **Vergil's Aeneid, Books VII-XII.** 4 hours.
341. **The Teaching of Latin.** A discussion and training course for teachers. 4 hours.
342. **Advanced Composition.** A careful study based on classic prose-writers. 4 hours.

PORTUGUESE

100. **Introductory Course.** Especially for Spanish majors and minors. Open to students who have completed Spanish 153 and to others by consent of instructor. 5 hours.

SPANISH

- 101, 102, 103. **Elementary Course.** Grammar, pronunciation, composition, conversation, reading of simple prose. 101 is open to students who have had no previous work in Spanish. Prerequisite for 102 is 101 or one year of high school Spanish. 3 hours each.
- 151, 152, 153. **Intermediate Composition and Reading.** Grammar review, composition, oral practice, rapid reading of modern authors. Prerequisite, 103 or two years of high school Spanish. 3 hours each.

- 201, 202, 203. Survey of Spanish Literature.** The survey continues down to the present day. Lectures, and reading of representative authors. Composition one day a week. Prerequisite, 153. 4 hours each.
- 220. Spanish Conversation.** Elementary course with records for comparison and imitation. Prerequisite, 151 or equivalent. 2 hours.
- 301. Spanish Novel of the 19th and 20th Centuries.** Study of representative novels and authors from the Regionalists to the present time. Prerequisite, 203. 3 hours.
- 302. Spanish Drama of the 18th and 19th Centuries.** Reading of selected plays of the chief dramatists from Moratin to the generation of 1898. Prerequisite, 203. 3 hours.
- 315. Arte y Cultura.** Conducted in Spanish. Informal class discussions of reports by students on present day topics relating to the life and interests of Latin America and Spain, with extensive use of films. Prerequisites, 220 or consent of instructor. 3 hours.
- 333. Spanish American Literature.** Survey of Spanish literature in America from the conquest to modern times. Required of Spanish majors. Prerequisite, 203 or consent of instructor. 3 hours.
- 340. The Golden Age. (The Dramatists).** Extensive individual reading of the plays of Lope de Vega, Calderon, Tirso, Ruiz de Alarcon and others, with class reports and intensive study of some one dramatist. Prerequisite, 203 or consent of instructor. 3 hours.
- 345. Cervantes.** Study of the life of the author and the Quijote with reference to his style and source of materials. Comparative reports on the *novelas* and other works. Prerequisite, 203 or consent of instructor. 4 hours.
- 351. Advanced Composition.** Daily themes based on Spanish models, with free composition once a week. Class discussions. Prerequisite, 203. 3 hours.
- 415. Spanish Phonetics.** Analysis of the sounds of Spanish, their manner of production, and special drill in connected passages of prose and poetry. 3 hours.
- 460. Latin American Poetry.** Study of the modern trends in the poetry of Latin America as a whole, with emphasis on its international aspect and relation to other literary forms. Prerequisite, 333 or consent of instructor. 3 hours.

500. **Seminar in Latin American Literature.** Intensive study of the modern novel in Latin America as an expression of social and cultural movements. Outside readings and class discussions. 2 hours.
501. **Seminar on a Selected Spanish Author.** Intensive study of one author, his life, his works and his relationships to the literary and social currents of his time. 2 hours.
520. **Composicion y Gramatica.** Free composition, based upon analysis of the style of contemporary Spanish authors, with special reference to grammatical constructions. Special projects in grammar may be undertaken. 4 hours.

ROMANCE PHILOLOGY

410. **Romance Philology.** A survey of the phonology, morphology, and syntax changes in Romance languages in general, with special attention to developments in French and Spanish for majors in these fields. 4 hours.

RUSSIAN

- 101, 102, 103. **Elementary Course.** Pronunciation; outlines of declensions and conjugations; reading of elementary texts; selection of basic roots; analysis of prefixation and suffixation; oral practice; composition. 3 hours each.
- 151, 152, 153. **Intermediate Course.** Reading of selections from Russian literature; advanced conversation and composition. 3 hours each.
- 203, 210, 212. **Survey of Modern Russian Literature.** Reading of works of Gogol, Lermontov, Tolstoy, Dostoyevsky, Chekhov, Pushkin. 4 hours each.

GEOGRAPHY AND GEOLOGY

Professor Barton (Chairman); Associate Professor Shank;
Assistant Professor Krause.

Persons who expect to teach in the elementary school are urged to take at least a minor in geography, which must include Geography 100 and 101.

Those expecting to teach commercial or economic geography in high school with a medium preparation must have twelve quarter hours of college geography. Students should meet this requirement by taking Geography 100, 210, 304, and 324.

Those expecting to teach physical geography in high school with a medium preparation must have eighteen quarter hours in college physical geography. Students should meet this requirement by tak-

ing Geography 101, 310, 300, and any other physical geography subject (see list below).

Classification of geography courses:

Physical: 101, 201, 250, 300, 301, 302, 303, 306, 310.

Social: 100, 210, 304, 317, 319, 324, 328, 330, 345.

State and Continental: 313, 314, 315, 316, 318, 320, 321.

Educational: 340, 341, 342.

Geography 100, 101, and 210 are required of all geography majors and minors who have enrolled since 1939.

100. Global Geography. A survey of the physical environment and its application to the human world; the resulting geo-cultural and geo-political problems. A field trip is required. 5 hours.

101 (205). Physical Geography. For students who plan to teach nature study, natural science, social science, general science, or geography. Units on landforms, soil, waterbodies, minerals, native plant life, native animal life, direction and distance, and the universe. These physical phenomena are interpreted as to their influence upon each other and upon the four geographical cultural factors. A great variety of visual education methods are illustrated in this class. One major field trip is required. 5 hours.

201. Soil Geology. A study of the genesis of soils. It includes a study of rocks and rock-forming minerals, the basic principles of rock weathering and erosion, the effects of climate and parent material on soil formation and the origin and functions of soil colloids. Designed for Agriculture majors and others especially interested in soil-forming processes. 4 hours.

210. Economic Geography. A study is made of the world distribution of types of activity and industries, such as hunting, fishing, lumbering, grazing, farming, mining, manufacturing, transportation, and trade. 4 hours.

250. Meteorology for Pilots. A course in which weather is studied in detail as to its origin, its changes, the factors and laws influencing it, and its influence upon aviation. Practical use is made of modern weather maps, weather symbols, and the code system. Data and instruments of a United States Airway Weather Station are studied to help make the course practical. 2 hours.

300. Physical Geology. The materials composing the earth and the agencies and processes involved in the present physical condition of the earth's surface. Practical problems that man must face in the use of the earth, such as cultivation, construction, and drainage, are stressed. Laboratory and field work are required. 4 hours.

301. Structural Geology. This course gives a world-wide treatment of rock deformation and its results. Prerequisite, 300. 4 hours.

- 302. Historical Geology.** This course presents in chronological order the procession of physical and biotic changes through which the earth has passed. It includes not only the physical history of the earth, but the evolution of life forms as evidenced by fossil records. Prerequisite, 300 or permission of the instructor. An elementary course in Zoology or Botany is also recommended for preparation. 5 hours.
- 303. Economic Geology.** A study of the world's mineral resources, their geologic origins, their world distribution, methods of production and processing, and economic problems resulting from their utilization. Prerequisite, 300. 4 hours.
- 304. Advanced Economic Geography (Economics 304).** This course is designed to supplement 210 in presenting the geographic influences underlying commerce and industry. Discussion of the different industrial regions of the world, with their differing problems of access to raw materials and markets. Prerequisites, Geography 210 and Economics 205 and 206. 4 hours.
- 306. Map and Aerial Photo Reading.** Students are taught the source and use of military and civilian maps, charts, graphs, and aerial photographs. Laboratory and field work are required. 3 or 4 hours.
- 310. Meteorology.** A course in which weather conditions are studied in detail as to their origin, their changes, the factors and laws influencing them, and their influence upon man. Emphasis is placed equally upon the theoretical side and upon subject-matter which will be practical to aviators, farmers, and urban dwellers. 4 hours.
- 313. Geography of Illinois.** An intensive regional study of Illinois and of contiguous areas outside the State where geography is closely related to that of Illinois. Prerequisites, 100 and 101. Open to geography majors and minors and to others having special permission. 3 hours.
- 314. Geography of North America.** A systematic regional treatment of America north of Mexico. Special emphasis is given to a study of man's adjustment to his natural environment and to economic, political, and cultural problems. 4 hours.
- 315. Geography of Europe.** Europe is studied intensively by regions. The description, interpretation, utilization, and interdependence of regions are stressed. Present and possible future significance of the continent receives attention. 4 hours.
- 316. Geography of South America.** A study is made of the regions and resources of South America as they relate to national and international problems.

317. **Economic History of the United States.** (Economics 317). An Economic analysis of our colonial development, of the westward movement, of industrialization, and of the emergence of the United States as a world power. The historical background of the economic problems of agriculture, transportation, banking, manufacturing, and labor is stressed. Prerequisites, Economics 205 and 206. 3 hours.
318. **Geography of Asia.** Life conditions and economic development as influenced by location, climate, relief, size, shape, and other natural conditions. 4 hours.
319. **Historical Geography of the United States.** A study of geographic influences upon the discovery, exploration, settlement, and development of the United States. Emphasis is placed upon the physical setting, the western migrations, and upon the adjustments and maladjustments of American society to earth conditions and resources. 4 hours.
320. **Geography of Africa.** Life conditions as influenced by location, relief, climate, soils, and minerals. The vast mineral resources and the rapid development of South Africa. The ascendancy of European influence in Africa. 4 hours.
321. **Australia.** A study of the only continent which lies wholly in the Southern Hemisphere, its unusual climatic and economic conditions, its importance in the British Empire, and its vital place in the economic and political life of the Pacific. 2 hours.
- 324 (325). **Restoration and Conservation of Natural Resources.** (Economics or Sociology 324). This course includes a survey of the major resources of the United States, the history of their exploration, and their influence on the development of the nation, and the problems of their conservation and restoration, especially water, mineral, forest, grass, soil and wild-life resources. State and national Resources Planning Boards reports will be used. 4 hours.
328. **International Trade.** (Economics 328). Present-day problems of international economic relations are treated against a background of history, economic theory, and factual information about the world's population, its resources, and its industries. Emphasis is given to the position of the United States in world economy. Prerequisites, Economics 205 and 206. 3 hours.
340. **Geography for Kindergarten and Primary Teachers.** The purpose of this course is to provide the teacher with a rich supply of material to enliven the geography and science work on the kindergarten and primary levels. It also gives the student practice in putting into simple language descriptions and interpretations of the physical and cultural phenomena, in such a way as to stimulate interest in nature and man's activities. Prerequisites, 100 and 101. 3 hours.

341. **Intermediate Grade Geography.** This course is similar to 340 except that it is adapted to those teaching or expecting to teach in the intermediate grades. Not to be taken by students who have had 340. Prerequisites, 100 and 101. 3 hours.
342. **Junior and Senior High School Geography.** This course is similar to 340 and 341 except that it is adapted to those teaching or expecting to teach in junior or senior high school. Not to be taken by students who have had 340 or 341. Prerequisites, 100, 101, and 210. 3 hours.
345. **Political Geography of World Problems.** An integrated study of the political and geographical structure of the world and of its relation to the political affairs of the United States. Emphasis is placed on interdependence and on the relations of natural resources and geographic factors to present political policies. 4 hours.
401. **The Development and Role of Geography.** The purpose of this course is to acquaint the student with the history and philosophy of geography as illustrated by various types of literature. Emphasis is placed on the role of geography in the social studies. 3 or 4 hours.
403. **Special Methods and Problems in Geography.** A research methods course offered primarily for teachers of geography, earth science, and allied subjects. Special problems are studied from the two standpoints of pure research and teaching method. 3 or 4 hours.
406. **Cartography and Graphics.** Critical supervision in the construction and reproduction of maps and charts used in reports, theses, and various publications. 3 or 4 hours.
407. **Geography of World Trade.** Analysis of current trends and problems, especially with regard to the foreign trade of the United States and to the degree of self-sufficiency among nations. 3 or 4 hours.
408. **Geography of Airways and Air Traffic.** Geographic description and interpretation of the airlines of the world, their present and potential traffic, and their economic, political, and social significance. 3 or 4 hours.
424. **Methods and Problems in Conservation.** A research methods course offered primarily for teachers of conservation or allied subjects. Special problems are selected which have not been covered in the subject matter courses or in education courses. 3 or 4 hours.
- 500, 510. **Seminar.** An introduction to the theory and technique of research in geography. 2 to 4 hours.

- 515. Field Work Techniques.** This course gives the student field experience in observing, recording, mapping, photographing, and studying geography out of doors. Various field techniques and instruments will be employed in working out geographic projects. 3 or 4 hours.

GOVERNMENT

Professors Alexander, Swartz (Chairman); Associate Professor Klingberg.

An undergraduate major for a student in the College of Education consists of thirty-six quarter hours, for one in the College of Liberal Arts and Sciences forty-two quarter hours; a minor of twenty-four quarter hours in both Colleges.

A major or minor is recommended for those wishing to teach civics or government courses, and for those wishing to qualify for the study of law.

Senior-college students are permitted to take advanced undergraduate courses in government without any other prerequisites.

Students majoring in government are urged to take as much work as possible in other social science departments, with at least one minor in a related field.

Students planning to take graduate work in government beyond the M.A. should acquire a reading knowledge of both French and German.

Advice as to courses recommended in government and related fields can be obtained from members of the departmental staff.

- 200. American Governmental Problems I.** This course brings up for consideration and discussion those governmental problems which are of most vital and practical concern to the average citizen. 5 hours.
- 201. American Governmental Problems II.** (Economics 201). A continuation of Government 200, with emphasis upon governmental functions and services. 3 hours.
- 300. American National Government.** A survey of the structure, functions, and principles of the government of the United States. The Federal Constitution; the President and his powers; congressional organization and procedure; the federal judiciary. 4 hours.
- 315. Administration of Justice.** A study of the organization and administration of the American judicial system, with emphasis upon means of improvement. 3 hours.
- 330. Illinois State Government.** The historical development of the governmental system of Illinois; past and present constitutions, executive, legislative, judicial organization and procedure; local government. 2 hours.

333. **Problems of Southern Illinois.** A study of the economic, social, agricultural, health, and political problems of the region. 3 hours.
360. **Public Administration.** This course deals with the increasingly important problems of national, state, and local administration of government; machinery of administration; civil service; personnel management; administrative law. 4 hours.
366. **State and Local Government.** A study of the leading problems in government and administration in American states and localities. Problems pertaining to the executive, legislative, and judicial; taxation, public health, education, commerce, and industry. 3 hours.
367. **Municipal Government.** A study of the evolution of city government in the United States; the various types of city government; municipal elections, charters, etc. 3 hours.
370. **International Relations.** A study of the leading problems in world politics. Special consideration is given to such topics as modern imperialism, contemporary colonial systems, and postwar problems. 4 hours.
380. **Political Parties.** The development of political parties in the United States; the fundamental principles underlying party organization and functions; the party platform, nominating systems, and campaign methods. 4 hours.
385. **Contemporary Political "Isms".** An advanced survey of the leading schools of political thought in England and Europe in the 19th and 20th centuries; Socialism, Communism, Pluralism, Fascism, Nationalism, etc. 3 hours.
390. **Comparative Government.** A comparative study of the governmental systems of the leading democracies and dictatorships of Europe: England, France, Sweden, Switzerland, Italy, Germany, Russia. 3 hours.
420. **Pressure Groups and Politics.** An analysis of the rapidly-growing number of interest groups and their techniques of political propaganda. 4 hours.
435. **Government and Business.** (Economics 335). An historical study, with contemporary emphasis, of the increasingly important relations between government and economic institutions. 3 hours.
450. **Contemporary Legislation.** An analysis of contemporary national problems through a study of recent and proposed legislative enactments. 4 hours.
472. **International Government.** A study of the organization and development of international governmental and administrative systems; the machinery of international intercourse; the problem of war. 3 hours.

- 475. International Law.** A study of the legal rules and practices governing the nations in their relations in peace and war. Careful attention will be given to those legal decisions which are recognized as important precedents in international law. 3 hours.
- 487. American Political Ideas.** An historical study of the political ideas of leading American statesmen and publicists, and their resulting influence upon our governmental system. 4 hours.
- 495. Constitutional Law.** A study of American constitutional principles, as illustrated by important decisions of the U. S. Supreme Court. 3 hours.
- 500-510. Seminar.** Hours to be arranged.

HISTORY

Professors Briggs (Chairman), Lentz; Associate Professors McNicoll, Pitkin, Wright; Assistant Professors Caldwell, Pardee.

Students who intend to make History their major field should consult with the representative of the Department at the time of registration. Courses on the 100 and 200 levels are designed for freshmen and sophomores and are prerequisite to the more advanced work. Forty-two quarter hours are required for a major in History in the College of Liberal Arts and Sciences. Thirty-six quarter hours are required for a major in the College of Education. At least half of the work for a History major must be on the 300 and 400 levels and care should be taken to distribute the work in the fields of American and European history. Twenty-four hours are required for a minor in History.

Courses on the 400 level may be taken for graduate credit by properly qualified students upon consent of the instructor.

- 101, 102, 103. Survey of World Civilization.** These courses are designed primarily for freshmen as a survey of the development and evolution of civilization and are the foundation for further courses in the field of history. A term is devoted to each of the periods: Ancient, Medieval and Modern. Required of all History majors. 3 hours each.
- 201. History of the United States to 1865.** Courses 201 and 202 are designed to provide a general survey of the political, social and economic development of the United States. Prerequisite, sophomore standing. 5 hours.

- 202. History of the United States Since 1865.** A continuation of 201. 5 hours. Either 201 or 202 may be taken to meet the graduation requirements in the College of Liberal Arts and Sciences.
- 210 (310). The Middle Ages.** The history of Europe from the Ancient World to approximately 1400. Feudalism is emphasized, but a treatment of the religion and intellectual life of Europe is included. Prerequisite, freshman survey. 4 hours.
- 211. Modern Europe, 1400 to 1789.** A continuation of 210, stressing the transition from medieval to modern life, down to the time of the French Revolution. Prerequisite, freshman survey. 4 hours.
- 212. Modern Europe, 1789 to 1946.** A study of the most important social, economic and political developments in Europe after 1789. Prerequisite, freshman survey. 4 hours.
- 215. Hispanic-American History.** A course dealing with Spain's discovery and conquest of a New World, the organization of the colonial system, and the development of government and culture in a new setting. The decline of Spain in America and the rise of the discontent which resulted in the wars for independence. Prerequisite, 103 or sophomore standing. 4 hours.
- 216. Hispanic-American History.** The development of the modern republics of Hispanic America. The leaders of the revolutions and the difficulties of a century of political experimentation are stressed. The course closes with a study of the recent problems of the Hispanic-American nations. Prerequisite, 215. 4 hours.
- 217. History of the Caribbean Area.** A general survey of the West Indies and Central America. Special attention to the period 1650-1823. Prerequisite, 215. 4 hours.
- 304. History of the Ancient Near East.** A review of the political, economic, and religious history of Africa and Southwestern Asia from about 3000 B.C. to the time of Christ. It includes Egypt, Babylonia, Assyria, the Hittites, and the nations of Syria and Palestine. Particular attention is paid to the history of the Hebrews. Prerequisite, freshman survey. 3 hours.
- 305. History of Greece.** This is a careful study of the cradle of civilization. In addition to the political and economic development of the Greeks, attention is called to their higher cultural development, as in philosophy, education, religion, art and architecture. 3 hours.
- 306. History of Rome, 509 B.C. to 500 A.D.** The political, economic, and social history of Rome, with particular emphasis on Roman law, as well as upon the Roman development of Greek culture. The Roman world as a fertile soil for the spread of Christianity is also stressed. 3 hours.

- 308 (208). History of Illinois.** The history of the State from 1818 to the present. Recommended for History majors and those who expect to teach in elementary schools. Prerequisites, 201 and 202. 3 hours.
- 322. English History to 1603.** A study of England from ancient times to the death of Elizabeth. The course emphasizes the evolution of the various phases of the institutional life of the state. Prerequisite, freshman survey. 4 hours.
- 323. English History, 1603-1815.** A careful tracing of Stuart and Hanoverian England to the end of the Napoleonic Wars. Attention is directed to the beginnings of imperialism, the development and collapse of absolutism, and the progress of constitutional government. Prerequisite, 322. 4 hours.
- 324. English History, 1815-1946.** An investigation of the Era of Reform, the building of the second British Empire, and England in the World Wars. A study is made of recent British problems and the Commonwealth of Nations. Prerequisite, 323. 4 hours.
- 330. Middle Period of American History, 1789-1860.** A study of the conflicting sectional and nationalistic forces which characterize the period. The economic and political forces leading to the Civil War are stressed. Prerequisites, 201 and 202. 3 hours.
- 401. History of the South to 1860.** An intensive study of the social, economic, political, and cultural development of the "Old South" to the Civil War, to bring out the distinctive culture and problems of the section. Prerequisite, 201. 3 hours.
- 402. History of the South Since 1860.** The Civil War; political and economic reconstruction; the problems of the "New South" are carefully considered. Prerequisite, 202 or 401. 3 hours.
- 403, 404. Hispanic-American Culture.** Individual phases of Latin-American life are studied by various students. The lectures summarize the leading institutions and developments of four centuries of Spanish life in America. Prerequisite, 212. 3 hours each.
- 410. Special Readings in History.** Supervised readings for students with sufficient background. Registration by special permission only. Offered on demand. 3 hours.
- 411, 412. Intellectual History of the United States.** The various types of economic, social and political thought that have influenced the development of our nation. The first part covers the period to 1860, and the second carries the study down to the present. Prerequisite, 201-202. 3 hours each.
- 415. The Age of the Renaissance.** The course begins with the Italian phase of the Renaissance and follows its spread to other sections of Europe. Prerequisite, freshman survey. 3 hours.

- 416. The Protestant Reformation.** A survey of the religious, cultural, and economic forces which brought about the movement for reform. The political effects of the division of Christendom and the economic implications of Protestantism receive special attention. Prerequisite, freshman survey. 3 hours.
- 420 (320). The French Revolution.** The passing of feudalism in France and the development of the background of the revolutionary movement are carefully considered. The study is carried through the revolutionary cycle concluding with the fall of the Napoleonic Empire. Prerequisite, adequate background. 3 hours.
- 421. Research in Illinois History.** Investigation of special topics in various phases of the history of the State. Prerequisites, 201, 202, 308, and permission of the Department. 3 hours.
- 425 (325). American Colonial History.** The founding of the American colonies and the development of their institutions, through the Revolution. Prerequisite, 201. 3 hours.
- 426. Social and Intellectual History of Hispanic-America.** A study of the intellectual origins of the New World and the development of the "Hispanic mind". Philosophic, academic, and scientific ideas and controversies are reviewed in an effort to arrive at an understanding of the culture and temperament of Hispanic America. Prerequisite, 212. Knowledge of Spanish desirable. 3 hours.
- 435 (335). Recent United States History, 1865-1900.** The major developments in American life from the Civil War to the turn of the century. Prerequisite, 201-202. 3 hours.
- 436 (336). Recent United States History, 1900-1946.** Some contemporary problems, economic, social, and political, confronting the nation, are stressed. Prerequisite, 201-202. 3 hours.
- 440 (340). History of American Diplomacy.** A study of the important treaty relations of the United States, and a general consideration of American foreign policies. Some attention is given to the organization and functions of our Department of State. Prerequisite, 201-202. 5 hours.
- 442, 443. History of the West.** A series of two courses that provides an intensive study of the influence of the frontier on the main trends in United States history. Students may take either or both courses. Prerequisite, 201-202. 3 hours each.
- 450. The World Since 1914.** Beginning with a brief review of the causes and results of World War I, the course emphasizes the League of Nations, war debts, disarmament, causes of the second World War, the conflict, and the United Nations. Prerequisite, adequate background. 5 hours.

- 451. Historiography.** The development of history as a written subject will be considered, including the works and philosophy of the various outstanding historians in the ancient, medieval and modern periods. Some emphasis will be placed upon the different schools of American historians. Required of all majors in History. Prerequisite, senior standing. 3 hours.
- 452. Historical Research and Thesis Writing.** The rules of historical research studied and applied to a definite topic. Required of all majors in History. Prerequisite, senior standing. 3 hours.
- 453. New Viewpoints in American History.** A course presenting new interpretations and recent developments in the field of American History. Prerequisite, 201-202. 3 hours.
- 454. Biography in American History.** A study of outstanding leaders and their contributions to the history of the United States. Some attention will be paid to historical writers who specialize in biography. Prerequisite, a course in United States history. 3 hours.
- 500-509. History Seminar.** Research methods applied to the various history fields. Prerequisite, graduate standing and adequate background. Offered on demand. 3 hours.
- 510. Readings in History.** Registration by special permission only. Offered on demand. 3 hours.

HOME ECONOMICS

Professor Woody (Chairman); Assistant Professors Babcock, Barnes

The Department of Home Economics provides training for two groups of students: namely,

1. Those working toward the degree, Bachelor of Science. The four-year curriculum followed by these students provides either
 - a. A general cultural education and professional training in Home Economics in the fields of dietetics, homemaking, and institutional management, or
 - b. A general cultural education plus professional training—through the College of Education—in the teaching of Home Economics.
2. Those wishing training for specific job competence, students not interested in an academic degree, who feel they must sacrifice general cultural education in order to acquire more quickly the competence needed in such specific jobs as dressmaking or homemaking.

In addition to these shorter programs of Dressmaking and Homemaking, the Department of Home Economics is ready to work out with any student a specialized program leading to specific job competence in any of a large number of different fields, such as the job of Clothes Designer, identified as 0-46.01 in the United States

Government's Official Dictionary of Occupational Titles. These individual programs require careful planning for each case. A student interested in such a program should consult with the Chairman of the Department prior to the registration date.

Students working in other departments, in any of the colleges, may select courses marked by the letter "M" in the following course-descriptions. Such students, if they elect a minor in Home Economics, must have the minor approved by the Chairman of the Home Economics Department.

105. **(M) Food and Cookery.** A beginning course in food preparation. Required of students majoring in Home Economics. 3 hours.
106. **(M) Food Purchasing.** Food production and marketing with emphasis on consumer needs. 3 hours.
111. **Introduction to Home Economics.** Survey of opportunities in the field of Home Economics as a basis for choice of vocation. Consideration of the qualities necessary and the resources available for their development. 1 hour.
127. **(M) Clothing Construction.** Making of underclothing and simple washable dresses over commercial patterns. 4 hours.
135. **(M) Textiles.** Appreciation of values in the choice of fabrics for clothing and house furnishings. 4 hours.
205. **Food and Cookery.** Production, marketing, preparation, and food values of meat and other protein foods, and of wheat flour. 4 hours.
206. **Food and Cookery.** Production, marketing, preparation, and food values of meat and other protein foods, and of wheat flour. 4 hours.
220. **(M) Food in Health.** A course planned to help college students with their dietary problems. 3 hours.
224. **(M) Housing and Equipment.** Planning and building of the home and choice of its basic equipment from the standpoint of cost, comfort, and service. 4 hours.
225. **Survey Course in Home Economics.** A course planned especially for majors in elementary education. Units of work in nutrition, school lunches, family and social relationships, textiles, and clothing. 4 hours.
227. **(M) Family Relationships.** A study of the factors that promote stability in the family group, and the responsibilities of the family toward community life. 3 hours.
251. **Clothing Selection and Care.** Discussion of suitability of clothes as to color, line, and interest. Expenditures for the clothing and care of it (in service and in storage) considered as factors in choice and conservation. 3 hours.

- 251A. Care of Clothing and Household Textiles.** A short course dealing with a variety of mending procedures, problems on stain removal, laundering, and storage, and basic facts about textiles necessary to the application of the above. 2 hours.
- 307. (M) Child Care and Training.** A brief study of the physical and mental development of the child and some practical aspects of his care and training. Prerequisite, Education 206. 3 hours.
- 308. Home Economics Education.** Philosophy and objectives of vocational education. History and development of vocational education. Planning units of work in Home Economics at various levels. 4 hours.
- 309. Home Economics Education.** Methods of teaching. A study of the teaching techniques involved in the learning experiences in school, home, and community; evaluation in terms of pupil growth. 4 hours.
- 320. Nutrition and Dietetics.** A study of the body's need for energy, growth and regulation. Planning of dietaries for people of various ages and activities and at different cost levels. Prerequisites, Home Economics 205, 206, and Chemistry 249. 4 hours.
- 321. Experience in Food Demonstration.** A course offering opportunity to practice the techniques studied in 309, the students giving demonstrations before children in grades and high school and before adults; the commercial type of demonstration is also included. 1 hour.
- 322. Textiles and Clothing.** A course organized to help majors in Home Economics to meet the requirements for the more advanced courses. 3 hours.
- 325. (M) Home Management, Lectures.** Managerial problems involved in the use of time, energy, and money. 3 hours.
- 325A. (M) Home Management, Residence.** Six weeks' residence in Home Management House, with experience in various household managerial and social problems. Prerequisite or required concomitants: 227, 307, 325. 4 hours.
- 326. (M) Home Furnishings.** Discussion of good taste in the choice of many things used in the house. 4 hours.
- 328. Personal and Family Living and Home Management.** A course planned for students majoring in dietetics and institutional management. 3 hours.
- 330. Costume Selection and Design.** Dresses designed for inexpensive materials and in pencil. 3 hours.

335. **(M) Meal Planning and Table Service.** Selection and care of table appointments. Planning, preparing, and serving of formal and informal meals. 4 hours.
- 335A. **(M) Meal Planning and Serving.** Discussion of material covered in 335 but without practice in preparation and serving. 4 hours.
338. **Art Needlework.** Laboratory work acquainting a student with a variety of ways to decorate garments and household articles, and providing a fund of ideas in dress designing and home furnishing. 2 hours.
340. **Diet and Disease.** Modifications of the normal diet as necessitated by diabetes, goitre, gastric ulcers, fevers, etc. Prerequisite, 220 or 320. Required for majors in hospital dietetics. 3 hours.
341. **Consumer Problems.** Discussion of difficulties in economical purchase of commodities and helps available to the consumer. 3 hours.
350. **Institutional Furnishings and Equipment.** A study of fabrics and furniture for various institutions in which a dietitian might work, and a study of equipment from the standpoint of use, care, and cost for these institutions. 3 hours.
351. **Institutional Organization and Management.** A course dealing with the organization of time and labor and the management of finances in the operation of institutions. 4 hours.
352. **Quantity Cookery.** Food problems of institutions, including financing, menu-making, food preparation, and service. Experience in the college cafeteria. 4 hours. (Not offered in 1946-47)
356. **Experimental Cookery.** Advanced food preparation, from the experimental standpoint. 4 hours. (Not offered in 1946-47)
357. **Readings in Food and Nutrition.** Reports, discussion, and review of current scientific literature. 2 hours.
358. **Experience in Institutional Administration.** Opportunity to work with the head of one or more institutions, to put into practice the theoretical points discussed in 351. 4 hours. (Not offered in 1946-47)
360. **Advanced Dressmaking.** Experience in fitting, tailoring in wool, and developing dresses in materials chosen for variety in pattern. 4 hours.
361. **Problems in Fitting.** Experience in fitting different people and in handling different types of material, each of which presents certain difficulties. The aim of the course is not to complete dresses, but to do only enough stitching to carry the fitting to completion. 2 hours.

- 362. Tailoring.** Making of a tailored dress, an unlined coat, and a lined coat, together with practice in the necessary preliminary details of tailoring. 4 hours.

INDUSTRIAL EDUCATION

Professor Schroeder; Assistant Professor English.

Never before has there been such a need for men and women trained in the industrial occupations. The use of machines in every walk of life has made necessary the education of great numbers of our men and women in the building, operation, and repair of machines. Persons so educated, to the point of vocational competency, may expect much greater employment possibilities than those without such education.

The Department of Industrial Education offers four-year curricula in drafting and machine shop affording the definite advantage of a college curriculum completed and the Bachelor of Science degree.

In addition to the training which requires four years and leads to a university degree, provision is made to serve also those students who are primarily concerned with specific vocational competence rather than a university degree. These students are permitted to take any courses or any combination of courses, so long as they are able to carry the work satisfactorily. Persons wanting specific vocational preparation that does not lead to a university degree are urged to consult with the Chairman of the Department at least two weeks before regular registration date, so that adequate time and care can be taken to work out a program suited to the student's own particular needs. Such programs may vary from one course to a combination of many courses and their completion may require a few weeks, or it may require as long as three years. In any case, the program should be worked out in advance.

- 101, 102, 103. General Engineering Drawing.** This constitutes the first year of drawing. It is a study of the fundamentals of graphic representations, and includes specific practice in architectural and machine drawing. 4 hours each.
- 106. Descriptive Geometry.** A presentation of those problems which engineering draftsmen should understand about relationships involving points, lines, planes, and surfaces. Prerequisite, 101. 4 hours.
- 140, 141, 142. General Shop.** These courses are designed for those students who have had no industrial education training before entering this university. Such students who wish to major in industrial education or to discover their inclinations and abilities or broaden their educational outlook should take one or more of these courses as their introduction to industrial education. 4 hours each.

211. **Woodwork.** Instruction in the use and care of woodworking tools and machines. Study of wood, joinery, and wood finishes; construction of projects involving typical tool operations. 4 hours.
212. **Furniture Design and Construction.** A study of the principles of design as applied to the manufacture of furniture. Practice in designing and building furniture that can be made in school shops. 4 hours.
221. **Art Metal.** For beginners in metal work. Construction of small articles involving numerous processes, such as cutting, stretching, punching, drilling, riveting, soldering, bending, etching, and plating. 4 hours.
225. **Sheet Metal.** Instruction in laying out patterns, operation of standard sheet metal tools and machines. Construction of projects involving numerous materials and processes. 4 hours.
226. **General Metal.** This course is designed for the student who desires a variety of experience in the metal-working field. It includes instructional units in art metal, bench metal, sheet metal, forge work, lathe work, and welding. 4 hours.
230. **Handwork.** This course is planned especially for elementary teachers, in which an attempt is made to develop skill in handwork techniques, and to illustrate the use of handwork in elementary teaching. 3 hours.
231. **Laboratory of Arts and Industries.** This is a course planned for teachers and supervisors, to acquaint them with modern industrial arts program-development and teaching practices. Laboratory activity centers about work with basic material and processes used in modern arts and industries. 4 hours.
304. **Advanced Architectural Drawing.** A study of "styles" of architecture, building materials and costs, drawing of house plans and making specifications. 4 hours.
305. **Advanced Machine Drawing.** Study of machine design and strength and properties of metals. Designing and drawing simple tools and machines. 4 hours.
306. **Industrial Arts Design.** Study of design of projects suitable for industrial arts classes. Making complete plans and writing instruction sheets to accompany plans of the project. 4 hours.
- 307, 308, 309. **Vocational Drafting.** Intensive study and practice in various lines of drafting. 4 hours each.
313. **Furniture Construction.** Study of the principles of furniture construction and value. Building of selected pieces of furniture. 4 hours.

- 314. Wood Pattern Making and Foundry.** Instruction in building wood patterns and study of their use in general foundry practice. 4 hours.
- 320. Electrical Construction.** Study of practical applications of electrical principles, building of simple electrical appliances or installations, making use of important principles. 4 hours.
- 322, 323, 324. Machine Shop.** Study of machine tools commonly used in general shop practice. Performance of elementary fundamental processes on these machines, in the making of numerous small projects. 4 hours each.
- 325, 326, 327. Vocational Machine Shop.** Intensive study of the engine lathe and its operation. 4 hours each.
- 328, 329, 370. Vocational Machine Shop.** Intensive study of planer and shaper and their operations. 4 hours each.
- 330. Special Problems in the Arts and Industries.** An opportunity for the advanced student to obtain special instruction in the solution of his problems of special interest, in specific subject matter fields. 4-12 hours.
- 331. Industrial Education Seminar.** Study and research as to methods of making and using instructional aids in industrial education. Credit to be arranged with instructor.
- 332. Industrial Education Seminar.** Design of industrial education projects and their preparation for publication. Credit to be arranged with instructor.
- 333. Problems of Industrial Education.** A study of some of the most important problems confronting the teacher of industrial education today. 4 hours.
- 337. Organization of Industrial Education Shops and Courses.** A study of various shop organizations, planning of courses, and methods of teaching industrial education subjects. 4 hours.
- 350, 351, 352. Vocational Drafting.** A continuation of study and of practice begun in 307, 308, and 309. 4 hours each.
- 353, 354, 355. Vocational Drafting.** Extension of study and drafting practice to various specific fields of industry. 4 hours.
- 371, 372, 373. Vocational Machine Shop.** Intensive study of the milling machine and the grinding machine. Development of skill in their operation. 4 hours each.
- 377. Foundry.** Study of foundry methods, and properties of metals. Practice in moulding, casting, and finishing, simple casting of zinc alloys, aluminum, bronze, and cast iron.

JOURNALISM

It is the intention to develop as rapidly as possible basic training for practical work on the staff of newspapers, trade journals, and other publications. At the present time, the following courses do not constitute a major in the field of journalism, but students majoring in Business and Economics or in English will find in these journalism courses the initial preparation for entry into this field.

- 200, 201, 203. Principles of Journalism.** This series of courses presents the character and scope of journalistic work, the history of journalism, a study of the contemporary press, news gathering, newspaper writing, and make-up. 3 hours each.
- 300 (400). Journalism Seminar.** This course is designed for upper-class students who wish to undertake special studies in the field of journalism. 3 hours.

MATHEMATICS

Professor Mayor (Chairman); Associate Professors McDaniel, Purdy; Assistant Professor Wright.

Students who are beginning college mathematics may choose Mathematics 106 or 111. Either course satisfies part of the physical science requirement and counts toward a major or minor in mathematics. Mathematics 111 is recommended for students who may want to take more than two mathematics courses, including all who expect to major in chemistry, physics, or mathematics. No student is allowed credit for both 106 and 111.

For a major in mathematics a student must complete 36 hours if he is in the College of Education, or 42 hours for the College of Liberal Arts and Sciences. Twenty-four hours are required for a minor. Mathematics 210 does not count toward a major or minor in either college. Mathematics 210 or 311 are not counted for graduation from the College of Liberal Arts and Sciences.

- 106. General Mathematics I.** Algebra, with business applications. Includes fundamental operations, factoring, fractions, exponents, logarithms, linear and quadratic equations, graphs, simple interest, and simple discount. Prerequisite, high school algebra (1 year). 4 hours.
- 107. General Mathematics II.** Elementary mathematics of finance. Compound interest, annuities certain, life annuities, and life insurance. Prerequisite, 106 or 111. 4 hours.
- 111. Elementary Mathematical Analysis I.** College algebra, including determinants, logarithms, and binomial expansions. Prerequisite, high school mathematics (2 years). 4 hours.

- 112. Elementary Mathematical Analysis II.** Trigonometry. Prerequisite, 111 or 106. 4 hours.
- 113. Elementary Mathematical Analysis III.** Plane analytic geometry. Straight line, circle, conic sections, loci, polar coordinates, parametric equations, and transformations. Prerequisite, 112. 5 hours.
- 210. Mathematics for Elementary Teachers.** A professional treatment of the subject matter of arithmetic, including historical development of some topics of arithmetic, methods, and a study of trends and current literature on the teaching of arithmetic. This course is planned primarily for elementary school teachers. Prerequisite, 106. 4 hours.
- 212 (312). Spherical Trigonometry.** The solution of right and oblique spherical triangles, with an introductory study of spherical geometry. Application to the finding of distances on the earth's surface, determination of solar time, and the navigational methods of finding latitude and longitude. Prerequisite, 112. 3 hours.
- 230 (313). Solid Analytic Geometry.** The analytic geometry of curves and surfaces in space, including the study of straight lines, planes, and quadric surfaces. Prerequisite, 113. 4 hours.
- 251. Calculus I.** The elements of the differential calculus, with applications to geometry, physics, and other sciences. Prerequisite, 113. 4 hours.
- 252. Calculus II.** A continuation of 251 with most of the time given to the integral calculus. Some topics in differential calculus, methods of integration, and applications. Prerequisite, 251. 4 hours.
- 303. Calculus III.** Additional applications of integration, multiple integration, series, and partial derivatives. Prerequisite, 252. 4 hours.
- 305. Differential Equations I.** A study of the common types of ordinary differential equations, including separation of variables, the linear differential equation of the first order, and linear differential equations with constant coefficients. Special applications to problems of physics and geometry. Prerequisite, 252. 3 hours.
- 306. Differential Equations II.** A continuation of 305. The linear differential equation of the second order; integration in series; total differential equations, simultaneous equations; special topics in partial differential equations. Prerequisite, 305. 3 hours.

- 307. Statistical Methods.** The study of frequency distributions, averages, dispersions, linear correlation, reliability of statistical measurements, analysis of time series. The course attempts to develop understanding of the basic statistical measures and some competence in working with them. Prerequisite, two terms of college mathematics. 5 hours.
- 311. The Teaching of Secondary Mathematics.** This course includes a study of the origin and nature of mathematics, the history of the teaching of mathematics, and current literature on the teaching of secondary mathematics. Special attention is given to the two 1940 Reports on the Teaching of Secondary Mathematics. Prerequisite, three terms of college mathematics. 3 hours.
- 317 (206). Mathematical Theory of Finance.** A course in the mathematics of finance, more advanced than course 107. Includes annuities certain, sinking funds, amortization, bonds, life insurance, and life annuities. 3 hours.
- 320. Advanced College Algebra.** A further study of more advanced topics in algebra, including progressions, inequalities, mathematical induction, permutations and combinations, and complex numbers. Some topics in the theory of equations, including the solution of higher-degree equations, graphical methods, and roots of unity. A course particularly valuable as a background for the teaching of algebra. Prerequisite, 251. 3 hours.
- 325. Mathematics for Primary Teachers.** 3 hours.
- 421 (321). Theory of Equations.** The more advanced parts of the traditional college course in this subject. Topics include isolation of the roots of polynomial equations, symmetric functions, methods of approximating roots, determinants, systems of equations, resultants, and possible constructions with ruler and compass. Prerequisite, 320. 3 hours.
- 430 (330). Synthetic Projective Geometry.** Introduction to the fundamental concepts of projective geometry, including a study of conics and polar systems of conics. At the beginning projective properties are distinguished from metric specializations. Later full opportunity is given to prove some of the more familiar metric properties as special cases of the projective theorems. Prerequisite, 113. 4 hours.
- 451 (351). Infinite Series.** A course in advanced calculus, including the theory of infinite sequences and series of constants, tests for convergence, series of variable terms, power series, and Fourier series. Prerequisite, 303. 3 hours.

- 452 (352). Foundations of the Calculus.** A course in advanced calculus, including the theory of limits and its application to differentiation and integration, both with functions of one variable and with functions of more than one variable. Prerequisite, 303. 3 hours.
- 460 (360). Modern Geometry.** Advanced topics in Euclidean geometry by the synthetic method. Topics include the nine-point circle, the Simson line, the theorems of Ceva and Menelaus, coaxal circles, harmonic section, poles and polars, similitude, and inversion. Prerequisite, twelve hours of college mathematics. 4 hours.
- 481. Mathematical Statistics.** A second course in statistics. Students are required to have a working knowledge of the calculus, so that topics in advance of those in the elementary course may be included. 3 hours.
- 505. Topics in Modern Mathematics.** A course planned to show the relationships among the various parts of mathematics already studied by the student, to provide an introduction to selected topics in modern mathematics, and to present a clarified picture of the mathematical field. Attention is given to topics of interest to the secondary school teacher, and emphasis is placed on logical and historical developments. Topics from algebra, geometry, and analysis will be included. 6 hours.
- 520. Introduction to Modern Algebra.** The course is intended to display some of the richness of algebra when other possible mathematical systems are considered in addition to the traditional one based upon ordinary complex numbers, and also to examine the basic concepts of the ordinary systems of algebra. Among the topics studied are the uniqueness of factorization, rational numbers and fields, complex numbers, the theory of permutation groups, matrices, and algebraic number fields. 4 hours.
- 525. Theory of Numbers.** Topics in elementary number theory, including properties of integers and prime numbers, divisibility, Diophantine equations, congruence of numbers, continued fractions, magic squares, and other topics. 3 hours.
- 550. Readings in Mathematics.** Each student studies a topic of particular interest to him. Class periods are devoted to general discussion of sources and topics. For any one term all students will be working in the same area. In the fall term of 1944 the topic was "Problems in the Teaching of Secondary School Mathematics". 3 hours.

MUSIC

Professor Kesnar (Chairman); Associate Professors McIntosh, Wakeland; Instructors Hantz, Matthes, Wharton.

Students may prepare themselves as performers in the field of music by taking the regular suggested music curriculum, and they may also prepare themselves as teachers of music by taking the music education curriculum. In each of these two curricula, there are the following three major fields:

1. Voice
2. Piano
3. Orchestral and band instruments

All music majors must maintain a satisfactory membership in at least one of the University's music organizations—band, orchestra, chorus, ensemble—during their University attendance. Their attendance is required at recitals and ensemble performances. Scholarships amounting to \$10 each term are available to the most valuable and talented members of the various University music organizations.

THEORY COURSES

- 100. Music Understanding.** An examination of music with emphasis on the background, purpose and structure of thirty representative compositions chosen mainly from the field of symphonic music. 3 hours.
- 105, 106, 107. Sight Singing and Ear Training.** Exercises in this course are correlated with the work in the harmony courses so that the student gains practice in hearing and singing the harmonic materials. 2 hours each.
- 125, 126, 127. Harmony.** Students are required to take 105, 106 and 107 with this sequence of courses. 2 hours each.
- 205, 206, 207. Sight Singing and Ear Training.** Continuation of first year's work. 2 hours each.
- 222, 223, 224. Keyboard Harmony.** Prerequisite, 127. 1 hour each.
- 225, 226, 227. Harmony.** Students are required to take 205, 206, 207 and 222, 223, 224 with this course. 2 hours each.
- 300. Materials, Methods and Problems Pertaining to Music Taught in the First Six Grades.** 4 hours.
- 303. Materials, Methods and Problems Pertaining to Music Taught in the Junior High School.** 3 hours.
- 304. The Technique of Teaching Music Appreciation.** 3 hours.

305-I. Instrumental Problems, Materials and Conducting. Students gain practice in conducting by directing their fellow class members through a number of compositions, and toward the end of the course they are required to conduct the University Band or Orchestra through an assigned composition. 3 hours.

305-V. Vocal Problems, Materials and Conducting. 3 hours.

307. Recreational Music and Singing Games. A number of attractive folk songs and stunt songs suitable for assembly sings and informal groups are learned. The singing games taught are largely those collected in Southern Illinois by the instructor. Students are required to make a shepherd pipe and are taught to play it. Instruction is given in the playing of pocket musical instruments, such as the harmonica and ocarina.

This course is particularly useful to teachers who are interested in the less formal approach to music in the schools and for students interested in preparing themselves as leaders in summer camp activities, playground supervision, Four-H Club work, and similar types of recreational leadership. 4 hours.

310. Orchestration. This course is concerned chiefly with the technique of writing for the modern orchestra. Students are expected to complete the orchestration of an assigned composition and to conduct it before the University Orchestra. Original compositions may be used, provided the instructor gives his permission. 2 hours.

311. Bandstration. This course is concerned chiefly with the technique of writing for the band. Students are expected to complete a bandstration of an original or an assigned composition and conduct it before the University Band. 2 hours.

315, 316, 317. Choral Reading. This course familiarizes the student with a large amount of choral materials of all kinds, and deals with the chief problems in drilling and conducting. Prerequisite, 305-V. 2 hours each.

323, 324, 325. Counterpoint. 2 hours each.

326, 327, 328. Form and Composition. A study of the form and texture of music from motif through symphony correlated with original writing in song, rondo, and sonata form. Prerequisites, 227 and 325. 2 hours each.

335. Music History. The beginnings of musical thought, through the early Greek and Roman periods, and the development of music in the Fifteenth and Sixteenth Centuries. 3 hours.

336. Music History. The history of musical thought in the Seventeenth and Eighteenth Centuries and the first part of the Nineteenth Century. (Bach through Wagner). 3 hours.

337. **Music History.** The rise of nationalism. Later Nineteenth-Century and Twentieth-Century Composers. 3 hours.
- 340 (401). **Music Esthetics Research.** Student must have permission of the Chairman of the Music Department before registering for the work. 1 hour.
355. **Chamber Music.** String ensemble, string quartet; training in repertoire. 2 hours.
365. **Chamber Music.** Woodwind and brass ensemble; training in repertoire. 2 hours.

APPLIED MUSIC

- 150, 151, 152. **First-Year Violin.** Class or private lessons. 1 or 2 hours each.
- 160, 161, 162. **First-Year Woodwind and Brass.** Class or private lessons. 1 or 2 hours each.
163. **Wind and Percussion Class Lessons.** 3 hours.
- 170, 171, 172. **First-Year Piano.** Class or private lessons. 1 or 2 hours each.
- 190, 191, 192. **First-Year Voice.** Class or private lessons. 1 or 2 hours each.
- 250, 251, 252. **Second-Year Violin.** Class or private lessons. 1 or 2 hours each.
- 260, 261, 262. **Second-Year Woodwind and Brass.** Class or private lessons. 1 or 2 hours each.
- 270, 271, 272. **Second-Year Piano.** Class or private lessons. 1 or 2 hours each.
- 290, 291, 292. **Second-Year Voice.** Class or private lessons. 1 or 2 hours each.
- 350, 351, 352. **Third-Year Violin.** Class or private lessons. 1 or 2 hours each.
- 356, 357, 358. **Fourth-Year Violin.** Class or private lessons. 1 or 2 hours each.
- 360, 361, 362. **Third-Year Woodwind and Brass.** Class or private lessons. 1 or 2 hours each.
- 366, 367, 368. **Fourth-Year Woodwind and Brass.** Class or private lessons. 1 or 2 hours each.

- 370, 371, 372. Third-Year Piano.** Class or private lessons. 1 or 2 hours each.
- 376, 377, 378. Fourth-Year Piano.** Class or private lessons. 1 or 2 hours each.
- 390, 391, 392. Third-Year Voice.** Class or private lessons. 1 or 2 hours each.
- 396, 397, 398. Fourth-Year Voice.** Class or private lessons. 1 or 2 hours each.

PHILOSOPHY

Professor Tenney

A minor in philosophy consists of twenty-four quarter hours. Certain closely related subjects in other departments may be counted on the minor, subject to the consent of the philosophy instructor.

- 200. Approaches to Knowledge.** An attempt to show the relationship of the various college subjects to each other and to the student's basic beliefs and attitudes, with a view to integrating his studies and experiences. 3 hours.
- 290, 390. American Thought.** A survey of the ideas and ideals of Puritanism, transcendentalism, realism, pragmatism, and the other major philosophies which govern the behavior of modern Americans. 4 hours.
- 300. Types of Philosophy.** A beginning discussion of naturalism, idealism, pragmatism, realism, mysticism, and other important systems of thought, with special reference to the views of such modern philosophers as Bergson, Dewey, Alexander, and Whitehead. Fills the philosophy requirements in the College of Liberal Arts and Sciences. 4 hours.
- 310. Introduction to Reflective Thinking.** A study of the reasoning processes in action; the logical principles involved in the solution of historical, scientific, ethical, metaphysical, and practical problems. 3 hours.
- 316. Ethics.** An analysis of the principal theories of right and wrong, with practical applications to moral problems derived from the student's experience. Fills the philosophy requirement in the College of Liberal Arts and Sciences. 4 hours.
- 320. Philosophy of Religion.** An objective survey of the various religious points of view prevailing in the Western World. 4 hours.
- 345. Philosophy of Art.** A survey of present-day theories of aesthetics, together with discussions of recent examples of music, painting, and literature in terms of the theories behind them. The purpose of the course is not only to speculate about taste in the fine arts but also to improve it. 4 hours.

- 355. Philosophy of Education.** Theories of knowledge and their relationship to educational practices. This course may count on the education requirement as Education 355. 4 hours.
- 555. Seminar in Educational Philosophies.** For graduate students in elementary or secondary education. Offered only on request. 4 hours.

PHYSICAL EDUCATION FOR MEN

Associate Professors Lingle, Martin; Instructors Freeberg, Holder.

Courses 151, 152, and 153 are required of all freshmen. All students must have these for graduation, or offer in lieu thereof three quarters of competition on a varsity squad, each quarter in a different sport. Courses 145, 149, 151, 152, 153, 170, 171, 172, 173, 174, and 175 do not count toward a major or minor.

Courses 230 and 236, given in the Women's Department, may be taken by men and will count toward a major in the Men's Department.

Forty-two quarter hours in the Department of Physical Education and approval of the chairman of the department are required for a major.

It is required that regulation gym suits be worn in all activity classes in Physical Education. These may be purchased at the book store for approximately one dollar (trunks and jersey). Combination locks for lockers may be rented or bought at the book store.

The following courses in physiology are recommended for majors and minors: 209a, 230, 300, and 303.

- 145. Physical Education.** The equivalent of 151 or 152 or 153. Baseball, track, archery, tennis. Summer. 2 hours.
- 149. Modified Gymnastics.** For students with functional or structural disorders. (Credit equivalent to 151, 152, or 153). Five times a week. Fall, Winter, and Spring. 2 hours.
- 151. Physical Education.** Group games, relays, individual combative contests, calisthenics, softball, volleyball, and basketball. Five times a week. Fall. 2 hours.
- 152. Physical Education.** Boxing, wrestling, tumbling, and apparatus work. Five times a week. Winter. 2 hours.
- 153. Physical Education.** Track, baseball, tennis, and archery. Five times a week. Spring. 2 hours.
- 170. Football.** The University supports a football team during the fall term. Physical Education credit is given to the men remaining on the squad. Students who have no chance of making the team are not dropped from the squad. They are encouraged to learn the game and to participate for its inherent values. Five days per week. 2 hours.

171. **Basketball.** A basketball team represents the school during the winter term. The same observations hold for this course as for 170, so long as the student is retained on the varsity squad.
172. **Track.** See comments under 170.
173. **Tennis.** See comments under 170.
174. **Gymnastics.** See comments under 170.
175. **Baseball.** See comments under 170.
201. **Boxing.** The theory and practice of boxing. One hour a day, four days a week. Winter. 3 hours.
202. **Wrestling.** The theory and practice of wrestling. One hour a day, four days a week. Winter. 3 hours.
203. **Gymnasium Activities I.** This course aims principally to develop, by practice, individual technique in the following activities; single-line marching maneuvers; calisthenics; simple stunts and self-testing activities on the more popular pieces of heavy apparatus and the tumbling mats. Two hours a day, four days a week. Winter. 4 hours.
204. **Elementary Swimming.** Instruction and practice in all of the beginning fundamental strokes, floats, and kicks. Individual instruction given as needed. Summer. 2 hours.
205. **Advanced Swimming.** Further practice and study of all recognized strokes. Development of speed, endurance, rhythm, and timing are stressed. Prerequisite, passing of elementary swimming test. Summer. Three days a week, two hours a day for four weeks. 1 hour.
210. **Basketball Techniques.** This course deals with individual basketball fundamentals with special emphasis on passing, pivoting, basket shooting, dribbling, and individual defense. One hour a day, four days a week. Winter. 2 hours.
220. **Recreational Activities.** Techniques, skills, and rules are taught by participation in individual and group outdoor recreational sports. Four days a week. 2 hours.
221. **Recreational Activities.** Techniques, skills, and rules are taught by participation in individual and group indoor recreational sports. Four days a week. 2 hours.
230. **Folk Dancing.** Winter. Two days a week. 1 hour.
236. **Tap and Character Dancing.** Two days a week. 1 hour. Winter.

250. **Materials and Methods for Teaching Physical Education in the Elementary Schools.** Study, demonstration, and practice of the physical education activities of children from six to fourteen years of age. Graded lists of activities adapted to the age-period of the child. Organization and management of the activities; methods in the leadership of them. One hour a day, four days a week. Spring. 4 hours.
256. **Track and Field Theory and Technique.** Instruction and practice in all individual track and field events. Actual performance in all events required of the student. Methods of organizing and conducting track and field meets are a part of the course. Two hours a day. Five days a week. Spring. 5 hours.
257. **Football Techniques.** Individual instruction and practice in all the fundamentals of the game, such as passing, kicking, tackling, blocking, running with the ball. The student participates in actual scrimmage. Four days a week. Fall. 2 hours.
258. **Football Theory.** This course deals with all phases of the game. Offensive and defensive formation are analyzed; the strength and weakness of each are studied. The various types of individual plays are analyzed. The rules of the game discussed. Prerequisite, 257, or permission of the instructor. One hour a day, three days a week. Fall. 3 hours.
270. **Baseball Theory and Technique.** The technique of batting, fielding, playing the different positions, the strategy of the game, the conduct of daily practice, rules and play situations; also methods of teaching baseball. One hour a day on Monday and Wednesday; two hours a day on Tuesday and Thursday. 4 hours.
301. **Gymnasium Activities II.** Continuation of Gymnasium Activities I, which, in addition to the practice for development of technique, includes the theory and pedagogy of the various activities. Two hours a day, five days a week. Prerequisite, 203. Winter. 5 hours.
302. **Materials and Methods for Teaching Physical Education Activities in Junior and Senior High Schools.** Study, demonstration, and practice of the "total-body" activities adapted to the needs, interest, and capacities of junior and senior high school boys. Emphasis is placed on principles of leadership in an organized schedule or in outdoor and indoor developmental activities, necessitating a thorough knowledge of the purpose, aims, and remote and immediate objectives of physical education, and of the changing factors in the building of a school program. One hour a day, four days a week. 4 hours.

- 303. Kinesiology.** The mechanical analysis of physical education activities through the study of joint and muscle action. One hour a day, five days a week. Prerequisite, Physiology 209a. Spring. 5 hours.
- 327. Boy Scout Leadership Training.** The principles of the Boy Scout movement, together with aids for the finding of source material. Practical demonstrations and active leadership are required of each student. Prerequisite, junior standing. 2 hours.
- 330. Basketball Theory.** The different types of offense and defense are studied. Special emphasis is given to early season practice, offensive and defensive drills, team strategy, care of minor injuries, and the rules of the game. Prerequisite, 210 or permission of the instructor. One hour a day, three days a week. 3 hours.
- 353. The Organization and Administration of Physical Education.** This course includes the problems of the administrator, such as the grading, care and maintenance of playgrounds and gymnasiums; student leadership in physical education; the purchase and care of equipment; organizing and administering an intra-mural program. One hour a day, four days a week. 4 hours.
- 360 (260). Playground Administration.** Practical study of such problems as providing facilities and equipment, setting up the program, budgeting and financing, selecting and supervising the personnel, and building good will. One hour a day, four days a week. 4 hours.

PHYSICAL EDUCATION FOR WOMEN

Associate Professor Davies (Chairman); Assistant Professor Muzzey; Instructor Stehr.

The courses presented for graduation must include the following:

1. Three courses selected from the following group: 101H, 101S, 101SP, 101A, 102, 102A, 103, 103A, and
2. Three courses selected from the following: 201A, 202A, 203A, 204, 205, 211, 212, 213, 214, 215, 216, 218, 222, 230, 233, 236, and 239.
3. However, students majoring or minoring in physical education should take the following courses: 104, 105, 106, 223, 224, and 225, which correspond to the six activity hours required of all university students.

Students who are advised by the Medical Department to restrict their activities should register in a course marked with an "A" or an asterisk.

Forty-two hours, in addition to the courses listed in item 3 above, are required for a major in physical education, a total of forty-eight hours. Twenty-six hours are required for a minor in physical education, in addition to the required six activity hours, a total of thirty-two hours.

A major in this Department must include the following courses: 245, 303, 304, 305, 306, 307A, 307B, 308, 350, 351, 352, 353, 354, 314, 315, 413, and 414.

A minor in this Department must include the following: 245, 304, 305, 306, 307A, 307B, 308, 350, 353, 354.

ACTIVITY COURSES

All activity courses numbered 100 meet 3 days a week.

All activity courses numbered 200 meet 2 days a week.

Not more than one of these courses may be taken in any one term without special permission from the Department.

101H. Hockey. Techniques, skills, and team tactics. For freshmen only. 1 hour.

101S. Soccer. Techniques, skills, and team tactics. For freshmen only. 1 hour.

101SP. Speedball. Techniques, skills, and team tactics. For freshmen only. 1 hour.

101A. Individual Physical Education. A course for students who are physically unable to participate in the regular physical education activities. Horseshoes, croquet, badminton, shuffleboard. 1 hour.

102. Basketball and Folk Dancing. Continuation of 101. 1 hour.

102A. Individual Physical Education. Continuation of 101A. Posture correction, table tennis, bowling, and folk dancing. 1 hour.

103. Volleyball, Stunts, Posture Correction. Continuation of 102. 1 hour.

103A. Individual Physical Education. Continuation of 102. Paddle tennis and golf. 1 hour.

104. Speedball. Techniques, skills, and team tactics. For highly skilled girls, and majors and minors. 1 hour.

105. Basketball and Folk Dancing. Continuation of 104. 1 hour.

106. Volleyball, Stunts, Posture Correction. Continuation of 105. 1 hour.

201A, 202A, 203A. Adapted Physical Education. Hours to be arranged by conference.

***204. Swimming.** Strokes and safety devices for beginning swimmers. 1 hour.

***205. Swimming.** Intermediate and advanced techniques and strokes. 1 hour.

211. Hockey. 1 hour.

212. Basketball. 1 hour.

213. Softball. 1 hour.

***214. Archery.** 1 hour.

215. Badminton. 1 hour.

216. Tennis. 1 hour.

218. Individual Sports. Badminton, duck pins, and other recreational sports. Not open to those who have had 101A, 102A, and 103A. 1 hour.

***222. Golf.** Strokes, rules and regulations of the game. 1 hour.

223. Hockey. Techniques and skills. 1 hour.

224. Tap Dancing. Fundamentals and routines. 1 hour.

225. Tennis. Skills and techniques. 1 hour.

***230. Folk Dancing.** Fundamental steps and dances of various countries. 1 hour.

233. Modern Dance. Fundamentals of movement and composition. Basic course leading to creating contemporary dance compositions. 1 hour.

***236. Tap and Character Dancing.** 1 hour.

***239. Social Dancing.** Fundamental steps of ballroom dancing. For beginners only. 1 hour.

313. Speedball. 1 hour.

314. Modern Dance. 1 hour.

315. Golf. 1 hour.

316. Swimming. Advanced techniques. 1 hour.

317. Life Saving and Water Safety. Techniques of Red Cross Life Saving and Water Safety. 1 hour.

413. Archery. 1 hour.

414. Advanced Dancing. 1 hour.

415. Recreational Sports. 1 hour.

- 416. Advanced Modern Dancing.** Prerequisite, 233 or 314, or consent of instructor. 1 hour.

THEORY COURSES

- 245. Conduct of Play Activities.** A course dealing with age interests and characteristics of childhood, and the adaptation of games and play activities to the elementary grades. 4 hours.
- 303. Kinesiology.** The mechanical analysis of physical education activities through the study of joint and muscle action. (Taught in the Department of Physical Education for Men). Prerequisite, Physiology 209a. Spring. 5 hours.
- 304. Techniques of Seasonal Sports.** Soccer and Volleyball. Methods of teaching, construction of daily lesson plan, and analysis of techniques. Fall. 2 hours.
- 305. Techniques of Seasonal Sports.** Hockey and Speedball. Methods of teaching, construction of daily lesson plans, and analysis of techniques. Fall. 2 hours.
- 306. Techniques of Seasonal Sports.** Basketball. Methods of teaching, construction of lesson plans, and analysis of techniques. Winter. 2 hours.
- 307A. Techniques of Teaching Seasonal Sports.** Tumbling, stunts, track and field. A continuation of 306. Spring. 2 hours.
- 307B. Techniques of Teaching Seasonal Sports.** Softball, tennis, and gymnastics. Methods of teaching, construction of lesson plans, and analysis of techniques. Spring. 2 hours.
- 308. Methods of Teaching Dance.** A comprehensive course dealing with each of the various types of dance, including fundamentals, progression, and competition in each type. Prerequisite, 102, 224, and 233, or equivalent. Winter. 3 hours.
- 310. Theory of Officiating.** A study of requirements of a good official. Standards of umpiring field hockey as set up by the United States Field Hockey Association. Fall. 1 hour.
- 311. Theory of Officiating.** Basketball officiating. Study of requirements of a nationally rated official, and practice in officiating. Winter. 1 hour.
- 312. Theory of Officiating.** Softball and other Seasonal Sports. Study of requirements of a nationally rated official as set up by the National Section on Women's Athletics. Spring. 1 hour.
- 319 (219). Teaching Elementary School Group Activities.** Study of age characteristics, planning activity program for all grade levels, care of equipment, and techniques of teaching activities for elementary grades. Planned to fulfill the requirements of the State of Illinois for Elementary School Teachers. 4 hours.

345. **Supervision of Physical Education.** The functions of the supervisor of physical education, program planning, grading and planning progression of activities, devices for improving instructions. 2 hours.
- 348 (248). **Camp and Community Leadership.** Fundamentals of Scouting, camping, counselling. 2 hours.
350. **Materials and Methods for Teaching in Elementary and Secondary Schools.** A course designed for supervisors and teachers of physical education. Curriculum planning, based on grade characteristics and educational philosophy, creative rhythms, singing games, folk dancing, games of low organization, skills, skill tests, lead-up games, stunts and tumbling. Fall. 3 hours.
351. **Recreation and Physical Education for the Atypical and Handicapped Individuals.** Techniques of physical examinations; postural defects and their correction; activities suitable for the atypical; program building; and correlation with the physical education curriculum. Fall. 3 hours.
352. **History of Physical Education.** An historical 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. Winter. 2 hours.
353. **Organization and Administration of Physical Education.** Criteria for the selection of activities and the organization of classes, the policies and the personnel; the physical plant and its upkeep; the planning, utilization, and care of equipment in the physical education program. Spring. 4 hours.
354. **Principles of Physical Education.** The fundamental principles, aims, and objectives of physical education, the place of physical education in the educational program, and the problems of athletics. Winter. 2 hours.
355. **Techniques of Teaching Swimming and Life Saving.** Methods of teaching, analysis of strokes, and devices for teaching swimming and life saving. 3 hours.

PHYSICS AND ASTRONOMY

Professor Young (Chairman); Assistant Professor Zimmerschied.

A major consists of thirty-six quarter hours; a minor of twenty-four. Majors, and minors as far as is practicable, should take Mathematics courses as advised by the Chairman of the Department.

PHYSICS

- 101, 102. Survey Course in Physics.** Mechanics, mechanical vibration, wave motion, light, and sound are covered in 101, and heat and electricity are taken up in 102. 101 and 102 together constitute a single complete course. It is planned for those whose chief interests are not in the natural sciences, so as to enable them to interpret intelligently common physical phenomena and to obtain some insight into scientific methods. Mathematics and measurements are not stressed. Students who have had a year of physics in high school are not admitted. 101 and 102 count toward graduation, but they cannot be used to meet pre-medical or pre-engineering requirements in physics. Those who desire to meet these requirements, all who have had high school physics and desire further work in this field, and all who elect physics as a major or minor, must take their general college physics in 206, 207, and 208. 4 hours each.
- 206, 207, 208. College Physics.** These three courses are open to all students; they may be taken in any order. They are especially recommended for those who are scientifically inclined or plan to take additional work in physics or for those who desire pre-technical training. 4 hours each.
- 301. Mechanics.** An intensive study of forces, moments, translational and rotational motion, energy, friction, machine, elasticity of beams, mechanics of fluids. Supplementary material includes laboratory and demonstration experiments. 5 hours.
- 301A. Analytical Mechanics for Engineers.** No student should take both 301 and 301A. Prerequisite, Mathematics 251, or registration therein. 4 hours.
- 303. Heat.** A study and measurement of the fundamental quantitative aspects of heat. Also considerable attention to the principles and applications of thermodynamics. 5 hours.
- 305. Magnetism and Electricity.** Intensive study of fundamentals: Gauss's theorem, magnetometers, equipotential surfaces, capacity, energy, electrometers, alternating current, electromagnetics, applications. 5 hours.
- 306. Magnetic and Electrical Measurements.** A laboratory course stressing accuracy and technique. Includes resistances, galvanometers, electrical currents, capacities, damping, potentiometers, self and mutual induction, hysteresis losses. 4 hours.

- 308. Sound.** Theory of vibrations, vibrating systems and sources of sound, transmission, reception, transformation, measurement of sound energy, technical applications. 5 hours.
- 310. Light.** A detailed study of light phenomena, including principles and theories underlying measurement of speed, propagation of light, optical instruments, spectra, interference, diffraction, polarization, radiation in general. 5 hours.
- 312. Radio.** A study of the fundamental principles of radio reception, and phone and C.W. transmission. Special attention is given to the more important receiving circuits, including the regenerative, neutrodyne, and superheterodyne. Laboratory demonstrations and experiments are used to supplement the course. 4 hours.
- 314. Introduction to Modern Physics.** Recent developments in physics have been remarkable and fascinating. This course offers a general survey of these developments. It includes such subjects as the electron, thermionics, the photo-electric effect, radioactivity and isotopes, astrophysics, relativity, atomic and nuclear topics. 4 hours.
- 316. History of Physics.** A study of the development of physical thought, concepts, and theories, including the results and methods of contemporary physical research. This course should be especially valuable to those who desire to teach. 4 hours.

ASTRONOMY

- 201, 202. Introduction to Astronomy.** These two terms together constitute a single complete course. Four recitations a week, together with frequent evening observations with and without the telescope, constitute the work. As the students go on in their study from the earth to the moon, the sun, the planets, the stars, and the nebulae, their vision is broadened perhaps as rapidly in this ennobling science as it can be in any subject. The varying phases of the moon and the inferior planets, the vast distances to the stars, their great magnitude and high velocities, their constitution, temperature, and brilliance appeal especially to those who enjoy thinking along these lines. Those who take the course will find it helpful in presenting the difficult problems of mathematical geography and in vitalizing their nature study work. 4 hours each.
- 301, 302. Astronomy.** A more advanced course similar to 201 and 202, for senior-college students. 4 hours each.

PHYSIOLOGY AND HYGIENE

Professor Hinrichs (Chairman); Assistant Professor Denny;
Instructor Phillips.

- 200. Control of Communicable Diseases in the Public Schools.** A study of the principles of prevention of the communicable diseases most prevalent in public schools, and the application of these principles to the individual and to the community. 2 hours.
- 202. Health Education.** The meaning of health, the building of health attitudes and practices. Personal and community health problems. Application of the principles of healthful living to the public schools. 4 hours.
- 203. Physical Handicaps to Learning.** Designed for teachers to aid in detecting deviations from the health norms in children and young adults. Meaning of the health examination. Methods used in correction of remediable defects. Agencies whose help can be secured in the care of the physically handicapped. 3 hours.
- 206. Hygiene of the Home.** Child hygiene in the pre-school age, home nursing care of the young child, first aid in the home, home sanitation, food preservation. 2 hours.
- 209a. Introduction to Physiology.** The anatomy and physiology of the human body. A preliminary course in preparation for the more advanced work in physiology designed for students in preprofessional courses. 4 hours.
- 210. Home Nursing.** Theory, practice and demonstration in equipment and care of the sick room, routine care of patients, maternal and child care, recognition of more common symptoms of disease. Administration of simple treatments. 4 hours.
- 225. Community Health Problems.** Methods of water purification, sewage disposal, diseases transmitted by contaminated food, water, and milk. The problem of food handling. 2 hours.
- 230. Safety in Physical Education.** The prevention and treatment of athletic injuries. The most commonly occurring athletic injuries and infections. Methods of preventing, recognizing, and treating will be considered. 2 hours.
- 232. Beginning First Aid.** Red Cross First Aid Course as Basis. 2 hours.
- 233. Advanced First Aid.** Red Cross First Aid Course as Basis. 1 hour.
- 250. History of Nursing. Nursing Ethics.** Relations of the activities of doctor, patient, nurse and hospital. Responsibilities of each. 2 hours.

252. **Introduction to Nursing Care. Elementary Therapeutics.** Designed for students interested in a nursing career. 3 hours.
300. **Human Anatomy.** By the use of skeletons and mannikin, the principles of human anatomy are introduced. Designed especially for majors in the biological sciences, and for majors in Physical Education. 4 hours.
301. **Bacteriology.** An introduction to the study of sanitary science, including a study of the morphology and physiology of microorganisms. Emphasis is placed on laboratory study of non-pathogenes. Consideration of the relation of bacteriology to daily living. Prerequisite, one term of laboratory biology. 4 hours.
303. **Physiology of Exercise.** Designed to supplement P. and H. 209a and P.Ed. 303. A study of the effects of exercise on the various systems of the human body. An introduction to physical therapy. 2 hours.
306. **The Teaching of Health Education.** An aid in organizing material for presentation of health subject matter in elementary school and in high school. 3 hours.
310. **Public Health Aspects of Maternal and Child Hygiene.** 2 hours.
311. **Child Development.** Physical development of the child, beginning with the study of pregnancy, pre-natal and post-natal care, and the physical development of the child from birth to puberty. To supplement Education 343. 2 hours.
- 315, 316, 317. **Advanced College Physiology.** Series of three consecutive courses, especially designed for students intending to do advanced work or teaching in the biological sciences. (Course 315, Blood, Circulation and Respiration; Course 316, Gastro-intestinal and Endocrine Systems; Course 317, Nervous System and Special Senses.) Admission by permission of the Department. 5 hours for each course.
350. **Health Education Methods Applicable to Public Schools.** Designed especially for in-service teachers. Extension course. 4 hours.
360. **Fundamentals in Clinical Laboratory Testing.** Recommended for pre-professional students in the fields of medicine, nursing, dentistry, and veterinary sciences. 2 hours.
361. **Workshop in Health Education.** Summer course designed for in-service teachers, administrators, advanced students, nurses, social workers, and others interested in public health aspects of school and community living. Individual problems of classroom health are treated as units of study, together with other 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. 6 hours. Summer.

- 365. Introduction to Pathology.** Histological changes in tissues, due to local or systemic disease conditions. Prerequisite, Zoology 420. 2 hours.
- 380. The Meaning of the Physical Examination.** Introduction to the techniques of a physical examination, and discussion of the significance of results of such an examination. Introduction to elementary laboratory and clinical determinations. Primarily for majors and minors in Physiology and Hygiene and in Botany and Zoology, as well as for pre-clinical students and in-service teachers. May be taken for 1 hour or for 2 hours of credit. The first six weeks, devoted to elementary physical diagnosis, carries credit of 1 hour. The second six weeks, providing an introduction to clinical laboratory methods, likewise carries credit of 1 hour.
- 400. History of Medicine.** 2 hours.
- 440. Special Problems in Cellular Physiology.** An introduction to the study of the chemistry and physics of cellular behavior. Designed for advanced students in biological sciences. Prerequisites, Zoology 420, P. and H. 209a, Chemistry 302, and Physics 102. Lectures and demonstrations. 2 hours.
- 441. Special Problems in Cellular Pathology.** Prerequisite, 440. 2 hours.
- 455. Health Education in the Public Schools.** Recommended for advanced students in Education and in Health Education. 3 hours.
- 590. Problems and Introduction to Research in Physiology.** Registration by permission of the member of the Department under whom the student chooses to work. 4-6 hours.
- H. Honors Course in any of the Fields of Physiology and Health Education Offered.** Introduction to research. Registration limited to one student per term. 4-6 hours.

SOCIOLOGY

Assistant Professors Harlan, Petroff.

A major in sociology consists of 42 quarter hours for students in the College of Liberal Arts and Sciences, and 36 hours for the College of Education.

Students majoring in sociology are urged to minor in at least one other social science department and to take some work in each of the social sciences.

Geography 342 and History 375 or 376 may be counted toward a major in sociology.

101. **Introductory Sociology.** A broad survey of the field of sociology. The nature of group life, culture, the social processes, personality, and social problems will be presented in the light of modern knowledge. This course is prerequisite to all other courses in sociology except 203. 5 hours.
202. **Social Disorganization.** A study of various forms of disorganization in our society. Attention is given to the problems of standard of living, income, unemployment, poverty, relief, population, race, immigration, health, sex, and to those of special classes, such as the adolescents, the aged, the mentally deficient, and the diseased. Analysis of preventive and therapeutic measures. Prerequisite, 101. 4 hours.
203. **Marriage.** The nature and present-day problems of courtship, steps to marriage, and the various kinds of adjustment involved in marriage. A correlation of physiological, psychological, economic, and sociological aspects of marriage. Prerequisite, sophomore standing. No other course required. 3 hours.
- 205 (201). **Sociology of Rural Life.** Problems peculiar to American rural life, the family-farm institution, and the conflicts with urban types, are studied. Prerequisite, 101. 3 hours.
305. **Social Institutions.** Concepts of social institutions, study of the origin, development, and variability of human institutions. Prerequisite, 101. 3 hours.
310. **The Family.** The family in historic society and various contemporary cultures; the Industrial Revolution and the evolution of the modern family; changes in family functions; the family and the community; the role of women; the child in the family; growing instability; family member roles and personality development. Prerequisite, 101. 4 hours.
311. **Urban Sociology.** The rise, development, structure, culture, and problems of early and modern cities; urban personalities and human groupings. Prerequisite, 101. 3 hours.
314. **Population Problems.** Growth and mobility of populations, urbanization, qualitative difference in stock, differential rates in increase, controls proposed for improving values, and the various proposals for improving distributions are treated in this course. Prerequisite, 101. 3 hours.
315. **Crime and Its Treatment.** Study of the nature of crime; classifications, changing types of crime, criminal statistics, causal factors, and development of punishment. Prerequisite, 101. 3 hours.
320. **Race Relations.** Racial and cultural contacts and conflicts, covering a comprehensive and analytical view of the role played by racial groups in the United States. Prerequisite, 101. 3 hours.

321. **Teaching of the Social Studies in High School.** 2 hours.
330. **Propaganda and Public Opinion Analysis.** A presentation of the techniques and characteristics of propaganda and the methods devised to measure and estimate public opinion on controversial issues. Prerequisite, 101 or senior status. 3 hours.
331. **Social Control.** A presentation of the means by which members of groups are regulated. The importance of social institutions as factors in the shaping of group opinion and giving direction to social action is analyzed. Prerequisite, 101 or senior status. 3 hours.
333. **Problems of Southern Illinois.** 3 hours. See Government 333.
340. **Educational Sociology.** Application of social psychology to the problems of educational workers. The social-psychological aspects of the learning process; the techniques of attitude-formation and personality development; and the means of social control in school and classroom. Prerequisite, 101. 3 hours.
355. **Social Psychology.** An investigation of the role of social interaction as a factor in group life. Considerable attention devoted to the behavior of man as influenced by suggestion, fashion, fads, customs, and group morale. Prerequisite, 101 or senior status. 3 hours.
360. **Social Legislation.** A study of legislative plans for the remedy of various social problems in the United States and in foreign countries. Prerequisite, 101. 3 hours.
365. **General Anthropology.** The origin of man and culture. Fossil races and living races. Cultural types and cultural processes. Environmental effects on culture. One or two field trips. Prerequisite, 101. 3 hours.
366. **The American Indian.** The origin, distribution, and culture of the American Indian. The effects of his contacts and conflicts with white man. Prerequisite, 365. 3 hours.
369. **Sociology of Leadership.** Heredity, environment, and the conjuncture of opportunities as factors accounting for leadership. Theories of leadership, tests of leadership, and an analysis of representative leaders. Prerequisite, 101 or senior status. 3 hours.
370. **Social Implications of Religion.** A study of world religions and their development as methods of social control; their effect on personality development and their place in group and national conflicts. 3 hours.

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375. **Community Organization.** The factors involved in community organization and their integration; types, aims and objectives; community diagnosis; relationships with larger social units in the national life. Individual case study of a specific community. 3 hours.
401. **Juvenile Delinquency.** A study of the causes of delinquency in children. Emphasis upon methods of social analysis and current research findings. The interrelation of physical, mental, and social factors in delinquency. Practical programs reviewed. Prerequisite, 101. 3 hours.
410. **Social Research Methods.** The possibility of scientific research in sociology. Discussion and evaluation of various methods of collecting, classifying, interpreting, and presenting social data, with particular emphasis on local research projects. Prerequisites, 101 or senior or graduate standing. 3 hours.
450. **History of Social Thought.** A critical analysis of the social thinking of some of the outstanding scholars, including Egyptian, Oriental, Hebrew, Christian, Greek, and Roman representatives, and the schools of social thought developing after the Middle Ages. Prerequisite, 101. 3 hours.
455. **Contemporary Sociology.** A comparative study of recent developments in the field of sociology. Considerable attention is focused on the contributions of living sociologists. 450 is recommended as a preparation for this course. 3 hours.
490. **Social Progress.** A study of various theories of social progress, with a critical analysis of their applicability. 3 hours.
500. **Cultural Change.** The origin and development of world culture, the processes of cultural change, and the various problems and maladjustments arising therefrom. Prerequisite, 101. 3 hours.
510. **Seminar in Social Research Projects.** Students select projects, preferably subjects of local interest. As this course is virtually an extension of 410, students should either have taken the latter or be familiar with the various methods of social research. 3 hours.
515. **Seminar in the Family.** A study of the problems created in the home and family by the impact of economic and social changes, and measures for meeting them. Programs for the conservation of the family and for raising the level of family welfare. 4 hours.
555. **Collective Behavior.** An advanced course in the general area of social psychology. Special attention will be devoted to the nature of human attitudes, their formation, control, and expression. Prerequisite, 355. 3 hours. (tentative)

- 560. Social and Institutional Processes.** General nature of processes, classification and analysis of them; interaction, opposition, cooperation, and their various phases. Prerequisite, 101. 3 hours.
- 565. Seminar in Social Psychology.**

ZOOLOGY

Associate Professors Gersbacher (Chairman), Stein; Assistant Professor Scott.

A total of from forty-two to forty-four quarter hours is required for a major in Zoology. Six courses are required for a minor.

Zoology 101, 105, 200, 201, 300, 320 and 335 or their equivalents are required of all majors in Zoology.

Zoology 101, 200, 201, 300, 320 and 321 are courses which will be of great value to pre-medical and pre-dental students, and to those planning to take nurses' training.

- 101. General Vertebrate Zoology.** This course deals with the salient facts of vertebrate zoology, taking note of evolutionary development. One form of each chordate class will be studied with special emphasis on the amphibian type. Open to all junior college students. 5 hours.
- 105. General Invertebrate Morphology.** The complex cell will be studied, its specialization into various types, and the rise of tissues, organs, and systems characteristic of the various groups of invertebrates. Zoology 105 may be taken before Zoology 101 or following it, as suits the student's convenience. 5 hours.
- 200. Comparative Vertebrate Anatomy I.** Studies of comparative skeletal and muscular structures are made from a phylogenetic and evolutionary viewpoint. Prerequisite, Zoology 101, or its equivalent. 5 hours.
- 201. Comparative Vertebrate Anatomy II.** A continuation of the above, taking up a phylogenetic comparison of the digestive, reproductive, circulatory and nervous systems of vertebrates. Prerequisite, Zoology 101, or its equivalent. Zoology 201 may be taken before or after Zoology 200, as suits the convenience of the student. 5 hours.
- 210. General Ornithology.** Objects: to recognize the local birds, and to study their calls, their feeding, nesting, and migratory habits, and their relation to human welfare. 4 hours.

- 215. Entomology.** Identification of the local insects, the study of the critical points in the life histories of insects and their relation to human health and wealth. Prerequisite, Zoology 105, or its equivalent. 4 hours.
- 300. Vertebrate Embryology.** Chick and pig embryos are used as types. Emphasis is placed on the ontogeny of the individual and its relation to vertebrate phylogeny. Prerequisite, Zoology 101, or its equivalent. 5 hours.
- 315. Genetics.** A general course, with experimental work in breeding strains, etc., involving the principles of evolution and genetics. Prerequisite, approval of the department. 5 hours.
- 335. Field Zoology.** This course consists of the study of local fauna, its taxonomy and distribution. Prerequisites, Zoology 101 and 105, or their equivalents. 4 hours.
- 351. Economic Biology.** Effects of plants and animals upon the economic welfare of man. Not to be taken by students who have had Botany or Zoology 350. 4 hours.
- 380. History of Biology.** A short history of the biological sciences from the early Greek philosophers to the present time. This involves a study of the various theories and philosophies and their influence upon the rise of morphology, embryology, comparative anatomy, genetics, and ecology. Prerequisites, one year of Zoology and Botany. Not to be taken by anyone who has had Zoology 330. 4 hours.
- 405. Comparative Anatomy of Invertebrates.** The comparative study of the development of tissues, organs, and systems; and their tendencies in the invertebrates. Library reading and lectures. Prerequisite, Zoology 105, or its equivalent. 4 hours.
- 420. Histology of Organs.** Microscopic study of organs and tissues, with their origin and development. Prerequisite, one year of Zoology. 4 hours.
- 421. Histological Technique.** A study of the latest methods of preparing histological material in biology. The development of a certain skill in technique is required. Prerequisite, one course in Zoology or Botany numbered lower than 300. 5 hours.
- 470. Methods in Biology.** A study of methods, consisting of a consideration of objectives, different types of courses, teaching the scientific method, the laboratory method, the project method, field studies, measurements, evaluation, and other problems in the teaching of the biological sciences. Lectures, recitations and readings. 4 hours.
- 500. Parasitology.** Collection, identification, morphological and life history, and control measures of the main groups of the parasites of vertebrate animals. 5 hours.

510. **Bio-ecology.** A study of the composition and development of biotic communities, and of the relationships of plants and animals to their environment. 5 hours.
511. **Limnology.** A study of the biology of Crab Orchard Lake, Horse Shoe Lake, and various streams of Southern Illinois. 5 hours.
522. **Advanced Histology.** Serial slide making, and the working out of special problems in technique (beginning research). Prerequisite, Zoology 421, or its equivalent, and special permission from the department. 4 hours.
590. **Problems and Introduction to Research in Zoology.**

DEGREES AWARDED, 1945

Master of Science in Education Degree

Lewis Elbert Etherton

Arthur Madison Smith

College of Education

Bachelor of Science in Education Degree

Darcy Elise Ackerman
Mary John Baldwin
Thurlow Harten Bannister
Marion Phyllis Barron
Louie Edward Beltz
Wilma Dean Benedict
Vincent Birchler
Ralph Franklin Bishop
Jessie Ruth Blankenship
Ruth Taggart Borchelt
Esther H. Bramstedt
Ellen Anderson Brown
Wayne P. Carlisle
Lenora Mae Carr
Catherin Shumaker Cash
Dorothy Lyons Clark
Frances Elizabeth Clark
Myron L. Cochran
Doris Jeanette Crader
Lucille Marie Crain
Euline Dallas
Mary A. Darrough
Esther Juanita Davis
Lola Anderson Davis
Nadine Whitesides Dungan
Margaret Dunn
Nola McElroy Free
Mildred Friedline
James W. Fuller
Linda Fullmer
Jessie Virginia Garrett
Margaret Evalyn Garrett
Lester Souther Gill
Patricia Ann Greathouse
Mary Dee Haynes
Mary Marvel Heatherly
Alma Wilson Hoskins
Snyder Howell
Lorraine Louise Huck
Vivian Vetolia Hyte
Theresa Ivanuck
Florence E. Jack
Tommie Lee Jackson
Helen Catherine Jaeckel
Lorelei Baker Jennings
Alberta Pauline Johnson
Elizabeth Lucille Johnson
Eunice Johnson
Kathryn Armenta Jones
Anna Laura Kennedy
Jennie Stewart Kershaw

Ada E. Kraemer
Lela Lamb
Elijah Langford
Lois Lorraine Ledbetter
Selma Caroline Lemmerman
Hilda Marlow
Ruth Lee Marlow
Catherine Marie Martin
Dorothy M. McCarnes
Kate McClanahan
Chloe McNeill
Louise A. Melcher
Doris Jean Miller
Shirley Hope Miller
Emilyn Snow Morris
Zidania Frances Ogden
Louise O'Neil
Mary June Otrich
Mildred Farrar Page
Donald Ray Parker
Geneva G. Patterson
Maryann Peek
Wanda Conrad Pirtle
Kenneth Poole
Evelyn Justine Rex
Edith Lloyd Rice
Pauline Rose Sabella
Edwin E. Sanders
Bethal May Sliva
Jewell Simpson
Arline Smith
Mary Carolyn Smith
Gertrude O. Snodsmith
Jean Spriggs
Patricia Grace Stahlheber
John W. Stansfield
LaVerna Tuttle
Hewey E. Tweedy
Roy Clifton Vernon
Ocean Weaver
Elmer Vincent Webb
Mary Jane Whitlock
Henry W. Wichmann
Frances A. Williams
Marguriete Ardis Wilson
Kathryn Winkler
Verline Witcher
Bertha Allynn Wright
Dora B. Young
Rosalie Young

College of Liberal Arts and Sciences**Bachelor of Arts Degree**

Victor LeRoy Frank	June Ann Poe
Buford Garrison	Margaret Elizabeth Powell
Robert J. Hastings	John W. Russell
Edward Lawrence Hoffman	George William Schroeder
Margaret Konya	Russell William Simpson
Margaret E. Logan	Paul Townes
Charles Francis Montgomery	Robert St. Clair Vance
Howard R. Peters	Francis E. Watson

Bachelor of Science Degree

Raymond Arthur Alexander	Donald Ray Parker
George William Glascock	Thomas Edgar Stephenson
Hattie Emma Koons	

College of Vocations and Professions**Bachelor of Science Degree**

Kenneth Poole	Robert L. Varnum
Harold Wayne Taylor	Catherine Wilson

ENROLLMENT BY TERMS, 1945-46

	Men	Women	Total	Total Registrants
1st Summer, 1945.....				684
Graduates	13	17	30	
Post-Graduates	6	7	13	
Seniors	26	120	146	
Juniors	28	147	175	
Sophomores	19	123	142	
Freshmen	48	111	159	
Unclassified	4	15	19	
Total Residence	144	540	684	
2nd Summer, 1945.....				187
Graduates	6	5	11	
Post-Graduates	3	5	8	
Seniors	11	38	49	
Juniors	16	25	41	
Sophomores	10	26	36	
Freshmen	18	21	39	
Unclassified	0	3	3	
Total Residence	64	123	187	

	Men	Women	Total	Total Registrants
Fall, 1945				1665
Graduates	10	16	26	
Post-Graduates	2	2	4	
Seniors	18	94	112	
Juniors	25	87	112	
Sophomores	50	210	260	
Freshmen	216	328	544	
Unclassified	12	3	15	
Total Residence	333	740	1073	
Extension (duplicates excluded)	141	451	592	
Winter, 1945-46				1528
Graduates	21	12	33	
Post-Graduates	10	6	16	
Seniors	48	82	130	
Juniors	50	77	127	
Sophomores	76	196	272	
Freshmen	275	309	584	
Unclassified	14	2	16	
Total Residence	494	684	1178	
Extension (duplicates excluded)	79	271	350	
Spring, 1946				1531
Graduates	27	22	49	
Post-Graduates	15	1	16	
Seniors	91	105	196	
Juniors	125	114	239	
Sophomores	127	165	292	
Freshmen	456	255	711	
Unclassified	21	7	28	
Total Residence	862	669	1531	
Individual enrollment for regular school year, summer session, and extension				3044

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