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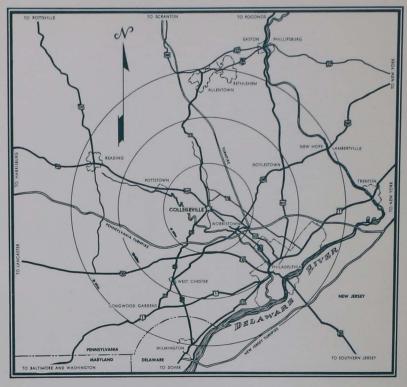
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## URSINUS COLLEGE BULLETIN

Vol. 55 No. 1

1957-1958 Catalogue Number

COLLEGEVILLE PENNSYLVANIA



Ursinus College is located in Collegeville, a borough in Montgomery County, Pennsylvania, twenty-five miles northwest of Philadelphia. U. S. Route 422 and Pennsylvania State Highway 29 intersect at Collegeville. It may be reached conveniently from Philadelphia by means of trains of the Pennsylvania, Reading, or Philadelphia and Western (69th Street Terminal) railroads to Norristown, Pennsylvania, from where buses leave for Collegeville.

Vol. LV No. 1

### URSINUS COLLEGE BULLETIN

CATALOGUE NUMBER

JANUARY 1957

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The Bulletin is published five times a year with issues in January, March, July, November and December.

# THE URSINUS COLLEGE BULLETIN



Catalogue Number

FOR THE

Eighty-eighth Academic Year
1957-1958

Collegeville, Pennsylvania January 1957

### CORRESPONDENCE WITH URSINUS COLLEGE

Communications with the College should be addressed to the appropriate administrative officer.

GENERAL COLLEGE MATTERS

The President

ACADEMIC STANDING OF STUDENTS AND REQUESTS FOR

TRANSCRIPTS

The Dean

ADMISSIONS, SCHOLARSHIPS, SUMMER SCHOOL

The Director of Admissions

**EVENING SCHOOL** 

The Director of the Evening School

PAYMENT OF BILLS

The Treasurer's Office

STUDENT EMPLOYMENT

The Director of Student Employment

PLACEMENT OF GRADUATES

The Director of Placement

SOCIAL REGULATIONS AND DORMITORIES FOR MEN

The Dean of Men

SOCIAL REGULATIONS AND DORMITORIES FOR WOMEN

The Dean of Women

ALUMNI AFFAIRS

The Alumni Secretary

The Post Office address is Collegeville, Pennsylvania.

The College telephone number is Huxley 9-3311

Visitors to the College are welcome. Student guides are available when the College is in session. The offices of the College are open Monday through Friday 9-12 and 1-5 and on Saturdays 9-12. Applicants for admission who wish to discuss their plans with one of the officers of admission are urged to write for an appointment.

Information regarding public transportation and highway routes to Collegeville will be found below the Map on the inside of the Cover of the Catalogue.

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### The Calendar for 1957-1958

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### The College Calendar for 1957-1958

1	1957		
January	7	Monday	Christmas Recess ends, 8:00 A.M.
January	24	Thursday	First Semester examinations begin
February	1	Friday	First Semester ends, 5:30 P.M.
February	11	Monday	Second Semester begins, 8:00 A.M. Registration of new students
March	1	Friday	Last Day for filing Open Scholarship Applications
March	22	Friday	Spring Recess begins, 5:30 P.M.
April	1	Monday	Spring Recess ends, 8:00 A.M.
May	30	Thursday	Second Semester examinations begin
June	8	Saturday	Alumni Day
June	9	Sunday	Baccalaureate Service, 10:45 A.M.
June	10	Monday	Commencement, 11:00 A.M.
July	8	Monday	Summer Session begins, 8:00 A.M.
August	30	Friday	Summer Session ends, 5:30 P.M.
September	30	Monday	Freshman Program begins
October	2	Wednesday	First Semester begins, 8:00 A.M.
November	27	Wednesday	Thanksgiving Recess begins, 5:30 P.M.
December	2	Monday	Thanksgiving Recess ends, 8:00 A.M.
December	20	Friday	Christmas Recess begins, 5:30 P.M.
195	58		
January	6	Monday	Christmas Recess ends, 8:00 A.M.
January	23	Thursday	First Semester examinations begin
January	31	Friday	First Semester ends, 5:30 P.M.
February	10	Monday	Second Semester begins, 8:00 A.M. Registration of new students
March	1	Saturday	Last Day for filing Open Scholarship Applications
March	28	Friday	Spring Recess begins, 5:30 P.M.
April	7	Monday	Spring Recess ends, 8:00 A.M.
May	29	Thursday	Second Semester examinations begin
June	7	Saturday	Alumni Day
June	8	Sunday	Baccalaureate Service, 10:45 A.M.
June	9	Monday	Commencement, 11:00 A.M.
July	7	Monday	Summer Session begins, 8:00 A.M.
August	29	Friday	Summer Session ends, 5:30 P.M.
September	29	Monday	Freshman Program begins, Registration

of new students

First Semester begins, 8:00 A.M.

October

Wednesday

### The Directors

	First	Term
	Elected	Expires
REV. TITUS A. ALSPACH, D.D., Lancaster,	1925	1960
LILLIAN ISENBERG BAHNEY, B.A., Myerstown,	1951	1961
CHARLES A. BEHNEY, M.D., Lansing, Michigan,	1937	1957
REV. C. EUGENE BLUM, B.A., B.D., D.D., York,	1950	1960
SAMUEL C. BOND, JR., B.A., Orefield,	1952	1957
WALTER R. DOUTHETT, M.A., Darby,	1946	1961
SHERMAN A. EGER, M.D., Cynwyd,	1949	1959
EDWARD S. FRETZ, LL.D., Collegeville,	1925	1960
THOMAS P. GLASSMOYER, B.S., LL.B., Willow Grove,	1956	1961
Donald L. Helfferich, B.A., LL.B., LL.D., Collegeville,	1927	1957
EVELYN GLAZIER HENZEL, M.A., Glenside,	1950	1960
H. OBER HESS, Esq., B.A., LL.B., Norristown,	1947	1957
REV. MERRITT J. JEFFERS, M.S., B.D., D.D., Myerstown,	1953	1958
RHEA DURYEA JOHNSON, B.A., LITT.D., Philadelphia,	1928	1958
ROBERT L. JOHNSON, LL.D., Philadelphia,	1947	1957
REV. W. SHERMAN KERSCHNER, D.D., Philadelphia,	1940	1960
CHARLES LACHMAN, LL.D., Bryn Mawr,	1949	1959
STEWART E. LAUER, B.S., LL.D., York,	1953	1958
REV. JOHN LENTZ, D.D., Norristown,	1946	1961
D. STERLING LIGHT, B.A., Norristown,	1947	1957
N. E. McClure, Ph.D., Litt.D., LL.D., L.H.D.,		
Collegeville,	1936	1961
REV. JAMES M. NIBLO, D.D., Norristown,	1936	1961
CHARLES H. Noss, York,	1944	1959
R. MAXWELL PAINE, B.A., D.D., Norristown,	1955	1960
HARRY E. PAISLEY, LL.D., Philadelphia,	1907	1957
GEORGE E. PFAHLER, M.D., Sc.D., LL.D., Philadelphia,	1935	1960
WILLIAM D. REIMERT, B.A., LL.D., Allentown,	1947	1957
CHARLES V. ROBERTS, B.S., Drexel Hill,	1956	1961
CHESTER ROBBINS, M.A., LL.D., Princeton, N. J.,	1943	1959
George L. Thomas, Jr., B.A., D.C.S., Lilypons, Md.,	1951	1961
ROBERT R. TITUS, B.S., LL.D., Villanova,	1948	1958
RALPH F. WISMER, Esq., B.A., LL.D., Collegeville,	1938	1958
HARLESTON R. WOOD, B.A., Conshohocken,	1956	1961

### COMMITTEES OF THE BOARD OF DIRECTORS

- Executive Committee: R. F. Wismer, H. E. Paisley, D. L. Helfferich, John Lentz, J. M. Niblo, N. E. McClure, R. D. Johnson, D. S. Light, Charles Lachman, W. D. Reimert.
- Committee on Finance: R. F. WISMER, H. E. PAISLEY, J. M. NIBLO, N. E. McClure, D. L. Helfferich, R. R. Titus, Charles Lachman, W. D. Reimert.
- Committee on Buildings and Grounds: J. M. Niblo, W. R. Douthett, N. E. McClure, D. S. Light, C. H. Noss, W. D. Reimert.
- Committee on Instruction: N. E. McClure, G. E. Pfahler, D. L. Helfferich, R. L. Johnson, Chester Robbins.
- Committee on Long-Term Planning: J. M. Niblo, W. S. Kerschner, W. R. Douthett, G. E. Pfahler, C. H. Noss, R. F. Wismer, N. E. McClure, D. L. Helfferich, H. E. Paisley, Charles Lachman.
- Committee on Budget: W. R. Douthett, R. F. Wismer, N. E. McClure, D. L. Helfferich, John Lentz.

### OFFICERS OF THE CORPORATION

President: HARRY E. PAISLEY, Philadelphia.

First Vice-President: WILLIAM D. REIMERT, Allentown.

Second Vice-President: Rev. W. SHERMAN KERSCHNER, Philadelphia.

Secretary: RALPH F. WISMER, Collegeville.

Assistant Secretary: D. STERLING LIGHT, Norristown.

Treasurer: RALPH F. WISMER, Collegeville.

### The Administration

N. E. McClure, Ph.D., Litt.D., LL.D., L.H.D., President DONALD L. HELFFERICH, B.A., LL.B., LL.D., Vice-President CHARLES LACHMAN, LL.D., Vice-President WILLIAM S. PETTIT, M.S., Dean GEOFFREY DOLMAN, M.A., Director of Admissions ALLAN L. RICE, PH.D., Assistant Director of Admissions H. LLOYD JONES, JR., M.A., Assistant Director of Admissions WILLIAM J. PHILLIPS, Ph.D., Director of the Evening School REV. ALFRED L. CREAGER, B.S., B.D., D.D., College Chaplain G. SIEBER PANCOAST, Ph.D., Dean of Men MISS CAMILLA B. STAHR, B.A., Dean of Women ROBERT F. SUTTON, M.A., Librarian RALPH F. WISMER, Esq., B.A., LL.D., Treasurer JAMES R. RUE, Manager, Treasurer's Office HARVEY R. VANDERSLICE, PED.D., Director of Placement EVERETT M. BAILEY, M.A., Director of Athletics CHARLES D. MATTERN, Ph.D., Director of Student Employment EDWARD H. PLATTE, M.D., College Physician MISS HELEN M. MOLL, R.N., Resident Nurse

Russell L. Remig, Ch.E., Superintendent of Buildings William S. Friedeborn, B.A., Manager, Supply Store Roger P. Staiger, Ph.D., Alumni Executive Secretary

JOSEPH P. LYNCH, Steward

### THE ADMINISTRATIVE STAFF

### Secretaries

MRS. MARY S. STEELE, President's Office

Mrs. H. Arnold Smith, Dean's Office

Mrs. B. A. Yankolonis, Dean's Office

MISS AGNES J. DONAHUE, B.A., Office of Admissions

MRS. CHARLES E. STOVER, Office of Admissions

Mrs. Elwood W. Adams, Placement Office

MRS. MAURICE O. BONE, Alumni Office

MRS. RAYMOND S. LONG, Alumni Office

### Assistants

MR. WALLACE ANGSTADT, Treasurer's Office

Mr. Frederick Wentz, Treasurer's Office

MR. T. SPENCER HAND, M.S. IN L.S., Assistant Librarian

MRS. ROGER P. STAIGER, B.A., Circulation Assistant, Library

MRS. VERNA SCHUSHNAR, R.N., Assistant Resident Nurse

MR. REID E. WATSON, B.A., Assistant Superintendent of Buildings

#### Residents

MR. J. DOUGLAS DAVIS, M.A.

MR. H. LLOYD JONES, JR., M.A.

REV. RICHARD T. SCHELLHASE, B.A., B.D.

### Preceptresses

MRS. W. U. HELFFERICH, B. LITT, Hobson Hall

MRS. G. HENRY SHRYOCK, 942 Main Street

MISS MILDRED MORRIS, Glenwood Hall

Mrs. Evan S. Snyder, B.S., Duryea Hall

MRS. EDGAR BAIRD, 45 Sixth Avenue

Mrs. A. E. Schellhase, 646 Main Street

MRS. ROBERT E. OGREN, B.A., Fircroft Hall

Mrs. Paul E. Towers, Clamer Hall

MRS. CLEMENT W. DECHANT, South Hall

MRS. CLOYD A. HAZLETT, 702 Main Street

Mrs. John H. McCandless, Maples Hall

Mrs. Lawrence H. Pearson, 944 Main Street

### The Faculty, 1956-1957\*

NORMAN EGBERT McClure, Ph.D., LITT.D., LL.D., L.H.D., President; Professor of English

B.A., Ursinus College; M.A., Pennsylvania State University; Ph.D., University of Pennsylvania; Litt.D., Pennsylvania Military College, Drexel Institute of Technology; LL.D., Temple University; L.H.D., Franklin and Marshall College.

WILLIAM SCHUYLER PETTIT, M.S., Dean; Professor of Chemistry B.S. in Chem., M.S., University of Pennsylvania.

JOHN WENTWORTH CLAWSON, M.A., Sc.D., Dean, Emeritus; Professor of Mathematics, Emeritus

B.A., M.A., University of New Brunswick; B.A., Cambridge University; Sc.D., Ursinus College.

ELIZABETH BRETT WHITE, Ph.D., Professor of History, Emeritus B.A., Cornell University; M.A., University of Wisconsin; Ph.D., Clark University.

\*\*MARTIN WEAVER WITMER, B.A., Ped.D., Professor of English, Emeritus B.A., Ped.D., Franklin and Marshall College.

CHARLES LYON CHANDLER, B.A., LL.D., Professor of Political Science, Emeritus

B.A., Harvard University; LL.D., University of Porto Alegre; LL.D., University of Bogota.

JAMES LANE BOSWELL, PH.D., Professor of Economics

B.A., Georgetown College; M.A., Ph.D., University of Pennsylvania.

Russell Davis Sturgis, Ph.D., David Laucks Hain Professor of Chemistry

B.A., University of Delaware; M.S., Ph.D., University of Pennsylvania. George Russell Tyson, Ph.D., Professor of Psychology and Education B.S., M.A., Ph.D., University of Pennsylvania.

MAURICE OBERLIN BONE, B.C.S., Professor of Economics B.C.S., Northwestern University.

Frank Leroy Manning, Ph.D., Professor of Mathematics
B.S., Cornell University; M.S., Rutgers University; Ph.D., Cornell
University.

Listed in order of appointment to present rank; appointments of the same year are listed alphabetically.

<sup>\*\*</sup>Died, October 8, 1956

DONALD GAY BAKER, Ph.D., Professor of Greek

B.A., Haverford College; M.A., Ph.D., Harvard University.

GEORGE WELLINGTON HARTZELL, Ph.D., Professor of German

B.A., Lehigh University; M.A., Ph.D., University of Pennsylvania.

CALVIN DANIEL YOST, JR., Ph.D., Professor of English

B.A., Ursinus College; M.A., Ph.D., University of Pennsylvania.

MAURICE WHITMAN ARMSTRONG, S.T.M., Ph.D., Professor of History B.A., M.A., Dalhousie University; B.D., Pine Hill Divinity Hall; S.T.M., Ph.D., Harvard University.

HARVEY ROSEN VANDERSLICE, M.A., PED.D., Professor of Education B.A., Ursinus College; M.A., University of Pennsylvania; Ped.D., Ursinus College.

PAUL RAYMOND WAGNER, Ph.D., J. Harold Brownback Professor of Biology

B.S., Ursinus College; M.S., Ph.D., University of Pennsylvania.

EVERETT MARTIN BAILEY, M.A., Director of Athletics; Professor of Physical Education

B.P.E., B.S., Springfield College; M.A., Columbia University.

JOHN JACOB HEILEMANN, Ph.D., Professor of Physics B.A., M.A., Ph.D., University of Pennsylvania.

CHARLES DAVID MATTERN, Ph.D., Professor of Philosophy B.S., Ursinus College; Ph.D., University of Pennsylvania.

EUGENE HERBERT MILLER, Ph.D., Professor of Political Science B.A., Ursinus College; M.A., Ph.D., Clark University.

WILLIAM FRANKLIN PHILIP, Mus. Doc., Professor of Music

Mus.B., Mus.M., Mus.Doc., State Academy of Church and School Music, Berlin.

FOSTER LEROY DENNIS, Ph.D., Professor of Mathematics

B.S., Ursinus College; M.A., Cornell University; Ph.D., University of Illinois.

WILLIAM JOHN PHILLIPS, Ph.D., Professor of English B.A., M.A., Ph.D., University of Pennsylvania.

ALFRED MILES WILCOX, M.A., Professor of French

B.A., Wesleyan University; M.A., Brown University.

ELEANOR FROST SNELL, M.A., Professor of Physical Education

B.A., University of Nebraska; M.A., Columbia University.

ALLAN LAKE RICE, Ph.D., Assistant Director of Admissions; Professor of German

B.A., M.A., Ph.D., University of Pennsylvania.

HELEN THOMPSON GARRETT, Ph.D., Professor of French

B.A., Swarthmore College; *Diplome*, University of Lille; Ph.D., University of Pennsylvania.

GARFIELD SIEBER PANCOAST, Ph.D., Dean of Men; Professor of Political Science

B.S., Ursinus College; M.A., Ph.D., University of Pennsylvania.

ROBERT FRANKLIN SUTTON, M.A., Librarian

B.S., District of Columbia Teachers College; M.A., University of Pennsylvania.

James Allan Minnich, M.A., Associate Professor of Education B.S., M.A., University of Pennsylvania.

Alfred Leon Creager, B.S., B.D., D.D., Chaplain; Associate Professor of the History of the Christian Church

B.S., Ursinus College; B.D., The Theological Seminary, Lancaster; D.D., Ursinus College.

RAYMOND VICTOR GURZYNSKI, M.Ed., Associate Professor of Physical Education

B.S., Ursinus College; M.Ed., Temple University.

Geoffrey Dolman, M.A., Director of Admissions; Associate Professor of English

B.A., M.A., University of Pennsylvania.

ROGER POWELL STAIGER, Ph.D., Associate Professor of Chemistry B.S., Ursinus College; M.S., Ph.D., University of Pennsylvania.

RICHARD MUMMA FLETCHER, Ph.D., Associate Professor of Psychology B.A., Franklin and Marshall College; Ph.D., Pennsylvania State University.

KUHRT WIENEKE, M.S., Assistant Professor of Physical Education B.A., Thiel College; B.P.E., Springfield College; M.S., Pennsylvania State University.

JAMES DOUGLAS DAVIS, M.A., Assistant Professor of History B.A., Ursinus College; M.A., University of Pennsylvania.

BLANCHE BEATRICE SCHULTZ, M.S., Assistant Professor of Mathematics B.S., Ursinus College; M.S., University of Michigan.

EVAN SAMUEL SNYDER, M.S., Assistant Professor of Physics B.S., Ursinus College; M.S., University of Pennsylvania.

HOWARD LLOYD JONES, JR., M.A., Assistant Director of Admissions; Assistant Professor of English

B.A., University of Delaware; M.A., University of Pennsylvania.

Ammon George Kershner, Jr., Ph.D., Assistant Professor of English B.S., M.S., M.A., Ph.D., University of Pennsylvania.

WILLIAM THOMAS PARSONS, Ph.D., Assistant Professor of History B.A., Ursinus College; M.A., Ph.D., University of Pennsylvania.

ROBERT EDWARD OGREN, Ph.D., Assistant Professor of Biology B.A., Wheaton College; M.S., Northwestern University; Ph.D., University of Illinois.

WALTER WOODROW MARSTELLER, B.S., Assistant Professor of Physics B.S., Ursinus College.

ELIZABETH READ FOSTER, Ph.D., Assistant Professor of History B.A., Vassar College; M.A., Columbia University; Ph.D., Yale University.

ALFRED D. ROBERTS, M.A., Assistant Professor of Romance Languages B.A., Ursinus College; M.A., University of Pennsylvania.

HARRY CLAY SYMONS, M.A., Assistant Professor of Economics B.A., M.A., Pennsylvania State University.

RICHARD TYSON SCHELLHASE, B.A., B.D., Assistant Professor of Religion B.A., Ursinus College; B.D., The Theological Seminary, Lancaster.

RAYMOND LOUIS RAFETTO, JR., B.S., Assistant Professor of Economics B.S., Temple University.

ROBERT CARRINGTON STEIN, M.S., Assistant Professor of Biology B.A., St. Olaf College; M.S., Cornell University.

Jessie Ashworth Miller, Ph.D., Lecturer in Sociology B.A., University of Maine; M.A., Ph.D., Clark University.

MARIAN GERTRUDE SPANGLER, B.A., Instructor in Music B.A., Ursinus College.

THOMAS SPENCER HAND, M.S. IN L.S., Assistant Librarian B.A., Haverford College; M.A., University of Pennsylvania; M.S. in L.S., Drexel Institute of Technology.

JENEPHER PRICE SHILLINGFORD, B.S., Instructor in Physical Education B.S., Ursinus College.

MARGARET BROWN STAIGER, B.A., Circulation Assistant in Library B.A., Ursinus College.

HARRY A. SPANGLER, B.S., Assistant in Physical Education B.S., Shippensburg State Teachers' College.

WILLIAM HOWARD YOST, M.Ed., Assistant in Physical Education B.P.E., Springfield College; B.A., Western Reserve University; M.Ed., Temple University.

### OFFICERS OF THE FACULTY

Chairman, The President Secretary, Professor Yost

PROFESSOR YOST

### ACADEMIC COUNCIL

THE PRESIDENT

PROFESSOR MILLER

THE DEAN
PROFESSOR MATTERN

#### **ADVISERS**

Biology Department, Professor Wagner

Chemistry Department, Professor Sturgis

Classics Department, Professor Baker

Economics and Business Administration Department, Professor Boswell

English Department, Professor Yost

German Department, Professor Hartzell

Health and Physical Education, Professor Vanderslice

History Department, Professor Armstrong

Mathematics Department, Professor Manning

Physics Department, Professor Heilemann

Political Science Department, Professor Miller

Psychology Department, Professor Tyson

Romance Languages Department, Professor Wilcox

#### COMMITTEES

Admission and Standing: The President, Dean Pettit, Professor Yost, Professor Dolman, Professor Jones.

Library: The President, The Librarian, Professor Armstrong, Professor Yost, Professor Sturgis.

Scholarships: The President, Dean Pettit, Professor Mattern, Professor Dolman, Professor Jones.

Discipline: Dean Pettit, Dean Stahr, Dean Pancoast, The Chaplain, Professor Wilcox, Professor Dolman, Professor Sturgis.

Student Activities: Dean Pancoast, Professor Bone, Dean Stahr, The Chaplain, Professor Parsons, Professor Staiger.

- Student Publications: Professor Mattern, Professor Bone, Professor Jones, Professor Dolman, Professor Schellhase.
- Athletics: Professor Bailey, Dean Pancoast, Professor Dennis, Professor Schellhase.
- Forum: Professor E. H. Miller, Professor Armstrong, Professor Yost.

### Historical Sketch

THE BEGINNING of educational work on what is now the campus of Ursinus College dates back to the construction of a primitive school-house built of logs probably two centuries ago. The ancient building was razed in 1832 when Todd's School was built in the town of Perkiomen Bridge, now Collegeville. In 1848 Freeland Seminary was opened on a tract adjacent to Todd's School. The new school occupied the buildings now known as Freeland Hall and Stine Hall. During the following two decades many hundreds of young men were educated here.

In 1867 a group of men, members of the German Reformed Church, actuated by a desire to serve the interests of higher education and of evangelical Christian religion, laid plans to establish a college where, to quote their words, young men could be "liberally educated under the benign influence of Christianity." They chose as the name of the College that of the distinguished sixteenth-century scholar and reformer, Zacharius Ursinus of the University of Heidelberg. In 1869 the charter was granted by the Legislature of Pennsylvania. The buildings of Freeland Seminary were bought, and instruction was begun on September 6, 1870. Women were admitted to the College for the first time in 1881.

Coincident with the founding of the College was the establishment of a preparatory department as a successor to Freeland Seminary. The preparatory school was called Ursinus Academy and was operated as such until 1910, when it was discontinued.

Although Ursinus College admits students of all faiths, the College has been since its founding a church-related college, related to the German Reformed Church, later known as the Reformed Church in the United States, and since 1934 known as the Evangelical and Reformed Church.

#### COLLEGE PRINCIPLES

URSINUS COLLEGE is a Christian, coeducational, liberal arts college which seeks to help the student to understand and to emulate excellence in scholarship and in conduct. Although in recent decades the College has extended its work to include the preparation of men and women for a variety of professions, the College continues to emphasize the fact that however varied and specialized the changing needs of the day, the fundamental needs of man remain constant. Each student, whatever his field of specialization, is required to study those subjects which are the core of our cultural heritage.

Ursinus recognizes its duty to preserve the cultural and spiritual tradition which this generation has inherited and to transmit this sense of duty to succeeding generations.

The College seeks to help the students to develop those qualities which will fit them for the extraordinary responsibilities of educated men and women. The purposes of the College are achieved through its curriculum, through the many extra-curricular activities, and through the pattern of campus life.

The whole educational program serves to cultivate a particular set of qualities in the students:

- (1) An active intellectual curiosity and a desire to learn
- (2) A knowledge of the techniques of sound scholarship
- (3) An ability to think logically and critically
- (4) A mature understanding of one's self, of others, and of society
- (5) An insight into our natural environment, and a knowledge of the laws governing it
- (6) An appreciation of our cultural inheritance
- (7) A sense of responsibility
- (8) Attitudes consonant with the Christian ideal of morality and service

Ursinus College regards its educational task as a cooperative quest for complete Christian living. To this end, the purpose of the College, with its resources of equipment, curriculum and personnel, is conceived to be the development of those ideas, ideals, attitudes, habits, and skills in each student which will make for his creative and effective participation in the modern world.

- I. Intellectual To stimulate active intellectual curiosity, to encourage scholarly habits and creative effort, and to provide for the integration of knowledge in such a way as to insure for each individual a working philosophy of life.
- II. Cultural To quicken interest in the great achievements of humanity, to enlarge understanding of the arts and sciences, and to enhance appreciation of spiritual values.
- III. Vocational To develop in the student versatility and adaptability, to help him find his appropriate lifework, and to provide

him with such special preparation as will be in harmony with the general cultural aims of the College.

IV. Health To provide such a system of instruction and activity as will guide each student in developing for himself an adequate

life program of physical and mental health.

V. Social To help each student to become conscious of his obligation to the social group, and to provide such training and participation as will fit him for creative and intelligent service in life.

VI. Character To utilize all the resources of the College in the development of positive Christian character.

### CULTURAL ENVIRONMENT

STUDENTS AT URSINUS have all the advantages of living in the country, and at the same time they are close enough to New York and Philadelphia to have easy access to such additional opportunities for culture as the symphony orchestra, grand opera, legitimate theatres, museums, lectures, and exhibits.

Ursinus is located in the heart of a region which is rich in historical tradition. In Colonial days this region was the center of the cultural and political development of America.

### ACCREDITATION

URSINUS IS A MEMBER of the Association of American Colleges, and is on the approved list of the Middle States Association of Colleges and Secondary Schools, the American Association of University Women, and the \*Association of American Universities.

<sup>•</sup> The Association of American Universities late in 1949 discontinued its practice of accrediting colleges and universities. At that time Ursinus had been continuously approved by the Association for many years.

### College Activities

### **ATHLETICS**

URSINUS RECOGNIZES the physical and moral benefit derived from athletic activity and accordingly offers a well-balanced sports program open to all. Intercollegiate competition is encouraged in football, basketball (varsity and junior varsity), soccer, wrestling, baseball, track, tennis, and golf. In addition to this intercollegiate program intramural games are played. Intramural athletics for men include league competition in touch football, basketball, and softball, and an elimination tournament in tennis.

For women students, the College supports intercollegiate competition in hockey (varsity and junior varsity), basketball (varsity and junior varsity), softball, tennis, swimming, and lacrosse. The intramural program provides voluntary recreation in hockey, basketball, tennis and softball.

The gymnasiums, playing fields, and equipment available for the pursuit of these various activities are described under Buildings and Equipment. (See pp. 20 to 23).

### **ORGANIZATIONS**

A LARGE NUMBER of organizations provide numerous and varied facilities of extra-curricular activity. All such organizations are approved by the Faculty and are supervised by the Committee on Student Activities or the Dean of Men and Dean of Women. In addition various members of the Faculty serve these groups as advisers. Student life on campus is regulated and controlled by the Men's Student Council and the Women's Student Government Association under the direction of the Dean of Men and the Dean of Women. Members of the student governing organizations are elected by the student body.

One of the most active organizations is the Young Men's and Young Women's Christian Association of which every student is nominally a member. Numerous religious and social activities are planned and sponsored by this group in collaboration with other campus groups. Allied religious and service groups are the Chi Alpha Society for those students planning to enter the ministry or other religious work, the Lutheran Student Association, the Canterbury Club, and the Newman Club.

Other organizations stimulate the interest of students in particular areas of study or in future occupations: the Anders-Brownback Pre-Medical Society, the Beardwood Chemical Society, the English Club, the French Club, the Pre-Legal Society, the Future teachers of America, and the Business Administration Club. Interest in athletics and campus

spirit is fostered by the Women's Athletic Association, the Varsity Club, and the Spirit Committee. A chapter of the Honorary Social Studies

Society, Pi Gamma Mu, has been established.

A large and varied program of dramatics is sponsored and carried out by the Curtain Club, which presents two major productions a year in addition to various group productions. There is at Ursinus a chapter of Alpha Psi Omega, a national honorary dramatic fraternity.

The Debating Club each year holds intercollegiate and intramural debates on topics of national interest. Members may qualify for election

to Tau Kappa Alpha, the national honorary debating fraternity.

Music plays a large part in the life at Ursinus. The College Choir, the Glee Club, the Band, and the Music Club all serve to encourage an interest in good music. One of the outstanding musical events of the year is the traditional rendering of Handel's *Messiah* each year during the Christmas season.

There are eleven local social organizations on the Ursinus campus. The fraternities are Sigma Rho, Zeta Chi, Alpha Phi Epsilon, Demas, Beta Sigma Lambda, and Delta Pi Sigma. The sororities are Omega Chi, Alpha Sigma Nu, Kappa Delta Kappa, Phi Alpha Psi, and Tau Sigma Gamma.

#### **PUBLICATIONS**

THE URSINUS BULLETIN, of which the Catalogue is a number, is the official publication of the College. It is issued five times a year.

THE ALUMNI JOURNAL, the official publication of the Alumni Associa-

tion, appears three times a year.

THE URSINUS WEEKLY is the Ursinus newspaper. It is managed by a Board of Control consisting of student and faculty representatives and is edited and written entirely by the students. The Editor-in-Chief, the associate editors, and the business manager are elected by the board on the basis of merit and the staff is selected by the editors on the same basis. The paper appears each week and is of interest to students and alumni as a record of life at Ursinus.

THE LANTERN serves as an outlet for those interested in creative writing and art. It is written and edited by an all-student staff under the direction of a member of the Faculty Committee on Student Publications. It is published three times a year.

THE RUBY, the Ursinus yearbook, is published by the Senior Class each year. It is a volume presenting an intimate pictorial account of the year's activities, not only of the Class, but of the entire College.

### Buildings and Equipment

Bomberger Memorial Hall, named for J. H. A. Bomberger, President of Ursinus College, 1870-1890, is a large and imposing structure in the Romanesque style of architecture, built of Pennsylvania blue marble. This building is for the use of the departments of language and literature, the social sciences, history, philosophy, religion, public speaking, and music. In it are the chapel, twelve classrooms, six conference rooms, a seminar room, two music studios, two day studies, a recreation room, the student lounge, and the offices of the Dean, the Dean of Men, the Director of Admissions, the Treasurer, the Director of Student Teaching and Placement, and the Director of Student Employment. The erection of Bomberger Hall was made possible by the benefactions of the late Robert Patterson. The Clark Memorial Organ occupies a position in the front of the chapel in Bomberger Hall. It is a memorial to the late Charles Heber Clark, LL.D., and was the gift of his wife.

PFAHLER HALL OF SCIENCE, erected in 1932, and named in honor of Dr. George E. Pfahler, is a stone and concrete building. The first floor and basement are devoted to work in psychology, education, mathematics, and physics, the second floor to biology, and the third floor to chemistry. The building contains the offices of the President and Vice-President, the Levi Jay Hammond Laboratory of Comparative Anatomy, the W. Wayne Babcock Laboratory of General Biology, the Anna Heinly Schellhamer Laboratory, the Schellhamer Laboratory, nine other teaching laboratories, two laboratories for research, nine professors' laboratories and offices, seven classrooms, a lecture hall with gallery and projection booth, and a library. The building is equipped with a deck for astronomical observation, on which is mounted the Elihu Thomson Memorial Telescope.

THE ALUMNI MEMORIAL LIBRARY contains reading rooms, offices of the library staff, seminar rooms, workroom, faculty and directors' room, stacks, vaults containing rare books and manuscripts, music room, and the Shaw-Bernard (Museum) Collection of curios and objets d'art.

The Library collection of 46,000 volumes, exclusive of government documents and pamphlets, has been selected to serve the needs of the liberal arts college. The Library receives over 200 periodicals and newspapers. The location of Ursinus College in the Philadelphia area makes available for special studies the considerable bibliographical holding of neighboring libraries through personal consultation or inter-library loan.

The Thompson-Gay Gymnasium, built in 1927, occupies a convenient position adjoining Patterson Field and John B. Price Field. It is built of native brownstone, structural steel, and concrete. It contains a playing-floor, a gallery for spectators, locker rooms, shower rooms, coaches' offices, and storage rooms. At one end of the main floor is a completely equipped theatrical stage. Portable seating constitutes a part of the equipment of the building. This building is a memorial to Robert W. Thompson, '12, and George H. Gay, '13, noted Ursinus athletes, both of whom died in their senior year at the College.

THE COLLEGE GYMNASIUM, erected in 1947, is located near the Thompson-Gay Gymnasium and Price Field. It contains a large basketball court, two single handball courts, seating for 800 spectators, two dressing and shower rooms for players, a dressing room for officials, and storage rooms.

PATTERSON FIELD, named for Robert Patterson, first benefactor of the College, contains the varsity football field, space for competition in field events, and a quarter mile track with a 220 yard straightaway. The steel grandstand provides seating for 1440 spectators.

PRICE FIELD, named for Dr. John B. Price, '05, one of the great athletes in Ursinus history, contains the soccer field, the baseball diamond, several softball fields, and football practice ground.

THE TENNIS COURTS are at the rear of Curtis Dormitory.

THE EFFIE BRANT EVANS HOCKEY FIELD is located on the east campus near the Alumni Memorial Library.

THE EGER GATEWAY, erected by the generosity of George P. Eger, of Reading, Pennsylvania, stands at the entrance of the walk leading from Main Street to Freeland Hall.

Post Office and Supply Store. A Post Office is maintained on the campus for the convenience of students. Adjacent to the Post Office is the Supply Store, in which are sold text books, college jewelry, stationery, confections, and students' supplies.

### DORMITORIES FOR MEN

FREELAND HALL, erected in 1848, is the original building of Freeland Seminary. Derr Hall, and Stine Hall are additions to Freeland. The buildings are of stone, four stories in height with a fifth story of dormer rooms. On the two lower floors are the four dining rooms, the kitchen, storage and refrigeration rooms, and the office of the steward. The upper floors are for the residence of men students. The rooms are of varying size, designed for one or two occupants, a number being arranged en suite.

THE BRODBECK and CURTIS DORMITORIES FOR MEN are buildings in English Colonial style. Each building has four floors. The rooms are spacious, well-lighted, and easy of access by means of fireproof stairways. They bear the names of esteemed benefactors of the College, Andrew R. Brodbeck and Cyrus H. K. Curtis.

FETTEROLF HOUSE, fronting on Main Street and facing the College campus, is a residence hall for men.

#### DORMITORIES FOR WOMEN

FIRCROFT, a residence for women students, was presented to the College by Miss Sara E. Ermold as a memorial to her mother, Ella N. Ermold.

Hobson House, is located at Sixth Avenue and Main Street. It is used as a residence hall for women.

SHREINER HALL, fronting on Main Street and facing the College campus, is a residence hall for women. This is a three-story brick building arranged for the accommodation of thirty-three students. On the first floor are a reception room and the office of the Dean of Women.

DURYEA HALL, next to Shreiner Hall, is a residence hall for fifteen women and a faculty family.

Trinity Hall, familiarly known as South Hall, a residence for women,

is located on Sixth Avenue. The building, with the grounds on which it is located, represents a joint benefaction to the College by the late Henry M. Housekeeper, who was an elder in Trinity Reformed Church, Philadelphia, and the late Abram G. Grater, who was an elder in Trinity Reformed Church, Norristown, Pa.

THE MAPLES, a three-story building located on Main Street, opposite the east campus, is a residence hall for women.

CLAMER HALL, Main Street, the gift of Dr. Guilliam H. Clamer, is a residence hall for women.

Sprankle Hall, on the east campus fronting Fifth Avenue, is an infirmary.

SUPERHOUSE, a residence on Main Street opposite the campus, was bequeathed to the College by the late Henry W. Super, D.D., LL.D., Vice-President and Professor of Mathematics, 1870-1891, and President, 1892-1893.

Lynnewood is a private residence hall for women, on Main Street opposite the west campus.

GLENWOOD, 646 MAIN STREET, 724 MAIN STREET, 942 MAIN STREET, and 944 MAIN STREET, Collegeville, are buildings leased by the College to provide additional residence quarters.

Paisley Hall, Stauffer Hall and Beardwood Hall, are three new dormitories for women. Construction began in July of 1956 and completion is expected by September of 1957. The buildings will house 244 women and are located on the east campus behind the Alumni Memorial Library.

### Admission

THE FIRST step in seeking admission to Ursinus College is to file an application. A form for this purpose may be obtained from the Office of Admissions. After the completed form has been returned to the College, accompanied by the ten-dollar pre-matriculation fee, the Director of Admissions will request the applicant's school principal or headmaster to send an official transcript of the school record. At the same time, inquiry is made concerning the character of the candidate and his fitness to do college work. When a school record has been returned to the College, the Director of Admissions will assign the appropriate College Entrance Examination Board Tests.

#### TESTS

ALL CANDIDATES for admission to the Freshman Class are expected to take at least the Scholastic Aptitude Test of the College Entrance Examination Board. Full information concerning the dates of administering such tests can be obtained by writing directly to the College Entrance Examination Board, P.O. Box 592, Princeton, New Jersey. If, in the opinion of the Committee on Admissions, it seems helpful to have additional information, the applicant may be asked to take additional achievement tests. In a few exceptional cases, the Committee on Admissions may prescribe tests other than those of the College Entrance Examination Board.

#### PREPARATION

A CANDIDATE for admission to the Freshman Class must be a graduate of an approved secondary school.

If the applicant is a graduate of a four-year high school and does not plan to major in Business Administration, he should offer for admission at least fifteen units which are to be distributed as follows:

BASIC ACADEMIC CREDITS (9 Units) English, Four Years, Earning Three Units Elementary Algebra, One Unit Plane Geometry, One Unit Science, One Unit

Social Studies, One Unit

Foreign Language, Two Units in One Language

### ADDITIONAL ACADEMIC CREDITS (At least 21/2 Units)

Advanced Algebra

Solid Geometry

Plane Trigonometry

Science

Social Studies

Foreign Language

ELECTIVES (Maximum 31/2 Units)

Not more than 1 credit will be accepted in any single elective.

Bookkeeping

Drawing (Mechanical, Prepared Course)

Geology

Stenography

Junior Business Training

Music and Art (History or Appreciation)

Commercial Law

Commercial Geography

If the candidate is a graduate of a three-year high school and does not plan to major in Business Administration, he should offer at least twelve units, which should include the basic credits above. Not more than one unit may be presented from the group designated as electives.

### ADMÍSSION TO BUSINESS ADMINISTRATION

APPLICANTS for admission to the course in Business Administration will not be required to present the normal two entrance credits in Foreign Language but will be permitted to substitute, in place of Foreign Language, additional units in Bookkeeping, Stenography, Junior Business Training, Commercial Law, and Commercial Geography. Not more than two such units will be permitted in any single subject. A student so admitted must present fifteen entrance units and meet the normal Foreign Language requirements for graduation.

Applicants whose preparation does not coincide precisely with the foregoing outline may in exceptional cases be admitted to the College if, in the judgment of the Committee on Admissions, they are qualified to do college work satisfactorily.

#### ENGINEERING PROGRAM

ARRANGEMENTS have been made with the Engineering Schools of the University of Pennsylvania by which a student may transfer to the University after completing three years of prescribed work toward the B.A. degree at Ursinus College.

Ursinus College will grant the B.A. after the student has satisfied the requirements for that degree. The University of Pennsylvania will grant

the Engineering degree upon completion of the fifth year.

The candidate for the Engineering program must present 31/2 years

of entrance credit in Mathematics.

His background in foreign language must be such that he will be capable of entering the *second* year of language in college. If this is not the case he must make up the deficiency in foreign language in summer school.

### SPECIAL STUDENTS

A LIMITED NUMBER of applicants who are not candidates for degrees may be admitted as special students, provided that they have satisfactory preparation for the college courses which they wish to pursue. Special students who reside at the College must register for at least twelve hours of work in each semester. They are subject to the same regulations as other students.

#### TRANSFER STUDENTS

To enter the Sophomore or Junior Class at Ursinus College, an applicant must support his application by requesting each institution he has attended subsequent to graduation from secondary school to send to the Director of Admissions a transcript of his record at the institution of higher learning and a certificate of honorable dismissal. It will be helpful if the candidate will send a catalogue of the college he has been attending, marked to indicate the courses he has taken. No advanced standing will be granted to a transfer student unless his previous college record is free of failures and conditions.

Not more than sixty hours of work taken elsewhere will be credited to students transferring to Ursinus College.

#### PART-TIME STUDENTS

Non-resident students who are candidates for a degree and who wish to pursue fewer than twelve semester hours of work are classified as part-time students.

### NOTIFICATION OF ADMISSION

When a candidate for admission is notified of his acceptance by the College, he must make an advance payment of fifty dollars in accordance with the provisions of the Candidates' Reply Date Agreement as used by member colleges of the College Entrance Examination Board. This payment is credited on his bill for the first term. If he fails to complete his matriculation, the payment is forfeited.

### THE SUMMER SCHOOL

THE EIGHT-WEEK CURRICULUM of the Summer School is announced in the Spring, and information concerning course offerings is available after April 15. A student from another institution may be considered for admission to Summer School upon written permission of the Dean of that institution authorizing him to enroll for a specific course or courses. Admission to the Summer School is not admission to candidacy for a degree. Inquiries should be addressed to the Director of Admissions.

### THE EVENING SCHOOL

THE EVENING SCHOOL is organized to make college work available to men and women employed in business, in industry, in teaching, and to others who may be interested. The program emphasizes courses in business administration and in fields closely allied to business administration, such as economics, political science, history, English composition, public speaking and certain foreign languages.

For information, catalogue, and application forms, address The Director, Evening School, Ursinus College, Collegeville, Pa.

### TUITION EXCHANGE PROGRAM

Ursinus College is a member of the Tuition Exchange. Requests of children of faculty members of other member institutions for tuition remission will be considered upon application. Because of the necessity for maintaining a balance of imports and exports, it may not always be possible to honor such requests. Applications for tuition remission should be made through the liaison officer of the institution with which the applicant's parent is associated.

### PROGRAMS IN SPECIAL FIELDS

URSINUS is a college of liberal arts and sciences. This means that Ursinus emphasizes a broad, general education regardless of the particular career for which a student plans to prepare. At the same time, it is

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possible at Ursinus to prepare for specific careers in the fields listed below. A placement service maintained by the College helps the student to find a position in the field of his choice.

Business. Graduates in Business Administration find employment as accountants, secretaries, junior executives, sales managers. They are employed by many types of industrial concerns, banking institutions, public utilities, transportation companies, department stores, chain stores, etc. By electing Spanish, it is possible for students majoring in business to prepare for the growing opportunities in South American trade.

Chemical Research: Industrial Chemistry. The College provides opportunities for students desiring to major in Chemistry with a view to devoting their lives to some type of chemical research. Graduates find employment in the chemical industry doing pioneer work in the field of chemical research and development.

Dentistry. The Council on Dental Education of the American Dental Association fixes as the minimum basis for admission to an approved dental school the successful completion of two full years of academic work in an accredited college of liberal arts and science. This college work must include courses in English, biology, physics, inorganic and organic chemistry.

Educational Administration. Basic courses in Education are provided which are prerequisite to the professional courses in Educational Administration offered in graduate schools of education of leading universities.

Engineering. Students who wish to study Chemical, Civil, Electrical, Mechanical or Metallurgical Engineering may avail themselves of a program which is being offered at Ursinus College in cooperation with the University of Pennsylvania. A student at Ursinus College may transfer to one of the Engineering Schools of the University of Pennsylvania after completing three years of prescribed work toward the B.A. degree at Ursinus.

Ursinus College will grant the B.A. degree after the student has satisfied the requirements for that degree. The University of Pennsylvania will grant the Engineering degree upon completion of the fifth year.

Foreign Service. The American foreign service presents attractive opportunities to a limited number of young people who are willing to

prepare themselves adequately for service abroad. The history and social science courses, together with offerings available in the modern languages, provide preparation for the examinations required of applicants for positions in foreign service. Upon graduation students are urged to pursue additional work at a recognized graduate school.

Graduate Study. One purpose of the curriculum of the modern liberal arts college is to prepare students for advanced study in various fields of knowledge. Preliminary study is done by the student at the undergraduate level in his chosen major field. Those intending to enter graduate schools should have a thorough grounding in their chosen field. As a reading knowledge of French and German is essential for most higher degrees, this knowledge should be acquired in the undergraduate school.

Health and Physical Education. It is possible to specialize in health and physical education and at the same time obtain a general cultural education. Health and physical education graduates meet the requirements for certification to teach in this field in Pennsylvania and other states.

Journalism. A student interested in journalism should enroll in the departments of history, political science or English and elect widely in other fields. Following graduation from college a year at a professional school of journalism is recommended.

Laboratory Technology. It is possible to arrange for either a two-year or a four-year course of preparatory work, although the latter is strongly recommended as the preferred training.

Law. As a general rule leading law schools require a baccalaureate degree as one of the conditions for acceptance of candidates. A broad, cultural education is considered the best preparation for legal study.

Medicine. Concentration in biology or chemistry is recommended in order to prepare students who are interested in the various aspects of medicine. Preparation for schools of osteopathy and of veterinary medicine, as well as for the regular medical schools, is provided.

Music. Although a considerable number of courses in music are available at Ursinus, no major in music is offered. Those who wish to follow music as a career should plan to attend graduate school after completing their work at Ursinus.

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Nursing. Students who plan to enter the profession of nursing should register for courses in biology, chemistry, and liberal arts in order to qualify for consideration by schools of nursing.

Physical Research. A program of concentration in Physics and Mathematics is offered to students interested in physics as a career.

Psychology. Undergraduate work in psychology is designed for those who seek admission to graduate schools or who wish to enter personnel work in industry. Undergraduate study in psychology is of assistance in the fields of teaching, guidance, law, clinical psychology, personnel and social work, nursing, and preparation for medicine.

Teaching. Work in Education, including practice teaching, as required by many of the state departments of Education, is offered to those who plan a career in Education. Teacher preparation is limited to the secondary school field. Students follow curricula under the guidance of advisers.

Theology and Religious Education. Most leading theological schools have as a requirement for consideration for admission a degree in liberal arts. Students who are preparing for the ministry should plan a broad course of study which will include history, languages, and literature, although specific subjects are not ordinarily specified by seminaries as necessary for admission.

#### THE COLLEGE YEAR

THE COLLEGE year at present consists of two terms of sixteen weeks each and a Summer Term of eight weeks. Students are admitted to the College at the beginning of any term. Students who wish to do so may accelerate their college courses by attending the Summer Term in addition to the Fall and Spring Terms. The Summer Term is available to all students who wish to take advantage of it.

### Expenses

Men—Comprehensive Fee \$1190 to \$1300  Women—Comprehensive Fee \$1230 to \$1300  Activities Fee \$15  NON-RESIDENT STUDENTS Charges Per Year  Tuition \$600  Activities Fees \$15  PAYMENTS ARE TO BE MADE AS FOLLOWS  New Students  Advance Payment \$50  As indicated on bill  Breakage Deposit \$10  Old Students  July 15— Advance Payment \$50  All Students  September — As indicated on bill  Comprehensive Fee less credit for advance payment  Activities Fee  January — As indicated on bill	RESIDENT STUDENTS Charges Per Year			
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Old Students  July 15 —  Advance Payment	As indicated on bill			
July 15 — Advance Payment	Breakage Deposit		\$10	
Advance Payment	Old Students			
All Students  September — As indicated on bill  Comprehensive Fee less credit for advance payment  Activities Fee  January — As indicated on bill	July 15 —			
September — As indicated on bill Comprehensive Fee less credit for advance payment Activities Fee January — As indicated on bill	Advance Payment		\$50	
Comprehensive Fee less credit for advance payment Activities Fee January — As indicated on bill	All Students			
Activities Fee  January — As indicated on bill	September – As indicated on bill			
January – As indicated on bill	Comprehensive Fee less credit for advance payment			
	Activities Fee			
Comprehensive For				
Comprehensive ree	Comprehensive Fee			
Activities Fee	Activities Fee			

When the student is a recipient of a scholarship award, credit will be applied in the amount of one-half the value of the annual award to each semester bill.

Some students find it inconvenient to pay the comprehensive fee in one sum. Requests for devising a special financial plan may be made in advance to the Treasurer's Office.

### FEES

Pre-Matriculation Fee. A fee of \$10 is paid by the candidate at the time he files his application. This fee is not refundable and is not applied toward the student's bill.

Checks should be made payable to URSINUS COLLEGE.

EXPENSES 33

Special and Part Time Students are charged at the rate of \$20 per semester hour.

ADVANCE PAYMENT. (a) Upon his acceptance by the College an applicant must make an advance payment of \$50. This payment is credited on his bill for the first term. If he fails to complete his matriculation, this payment is forfeited. (b) All regularly enrolled students must make an advance payment of \$50 at such time as may be designated by the College. This payment is forfeited if the student fails to complete his registration.

COMPREHENSIVE FEE covers classroom instruction, tuition, use of laboratories, libraries, gymnasiums, and the infirmary; ordinary medical attention; care by the resident nurse; furnished room and table board, exclusive of Christmas and Winter and Spring recesses. The variation in fee depends upon the location of the room.

The College reserves the right to make reasonable alterations in the comprehensive fee at the beginning of any term to cover possible unforseen costs.

ACTIVITIES FEE covers subscription to the *Ursinus Weekly*, intercollegiate debating, the Christian Associations, the Ursinus College Forum, admission without charge to all athletic contests at the College, admission to Curtain Club plays and to College dances.

Pre-Session Camp for Women in Physical Education. An instructional fee of \$30 is charged for attendance at the Pre-Session Physical Education Camp. The charge for room and board is \$32 for the period.

ROOM DRAWING. A previously enrolled woman student must pay \$10 in order to qualify for drawing a room. Credit will be applied on the bill for the first term.

PRIVATE MUSICAL INSTRUCTION. A fee of \$50 is charged for any student who wishes private individual instruction in organ, piano, violin, voice or any band or orchestral instrument. This is the charge for one half-hour lesson each week during the regular term.

BREAKAGE DEPOSIT. A deposit of \$10 is required of each new student to defray any expense incurred by injury to property and is included on the bill for the first term. The unexpended balance is returned upon graduation or withdrawal from College.

Checks should be made payable to URSINUS COLLEGE.

STUDENT TEACHING. An additional fee of \$50 is required of each student engaged in practice teaching. This is payable upon presentation of the bill.

GRADUATION FEE. A graduation fee of \$10 is charged each student on the last bill of his senior year.

TRANSCRIPT FEE. A charge of \$1 is made for each transcript of a student's record after the first. Requests for transcripts should be made to the Office of the Dean.

# REGULATIONS

BILLs for the Comprehensive Fee are issued approximately thirty days before the beginning of each term. A student's bill must be settled no later than the date indicated on the statement.

No student who is indebted to the College or to any of its departments or agencies will be permitted to register at the beginning of any term, and all items due the College from a candidate for graduation must be paid before the candidate may be presented for a degree.

A student who is absent from College because of sickness, and retains his place in class, pays the Comprehensive Fee in full during his absence, except when the absence is continuous over a period exceeding four weeks, in which case resident students are allowed a rebate of \$5 for each full week on account of table board. No refund is allowed because of a student's dismissal or withdrawal from the College during a term, except when the student enters the armed services.

A student who voluntarily withdraws from College must notify the Dean and settle all bills within thirty days or be liable to dishonorable dismissal.

The possession or use of alcoholic beverages on the campus or in Collegeville is forbidden.

If a woman student marries, she at once forfeits her membership in the College. She may, however, apply for readmission.

The College reserves the right to exclude at any time students whose conduct or academic standing renders them undesirable members of the college community, and in such cases the fees due or paid in advance to the College will not be refunded in whole or in part.

Checks should be made payable to URSINUS COLLEGE.

# General Information

# ROOMS AND MEALS

URSINUS COLLEGE is a community and pleasant community life is emphasized. Students who are not living in their own homes are required to room at the College and to take their meals in the College dining rooms. A faculty-supervised French table is available for those who wish practice in oral French.

Each resident student supplies his own towels, two pairs of sheets for a single bed, mattress protector, a pair of pillow cases (38" x 45"), a pair of blankets, and a bedspread.

First-year students, except those whose presence is needed for service, are required to vacate their rooms immediately following the second-term examinations.

# PUBLIC WORSHIP

ALL RESIDENT students and all day students whose homes are within a mile of the campus are required to attend religious services in the College chapel on certain designated days of each week. Students may not be absent from chapel services more than three times in a semester without valid excuse. Students are encouraged to attend services on Sunday in the church of their own choice.

# **ABSENCES**

STUDENTS are expected to attend all meetings of the classes in which they are enrolled and to take all tests and examinations on the announced days.

A student's absences in any course must not exceed twice the number of meetings per week in that course. This regulation is designed to allow for cases of illness, the death of a relative, or duty away from the College as a representative of the institution, and, in the case of a day student, transportation difficulties.

If a student has exceeded the number of allowed absences he may be dropped from the course by the Dean after consultation with the instructor and the student's adviser. If a student is dropped for overcutting, he will be assigned a grade of F in that course. If he is allowed

to continue, he must make up the work missed and pay the required fees for permits and re-examinations.

The fee for each re-test and re-examination is five dollars (\$5).

Three latenesses are counted as the equivalent of one absence. Absences directly preceding and following a holiday are counted double.

A third-year or fourth-year student whose grades in the term immediately preceding include at least one A and no grade lower than B is placed on his own responsibility for attendance at classes.

# GRADES OF SCHOLARSHIP

On the completion of a course, the standing of the student is expressed, according to his proficiency, by one of six grades, A, B, C, D, E, or F. Letter A denotes grades between 100% and 90%, B between 90% and 80%, and so on. The grade E denotes a failure which may be made up by re-examination. The fee for this examination is five dollars. Students who have received grades higher than E are not permitted to take re-examinations for the purpose of raising their grades. The grade of F at the end of a term denotes a failure. That work must be repeated in order to obtain credit for the course. The mark I denotes that the work of a course is incomplete. This grade may be assigned only in cases of hospitalization or emergency, upon written permission of the Dean.

If the grade of E or I is not removed within one month after the beginning of the following term, the grade of F will be assigned for the course.

A student is required to make an average of at least 65% in his first year and an average of at least 70% each term thereafter. A student who fails to do so will be restricted in his extra-curricular activities and reported to the Faculty. A student whose cumulative average remains below 70% after the first year will not be permitted to remain in College unless, because of mitigating circumstances, the Faculty votes that he be permitted to continue. The action of the Faculty in all such cases is final.

Employment under the Bureau of Student Employment, or participation in intercollegiate athletics or other intercollegiate activities is not allowed to a student whose average for the preceding term is below 70%. A student under discipline may be barred by the Committee on Discipline from all extra-curricular activities.

A permanent record is kept of each student's work, a copy of which is sent to his parent or guardian at the close of each term. The standing of first-year students is reported also at mid-term. Through correspondence and conferences, the cooperation of parents is sought in the endeavor to obtain the best possible results in the work of students.

# DEGREES

URSINUS COLLEGE confers two degrees in course: Bachelor of Arts and Bachelor of Science. For specific requirements of the curricula leading to each of these degrees, see pages 91, 92, 93 and 94. Degrees are conferred only at convocations and candidates must present themselves in person.

The College may confer the honorary degrees of Doctor of Divinity, Doctor of Pedagogy, Doctor of Science, Doctor of Letters, and Doctor of Laws on persons whose distinguished ability and service have been deemed worthy of such recognition by the Faculty and the Board of Directors.

# HONORS

# COMMENCEMENT

Two Commencement honors are assigned: one, the Valedictory, to the person attaining the highest standing in the graduating class; the other, the Salutatory, to the person attaining the next highest standing.

# GRADUATION WITH DISTINCTION

Members of the graduating class who have shown great proficiency in their entire course may be graduated with distinction if, in the opinion of the Faculty, their attainments warrant such honors. These distinctions, Summa Cum Laude, Magna Cum Laude, and Cum Laude, are given only for unusual excellence in all the subjects pursued by the candidate.

# DEPARTMENT HONORS

Students may be graduated with special honors in departments of study in which they have shown exceptional proficiency, and in which they have done extra work.

- 1. A candidate for Department Honors must have the endorsement of the professor in charge of the department in which he expects to try for such honors, and must enroll as a candidate at the Dean's office at least eight months prior to the anticipated date of graduation.
  - 2. A student must maintain a grade not lower than C in any course pursued

after the first year and must maintain an average of B while he is pursuing his work as a candidate for Department Honors.

3. A candidate must complete an amount of work equivalent to three semester hours in the department in which he intends to try for honors in addition to the full number of semester hours prescribed for graduation. At least twelve semester hours must be in the subject in which he is registered for Department Honors. He must submit to the Faculty a thesis on some subject within the field represented by his extra work. The thesis must be presented at least one week before the time set for the senior final examinations.

# MEDICAL SERVICE

THE COMPREHENSIVE FEE paid by resident students entitles them to ordinary medical attention. The College Physician may be consulted in his office on the campus during office hours. He will regularly visit patients in the infirmaries and students confined to their rooms by illness. During the regular College sessions the resident nurses are on duty twenty-four hours a day. They care for the sick under the direction of the College Physician. Each student is given a physical examination on entering College.

The College will not pay bills that students contract with hospitals or with physicians or nurses not on the staff of the College. The College reserves the right to enforce quarantine and to engage the services of special attendants if necessary, but will not be responsible for the compensation of extra physicians, nurses, or attendants, which compensation must be provided by the student or his parent or guardian.

# PRE-SESSION CAMP FOR WOMEN IN PHYSICAL EDUCATION

A CAMP is available on an optional basis for sophomore, junior, and senior women who are majoring in Physical Education. The camp is operated during a period of two weeks immediately preceding the opening of the fall term. Class instruction by regular members of the staff normally includes work in archery, canoeing, hockey, horseback riding, officiating, swimming, life-saving, and tennis. The time spent in camp activities will be deducted from the hours required in Physical Education activities, Courses 203 to 208, during the college year.

# Scholarships, Prizes, and Aid to Students

# **FULL-TUITION SCHOLARSHIPS**

THERE ARE eight Open Scholarships, each having a potential value of \$2400, available to the entering Freshman Class in September. The Open Scholarships are competitive, provide full tuition to the recipients, and are tenable for four years, provided that the holder's conduct and scholastic work remain satisfactory.

Candidates for Open Scholarships must take the Scholastic Aptitude Test and three sub-tests of the Scholastic Achievement Tests (one of which must be in English) in the December, January, February or March series of the College Entrance Examination Board.

Application for Open Scholarships must be filed by March 1.

# OTHER SCHOLARSHIPS

Many endowed scholarships, each having a potential value of from \$200 to \$1600 for four years, are awarded on the basis of financial need. Each grant is tenable for four years provided that the holder's conduct and scholastic work remain satisfactory.

Scholarship application forms may be obtained from the Director of Admissions. Applicants for both types of scholarship are required to fill out the College Scholarship Service Statement, indicating financial status.

# BUREAU OF STUDENT EMPLOYMENT

The Bureau, conducted under the management of officers of the College, provides opportunities for students to earn a part of their expenses by working as waiters, laboratory assistants, library assistants, typists, and clerks in the Supply Store. These positions are standardized so as not to overburden the student or to interfere with his studies. Positions accepted under the Bureau of Student Employment must, however, always take precedence over any other extracurricular activities. A standard position, such as a waitership in the dining room, pays two hundred and fifty dollars per year. Approximately one hundred and

fifty positions, representing varying amounts of compensation and types of work, are now open to students.

Students who agree to perform a specific task, such as serving in the dining rooms, have their accounts credited in advance of their work. Those who work by the hour, however, have their accounts credited at the end of their term of work. Inasmuch as bills for the Spring Term are prepared and mailed before the end of the Fall Term, students who work by the hour must all have their bills adjusted at the opening of the Spring Term.

Letters of application, as well as those requesting information, should be addressed to the Director of Student Employment.

# PLACEMENT BUREAU

Ursinus College conducts a placement bureau to assist students and graduates in finding positions for which they qualify. Its function is to serve as a point of contact for seniors and alumni with educational institutions, business, and industry. Detailed personal and scholastic records of seniors and alumni are compiled and are available along with a photograph, for all prospective employers.

Alumni Placement—The Placement Bureau acts as a clearing house for the placement of alumni seeking employment or new positions. Alumni are encouraged to place their names on the list of available candidates. A fee of \$1.00 is charged for alumni registrations.

Persons seeking placement in the educational field or in business or industry should address communications to the Director of Placement, Ursinus College, Collegeville, Pa.

#### LOAN FUNDS

Permanent funds have been established to provide loans to third-year and fourth-year students. Applications for loans should be addressed to the President of the College.

#### PRIZES

THE PHILIP H. FOGEL MEMORIAL PRIZE

The Philip H. Fogel Memorial Prize of \$25 is awarded each year to the member of the Senior Class who has done the best work in the Department of Religion. The prize has been endowed by Mrs. Edwin J. Fogel in memory of her son, Philip H. Fogel, Ph.D., Class of 1901.

# THE EDWIN M. FOGEL PRIZE

The Edwin M. Fogel Prize of \$25 is awarded each year to the student who, under the direction of the Department of History and the Department of German, submits the best essay on the contribution of the Pennsylvania Germans to American life and culture. The prize has been endowed by Edwin M. Fogel, Class of 1894.

# THE DUTTERA PRIZE

A prize consisting of the income of \$500 contributed by Mrs. Amos Duttera of Taneytown, Maryland, is awarded each year to the student attaining the highest standing in the study of church history (Religion, Course 6).

#### THE PETERS PRIZE

The Rev. Dr. and Mrs. Morgan A. Peters Memorial Prize of \$50, established under the will of Emma Jane Peters, is awarded each year to a man in the Senior Class for excellence in the study of the Bible.

# THE PAISLEY PRIZES

Two prizes of \$25 each for the best dissertations on an assigned topic by members of the Senior Class, one open to men, the other open to women, have been endowed by Mr. and Mrs. H. E. Paisley, of Philadelphia. These prizes are offered to encourage students in the thoughtful application of the principles of Christianity to problems of practical life. The awards are made each year.

#### THE ELIZABETH ROCKEFELLER MC CAIN PRIZE

A prize of \$50 has been endowed by the late George Nox McCain, Litt.D., of Philadelphia, as a memorial to his mother, Elizabeth Rockefeller McCain. This prize is awarded each year to the student who at the end of the second year has shown the greatest ability in the knowledge and use of the English language as indicated by work in composition and literature.

#### THE BOESHORE PRIZES

Two prizes of \$25 each, endowed by Mr. and Mrs. Miller H. Boeshore of Philadelphia, one open to men, the other open to women, are awarded each year to those students who have attained the highest standing at the end of the first year in the study of Greek.

#### THE EHRET PRIZE

A prize consisting of the income of \$500, established under the will of the Rev. Harry J. Ehret, '00, D.D., in memory of his son, Robley W. Ehret, '39, is awarded each year to a student who has excelled in athletics.

# THE RONALD C. KICHLINE ATHLETIC PRIZE

A prize consisting of the income of \$1,000, established under the will of Ronald C. Kichline, '16, is awarded each year to a student who has excelled in athletics.

#### THE ROBERT TRUCKSESS PRIZE

A prize of \$50 offered by Robert Trucksess, Esq., of Norristown, Pennsylvania, is awarded each year to a man in the Senior Class who plans to study law, and who shows unusual promise.

# THE URSINUS WOMEN'S CLUB PRIZE

A prize of \$20, offered by the Ursinus Women's Club, is awarded each year to the young woman who has attained the highest distinction in athletics.

### THE URSINUS CIRCLE PRIZE

A prize of \$25, offered by the Ursinus Circle, is awarded each year to the student who has written the best pageant under the auspices of the Department of Public Speaking.

#### THE ELLEN BEAVER SCHLAYBACH MEMORIAL PRIZE

A prize of \$15, offered by the Omega Chi Sorority, is awarded each year to the woman of the Senior Class who has attained the highest scholastic average at the completion of her four years. This prize is offered in memory of one of the Sorority's former presidents, Ellen Beaver Schlaybach, Class of 1938.

#### THE GEORGE DITTER PRIZE

The George Ditter Prize of \$25 is awarded each year to that member of the graduating class whose work in the Departments of History and Political Science gives promise of contributing most to the perpetuation of democratic self-government. This prize was established by George Ditter's son, the Honorable J. William Ditter, LL.D., and continued by George Ditter's grandchildren, Miss Mabel B. Ditter, Class of 1939, and Mr. J. William Ditter, Jr., Class of 1943.

#### THE ROSICRUCIAN PRIZE

The Rosicrucians, the honor society for women, have established a prize to be awarded each year to the woman student who at the end of the first year has the highest scholastic standing.

# THE ELIZABETH B. WHITE PRIZE

A prize of \$25 is awarded each year to the woman in the Senior Class

who has chosen History as her major subject and who, in the judgment of the Department of History, gives greatest promise of successful continuance in that field or in social welfare work. This prize was established by Dr. Elizabeth B. White, Emeritus Professor of History.

# THE J. HAROLD BROWNBACK PRIZE

A prize of \$25 is awarded each year to a member of the Senior Class for outstanding achievement in scholarship and in extracurricular activities. This award was established by Mrs. Paul L. Doughty (Mary C. French Doughty, Class of 1952).

# PERMANENT SCHOLARSHIP FUNDS

THE COLLEGE possesses a number of permanent scholarship funds. The income of each fund is assigned annually to a student designated by the College. The list of these scholarships is as follows:

m	
The John Alexander Scholarship, founded by John Alexander, D.D., of	
St. Louis, Missouri, in appreciation of benefits enjoyed when a student in	e1 000 00
the College,	\$1,000.00
The Alumni Memorial Scholarships, founded by the gifts of alumni and	
friends, in memory of the Ursinus men who gave their lives in the service	
The state of the s	103,335.53
The Appel Memorial Scholarship, founded under the will of the Rev.	
Richard S. Appel, D.D., as a memorial to his son, Robert S. Appel, A.B., '01,	2,000.00
The Aspden Memorial Scholarship, founded by Newton J. Aspden, of	
Trinity Reformed Church, Philadelphia, in memory of his beloved wife,	
Levinah Erb Aspden,	5,000.00
The Bahner Scholarship, founded in 1919 by the members of Trinity	
Reformed Church, Waynesboro, Pa., in honor of the Rev. Franklin F.	
Bahner, D.D., '73, and his wife, Mary Ella Bahner, on their completion of	
forty-two years of devoted service in the pastorate of the Waynesboro charge,	1,000.00
The F. Kline Baker Scholarship, founded under the will of F. Kline	
Baker, of Philadelphia, in memory of his wife, Helen Baker,	2,000.00
The Beck Scholarship, founded by the Rev. Samuel W. Beck, of Littles-	
town, Pa., in appreciation of the scholarships awarded to his four daugh-	
ters, the income to provide scholarships for girls who plan to teach,	1,000.00
The Augustus Behney Scholarship, founded by Charles A. Behney, M.D.,	
'12, in memory of his father,	3,500.00
The Valeria Behney Scholarship, founded by Charles A. Behney, M.D.,	
'12, in memory of his mother,	3,550.00
The Bethany Tabernacle Scholarship, founded by the congregation of	0,000.00
Bethany Tabernacle Reformed Church, Philadelphia, the Rev. H. H. Hart-	
man, '94, pastor,	2,000.00
The J. William Bireley Scholarship, founded by J. William Bireley of	4,000.00
Frederick City, Md.,	1,000.00
Tructick City, Ind.,	1,000.00

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The Anna M. Bomberger Scholarship, founded by Anna M. Bomberger	
with gifts amounting to \$600 and completed by Mrs. H. S. Bomberger, both	
of Lancaster, Pa.,	1,000.00
The John Brownback Memorial Scholarship, founded by Melinda M.	
Acker and Mary M. Brownback, of Uwchland, Chester County, Pa., in	
memory of their father,	1,000.00
The Mary M. Brownback Scholarship, founded under the will of Mary M.	
Brownback, of Uwchland, Chester County, Pa.,	1,000.00
The Carson Scholarship, founded under the will of Captain John Carson,	
of Newburg, Cumberland County, Pa.	1,000.00
The Christ Church, Hellertown, Scholarship, founded by the congregation	
of Christ Evangelical and Reformed Church, Hellertown, Pa., the Rev.	
Adam E. Schellhase, '18, pastor,	1,000.00
The Class of 1911 Scholarship, founded by the Class of 1911,	1,139.50
The John H. Converse Scholarship, founded by John H. Converse, of	
Philadelphia,	1,000.00
The Club and Key Scholarship, founded by The Club and Key Society,	2,599.55
The Deitz Scholarship, founded by Gilbert A. Deitz, '18 and Purd E.	
Deitz, '18, in memory of Martha E. Deitz and Mattie A. Deitz,	1,000.00
The Barnabas Devitt Scholarship	1,000.00
The Elsie Devitt Scholarship	1,000.00
The Emma Mayberry Devitt Scholarship	1,000.00
The Devitt Scholarships were founded under the will of Emma Devitt of	
Philadelphia, Pa.,	
The Doll Family Scholarship, founded by George Doll, Adaline Doll, and	
Josephine Doll of Philadelphia,	2,037.92
The Charles and Elizabeth Drumm Scholarship, founded by Charles	
Drumm, of Philadelphia, Pa.,	4,000.00
The Eastwick Scholarships, founded by Joseph Lees Eastwick, LL.D.,	25,500.00
The Erb Scholarship, founded by the Rev. William H. Erb, '93, and	
Andora Erb.	2,000.00
The Fetterolf Memorial Scholarship, founded under the will of Abraham	
D. Fetterolf, of Collegeville, Pa.,	2,000.00
The John B. and Horace A. Fetters Scholarship, founded under the will	
of Mary M. Brownback, of Uwchland, Chester County, Pa.,	1,000.00
The John B. Fetters Memorial Scholarship, founded by Rebecca B. Fet-	
ters, of Uwchland, Chester County, Pa., in memory of her son, who died	
after a week's attendance at College in September, 1885,	1,000,00
Th Alice L. and William D. Fox Scholarship, founded under the will of	
Alice L. Fox, of Lebanon, Pa.,	1,000.00
The Henry Francis Scholarship, founded by Henry Francis, of Spring	
City, Pa.,	1,000.00
The Elizabeth Frey Scholarship, founded by gift of Elizabeth Frey, of	THE REAL PROPERTY.
	11,500.00
The Grace Church Scholarship, founded by Milton Warner and Wilson	
H. Lear, of Grace Reformed Church, Philadelphia, Pa.,	1,000.00

The Haines Scholarship, founded by Charles Grove Haines, '03, and Bertha Moser Haines, '02,	1,749.83
The Heidelberg Scholarship, founded by a member of Heidelberg Re-	1,7 13.03
formed Church, York, Pa.,	1,000.00
The Nora Shuler Helfferich Scholarship, founded to honor Nora Shuler	
Helfferich, '93, by her daughter-in-law, Anna Knauer Helfferich, '20, the	
income to be awarded to needy and deserving women students,	8,009.72
The William Ursinus Helfferich Scholarship, founded by Christ Re-	
formed Church, Bath, Pa., on the twenty-fifth anniversary of the ministry	1 400 00
of their pastor, and increased by later gifts.	1,500.00
The William A. Helfferich Scholarship, founded by the Rev. W. A. Helf-	1 000 00
ferich, D.D., of Fogelsville, Pa.,  The George W. and Francis R. Hench Scholarship, founded by the Rev.	1,000.00
S. M. Hench, D.D., of Trappe, Pa., in memory of his parents,	1,500.00
The Mattie B. Hench Scholarship, founded by Mrs. Mattie B. Hench, of	1,500.00
Trappe, Pa.,	1,200.00
The Joseph H. Hendricks Memorial Scholarship, founded in memory of	
the Rev. Joseph H. Hendricks, D.D., for forty-three years (1862-1905)	
pastor of Trinity Church, Collegeville, and for eighteen years (1887-1905)	
a Director of Ursinus College, by his friend, Jacob P. Buckwalter, of Macon,	
Georgia,	5,000.00
The Hilltown Scholarship, founded by the Hilltown and Dublin charge of the Reformed Church in the United States, Bucks County, Pa.,	1 000 00
The Freeland G. Hobson Scholarship, founded under the will of Freeland	1,000.00
G. Hobson, LL.D., '76, of Collegeville,	1,000.00
The Joseph and Enoch Isenberg Scholarship, founded by Dorothy Isen-	1,000.00
berg, of Hollidaysburg, Pa.,	1,000.00
The Mary E. and James M. S. Isenberg Scholarship, founded by Paul H.	
Isenberg, '21, Lillian Isenberg Bahney, '23, and Helen Isenberg Ballantyne,	
'24, in memory of their parents,	1,000.00
The Jefferson Medical College Scholarship, founded by Lewis Cass	
Scheffey, M.D., ScD., to aid students who plan to enter Jefferson Medical	0.000.00
College,	3,600.00
The Saint John's, Orwigsburg, Scholarship, founded by the congregation	
of Saint John's Reformed Church, Orwigsburg, Pa., the Rev. D. R. Krebs,	
D.D., '02, pastor,	1,000.00
The Johnson Scholarship, founded in memory of J. Howard Johnson, '94,	
and his wife, Myra, by Mrs. Ella J. Johnson,	500.00
The Keeley Scholarship, founded by Joseph Keely, of Spring City, Pa., The Kelker Scholarship, founded by Rudolph F. Kelker, of Harrisburg,	1,000.00
Pa.,	1,000.00
The Francis Kready Scholarship, founded by Francis Kready, of Lancaster	2,000.00
Pa.,	2,000.00
The Franklin W. Kremer Memorial Scholarship, founded by the Rev.	
F. W. Kremer, D.D., with gifts amounting to \$500, and completed by the	
Sunday School of the First Reformed Church, of Lebanon, Pa., in grateful	
memory of his thirty-eight years' pastorate,	1,000.00

The LeRoy Boyer Laubach Scholarship, founded in memory of LeRoy	
Boyer Laubach by his mother, Mrs. M. B. Laubach, of Philadelphia, Pa.,	2,000.00
The Leinbach Scholarship, founded by Irwin S. Leinbach, '29, M.D., Sc.D.,	2,500.00
The Sarah J. Leiphart Scholarship, founded under the will of Sarah J.	
Leiphart, of York, Pa.,	9,842.81
The Francis Magee Scholarship, founded by the late Francis Magee, of	
Philadelphia,	1,000.00
The Aaron E. March Scholarship, founded by Aaron E. March, of York	
Pa.,	2,000.00
The Markley Scholarship, founded by Dr. Mary E. Markley, '02, in memory of her father, the Rev. A. B. Markley, D.D., '76,	4,500.00
The Saint Mark's Scholarship, founded in 1918 by the members of Saint	4,300.00
Mark's Reformed Church, Lebanon, Pa., in honor of their pastor, the Rev.	
I. Calvin Fisher, D.D., '89, and his wife, Eva S. Fisher, and in celebration	
of their twenty-fifth anniversary in the pastorate of Saint Mark's Church,	1,000.00
The James W. Meminger Scholarship, founded by the congregation of	
Saint Paul's Reformed Church, Lancaster, Pa., in honor of the Rev. James	
W. Meminger, D.D., '84, former pastor,	1,000.00
The Meyran Scholarship, founded by Louis A. Meyran and his wife,	
Marie H. Meyran, of Grace Reformed Church, Pittsburgh, Pa.,	2,000.00
The Miller Scholarship, founded by Elmer E. and Erma Miller Stein-	
brunn, of Orwigsburg, Pa., in memory of Mrs. Steinbrunn's parents, Alfred	
M. and Pauline Miller,	1,000.00
The D. Charles Murtha Fund, founded under the will of D. Charles	1001000
Murtha, '86,	19,949.32
The Annie Neff Scholarship, founded under the will of Annie Neff, of Alexandria, Huntingdon County, Pa.,	1,500.00
The Martin B. Neff Scholarship, founded by Annie Neff in memory of	1,500.00
Martin B. Neff, of Alexandria, Pa., and in recognition of his life-long	
interest in Ursinus College,	1,800.00
The Noss Scholarship, founded by Charles H. Noss, of York, Pa., in	
memory of his parents, William S. Noss and Emma S. Noss,	8,000.00
The George Leslie Omwake Scholarship Fund, founded by several hun-	00 501 10
dred alumni and other friends of the sixth president of Ursinus College,  The Omwake Memorial Scholarship, founded by W. T. Omwake, Esq., of	36,591.16
Waynesboro, Pa., as a memorial to his parents, Henry and Eveline Beaver	
Omwake,	2,000.00
The Paisley Scholarship, founded in honor of Mrs. Carrie Strassburger	
Paisley, of Trinity Reformed Church, Philadelphia,	2,000.00
The Harry E. Paisley Scholarship, founded by Harry E. Paisley, LL.D.,	
of Trinity Reformed Church, Philadelphia,	5,000.00
The John and Margaret Paisley Scholarship, founded by John and Margaret Paisley, of Garden City, Long Island, N. Y.,	6,000.00
The Saint Paul's, Lancaster, Scholarship, founded by the congregation of	0,000.00
Saint Paul's Reformed Church, Lancaster, Pa., the Rev. T. A. Alspach, D.D.,	
'07, pastor,	2,000.00

The Pennsylvania Female College Memorial Scholarship, founded by the Glenwood Association, a body of former students of the Pennsylvania	
Female College, in recognition of the earlier work done at Collegeville for the higher education of women,	3,000.00
The Neri F. and Serena J. Peters Scholarship, founded in memory of the Rev. and Mrs. Neri F. Peters by their children,  The Raynor-Fetterolf Scholarships, founded by Alves L. Raynor and his	2,000.00
wife, Helen Miller Raynor, '11, in memory of their son, Eugene Richard Raynor (1926-1940),	60,000.00
The Jesse W. Roberts Memorial Scholarship, founded by Charles B. Roberts, '32, in memory of his father,	8,650.00
The Silas H. Rush Scholarship, founded in memory of her parents, Mr. and Mrs. Silas H. Rush, by Mrs. E. R. Hoffman, of Philadelphia,	1,000.00
The Scheer Memorial Scholarship, founded under the will of Thekla Ida Scheer, in memory of her father, the Rev. George A. Scheer, D.D., '76, the	
income to be used to aid students who plan to enter the Christian ministry,  The Jacob S. and Lucinda Schwartz Scholarship, founded by the bequest	5,000.00
of Jacob S. Schwartz, of Hanover, Pa.,  The Schwenksville Community Scholarship, founded by the citizens of	1,000.00
Schwenksville, Pa.,  The Jocelyn Xander Sheeder Scholarship, established by the late S. Eliza-	1,912.00
beth Xander, of Philadelphia, Pa.,  The J. B. Shontz Memorial Scholarship, founded by the Congregation	1,000.00
and Sunday School of Saint John's Reformed Church, Chambersburg, Pa., in memory of their former pastor, the late Rev. J. B. Shontz,	2.000.00
The A. Lizzie Shreiner Scholarship, founded under the will of A. Lizzie	1,000.00
Shreiner, of Lancaster, Pa.,  The Siebert Scholarship, founded under the will of P. W. Siebert, of	1,350.00
Pittsburgh, Pa.,  The Sigma Rho Lambda Fraternity Scholarship,	1,004.00 1,131.50
The George S. Sorber Scholarship, founded by the Rev. George S. Sorber, D.D., of York, Pa.,	2,000.00
The Nathan Spangler Scholarship, founded by Nathan Spangler, of York, Pa.,	1,000.00
The Sprankle Scholarship, founded under the will of Samuel Sprankle, of Altoona, Pa.,	2,000.00
The Stauffer Memorial Scholarship, founded in memory of Robert Ursinus and John Donald Stauffer, deceased children of the Rev. J. J. Stauffer, by gifts amounting to \$500 from the pastor and members of the Lykens Valley charge, and completed by a bequest of \$500 under the will of Elizabeth	
Ritzman, of Gratz, Pa.,  The Harold D. and Edith C. Steinbright Scholarship, founded by Mr.	1,000.00
and Mrs. Harold D. Steinbright, of Cedars, Pa.,  The Clementina R. Stewart Scholarship, founded under the will of Clem-	7,455.00
entina R. Stewart, of Myerstown, Pa.,	1,000.00

The G. Leicester Thomas Scholarship, founded by G. Leicester Thomas,	
of Adamstown, Md.,	9,000.00
The Trinity Bible School Scholarship, founded by the Bible School of	
Trinity Reformed Church, Philadelphia,	2,750.00
The Trumbower Memorial Scholarship, founded by Mr. H. C. Trum-	
bower, of Trinity Reformed Church, Philadelphia, in memory of his par-	
ents, Dr. Lewis T. and Annie B. Troxel Trumbower,	5,000.00
The Abraham Wagner Scholarship, founded under the will of Abraham	
Wagner, of the Robinson Church, Berks County, Pa.,	1,000.00
The George A. Walker Scholarship, founded under the will of George A.	
Walker, of Philadelphia, Pa.,	10,000.00
The Wehr Scholarships, founded in honor of the Rev. Calvin P. Wehr,	
D.D., '95, and Agnes E. Wehr, by their daughter, Florence A. Wehr,	13,000.00
The John Wiest Scholarship, founded in memory of John Wiest, a mem-	
ber of the original Board of Directors of Ursinus College, by his son,	
Howard M. Wiest, '92,	5,000.00
The George Wolff Scholarship, founded by the Rev. George Wolff, D.D.,	
of Myerstown, Pa.,	1,000.00
The Young Scholarships, founded under the will of Mary Lantz Young,	
of Philadelphia, Pa.	16.000.00

# The Educational Program

THE DEPARTMENTAL SYSTEM is employed in the organization and administration of instruction. By this system, the courses of instruction are offered in thirteen departments: Biology, Chemistry, Classics, Economics and Business Administration, English, German, Health and Physical Education, History, Mathematics, Physics, Political Science, Psychology, Romance Languages. The adviser is the medium of communication between the Faculty and students of his department. The approval of the adviser is necessary before a student may register for or enter upon any course of study, or discontinue any work.

A student, at matriculation, chooses the subject of major concentration he desires to pursue, and with the advice and consent of the adviser selects his studies for the year and reports his selection to the Dean on a blank provided for the purpose. A student who is uncertain as to his future plans, and therefore undecided as to his major field, may choose to be registered in an "undesignated major" for the first year.

# CHOICE OF STUDIES

The work of every student is composed of three parts: (1) courses which are, in the judgment of the Faculty, essential to a liberal education and are required of all students before graduation; (2) courses required by the department in which the student is registered, and which comprise his major field of concentration; (3) elective courses chosen by the student as a means of further individualizing his course of study, and adapting it to his own intellectual tastes and future purposes.

# REGISTRATION

All students must register at the beginning of the Fall Term for the work of the Fall and Spring Terms. Changes in courses of study may be made during the first week of a term with the written approval of the adviser. After the first week, courses may be added or dropped only by joint permission of the Dean, the adviser, and the instructors involved. A student who withdraws from a course without such permission will receive the grade of F. A fee of one dollar is charged for the registration of students on days other than those appointed in the College Calendar.

In registering, the student must present to his department adviser his

complete list of studies, both prescribed and elective, for the whole year. Courses prescribed as degree or departmental requirements or to satisfy conditions must take precedence over and be scheduled before elective courses. When a student changes to another department, he must fulfill the requirements of that department in order to be graduated.

# REQUIREMENTS FOR GRADUATION

The requirement for the degree of Bachelor of Arts or Bachelor of Science is the completion of one hundred and twenty semester hours of work, within which must be included all the courses required by the Faculty of all students for graduation and the courses required by the department to which the student belongs. At least sixty semester hours of this work must have been taken at Ursinus College, and this must include the work of the senior year.

A resident student may not take in any one term less than twelve semester hours of work. The normal maximum for a term is five courses or fifteen semester hours. Two semester hours above the normal maximum may be scheduled with the approval of the adviser, provided the student's average for the preceding term is eighty or higher. Three semester hours above the normal maximum may be scheduled with the approval of the adviser, provided the student's average for the preceding term is eighty-five or higher (Exception: Engineering and Physical Education majors are permitted to schedule in each term three hours more than the normal maximum).

# PRESCRIBED COURSES (REQUIRED OF ALL CANDIDATES FOR GRADUATION)

English Composition 1, 2

English Composition 3, 4 English Literature 3, 4, or 17, 18, or 19, 20

History 1, 2

Foreign Languages 1, 2 and 3, 4 or equivalent

Biology 3, 4, Chemistry 1, 2, or Physics 1, 2 (if prerequisites are satisfied)

Economics 3, 4, or Political Science 1, 2

Psychology 1

Philosophy (one semester)

Physical Education 101, 2 (No semester hour credit. Not required of students in the Physical Education Department).

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Biology 3, 4, Chemistry 1, 2, or Physics 1, 2 (if prerequisites are satisfied)

Economics 3, 4, or Political Science 1, 2

Psychology 1

Philosophy (one semester)

Physical Education 101, 2 (No semester hour credit. Not required of students in the Physical Education Department).

# Courses of Instruction

IN DESIGNATING courses of study, odd numerals are employed to represent the work of the Fall Term and even numerals the work of the Spring Term. Exceptions to this regulation are noted. Summer Term offerings are not announced in this catalogue, but so far as possible, courses will be offered to meet the needs of students who register for the Summer Term.

The credit value of each course, expressed in semester hours, is printed in italics. The hours per week are given in the definition of the course.

#### BIOLOGY

PROFESSOR WAGNER
PROFESSOR SNELL

ASSOCIATE PROFESSOR GURZYNSKI ASSISTANT PROFESSOR OGREN

#### ASSISTANT PROFESSOR STEIN

The program of this department aims, through the study of a number of aspects of biology, to foster the scientific attitude in its students, to encourage and maintain a critical and enthusiastic interest in the subject of biology for its own sake, and to provide a background of fundamental courses sufficient for its majors to qualify for teacher certification in the secondary schools and for pre-professional preparation in the several fields of the health services. The department prepares students for advanced work in the biological sciences.

Students majoring in Biology must take a minimum of 28 semester hours in Biology, including Biology 103, 104; 7, 8; 19; 21 or 22. The additional electives may be selected from Biology 6, 17, 18, 20, 21, 22, 23, 24, 25, 26. This department also requires its majors to take the following related courses: Physics 1, 2; Chemistry 101, 102; Mathematics 1, 2 or 1a, 2a.

Students majoring in Biology who are preparing to teach in secondary schools are required to take Biology 103, 104; 6; 7, 8; 17, 18; 21, 22.

Description of Courses

- 1. Personal and Community Hygiene MR. GURZYNSKI Structure and physiology of the human body in relation to personal hygiene. Study of problems in community hygiene. Lectures, paper, discussions. Offered only in the second semester. This course restricted to men. Three hours per week. Three semester hours.
- 2. Personal and Community Hygiene MISS SNELL Subject-matter and presentation as for Biology 1. A second semester course for women students only. Three hours per week. Three semester hours.
- 3. General Biology (Zoology)

  MR. STEIN
  Introduction to principles of structure, function, and development of living things as
  revealed in a study of selected animal types. Two hours of lecture; one two-hour laboratory period per week. Three semester hours.

# 4. General Biology (Botany)

MR. STEIN

Introduction to principles of structure, function, and development of living things as revealed in a study of selected plant material. Two hours of lecture; one two-hour laboratory period per week. *Three semester hours*.

Courses 3 and 4 of General Biology are not open to Biology majors but may be taken by any non-science student to satisfy the college requirements for graduation.

# 103. General Biology (Zoology)

R. OGREN

A more detailed consideration of the principles relating to the structure, function, and development of representative animal types. Two hours of lecture; two two-hour laboratory periods per week. Four semester hours.

# 104. General Biology (Botany)

DR. OGREN

A more detailed consideration of the principles relating to the structure, function, and development of representative animal types. Two hours of lecture; two two-hour laboratory periods per week. Four semester hours.

Courses 103 and 104 are the basic introductory courses prescribed for all biology majors and for any others who are planning to meet the various pre-professional requirements in biology.

#### 6. Advanced Botany.

DR. WAGNER

The course is designed to give the student a more detailed knowledge of the vascular plant groups, stressing the principles of taxonomy, ecology, and plant geography. Lectures and discussions followed by field and laboratory work. Prerequisite, course 104. Two hours of lecture; one three-hour laboratory period per week. *Three semester hours*.

Biology 6 is required for those who intend to apply for certification in Pennsylvania as teachers of biology and for pre-veterinarian students.

#### 7. Vertebrate Anatomy

MR. STEIN

The comparative anatomy and relationships of the chordates. A survey of the lower chordates and a detailed consideration of the external anatomy, the skeletal and muscular systems of the Dogfish, Necturus, and Cat. Prerequisite, Biology 103, 104. One hour of lecture, two three-hour laboratory periods per week. Four semester hours.

17. Human Anatomy and Physiology (Movement and Support)

DR. OGREN
Lectures and laboratory exercises illustrating and integrating structure and function
of the muscular, nervous, skeletal systems and sense organs. Laboratory material includes models, charts, the foetal pig and parts of the human cadaver. One hour of
lecture; one two-hour laboratory period per week. Two semester hours.

18. Human Anatomy and Physiology (Internal functions)

A short unit of topics in the anatomy and physiology of internal or

DR. OGREN

A short unit of topics in the anatomy and physiology of internal organs. Lectures and laboratory exercises demonstrating embryology, the autonomic nervous system, the circulatory, respiratory, endocrine, reproductive, excretory, and digestive systems. Dissection of the foetal pig is completed. Prerequisite, Biology 3 or 103. One hour of lecture; one two-hour laboratory period per week. *Two semester hours*.

#### 19. Embryology

DR. WAGNER

Gametogenesis, early development, histogenesis and organogenesis of selected animal

# ERRATUM - Page 52- add 8. Vertebrate Anatomy

Mr. Stein A continuation of course 7 covering the digestive, circulatory,

uro-genital and nervous systems of the Dogfish, Necturus. and Cat. Prerequisites, Biology 103, 104, 7. One hour of lecture: two three-hour laboratory periods per week. Four semester hours.

types, especially the chick, pig, and human. Prerequisites, Biology 103, 104. One hour of lecture; two three-hour laboratory periods per week. Four semester hours.

20. Histology.

DR. WAGNER
Structural and developmental study of tissues and organs of the vertebrate body.
Introduction to histological technique. Prerequisite, Biology 103, 104. One hour of lecture; two three-hour laboratory periods per week. Four semester hours.

21. Heredity.

DR. WAGNER
Lectures and discussions dealing with the principles of animal and plant genetics, and the consideration of factors pertaining to human inheritance. Assigned readings and papers. Open to all students. Preferably after they have had General Biology.

Two semester hours.

22. Evolution.

DR. WAGNER
Lectures and discussions explaining the history of living things in space and time.
Assigned readings and papers. Open to all students. Two semester hours.

23. Seminar STAFF Papers and reports concerned with the selected phases of biological knowledge. Topics to be chosen by the instructor in charge. Prerequisites, Biology 7-8; or 19, 20. Open to third and fourth year majors in biology. One hour per week. One semester hour.

24. Seminar STAFF
A continuation of course 23. Prerequisites, Course 7-8; or 19, 20. Open to third and fourth year majors in biology. One hour per week. One semester hour.

25. General Physiology.

DR. OGREN
Study of selected topics of cellular and comparative physiology including an introduction to physiological chemistry and instrumentation. Prerequisites, course 103, 104; Chemistry 101-102, (107-108 recommended); Physics 1, 2. Two hours of lecture; one four-hour laboratory period per week. Four semester hours.

26. Mammalian Physiology.

DR. OGREN Laboratory investigations and lectures on the functional properties of vertebrate muscular, nervous, circulatory, respiratory, excretory, digestive and endocrine systems. Prerequisites, Biology 103, 104, 7, 8; Chemistry 101, 102; Physics 1, 2. Two hours of lecture; one four-hour laboratory period per week. Four semester hours.

#### CHEMISTRY

PROFESSOR STURGIS

PROFESSOR PETTIT

#### ASSOCIATE PROFESSOR STAIGER

The courses of study offered by the Chemistry Department are (1) to provide the educational and cultural values associated with chemistry that are desirable for a liberal education; (2) to provide both required and desirable training in Chemistry for students planning to teach in the public schools; (3) to provide more than minimum training for students planning to become technicians in medical laboratories, and for pre-dental and pre-medical students; (4) to offer sufficient specialized training in chemistry beyond the basic courses, that will enable the graduate to enter a career as a professional chemist; and (5) to prepare students for graduate training.

Students majoring in Chemistry must take the following courses: Chemistry 101, 102; 103; 104; 105; 107, 108; 109, 110; Mathematics 1, 2; 5, 6; Physics 1, 2; Biology 3, 4. Students majoring in Chemistry who are preparing to teach in secondary schools may substitute courses in Education for the following courses: Chemistry 103; 104; 105; 109, 110 and Math. 5, 6.

A student presenting six credits in General Chemistry may satisfy the prerequisite for an advanced course by taking Course 102, for which one credit will be given.

# 1. General Chemistry.

DR. STAIGER

A development of the history, facts, and theories of the chemistry of the more common elements, including an introduction to organic and nutritional chemistry. For the non-science students this general course is offered as a terminal course and provides an understanding of the basic theories and principles of both inorganic and organic chemistry with related laboratory experience. Course 1, 2 may not be substituted for 101, 102 by students planning to major in chemistry. Two hours of lecture and three hours of laboratory work per week. Three semester hours.

#### 2. General Chemistry

DR. STAIGER

A continuation of Course 1. Prerequisite, Course 1. Two hours of lecture and three hours of laboratory work per week. *Three semester hours*.

# 101. General Chemistry.

DR. STAIGER

A detailed study of the theories and laws of inorganic chemistry, covering the common elements of the periodic system with their practical and industrial application. This course is accompanied by work in the mathematical solution of chemical problems and is prerequisite to advanced chemistry courses. Three hours of lecture and recitation and three hours of laboratory work per week. Four semester hours.

#### 102. General Chemistry.

DR. STAIGER

A continuation of Course 101. Prerequisite, Course 101. Three hours of lecture and recitation and three hours of laboratory work per week. Four semester hours.

### 103. Qualitative Analysis.

DR. STURGIS

The physico-chemical basis of analytical chemistry; analysis of the common cations and some of the anions. Prerequisite, Course 101, 102. Three hours lecture and three hours of laboratory work per week. Four semester hours.

#### 104. Quantitative Analysis.

DR. STURGIS

A study of the most acceptable methods of gravimetric and volumetric analysis. Prerequisite, Course 103. Three hours of lecture and three hours of laboratory work. Four semester hours.

#### 105. Quantitative Analysis.

DR. STURGIS

A continuation of Course 104. Prerequisite, Course 103, 104. Four semester hours.

#### 107. Organic Chemistry

MR. PET

The study of the properties, synthesis, and structure of the most important classes of the carbon compounds. Prerequisite, Course 101, 102 or equivalent. Three hours of lecture and three hours of laboratory work per week. Four semester hours.

April 3, 1957

Addenda to the Ursinus College Catalogue for 1957-58, page 54. Delete the first paragraph. Add the Following:

Students whose principal interest is chemistry will select a degree of concentration consistent with their vocational objective.

One of the following programs must be selected:

1. Chemistry major

This program is designed to meet the standards of the American Chemical Society for undergraduate professional training in chemistry.

The following courses are prescribed: Chemistry 101, 102, 103, 104, 105, 107A, 108A, 109, 110, 117, 118; Mathematics 1, 2, 5, 6; Physics 1, 2; Biology 3, 4.

2. Healing Arts

This program is designed for degree-seeking students planning for admission to professional schools in the healing arts (medicine, dentistry, osteopathy, veterinary medicine, etc.) who are specializing in chemistry in college.

The following courses are prescribed: Chemistry 101, 102, 103, 104, 107, 108, 109, 110; Mathematics 1, 2, 5, 6;

Physics 1, 2; Biology 103, 104.

J. leaching

This program is designed for prospective secondaryschool teachers who wish to be certified in chemistry.

The Following courses are prescribed: Chemistry 101, 102, 107, 108; Mathematics 1, 2. Additional courses in Biology or Physics are recommended.

The following courses will be added beginning 1957-58:

107A Organic Chemistry

The study of the properties, synthesis, and structure of the most important classes of the carbon compounds. Pre-requisite, Course 101, 102, or equivalent. Three hours of lecture and six hours of laboratory per week. Lecture sessions are held jointly with Chemistry 107. This course is required for students whose major is chemistry.

Five semester hours

108A Organic Chemistry

A continuation of Course 107A. Prerequisite, Course 107A. Three hours of lecture and six hours of laboratory work per week. This course is required for students whose major is charactry,

Five semester hours

108. Organic Chemistry

MR. PETTIT

A continuation of Course 107. Prerequisite Course 107. Three hours of lecture and three hours of laboratory work per week. Four semester hours.

109. Physical Chemistry

DR. STURGIS

The course includes a study of the states of matter, the properties of solution, atomic structure, radio-activity, and other topics. Prerequisites, Physics 1, 2; Mathematics 5, 6; Courses 104; 105 and 107, 108. Three hours of lecture and three hours of laboratory work per week. Four semester hours.

110. Physical Chemistry

OR. STURGIS

A continuation of Course 109. Prerequisite, Course 109. Three hours of lecture and three hours of laboratory work per week. Four semester hours.

117. Advanced Inorganic Chemistry.

DR. STAIGER

The study of the classification of inorganic compounds; the theory of the chemical bond, complex compounds and their properties, and isomerization and resonance of inorganic compounds. Two hours of lecture and three hours of laboratory per week. Prerequisite, Course 104, 105. *Three semester hours*.

118. The Identification of Organic Compounds.

DR. STAIGER

The classification and identification of organic compounds based on physical and chemical properties; the chemical analysis of organic functional groups and the preparation of characteristic derivatives. Two hours of lecture and three hours of laboratory per week. Prerequisite, Course 107, 108. Three semester hours.

\*120. Seminar.

DR. STURGI

Papers and reports in Physical Chemistry. One hour per week. One semester hour.

\*121. The Literature of Chemistry.

MR. PETTIT

The use of books, journals, and reports in the field of Chemistry. Open to third-year and fourth-year students. Prerequisites, Course 107, 108 and German 3, 4, one hour per week. One semester hour.

122. Seminar in Organic Chemistry.

MR. PETTIT

Reports on recent advances in Organic Chemistry. One hour per week. One semester hour.

# CLASSICAL LANGUAGES

PROFESSOR BAKER

The chief objective of the Classics Department is to develop in the student accuracy in thought and verbal expression. Other objectives are to enlarge the student's perspective by introducing him to a civilization other than his own; to increase his knowledge and understanding of the literature and institutions of England and America by studying the Greek and Roman sources from which they came; to encourage in the student a mastery of two languages which are important tools in many fields.

Students majoring in Classical Languages are required to take at least 12 semester hours of Greek and 12 semester hours of Latin, beyond Latin 2. In the first half of

<sup>\*</sup>This course is not offered in 1957-1958.

his senior year, each student must take the Seminar in Classical Studies, Greek 7. In the examination at the close of this course, he will be expected to show a satisfactory general knowledge of Greek and Roman literature, language, art, history, geography, mythology, religion, and private life. For this examination the student is expected to prepare himself (with the advice and help of the instructor) throughout his previous three years both by courses and by outside reading.

#### GREEK

1. Beginning Greek.

DR. BAKER

Six hours per week. Six semester hours.

Course I may be elected by students in any major field.

2. Intermediate Greek.

DR. BAKER

Three hours per week. Three semester hours.

Prerequisite, Greek 1 or its equivalent.

3, 4, 5, 6. Advanced Greek

DR. BAKER

Readings from Homer, Thucydides, Aristophanes, and other authors depending on the preferences and capacities of those electing the course. Only one of these courses will be given in any one semester. Three semester hours.

7. Seminar in Classical Studies.

DR. BAKER

A study of selected topics dealing with the Greco-Roman world. Knowledge of Greek and Latin is a prerequisite. Three hours per week. Three semester hours.

8. New Testament Greek.

DR. BAKER

Three hours per week. Three semester hours. Prerequisite, Greek 2.

LATIN

1. Elementary Latin.

DR. BAKER

A study of the grammar, syntax, and vocabulary, with emphasis upon the Latin elements in English words. Reading of passages from various authors. Three hours per week. Three semester hours.

2. Elementary Latin continued. Three semester hours.

DR. BAKER

3, 4. Ovid, Virgil.

DR. BAKER

Each three semester hours.

Prerequisite, Latin 2 or its equivalent.

5, 6, 7, 8, 9, 10, 11, 12. Advanced Latin.

DR. BAKER

The instructor will arrange with students electing these courses to read authors of one period or literary type, or authors whose works may be correlated with other fields of study, e.g., philosophy, history, law. Not more than two of these courses will be given in any one semester. Each of them carries three semester hours credit.

Prerequisite, Latin 4 or its equivalent.

22. Preparation for Teaching Latin.

DR. BAKER

For third-year or fourth-year students. Three hours per week. Three semester hours.

# DRAFTING AND DESCRIPTIVE GEOMETRY

1. Drafting

MR. MARSTELLER
Freehand lettering, use of instruments, geometric construction, freehand sketching, orthographic projection including auxiliary views, sectioning, axonometric projection, oblique projection, intersections, developments, fasteners, dimensioning, working drawings, shop processes, reproduction methods, graphs. Six hours laboratory per week. Three semester hours.

2. Descriptive Geometry

MR. MARSTELLER

Principles of projection, problems involving the essential relations of points, lines and planes, surfaces of revolution, warped surfaces, intersections, developments. Six hours laboratory per week. *Three semester hours*.

# ECONOMICS AND BUSINESS ADMINISTRATION

PROFESSOR BOSWELL
PROFESSOR BONE

ASSISTANT PROFESSOR SYMONS
ASSISTANT PROFESSOR RAFETTO

The work in the department of Economics and Business Administration is designed (1) to give a knowledge of economic philosophy; (2) a knowledge of the structure and functioning of our economy; (3) a suitable background for those who wish to enter business or graduate school.

Students majoring in this department must take a minimum of thirty (30) semester hours of work in the department, including Courses 3 and 4, and twelve (12) semester hours of work in Political Science, including Course 1-2.

A student may, if he wishes, concentrate in Accounting, Economics, Finance, or Industrial Relations, as is indicated by the grouping of courses as shown below:

Accounting: Economics 3, 4, 6, 11, 12, 15, 19, 20; Mathematics 11-12, 13-14; Electives in the department: six (6) semester hours.

Economics: Economics 3, 4, 8, 9, 10, 14, 17, 21; Electives in the department: six (6) semester hours.

Finance: Economics 3, 4, 6, 9, 10, 11, 12, 13, 15; Mathematics 11-12.

Industrial Relations: Economics 3, 4, 5, 18, 22, 23; Electives in the department: twelve (12) semester hours.

3. Economic Principles.

A survey of the general principles which underlie the functioning of our economic system. Special attention is given to the roles played by each of the factors of production, and to the pricing process. Three semester hours. Economics 3 is prerequisite for all other courses.

4. Economic Problems.

DR. BOSWELL, MR. RAFETTO, MR. SYMONS

This is a study of current economic problems, their impact on our society, and a critical analysis of proposed solutions. Among the problems considered are inflation, taxation, price controls, and monopolistic tendencies in business and labor, and our economic relations to other countries. Three semester hours. Economics 4 is a prerequisite for all other courses except Economics 3.

#### 5. Labor Problems.

MR. SYMONS

A study of human relations arising from industrial organizations and the employers' part in bringing about industrial peace. Prerequisite, Courses 3, 4. Three hours per week. Three semester hours.

#### 6. Business Finance.

AR. SYMON

A study of the financial aspects of business management, including the financing of corporations. Prerequisite, Courses 3, 4. Three hours per week. Three semester hours.

7. Marketing.

MR. SYMONS

A survey of the marketing mechanism and a comparative study of the most usual methods and practices. Prequisite, Courses 3, 4. Three hours per week. *Three semester hours*.

# 8. Foreign Trade.

MR. SYMONS

The principles of foreign trade; relation of foreign trade to national prosperity; foreign trade policies of the more important countries. Prerequisite, Courses 3, 4 and 7. Three hours per week. Three semester hours.

# 9. Money and Banking.

DR. BOSWELL

A study of monetary and banking theories followed by an analysis of the services and methods of operation of our commercial banks. Prerequisite, Courses 3, 4. Three hours per week. Three semester hours.

#### 10. Investments.

DR. BOSWELL

A survey of the various types of investment opportunities available. A study of methods of analyzing securities and timing their purchase or sale. Prerequisite, Courses 3, 4, 9. Three hours per week. Three semester hours.

# 11. Fundamentals of Accounting.

MR. BONE

Fundamental principles involved in the proprietorship and partnership form of organization. Adjusting and closing the books, preparation of statements and working papers. Problems and systematic practice set accompany the work. Prerequisite, Courses 3, 4. Three hours per week. Three semester hours.

# 12. Principles of Accounting.

IR. BONE

Principles involved in the corporate form of organization, including large enterprises and manufacturing types of business. Problems, questions and a systematic practice set accompany the work. Three hours per week. Prerequisite, Courses 3, 4, 11. Three semester hours.

#### 13. Public Finance and Taxation.

MR. SYMONS

A study of the general principles of public expenditures, public revenues, public indebtedness, and financial administration. Attention will be given to the principles and workings of the Federal Income Tax law. There will be class assignments in solving actual income tax problems. Prerequisite, Courses 3, 4. Three hours per week. Three semester hours.

#### 14. Railway Transportation.

MR. SYMONS

A study of the financing of railroad construction in the United States; rate making, routing, personal and territorial discrimination, competition and consolidation; state and federal legislation and regulation; government operation; criticisms of some of the proposed solutions of our railway problems. Prerequisites, Courses 3, 4. Three hours per week. Three semester hours.

15. Business Law.

MR. RAFETTO

An introductory course covering the fundamental procedures governing contracts, sales, agency, bailments, negotiable instruments, real and personal property. Lectures, reading, and study of cases and problems. Three hours per week. Prerequisite, Courses 3, 4. Three semester hours.

17. Business Organization.

MR. BONE

A study of the forms of business organizations—the historical background and the reasons for their development. Governmental control of large organizations with special attention given to the problems of monopolies. Prerequisite, Courses 3, 4. Three hours per week. Three semester hours.

18. Industrial Management.

MR. BONE

Historical background of industrial management, organization, physical plant, standardization, time study, wage payment, methods, control of production, planning and operation, executive control. Prerequisites, Courses 3, 4. Three hours per week. *Three semester hours*.

19. Intermediate Accounting.

MR. BONE

A study of advanced principles and the application of principles to the analysis of problems. Analysis of profits, application of funds, capital expenditures and depreciation policies, inventory valuation, installment accounts, branches, consolidated statements. Two hours per week. Two semester hours. Prerequisite, Economics 11, 12.

20. Introductory Cost Accounting.

MR. BONE

A study of the fundamental principles of cost accounting. Methods of finding the cost of specific orders or lots, fundamentals of process costs, accounting for by-products and joint products, estimate costs, and standard costs. Prerequisite, Courses 11, 12. Two hours per week. Two semester hours.

21. History of Economic Thought.

DR. BOSWELL

Attention is devoted largely to a study of the Physiocratic, Classical, and Neo-Classical writers. Prerequisite, Courses 3, 4. Three hours per week. Three semester hours.

22. Personnel Management.

DR. BOSWELL

An examination of methods of selecting and training workers; also the development of policies designed to build and maintain worker morale. Prerequisite, Courses 3, 4. Three hours per week. Three semester hours.

23. Labor Law and Social Security.

MR. RAFETTO

An examination of labor legislation, the social security program, and workmen's compensation, as they affect labor organization policies, employer policies, terms of collective bargaining agreements, and their relation to employment, living standards, and the general public welfare. Prerequisite, Courses 3, 4. Three hours per week. Three semester hours.

Mathematics of Finance. See Mathematics, Courses 11-12 and 13-14, p. 70.

#### **EDUCATION**

PROFESSOR TYSON
PROFESSOR VANDERSLICE

ASSOCIATE PROFESSOR MINNICH ASSOCIATE PROFESSOR FLETCHER

The Department of Education provides the professional courses required for certifica-

tion of Secondary School teachers in Pennsylvania, New Jersey, Delaware and Maryland. Students preparing for requirements of other states should consult the Head of the Department for information concerning specific requirements of those states. In planning its curriculum, the Department has in mind five specific areas in which the growth of students is to be stimulated:

- 1. To increase their awareness of the functions of the school in modern society;
- 2. To understand the changing philosophies of education which are advanced with the changes occurring in society;
- To increase their understanding of the nature of growth and development of human beings;
- 4. To understand how learning takes place;
- 5. To understand the methods used by the school in gaining its objectives.

The Department of Education regards the preparation of teachers to be a function of the College as a whole.

Students preparing for teaching must take the following courses:

Spring semester of their second year, Education 2.

Fall semester of their third year, Education 3, 7.

Spring semester of their third year, Education 4 and a special methods course in their major field.

Fall semester of their fourth year, Student Teaching.

- 2. Introduction to Teaching in Secondary Schools. MR. MINNICH AND DR. VANDERSLICE The characteristics of teaching as a profession with special reference to secondary education; the nature and interests of adolescents; the task of secondary schools in the United States contrasted with those in other countries; the organization of secondary education to meet the needs of pupils. Three hours per week during the second semester of the second year. Three semester hours.
- 3. Educational Psychology.

  The native equipment of the learner; the relationship of heredity and environment; the inheritance of human traits; the principles of growth and development; physical, emotional, social and mental development; the principles of learning; transfer of training. Prerequisites, Psychology 1 and Education 2. Three hours per week during

emotional, social and mental development; the principles of learning; transfer of training. Prerequisites, Psychology 1 and Education 2. Three hours per week during the first semester of the third year. Three semester hours. (The same course as Psychology 5).

4. Principles of Teaching and Learning.

MR. MINNICH
The application of the principles of educational psychology to teaching in the secondary school; the teacher as a guide of learning; the activities in which the teacher is called upon to engage. This course is required by the Department for all persons who expect to qualify for practice teaching. Prerequisite, Courses 2, 3, 7. Three hours per week. Three semester hours.

5. Student Teaching.

A laboratory course in student teaching consisting of observation, participation and teaching in neighboring high schools, with individual and group conferences. Consult the instructor for the requirements of different states. Required to complete certification. Open only to fourth-year students who meet the personality and scholastic re-

quirements. This course is given in the fall term, and only six hours of additional work can be carried with it. Prerequisite, Courses 2, 3, 4, 7, and the special methods course in the student's major field. Eight semester hours.

7. The History and Philosophy of Education.

IR. MINNICH

The development of educational ideas as they influence the present. The evolution of present practices with the underlying philosophies. Prerequisite, Psychology 1 and Course 2. Three hours per week during the first semester of the third year. Three semester hours.

 $10.\ Educational\ and\ Psychological\ Tests\ and\ Measurements.$ 

DR. FLETCHER

An introductory survey of the field of measurement in education, including measurement of intelligence and school results; main features of the technique of testing and test construction; types of tests and scales; evaluation; interpretation; use. Prerequisite, Course 3. Three hours per week offered in the first term. Three semester hours. (Same course as Psychology 6).

12. The Teaching of Science in the Secondary School.

DR. TYSON

This course is designed to acquaint the prospective teacher with the purposes and problems of the teaching of science in the secondary school. The chief topics include the development of objectives, the organization of typical curricula, and the methods used in both junior and senior high schools. Required of third-year students who are preparing to teach science. Three hours per week. Three semester hours.

22. Teaching of History and the Social Studies in the Secondary Schools. MR. MINNICH Selection and interpretation of subject matter in accordance with the following aims: (1) local, national and international issues, (2) cultural inheritance. Methods of engendering and developing desirable social concepts in secondary school students. Demonstrations; field trips; study of the tools of learning, including visual aids; cooperative planning and evaluation. Three hours per week. Three semester hours.

For similar courses in other fields see English 25, German 21, Latin 22, Mathematics 18, Physical Education 5-6, and Romance Languages 21.

24. Visual and Auditory Aids.

DR. FLETCHER

A study of the design, construction, and application of the combined visual and auditory aids to learning; anatomy and physiology of the eye and ear; the psychology of sensation and perception and its application in the use of slides, charts, motion pictures, and models. Review of applied research projects dealing with audio-visual aids to instruction and learning. Three hours per week. Three semester hours.

# MINIMUM ACADEMIC REQUIREMENTS FOR CERTIFICATION OF SECONDARY-SCHOOL TEACHERS IN PENNSYLVANIA\*

I. English	18 s.h.	1 Casamarka	10 - 1-
2. Mathematics	18 s.h.	4. Geography	
3. Any Foreign Language	18 s.h.	5. History	18 s. n.

<sup>\*</sup>Students should consult the Head of the Department of Education for an explanation of the above chart.

6. Social Studies		8. Biological Science	
History	9 s.h.	Botany	6 s.h.
Sociology	3 s.h.	Zoology	6 s. h.
Political Science	3 s.h.	Related Biological Science	6 s.h.
Economics	3 s.h.	9. Physical Science	
7. Science		Physics	6 s h.
Physics	3 s. h.	Chemistry	6 s.h.
Chemistry	3 s.h.	Related Physical Science	6 s.h.
Botany	3 s.h.	10. General Science	
Zoology	3 s.h.	(Ninth grade science)	
Related Physical Science	. 3 s.h.	18 semester hours in any or	
Related Biological Science.	. 3 s.h.	all of the sciences.	

# Requirements for Certification of Secondary-School Teachers in New Jersey

Authorization: To teach endorsed subject fields in grades seven to twelve.

- 1. A bachelor's degree based upon an accredited curriculum in a four-year college.
- 2. A minimum of thirty semester hours of credit in general background courses distributed in at least three of the following fields: English, social studies, science, fine arts, mathematics, and foreign languages. Six semester hours of credit in English and six in social studies will be required.
- 3. A minimum of eighteen semester hours of credit in courses distributed over four or more of the following groups including at least one course in A, B and C below.
  - A. Methods of Teaching. This group includes such courses as:
    - (1) methods of teaching in secondary schools, (2) visual aids in education, and
    - (3) individual instruction.
  - B. Educational Psychology. This group includes such courses as:
    - (1) psychology of learning, (2) human growth and development, (3) adolescent psychology, (4) educational measurements, and (5) mental hygiene.
  - C. Health Education. This group includes such courses as:
    - (1) personal health problems, (2) school health problems, (3) nutrition, (4) health administration, and (5) biology.
  - D. Curriculum. This group includes such courses as:
    - (1) principles of curriculum construction, (2) the high school curriculum, (3) a study of the curriculum in a specific field, and (4) extra-curricular activities.
  - E. Foundations of Education. This group includes such courses as:
    - (1) history of education, (2) principles of education, (3) philosophy of education,
    - (4) comparative education and educational sociology.
  - F. Guidance. This group includes such courses as:
    - (1) principles of guidance, (2) counselling, (3) vocational guidance, (4) educational guidance, (5) research in guidance, and (6) student personnel problems.
  - 4. One teaching field is required.

(Consult the Department of Education for required work and the number of hours within each teaching field.)

5. One hundred and fifty clock hours of approved student teaching. At least ninety clock hours must be devoted to responsible classroom teaching. Sixty clock hours may be employed in observation and participation.

TERM. The limited certificate may be made permanent when the applicant completes three years of successful teaching experience within the scope of the certificate. Permanent certification requires 24 additional hours in a subject matter field.

#### **ENGLISH**

PROFESSOR MC CLURE PROFESSOR YOST PROFESSOR PHILLIPS

PROFESSOR BAKER
ASSOCIATE PROFESSOR DOLMAN
ASSISTANT PROFESSOR JONES

#### ASSISTANT PROFESSOR KERSHNER

This department offers instruction in the knowledge and use of the English language, a study based on the premise that language is the indispensable tool in the life and labor of civilized man and is the art through which he most fully expresses his spirit. Its courses in literature provide opportunity to form an extensive acquaintance with English and American literature and to understand individual works as unique artistic creations and as products of a historical and social process. The ultimate aim is to implant a discriminating appreciation for the best that has been written in our civilization.

Students majoring in English must take the following courses: English Literature 3, 4; 5, 6; 7, 8, 9, 10; 11, 12; 19, 20; History 109, 110 or 111, 112; 113, 114.

Students preparing for graduate study in English should elect French and German as their modern languages. Study in classical languages is strongly recommended for such students.

#### COMPOSITION

- 1. First Year Composition. DR. YOST, DR. PHILLIPS, MR. JONES, DR. KERSHNER The fundamental grammar of English; the study and writing of expository prose. Three hours per week. Three semester hours.
- 2. First Year Composition. DR. YOST, DR. PHILLIPS, MR. JONES, DR. KERSHNER Continuation of Course 1; training in the critical reading of prose and verse. Prerequisite, Course 1. Three hours per week. Three semester hours.

Course 2 is prescribed for all students.

3. Second Year Composition. DR. PHILLIPS, MR. DOLMAN, MR. JONES, DR. KERSHNER Problems of functional writing; expository methods and practice. Prerequisite, Courses 1 and 2. One hour per week. One semester hour.

Course 3 is prescribed for all students.

4. Second Year Composition. DR. PHILLIPS, MR. DOLMAN, MR. JONES, DR. KERSHNER Continuation of Course 3. Prerequisite, Course 3. One hour per week. One semester hour.

Course 4 is prescribed for all students.

5. Advanced Composition.

MR. DOLMAN

Discussion of and practice in current types of fictional writing, with emphasis on the short story. Prerequisites, Courses 1, 2, 3, 4. Two hours per week. Two semester hours.

6. Advanced Composition.

MR. DOLMAN

Discussion of and practice in non-fictional writing with an introduction to basic forms of journalism. Prerequisites, Courses 1, 2, 3, 4. Two hours per week. Two semester hours.

\*7. Advanced Composition.

MR. DOLMAN

A course in descriptive writing and an introduction to the various creative forms used in Composition 8. Prerequisites, Courses 1, 2, 3, 4. Two hours per week. *Two semester hours*.

\*8. Advanced Composition.

MR. DOLMAN

A conference course in creative writing offering the student opportunity to practice his favorite type of composition. Enrollment is limited to twelve qualified students by arrangement with the instructor. Prerequisites, Courses 1, 2, 3, 4. Individually scheduled. Two semester hours.

Courses 5 and 6 alternate with Courses 7 and 8.

#### LITERATURE

3. Survey of English Literature.

DR. PHILLIPS, MR. JONES, DR. KERSHNER The history of English Literature from the beginning to the end of the neo-classical era. Special attention is given to the social background. Two hours per week. Two semester hours.

4. Survey of English Literature.

DR. PHILLIPS, MR. JONES, DR. KERSHNER A continuation of course 3 to the present. Two hours per week. Two semester hours. Courses 3, 4 are prescribed for second-year students majoring in English and are elective for second-year students in other major fields.

\*5. The English Essay. Eighteenth Century

DR. YOST

A study of the essay and non-fictional prose from the age of Queen Anne to the end of the eighteenth century. Three hours per week. Three semester hours.

Course 5 is prescribed for third-year and fourth-year students in other major fields.

6. The English Essay. Nineteenth Century.

DR. YOST

A study of the essay and non-fictional prose from Lamb to Stevenson. Three hours per week. Three semester hours.

Course 6 is prescribed for third-year and fourth-year students majoring in English and is elective for third-year and fourth-year students in other major fields.

7. English Poetry, 1790-1824.

DR. YOST

A study of English poetry from 1790 to the death of Byron. The decline of neoclassicism; the romantic movement. Three hours per week. Three semester hours.

Course 7 is prescribed for third-year and fourth-year students majoring in English and is elective for third-year and fourth-year students in other major fields.

8. English Poetry, 1824-1890.

DR. YOST

A study of the poetry of Tennyson and his contemporaries. Three hours per week. Three semester hours.

<sup>\*</sup> This course is not offered in 1957-1958.

### 9. Shakespeare.

DR. MC CLURE

The reading of Shakespeare's principal plays and the study of their background. Three hours per week. Three semester hours.

#### 10. Shakespeare.

DR. MC CLURE

Continuation of Course 9. Course 9 is not a prerequisite for Course 10. Three hours per week. Three semester hours.

Courses 9 and 10 are prescribed for third-year and fourth-year students majoring in English and are elective for third-year and fourth-year students in other major fields.

Courses 9 and 10 alternate with Course 16.

# 11. History of the English Language.

R. MC CL

Introduction to Anglo-Saxon and the history of the English Language. Two hours per week. Two semester hours.

# 12. History of the English Language.

DR. MC CLURE

Continuation of Course 11. Prerequisite 11. Two hours per week. Two semester hours.

Course 11-12 is prescribed for second-year students majoring in English and is elective in other major fields.

#### 15. Modern Poetry.

DR. PHILLIPS

English poetry from 1890 to the present. Two hours per week. Two semester hours. Course 15 is elective for all students.

# \*16. English Poetry, 1500-1600.

DR. MC CLURE

The development of narrative and lyric poetry. Two hours per week. Two semester hours

Course 16 is elective for all students.

#### 17. The English Novel.

R. PHILLI

A reading course in the development of the novel from its origin to the present. Two hours per week. Two semester hours.

Course 17 is elective for all students.

#### 18. Modern Drama.

DR. PHILLIPS

A reading course in the modern European and American drama from Ibsen to the present. Two hours per week. Two semester hours.

Course 18 is elective for all students.

#### 19. American Literature.

R. YOST

A survey of American literature from its beginnings to the Civil War. Three hours per week. Three semester hours.

#### 20. American Literature.

R. YOST

American literature from the Civil War to the present. Prerequisite, Course 19. Three hours per week. Three semester hours.

Course 19-20 is prescribed for third-year and fourth-year students majoring in English and is elective for second-year, third-year and fourth-year students in other major fields.

<sup>\*</sup>This course is not offered in 1957-1958.

#### 21. Classics in Translation.

DR. BAKER

A study of the major authors of ancient Greece and Rome, with a view to understanding the background of European and English literature. Two hours per week. Four semester hours.

#### 22. Classics in Translation.

DR. BAKER

Continuation of Course 21. Two hours per week. Two semester hours. Courses 21, 22 are elective for third-year and fourth-year students.

# 24. English Poetry.

DR. YOST

A seminar in the reading and interpretation of English and American poetry. Pre-requisite, Course 3-4. Three hours per week. Three semester hours.

Course 24 is elective for fourth-year students, with the permission of the instructor.

#### 25. Teachers' Course.

DR. PHILLIPS

The study and teaching of English; a consideration of problems, materials, and methods. Three hours per week. Three semester hours.

Course 25 is elective for third-year students majoring in English. Others are ad mitted only by special permission.

#### FRENCH

See under Romance Languages.

#### **GEOGRAPHY**

See History 128.

# GERMANIC LANGUAGES

PROFESSOR HARTZELL

PROFESSOR RICE

# **GERMAN**

Students majoring in German must take the following courses: German 5, 6; 7, 8; 9, 10; 13-14 and 21; twelve (12) semester hours study in another language.

# 1. Elementary German

DR. RICE

Elements of pronunciation; essentials of grammar. Three hours per week. Three semester hours.

This course is elective for all students who do not offer German for admission.

#### 2. Elementary German

DR. RICE

Continuation of German 1. Review of essentials of grammar; reading of simple prose and poems. Three hours per week. Three semester hours.

# 3. Intermediate German.

DR. HARTZELL

Grammar review; reading of more difficult German prose and poetry, composition, and conversation.

This course is required of those who have had two years of high school German and elect to continue the study of German in college. Three hours per week. *Three semester hours*.

#### 4. Intermediate German.

DR. HARTZELL

Continuation of German 3. The student is encouraged to develop facility in reading, writing, and speaking German. Three hours per week. Three semester hours.

5. Advanced German Reading.

DR. HARTZELL

Reading of material which will give background for the understanding of Goethe's Faust. Three hours per week. Three semester hours.

6. Goethe's Faust.

DR. HARTZELL

A careful study of the text of Goethe's Faust I and parts of Faust II and the Urfaust. Three hours per week. Three semester hours.

7. German of the Classics Period.

DR. HARTZELL

The masterpieces of Lessing and Klopstock. Two hours per week. Two semester hours.

8. German of the Classics Period.

R. HARTZEI

The masterpieces of Schiller and Goethe. Two hours per week. Two semester hours.

\*9. Literature of the 19th Century.

DR. HARTZELL

A careful reading of representative works of the 19th Century. Two hours per week. Two semester hours.

\*10. Literature of the 20th Century.

DR. HARTZELL

A careful reading of representative works of the 20th Century. Gerhart Hauptmann, Kafka, Thomas Mann, Schnitzler and Wiechert are the writers whose works are studied. Two hours per week. Two semester hours.

\*11. Scientific German

DR. RICE

Reading and careful translation of original works in scientific fields. Two hours per week. Two semester hours.

\*12. Scientific German

DR. RICE

Continuation of German 11. Readings may be assigned in scientific journals. Individual consultations. Two hours per week. Two semester hours.

13. Writing and Speaking German.

DR. RICE

Practice in the oral elements of the language; written composition. Two hours per week. Two semester hours.

14. Writing and Speaking German.

DR. RICE

Continuation of German 13. Increased emphasis upon speaking German. Two hours per week. Two semester hours.

21. Teachers' Course.

DR. HARTZELL, DR. RICE

Required of majors for the purpose of integrating the students' whole field of concentration. Three hours per week. *Three semester hours*.

# **SWEDISH**

Study in Swedish is open to students who have completed the language requirement for graduation.

1. Swedish Language and Culture.

DR. RICI

Grammar, reading, and lectures on cultural background. Three hours per week. Three semester hours.

<sup>\*</sup>This course is not offered in 1957-1958.

2. Swedish Language and Culture.

DR. RICE

Continuation of Swedish 1. Students completing this course will be able to read Danish and Norwegian as well as Swedish. Three hours per week. Three semester hours.

3. Advanced Swedish.

DR. RICE

Readings in Swedish literature, including selections from Danish and Norwegian. Three hours per week.  $Three\ semester\ hours$ .

4. Advanced Swedish.

DP PICE

Continuation of Swedish 3. More readings in Swedish literature, including selections from Danish and Norwegian. Three hours per week. Three semester hours.

#### GREEK

See under Classical Languages.

# HEALTH AND PHYSICAL EDUCATION

PROFESSOR VANDERSLICE

PROFESSOR BAILEY

PROFESSOR SNELL
ASSOCIATE PROFESSOR MINNICH

ASSOCIATE PROFESSOR GURZYNSKI

ASSISTANT PROFESSOR WIENEKE

MR. SPANGLER
MRS. SHILLINGFORD

MR. YOST

The Health and Physical Education Department of Ursinus College includes two distinct functions: the Service Program, and the Professional Course for Teachers. The Service Program includes the requirement of two periods per week in Physical Education and Health classes for all students in the Freshman year; organization of a diversified intramural program for all men and women; and ample provision of facilities for free play activities in numerous outdoor sports and activities.

The Professional Program for teachers is a four-year course offered for the training of teachers of Health and Physical Education. It is designed to give specific training in the field of Health and Physical Education in the framework of accepted Liberal Arts education.

Students majoring in Health and Physical Education must take the following courses: Physical Education 1, 2; 3; 5, 6; 7, 8; 9, 10; 14; 16, 17; 19; 20; 22; 201, 2; 203, 4; 205, 6; 207, 8; Chemistry 1, 2; Biology 3; 1 or 2; 17, 18; History 116.

1. Introduction to Physical Education.

MISS SNELL

An orientation course dealing with the interpretation, objectives, and current problems in physical education. Two hours per week. Two semester hours.

2. Principles and History of Physical Education.

An historical analysis of the physical education principles, philosophies, and activities of man from primitive to modern times. Two hours per week. Two semester hours.

3. Community Recreation Programs.

MR. BAILEY

A comprehensive analysis of the leisure-time problem. An examination of the nature, scope, need and function of community recreation programs, and of the social and economic forces affecting them. Three hours per week. *Three semester hours*.

4. Leadership in Camp and Club Activities.

MR. GURZYNSKI
Discussion of the principles, characteristics, and processes of leadership in light of

term.)

their significance to directors of camp and club activities. Three hours per week. Three semester hours.

5. Principles and Methods of Teaching Physical Education.

Miss snell Principles, methods, and problems of teaching physical educational activities at the elementary and secondary school levels. Open only to physical education majors and minors or students who have completed six hours in Education. Two hours per week. Two semester hours. (Second term.)

6. Methods of Health Instruction.

Analysis of the principles, materials and methods involved in the teaching of health at different age levels. Open only to physical education majors or students who have completed six hours in Education. Two hours per week. Two semester hours. (First

7, 8. Principles and Methods of Coaching and Officiating. MISS SNELL, MR. GURZYNSKI,
AND STAFF

This course is designed with particular reference to the needs of prospective coaches and officials. Opportunities for practice in coaching and officiating are given in connection with the intramural and required physical education programs. Two classroom hours and one hour of practice per week. Four semester hours.

- 9. Administration of Health, Physical Education, and Recreation.

  MR. BAILEY A study of the administrative problems in health, physical education, and recreation. Three hours per week. Three semester hours. (Second term.)
- 10. Tests and measurements in Health and Physical Education.

  MR. GURZYNSKI This course aims to familiarize the student with the nature, function, and history of specific tools of measurement in the field of health and physical education and to give him working knowledge and experience in the use of essential statistical procedures. Three hours per week. Three semester hours. (First term.)
- 14. Problems and Materials of Health and Safety Education in School Programs.

MR. WIENEKE

The scope, responsibility, and function of the health education program in the school with particular stress upon the phases of healthful school living, health service, and safety education. Two hours per week. Two semester hours.

16. First Aid. Mrs. shillingford

Preventive procedures and emergency treatment for all types of common injuries. A course designed to give the student directed practice in the application of first aid knowledge. Red Cross Advanced First Aid Certificate may be obtained by those who satisfy the requirements. Two hours per week. *One semester hour*.

- 17. Care and Prevention of Athletic Injuries.

  MRS. SHILLINGFORD This course deals with the causes of common injuries incident to athletic competition and stresses methods of prevention and treatment. Two hours per week. One semester hour.
- 19. Mechanical-Anatomical Analysis of Activities, Kinesiology.

  MR. GURZYNSKI
  An anatomical analysis of the mechanics of body movement and position. A study of
  the fundamental anatomical concepts in relation to the development of physical education skills. Prerequisite, Biology 17-18. Two hours per week. Two semester hours.

20. Physical Education for Atypical Children.

MR. BAILEY

An analysis of the general conditions producing atypical children, of the biological and physiological aspects involved, and of the resultant psychological and sociological problems. Methods are given for the selection and classification of these individuals and for the adaption of activities to meet their needs. Three hours per week. Three semester hours.

22. Physiology of Activity.

MR. GURZYNSKI

The physiological phenomena underlying physical activity. The anticipatory, immediate, and after effects of exercise on the different organs and the organism as a whole. Class discussion and laboratory demonstration. Prerequisite, Biology 17-18. Two hours per week. Two semester hours.

#### GENERAL PHYSICAL EDUCATION ACTIVITIES

#### 101. General Activities.

A basic course in physical activities, designed for the development of organic vigor and the essential neuro-muscular skills. It aims to provide the student with recreative activities which may be valuable in later life and to create situations which may foster satisfactory social and moral outcomes. Seasonal activities of both group and individual nature are provided. This course is a requirement for graduation for all students except those majoring in physical education, and must be completed in the first year. Two hours per week. Not a credit course.

# 102. Continuation of Course 101.

This course is a requirement for graduation for all students except those majoring in physical education, and must be completed in the first year. Two hours per week. Not a credit course.

#### PROFESSIONAL COURSES

# 201. First-Year Activities.

Physical education activities of a seasonal nature make up the major content of the course, with general emphasis on those of a team or group nature. Stress is placed upon the teaching and mechanical analysis of the individual skills and fundamental techniques. Study is made of the characteristic forms of different folk dances and their music. Outdoor activities include (men) football, touch football, soccer, speedball, tennis, softball, baseball, track, and field; (women) soccer, speedball, tennis, hockey, softball, track and field. The indoor activities for both men and women include marching tactics, calisthenics, apparatus work, folk dancing, group games, self-testing activities, basketball. Six hours per week. Two semester hours.

# 203. Second-Year Activities.

A continuation of Course 201-2 with added emphasis upon methods of teaching and the development of strategy and team play. Attention is given to the selection, adaptation, and use of music suitable for the various types of rhythmic activities. The following outdoor activities are included: (men) football, touch football, soccer, speedball, tennis, softball, baseball, track, field, canoeing, aquatic activities; (women) soccer, speedball, tennis, hockey, softball, track, field, canoeing, aquatic activities. Indoor activities for both men and women include marching and tactics, calisthenics, appar-

atus work, stunts, tumbling, self-testing activities, group games, rhythms, tap dancing, basketball. Six hours per week. Two semester hours.

204. Continuation of Course 203.

Two semester hours.

# 205. Third-Year Activities.

This course offers a variety of individual activities which are in common use in the field of physical education. The course includes (men and women) archery, riding, tennis, volleyball, swimming, diving, golf, canoeing, aquatic activities, group games, social dancing, tap dancing, marching, apparatus work, stunts, tumbling, pyramids, etc. Six hours per week. Two semester hours.

206. Continuation of Course 205. Two semester hours.

# 207. Fourth-Year Activities.

A continuation of Course 205 and Course 206. New activities are included and added emphasis is placed upon some of the more important individual sports already covered. A portion of this course is given over to review and to examinations for a comprehensive rating in physical education. The work in this course includes (men and women) archery, riding, golf, badminton, swimming, life saving, deck tennis, paddle tennis, quoits, horseshoes, canoeing, aquatic activities; (men) boxing; (women) modern dancing. Opportunity is given for original composition. Six hours per week Two semester hours.

208. Continuation of Course 207. Two semester hours.

#### HISTORY

PROFESSOR ARMSTRONG PROFESSOR BAKER PROFESSOR E. H. MILLER ASSISTANT PROFESSOR DAVIS
ASSISTANT PROFESSOR PARSONS
ASSISTANT PROFESSOR FOSTER

The objectives of the History Department are to provide an opportunity for students to recognize the mainsprings of Western Culture, to illuminate their chosen fields with a knowledge of the past, and to become acquainted with the methods of historical research, objectivity and analysis.

In addition to History 1-2, students majoring in history must take Course 113-114; six additional semester hours of European history; ten semester hours in elective history courses, including one seminar; Economics 3, 4; Political Science 1, 2, and Sociology 1.

1. European Civilization.

DR. ARMSTRONG AND STAFF

An introductory history of Europe for the purpose of providing a general historical background for other courses and for an understanding of contemporary world affairs. Required of all students for graduation, and pre-requisite for all other history courses. Two lectures and one section meeting per week. Three semester hours.

2. European Civilization.

DR. ARMSTRONG AND STAFF

Prerequisite History 1. Continuation of Course 1. Required of all students for graduation. Two lectures and one section meeting per week. Three semester hours.

#### \*103. Medieval Institutions.

DR. FOSTER

A study of selected economic, social, cultural, religious, and political institutions essential to the understanding of the period from the fall of Rome to the Renaissance. Three hours per week. *Three semester hours*. (Alternates with 111.)

\*104. The Renaissance and the Reformation.

R. ARMSTRONG

A study of humanism and religion in the 15th and 16th centuries. Three hours per week. Three semester hours. (Alternates with 126.)

\*105. The Age of Enlightenment.

MR. DAVIS

The development of the European state system 1648-1815, the Enlightenment, the French Revolution and the Napoleonic Era. Three hours per week. *Three semester hours*. (Alternates with 121.)

\*106. The Age of Romanticism.

MR. DAVIS

European romanticism and nationalism 1815-1870. Three hours per week. Three semester hours. (Alternates with 122.)

107. The World Since 1870.

DP APMSTRONG

A study of the impact of industrialization, neo-imperialism, and nationalism upon Europeon peoples and their overseas empires 1870-1914. Three hours per week. Three semester hours. (Alternates with 109.)

108. The World Since 1870.

DR. ARMSTRONG

A continuation of Course 107 covering the period 1914 to the present. Three hours per week. Three semester hours. (Alternates with 110.)

\*109. England and the British Empire.

DR. ARMSTRONG

A history of the English people with special attention to political and constitutional developments to 1600. Three hours per week. *Three semester hours*. (Alternates with 107.)

\*110. England and the British Empire.

DR. ARMSTRONG

A continuation of Course 109 with special attention to political and imperial developments since 1600. Three hours per week. *Three semester hours*. (Alternates with 108.)

111. English Social History.

DR. FOSTER

A study of the daily life of the English people. Three hours per week. Three semester hours. (Alternates with 103.)

112. English Social History.

DR. FOSTER

A continuation of Course 111. Three hours per week. Three semester hours. (Given in alternate years.)

113. The United States of America.

DR. PARSONS AND MR. DAVIS

Political and social history from colonial status to World Power with special emphasis on Pennsylvania. This course is prescribed for all students majoring in history and for any others who are preparing to teach social studies. Three hours per week. Three semester hours.

<sup>\*</sup>This course is not offered in 1957-1958.

114. The United States of America.

DR. PARSONS AND MR. DAVIS

A continuation of Course 113. Prescribed for all students majoring in history and for any others preparing to teach social studies. Three hours per week. Three semester hours.

\*115. American Diplomatic History.

MR. DAVIS

A study of American diplomacy from the treaty of 1783 to the present, including an analysis of the various factors which determine that policy: public opinion, population, world markets and international organization. Three hours per week. *Three semester hours*. (Given alternate years.)

116. History of the United States and Pennsylvania.

DR. PARSONS

A survey of United States history, particularly as it concerns Pennsylvania. This course is not open to history majors or to any student seeking certification in social studies. Three hours per week. *Three semester hours*.

\*117. Latin America.

DR. E. H. MILLER

Political and cultural backgrounds of South and Central American nations and their relation to the interests and policy of the United States. Three hours per week. Three semester hours. (Alternates with 123.)

\*118. Latin America.

DR. E. H. MILLER

A continuation of Course 117. Three hours per week. Three semester hours. (Alternates with 124.)

119. Greek History.

DR. BAKER

Studies in the political, social, and economic life of ancient Greece. Two hours per week. Two semester hours.

120. Roman History.

DR. BAKER

This course deals especially with the government of the Roman Republic, the transition to Empire, and the causes of its decline. Two hours per week. Two semester hours.

121. The Near East.

MR. DAV

The ancient civilization of Egypt, Babylonia, Persia, Greece, and the Byzantine Empire. The Moslem World and the Middle East in modern times. Three hours per week. *Three semester hours*. (Alternates with 105.)

122. The Near East.

MR. DAVIS

Prerequisite course 121. A continuation of Course 121. Three hours per week. Three semester hours. (Alternates with 106.)

123. The Far East.

DR. E. H. MILLER

History of the Asiatic Mainland and the Pacific Islands. Three hours per week. Three semester hours. (Alternates with 117.)

124. The Far East.

DR. E. H. MILLER

A continuation of Course 123. Three hours per week. Three semester hours. (Alternates with 118.)

125. French Civilization.

R. PARSON

A cultural history of the French people. Readings and papers in English. Two hours per week. Two semester hours. (English equivalent of French 5.)

<sup>\*</sup>This course is not offered in 1957-1958.

126. Canada.

DR. ARMSTRONG

The development of the Canadian people from colonial status to nationhood. Three hours per week. Three semester hours. (Alternates with 104.)

127. History of Western Art.

DR. ARMSTRONG

An introduction to the history of architecture, sculpture and painting presented by means of illustrated lectures and museum trips. Two hours per week. Two semester hours.

128. Geography.

MR. DAVIS

Extensive study of the major regions of the world. The purpose is to analyze each from the standpoint of climate, natural resources, and economic problems, and to give the student a fairly detailed knowledge of the physical geography of the regions. Three hours per week. *Three semester hours*.

129, 130. Seminar in European History.

MEMBERS OF THE STAFF

Preparation and discussion of research papers in European history. Open to third and fourth year students with permission of the instructor. Two consecutive hours per week, Four semester hours.

131, 132. Seminar in American History.

MEMBERS OF THE STAFF

Preparation and discussion of research papers in American history. Open to third and fourth year students with permission of the instructor. Two consecutive hours per week. Four semester hours.

#### ITALIAN

See under Romance Languages.

#### LATIN

See under Classical Languages.

#### MATHEMATICS

PROFESSOR MANNING

PROFESSOR DENNIS

#### ASSISTANT PROFESSOR SCHULTZ

The aims of the Mathematics Department are (1) The development of an appreciation of the role of mathematics in the progress of civilization, both past and present; (2) The development of the ability to do abstract, logical thinking by the analysis of the various deductive systems of mathematics; and (3) The development of special techniques which can be utilized in the related fields of physics, chemistry, biology, psychology and economics.

A student majoring in mathematics will take Mathematics in 1a, 2a and 3, 4 in the first year; Mathematics 5, 6 and Physics 1, 2 (to satisfy the general requirement in science) in the second year. A student majoring in mathematics must elect a minimum of twelve additional hours from courses numbered 7 to 28 inclusive.

1. Introduction to Mathematics.

DR. MANNING, DR. DENNIS, MISS SCHULTZ

A basic course introducing the student to some of the modern concepts in mathematics which are useful in present day applications of mathematics in many fields. Some of the topics introduced include Boolean algebra, symbolic logic, number sys-

tems, groups, finite and infinite fields, and algebraic functions. Three hours a week. Three semester hours.

# 2. Introduction to Mathematics.

DR. MANNING, DR. DENNIS, MISS SCHULTZ

A continuation of Course 1. The general theory of functions is extended to include the trigonometric functions and their inverses, the logarithmic and exponential functions and their fundamental properties. The course includes an introduction to probability theory and statistics. Three hours a week. *Three semester hours*.

#### la. College Algebra.

DR. MANNING

A review of fundamental manipulations; solving and graphing equations; mathematical induction; binomial theorem; proportion; progressions; laws of logarithms; probability; determinants; partial fractions; and series. Designed for students majoring in mathematics and physics and for those interested in engineering. Three hours a week. Three semester hours.

# 2a. Plane and Spherical Trigonometry.

DR. MANNING

Trigonometric functions; inverse functions; solution of right and oblique triangles; use of slide rule; identities and equations; computations with logarithms; complex numbers; right spherical and oblique spherical triangles; applications to navgation and astronomy. Three hours a week. *Three semester hours*.

# 3. Plane Analytic Geometry.

DR. DENNIS

This course is designed to acquaint the student with the analytic method of treating locus problems. The fundamental theorems on distance, angle, and area are shown to be invariant under translations and rotations. Linear, polynomial, rational, and algebraic functions are graphed and the conics are studied extensively, with respect to transformations and invariants. Three hours a week. *Three semester hours*.

#### 4. Solid Analytic Geometry.

DR. DENNIS

Higher plane curves; empirical equations; transcendental functions; tangents; pole and polar theory continue the analytic treatment in the plane. The course includes the plane and straight line in space, space curves and surfaces, with particular reference to the quadrics and ruled surfaces. Three hours a week. *Three semester hours*. Prerequisite, Mathematics 3.

#### 5. Elementary Calculus.

DR. MANNING, MISS SCHULTZ

Functions; limits; differentiation and integration of algebraic and transcendental functions. Three hours a week. *Three semester hours*.

# 6. Elementary Calculus.

DR. MANNING, MISS SCHULTZ

A continuation of Course 5. Applications of the calculus to problems in science and engineering. Three hours a week. *Three semester hours*. Prerequisite, Mathematics 5.

#### 7. Differential Equations.

OR. MANNING

Solution of first-order and first-degree equations; linear equations of higher order; complementary and particular solutions; integrating factors; operators; applications in the fields of chemistry and physics. Three hours a week. *Three semester hours*. Prerequisite, Mathematics 6.

# 8. Theory of Equations.

DR. MANNING

Real and complex roots of higher-degree equations; approximations of roots; deter-

minants and matrices; symmetric functions. Three hours a week. Three semester hours. Prerequisite, Mathematics 6.

#### 9. Advanced Calculus.

DR. DENNIS

Elementary functions for complex values of the variables; Taylor's series; partial differentiation and implicit functions; multiple integration; improper integrals; line integrals and functions of a complex variable. Three hours a week. *Three semester hours*. Prerequisite, Mathematics 6.

# 10. Advanced Calculus.

DR. DENNIS

A continuation of course 9. Gamma functions; Legendre polynomials; Bessel functions; elliptic integrals; Fourier series; calculus of variations. Three hours a week. Three semester hours. Prerequisite, Mathematics 9.

# 11. Mathematics of Finance.

MISS SCHULTZ

Operation of interest in relation to the amortization of debts; creation of sinking funds; treatment of depreciation. Two hours a week. Two semester hours.

# 12. Mathematics of Finance.

A continuation of Course 11. Valuation of bonds; accumulation of funds in buildingand-loan associations; elements of life insurance. Two hours a week. Two semester hours. Prerequisite, Mathematics 11.

# 13. Mathematical Statistics.

DR. MANNING

Probability; statistical methods of studying data from the fields of economics, education and the natural sciences; graphs; averages; dispersion; sampling. Two hours a week, Two semester hours.

# 14. Mathematical Statistics.

DR. MANNING

A continuation of Course 13. Regression and correlation; forecasting; quality control; production control; testing hypotheses; analysis of variance. Two hours a week. Two semester hours. Prerequisite, Mathematics 13.

#### \*15. Theory of Numbers.

DR. DENNIS

Theory of primes and divisibility conditions; simple continued fractions; congruences; Fermat's theorem; Wilson's theorem; quadratic residues; reciprocity law; linear indeterminate problems; Diophantine equations. Three hours per week. *Three semester hours*.

# \*16. Theory of Finite Groups.

DR. DENNIS

Fundamental theorems of finite groups; permutation groups; groups of movement; Abelian groups; prime-power groups; isomorphisms and the composition-series; Galois fields and their applications to finite geometries; groups of linear substitutions; Galois theory of equations. Three hours per week. Three semester hours.

#### 17. Teachers' Course.

DR. DENNIS

History of mathematics; logical aspects of mathematical systems; principal methods of presentation of mathematical topics; examination of the contents of standard high-school courses; this course is designed to develop an appreciation of the role

<sup>\*</sup>This course will not be offered in 1957-1958.

mathematics has played in the development of civilization and to perfect the technique of presentation of subject matter. Three hours per week. Three semester hours.

# 18. Modern Geometry.

DR. DENNIS

Similarity; theorems of Ceva and Menelaus' theorem; points, lines, and circles related to the triangle; Brocard's configuration; coaxial circles; inversion; poles and polars; cross-ratio; involution; Pascal's and Brianchon's theorems; ruler and compass constructions. Three hours a week. *Three semester hours*.

#### \*19. Finite Differences.

DR. MANNING

Numerical calculus; difference tables; difference equations; successive approximations; starter and corrector formulas; gamma and digamma functions; mechanical quadrature. Three hours per week. *Three semester hours*.

# 20. Probability.

DR. MANNING

Simple and compound probability; repeated trials; runs; normal curve approximation; Bertrand's paradox; deMere's problem; St. Petersburg problem. Three hours per week. Three semester hours.

#### \*21. Vector Analysis.

DR. DENNIS

Elementary vector algebra and calculus with applications to geometry and physics; scalar and vector fields; gradient; divergence; curl; divergence theorem; Green's theorem; Stokes' theorem; coordinate systems and transformation theory; non-Euclidean manifolds. Three hours per week. Three semester hours. Prerequisite, Mathematics 6.

# 22. Theory of Functions of a Complex Variable.

DR. DENNIS

Algebra of complex numbers; analytic functions; Cauchy-Riemann equations; conformal mapping; integrals of complex functions; Cauchy's theorem; power series; Taylor's theorem; Laurent's theorem; residues and poles; transformations; analytic continuation; Reimann surfaces. Three hours per week. *Three semester hours*. Prerequisite, Mathematics 6.

#### 23, 24, 25, 26. Problems.

DR. MANNING

A weekly set of problems from various fields. This course may be begun in any term and continued for as many as four terms. One hour per week. *One semester hour for each term*. Prerequisites, Mathematics 4 and 6.

27, 28. Astronomy.

See Physics, courses 11, 12.

#### MUSIC

PROFESSOR PHILIP

MISS SPANGLER

The program in music is designed to meet the needs of non-professional music students and to promote a wider knowledge and appreciation of the history, theory, and performance of great music. The program consists of classroom instruction and the opportunity for individual group participation.

<sup>\*</sup>This course is not offered in 1957-1958.

# A. THEORY OF MUSIC

#### 1. Elementary Harmony.

DR. PHILII

A thorough foundation in the melodic, rhythmic, and harmonic elements of music; keys, scales, intervals, cadences, major and minor chords; rhythmic reading and dictation, time durations, and the study of compound and simple measures. Prerequisite, one year of piano study or of musical theory. Two hours per week. Two semester hours.

## 2. Elementary Harmony.

DR. PHILIP

A continuation of Music 1. Prerequisite, Music 1. Two hours per week. Two semester hours.

#### B. APPRECIATION OF MUSIC

#### 13. Appreciation of Music.

DR. PHILIP

This course covers the early development of music through religious music, folk song and folk dance, and follows their progress to the larger forms of musical composition. Two hours per week. Two semester hours.

# 14. Appreciation of Music.

DR. PHILIP

A continuation of Music 13. The further development of music is traced into the symphonic and operatic fields of composition. Prerequisite, Music 13. Two hours per week. Two semester hours.

#### C. HISTORY OF MUSIC

#### 15. History of Music.

DR. PHILIP

Introduction to choral and instrumental music of the ancient and medieval period. Two hours per week. Two semester hours.

### 16. History of Music.

DR. PHILIP

A continuation of Music 15. This course deals with the music of the Eighteenth Century, the Romantic period, and the Twentieth Century. Prerequisite, Music 15. Two hours per week. Two semester hours.

#### 17. Opera and Orchestral Music.

A detailed analysis of symphonic music. Two hours per week. Two semester hours.

#### 18. Opera and Orchestral Music.

DR. PHILIP

A detailed analysis of proven operatic compositions. Two hours per week. Two semester hours.

#### 19. Music Dramas of Richard Wagner.

DR. PHILIP

An intimate discussion and the detailed analysis of Wagner's works. Two hours per week. Two semester hours.

Course 19 alternates with Courses 17, 18.

#### D. MUSICAL ORGANIZATION

21a, 22a. Band.

Participation in the marching and the concert band. Two hours per week. Not a credit course.

21b, 22b, Band

Second year. Continuation of first-year work. Two hours per week. Not a credit course.

21c, 22c. Band

Third year. Continuation of second-year work. Two hours per week. Not a credit course. 21d, 22d. Band.

Fourth year. Continuation of third year work. Two hours per week. Not a credit course.

27a, 28a. Vocal Ensemble and Methods.

A study of the basic principles of ensemble technique, vocal characteristics, and various types of voices. Discussion and study of the musical literature of the different periods. Practical application of principles studied as well as participation with the Ursinus Meistersingers in public concerts. Two hours per week. Credit of *one semester hour* to be awarded at the conclusion of the year.

27b, 28b. Vocal Ensemble and Methods.

Second year. Continuation of first-year work. Two hours per week. Credit of one semester hour to be awarded at the conclusion of the year.

27c, 28c. Vocal Ensemble and Methods.

Third year. Concentration of second-year work. Two hours per week. Not a credit course.

27d, 28d. Vocal Ensemble and Methods.

Fourth year. Continuation of third-year work. Two hours per week. Not a credit course.

Not more than twelve semester hours in Music may be counted toward graduation.

#### **PHILOSOPHY**

#### PROFESSOR MATTERN

#### ASSOCIATE PROFESSOR CREAGER

The primary aim of the Department is to cultivate a sensitivity to criticism, to the weighing of evidence, the drawing of inferences, and the becoming aware of latent assumptions.

The secondary aim is to have the student read some of the writings of the philosophers so as to see for himself how philosophical problems spring from common sense opinions. It is hoped that such training may better enable the student to integrate the knowledge he has acquired in other departments.

One three-semester-hour course in Philosophy is required of every student for graduation.

Courses in Philosophy are open to third-year and fourth-year students, with the exception of Course 6. Course 6 is open also for second-year students.

Courses 5 and 6 are designed for students who do not plan to elect advanced courses in Philosophy.

1. Introduction to Philosophy.

DR. MATTERN

A preliminary course designed to give to the student orientation with reference to the fields and problems of philosophy. Three hours per week. Three semester hours.

2. Modern Philosophical Problems.

DR. MATTER

This course is continuous with Course 1, but is a more intensive study of certain problems outlined in Course 1. Prerequisite, Course 1. Three hours per week. Three semester hours.

3. History of Ancient and Medieval Philosophy.

DR. MATTERN

This course is designed to assist the student in his interpretation of modern thoughtcurrents by means of a history of the evolution of reflective thought from Thales to Descartes. Three hours per week. *Three semester hours*.

4. History of Modern Philosophy.

DR. MATTERN

This course is a continuation of Course 3, beginning with Descartes and tracing the modern development to present philosophical tendencies. Prerequisite, Course 3. Three hours per week. Three semester hours.

5. Ethics.

DR. MATTERN

A study of the principles of moral judgment, with exposition and criticism of the more important theories concerning the basis of distinction between right and wrong conduct; the various problems of theoretical and practical ethics. Papers by students. Three hours per week. Three semester hours.

6. Logic.

DR. MATTERN

A study of the guiding principles involved in correct thinking; the use of terms; classification; the nature of deductive inference with special reference to fallacious forms of reasoning as they receive expression in daily life; the canons of inductive inference; the basic concepts in scientific method. Three hours per week. *Three semester hours*. Course 6 is open to second-year students.

7. Philosophy of Religion.

DR. CREAGER

A study of religious beliefs and practices in order to ascertain the nature and value of religion. Particular attention is given to questions involving the nature and reality of God, the problem of evil and suffering, free will, and immortality. Prerequisite, third-year standing. Three hours per week. Three semester hours.

# PHYSICAL EDUCATION

See under Health and Physical Education.

#### PHYSICS

PROFESSOR HEILEMANN

ASSISTANT PROFESSOR SNYDER

#### ASSISTANT PROFESSOR MARSTELLER

The courses in Physics are designed to furnish the student with a groundwork of as much of the material of physics as the time will permit. In presenting this material stress is laid upon methods of analysis and presentation of ideas. It is hoped in this way to make the student conversant with the methods of physics, to develop in him the ability to transmit his ideas to others, and to be able to study independently. In every course, and in the elementary course particularly, the primary aim is to make the subject meaningful to every intelligent student.

Students majoring in Physics must take the following courses: Physics 1, 2, 3, 4, 5, 6, 7, 8; Mathematics 1a, 2a, 3, 4, 5, 6, 7, 9, 10, 21; Chemistry 101, 102.

Students majoring in Physics who are preparing to teach in secondary schools may substitute courses in Education for the following courses: Physics 7, 8; Mathematics 21.

1. General Physics. DR. HEILEMANN, MR. SNYDER, MR. MARSTELLER Elementary mechanics and heat. Physics is presented not only as a science having

practical application to everyday life, but as an example in itself of general scientific method. Prerequisite, Mathematics 1, 2, or high-school trigonometry and a satisfactory rating in the Mathematical Aptitude section of the CEEB test or in some test of a similar nature. Although not a requirement, Mathematics 5 and 6 are strongly urged, to be pursued concurrently if not already completed. Three hours lecture and three hours laboratory per week. Four semester hours.

2. General Physics.

DR. HEILEMANN, MR. SNYDER, MR. MARSTELLER Elementary sound, light, electricity and magnetism. Prerequisite, Physics 1. Three hours lecture and three hours laboratory per week. Four semester hours.

Admission to advanced courses depends upon the quality of work done in the elementary course.

Students intending to elect any of the advanced courses are asked to confer with the instructor during the year prior to that in which the course is to be taken, in order that a satisfactory schedule may be arranged.

- 3. Mechanics: Statics and Dynamics.

  Plane and space force systems; concurrent forces; moments; center of gravity; friction; motion; curvilinear motion; projectiles; D'Alembert's Principle; moment of inertia; equilibrium of a rigid body; kinematics; Newton's Laws; work and energy; harmonic rotation about a fixed axis; torsion pendulum; compound pendulum; coupled systems. Prerequisite, Mathematics 5 and 6. Three hours lecture and three hours laboratory per week. Four semester hours.
- 4. Electricity and Magnetism.

  MR. SNYDER
  Gauss's Theorem; potential; capacity; electric and magnet circuit; Kirchhoff's Laws; inductance; alternating currents; electrical machinery; elements of electronics. Prerequisite, Mathematics 5 and 6. Three hours lecture and three hours laboratory per week. Four semester hours.
- 5. Optics.

  MR. MARSTELLER
  Image formation; systems of lenses and mirrors; dispersion; spectra; interference and diffraction; polarization; origin of radiation; effects of radiation; applications. Three hours lecture and three hours laboratory per week. Four semester hours.
- 6. Sound.

  DR. HEILEMANN
  The nature of sound, the physical basis of music, speech, and hearing; acoustics of buildings; methods of sound transmission and reproduction, and study of distortion; diffraction and interference; applications. Three hours lecture and three hours laboratory per week. Four semester hours.
- 7. Atomic Physics.

  The elementary charged particles; electromagnetic radiation; waves and particles; elementary theory of the hydrogen atom; atomic spectra and electron distribution; natural radioactivity; nuclear disintegration; nuclear energy. Mathematics 5 and 6. Three hours per week. Three semester hours.
- 7a. Laboratory in Atomic Physics.

  Laboratory work (optional) for Course 7. Three hours per week. One semester hour.

  Continuation of Course 7. Three hours per week. Three semester hours.

8a. Laboratory in Atomic Physics.

MR. SNYDER

Laboratory work (optional) for Course 8. Three hours per week. One semester hour.

9. Special Topics.

DR. HEILEMANN, MR. SNYDER, MR. MARSTELLER

Readings and laboratory work with conferences. The student, having chosen some field in which he is interested, is expected to become familiar with the special instruments and methods of measurement used in that field. Only students capable of independent work may elect this course. Prerequisites, Mathematics 5 and 6 and two years of college physics. Credit according to work done.

10. Special Topics.

DR. HEILEMANN, MR. SNYDER, MR. MARSTELLER

Continuation of Course 9. Credit according to work done.

11. Astronomy.

MR. MARSTELLER

Facts and theories concerning the appearance, dimensions, motions, and interrelations of celestial bodies. Prerequisite, Mathematics 1 and 2 or its equivalent and some knowledge of physics. Two hours per week. Two semester hours.

12. Astronomy.

MR. MARSTELLER

Continuation of Course 11. Two hours per week. Two semester hours.

14. Alternating Currents.

MR. SNYDER

Capacitative and self-inductive circuits; mutual induction; the alternating-current circuit; aletrnating-current power and power factor; divided circuits; application of complex numbers; electro-magnetic waves. Prerequisites, Physics 4 and Mathematics 5 and 6. Three hours per week. Three semester hours.

#### POLITICAL SCIENCE

PROFESSOR E. H. MILLER

PROFESSOR G. S. PANCOAST

The objectives of the Department of Political Science with relation to the general student are

- To help the student attain an appreciation of both the theory and the functioning of politics.
- (2) To aid the student in developing the faculty of critical thinking and objective attitudes.
- (3) "To teach those values that sustain faith in freedom."

The professional objectives are:

- (1) To prepare students for graduate work in political science and the law.
- (2) To prepare students for the examinations for both the domestic civil service and the foreign service.

In addition to History 1-2 and Political Science 1-2, which are required for graduation under the general college requirements, students majoring in Political Science must take an additional sixteen (16) hours of Political Science (Political Science 5, 6 and ten elective hours); History 113-114; Economics 3, 4; Sociology 1-2.

It is recommended that Political Science 1-2 be taken in the first year, Political Science 5, 6 and Economics 3, 4 in the second year, and History 113-114 in the third year.



## 1. American Government.

DR. PANCOAST

An analysis of the structure and functions of American national and state governments. Three hours per week. Three semester hours.

#### 2. American Government.

DR. PANCOAS

Continuation of American Government No. 1. Three hours per week. Three semester hours.

#### 3. Municipal Government and Administration.

DR. PANCOAST

The legal power and position of the city in our political system. Thorough consideration of forms and activities of city government. Three hours per week. Three semester hours.

#### 4. Political Parties.

DR. PANCOAST

Both structural description and functional analysis of American political parties. The organization, work, leaders, and place of political parties in our democracy are considered at length. Three hours per week. *Three semester hours*.

#### 5. Comparative Government.

DR. MILLEI

A detailed comparison of the Cabinet and Presidential systems, as exemplified by England and the United States. Three hours per week. Three semester hours.

# 6. Comparative Government.

The study is extended to other representative governments, including France, Germany, Italy, Russia and Japan. Three hours per week. Three semester hours.

# 7. Political Theory.

DR. MILLER

Significant political ideas, forces, and concepts from Plato to the present. Three hours per week. Three semester hours.

# 8. Constitutional Law.

DR. PANCOAST

Historical backgrounds and principles formulated by the United States Supreme Court receive special emphasis. In addition to a textbook, extensive use is made of case studies. Three hours per week. *Three semester hours*.

#### 9. Public Administration.

DR. PANCOAST

A survey of the field of public administration, emphasizing administrative organization, fiscal management, and personnel management. The administrative process is considered as a unit encompassing federal, state, and local administration. Three hours per week. *Three semester hours*.

#### \*11. Seminar in Political Science.

DR. MILLER

Selected topics in international organization and international relations. Two hours per week.  $Two\ semester\ hours.$ 

#### \*12. Seminar in Political Science.

P MILI

Continuation of Seminar in Political Science 11. Two hours per week. Two semester hours.

# 13. Seminar in Political Science.

DR. MILLER

International Law. The case-study method. Two hours per week. Two semester hours. 14. Seminar in Political Science.

Continuation of Seminar in Political Science 13. Two hours per week. Two semester hours.

\*Open only to third-year and fourth-year students.

Courses 11, 12 alternates with Courses 13, 14.

\*Courses 13, 14 are not offered in 1957-1958.

# **PSYCHOLOGY**

PROFESSOR TYSON

#### ASSOCIATE PROFESSOR FLETCHER

The Department of Psychology is guided in its offerings and activities by two sets of objectives: (1) For the student majoring in areas other than Psychology, the introductory course for all, and Abnormal Psychology and Mental Hygiene for many, endeavor to show the growth of modern psychology and an understanding of adjustments used in maintaining mental health; and (2) an attempt is made to present a composite view of the main phases of present-day psychology, which is based on a broad foundation in social science and the biological sciences.

Students majoring in Psychology must take the following courses: Biology 3, 21, 22; Mathematics 1-2, 13-14; Economics 3-4; Political Science 1-2 and Sociology 1-2; Psychology 1, 4, 5, 6, 7, 8, 10 and 12. Students who plan to continue the study of Psychology at the graduate level are strongly urged to include in their schedules Mathematics 5-6; Biology 17-18; Philosophy 3-4 and Physics 1-2.

1. Elementary Psychology.

DR. TYSON, DR. FLETCHER

An introductory study of mental life and accompanying types of human behavior. Three hours per week. Three semester hours.

Course 1 must be taken during the first semester of the second year by all students preparing to become teachers.

4. Social Psychology.

DR. FLETCHER

A study of group action and of the group influences by which the individual is surrounded; tradition, custom, public opinion, and other psychological and social forces which affect individual judgment and action. Three hours per week. Three semester hours. Permission of the instructor is required for admission to the course.

5. Educational Psychology.

DR. TYSON

The native equipment of the learner; the relationship of heredity and environment; the inheritance of human traits; the principles of growth and development; physical, emotional, social and mental development; the principles of learning; transfer of training. Prerequisites, Psychology 1 and Education 2. Three hours per week during the first semester of the third year. Three semester hours. (The same course as Education 3.)

6. Educational and Psychological Tests and Measurements.

An introductory survey of the field of measurement in education, including measurement of intelligence and school results; main features of the technique of testing and test construction; types of tests and scales; evaluation; interpretation; use. Prerequisite. Course 5. Three hours per week. Three semester hours. (The same course as Education 10.)

7. Seminar in Psychology.

DR. FLETCHER

A course designed to acquaint the student with current trends in theoretical and applied psychology. Emphasis will be given to the preparation and presentation of papers on selected topics which will vary from year to year. Open only to fourth-year students majoring in psychology. One hour per week. *One semester hour*.

8. Abnormal Psychology and Mental Hygiene.

DR. TYSON
Abnormalities of sensation, perception, memory, thinking, emotion, intelligence, motor

activity and personality; sleep, dreams, and phenomena of suggestion; critique of psychoanalytic theories; psychological aspects of neurotic and psychotic disorders. The course will be given from the point of view of preventive mental hygiene. Three hours per week. Three semester hours.

10. Elementary Experimental Psychology.

DR. FLETCHER
This course is designed to acquaint the student with laboratory techniques used in psychology. Limited to and required of all majors in psychology. Lectures, demonstrations, individual experiments and the preparation of scientific reports. Two hours lecture and four hours laboratory. Four semester hours.

12. Psychology in Industry.

This course deals with the application of psychological techniques and principles to the problems of industry. Emphasis is given to individual differences, aptitudes and skills, job evaluation, merit rating, work methods, training programs, fatigue, accident control, safety education, incentives, employe attitudes, morale, the interview and related employment methods. Three hours per week. Three semester hours. (Opėn upon approval of the head of the department to juniors and seniors who have completed Psychology 1).

## PUBLIC SPEAKING

# ASSISTANT PROFESSOR KERSHNER

3-4. Public Speaking.

DR. KERSHNER

Composition and delivery of various types of speeches, with group criticism and discussion. The class will be organized and conducted according to the rules of parliamentary procedure. Prerequisite, English Composition 1-2. Two hours per week. Four semester hours.

5-6. Debating.

DR. KERSHNER

This course is organized for both beginners and advanced students who are interested in debating in intramural and intercollegiate tournaments. Open to third-year students who have completed Public Speaking 3-4, or who have been members of the Debating Club for at least one year. The course may be repeated for credit in the senior year. One hour per week. Two semester hours.

Note: All students in the College may participate in the activities of the extracurricular debating society without necessarily being enrolled in Course 5-6.

#### RELIGION

ASSOCIATE PROFESSOR CREAGER
PROFESSOR BAKER

PROFESSOR ARMSTRONG PROFESSOR MATTERN

# ASSISTANT PROFESSOR SCHELLHASE

The aim of the Department of Religion is to give opportunity for a scholarly and reverent study in the field of religion, centering attention primarily upon the Hebrew-Christian tradition. The courses in the English Bible are considered basic to a liberal education. Philosophy of Religion, Church History, and Christian Classics are courses offered to afford opportunity for students to deepen their interest in the "heart truths" of religion. The department directs a religious program, led by students, which includes worship, service projects, counseling and discussion. The unique nature

of our college lays responsibility upon every member of the faculty, administration, and student body to lend support consciously to the major objectives as stated.

1. Introduction to the Literature of the Bible: Old Testament.

An appreciative and historical study of the Bible, with a view to discovering its origin, nature, and significance in the life of today. Three hours per week. Three semester hours.

2. Introduction to the Literature of the Bible: New Testament.

MR. SCHELLHASE Three hours per week. Three semester hours.

\*4. Christian Classics.

DR. CREAGER

Readings in the classics of Christian literature including the writings of such men as Augustine, St. Francis of Assisi, Thomas à Kempis, Fox, Law, Baxter, Woolman, and Temple. Three hours per week. *Three semester hours*.

6. History of the Christian Church.

DR. CREAGER

A study of the development of the Christian church from the apostolic period to modern times, with a view to understanding the nature and extent of its contribution to society. Three hours per week. *Three semester hours*.

Course 4 alternates with Course 6.

The following related courses are recommended to students interested in the study of religion.

HISTORY

104. The Age of the Reformation.

DR. ARMSTRONG

Three hours per week. Three semester hours.

**PHILOSOPHY** 

5. Ethics.

DR. MATTERN

Three hours per week. Three semester hours.

**Р**ні**L**оѕорну

7. Philosophy of Religion.

DR. CREAGER

Three hours per week. Three semester hours.

GREEK

8. New Testament Greek.

DR. BAKER

Three hours per week. Three semester hours.

HISTORY

132. Seminar in Church History.

DR. ARMSTRONG

Two consecutive hours per week. Two semester hours. Students intending to select this course are asked to confer with the instructor.

#### ROMANCE LANGUAGES

PROFESSOR WILCOX
PROFESSOR GARRETT

ASSISTANT PROFESSOR PARSONS
ASSISTANT PROFESSOR ROBERTS

Reading ability and an understanding of the foreign culture comprise the scope of the first two years' work.

<sup>\*</sup>This course is not offered in 1957-1958.

Students who advance beyond courses numbered 4 receive further instruction in conversation, composition and in the literature of the respective languages. The goal of this teaching is to develop faculties of critical and esthetic judgment.

#### FRENCH

French majors should meet the following requirements:

French 5, 6, 9, 15, 16; History 103, 104 or 105, 106; Latin 1, 2, 3, 4 (or equivalent, i.e., four years of Latin in secondary school).

One of the following courses: French 7, 8, 10;

Two of the following courses: French 11, 12, 13, 14.

1. Elementary French.

MR. WILCOX

Three hours per week. Three semester hours.

2. Elementary French.

MR. WILCOX

Prerequisite: French 1. Three hours per week. Three semester hours.

3. Intermediate French.

DR. GARRETT

Prerequisite: French 2 or equivalent (i.e., satisfactory completion of two years of French in secondary school). Three hours per week. *Three semester hours*.

4. Intermediate French.

Prerequisite: French 3. Three hours per week. Three semester hours.

DR. GARRETT

3a. Intermediate French.

MR. ROBERTS

For students planning further work in French. Prerequisite: French 2 or equivalent.

Three hours per week, Three semester hours.

4a. Intermediate French.

MR. ROBERTS

Prequisite: French 3a. Three hours per week. Three semester hours.

5. Survey of French Civilization.

R. PARSONS

French 5 is the same course as History 125. Two hours per week. Two semester hours.

6. Survey of French Literature.

MR. ROBERTS

Two hours per week. Two semester hours.

\*7. Rabelais, the Pléiade, Montaigne.

MR. WILCOX

Two hours per week. Two semester hours.

\*8. Corneille, Racine.

MR. WILCOX

Two hours per week. Two semester hours.

9. Molière.

MR. WILCOX

Two hours per week. Two semester hours.

10. Voltaire, Rousseau.

MR. WILCOX

Two hours per week. Two semester hours.

Courses 7 and 8 alternate with courses 9 and 10.

Courses 7 and 8 afternate with courses 9 and 10

11. Seminar in French Literature 1800-1860. Three hours per week. Three semester hours.

DR. GARRETT

<sup>\*</sup>This course is not offered in 1957-1958.

12. Seminar in French Literature.

DR. GARRETT

Prerequisite: French 11. Three hours per week. Three semester hours.

\*13. Seminar in French Literature since 1860.

DR. GARRETT

Three hours per week. Three semester hours.

\*14. Seminar in French Literature.

DR. GARRETT

Prerequisite: French 13. Three hours per week. Three semester hours.

Courses 11 and 12 alternate with courses 13 and 14.

15. Advanced Grammar.

DR. GARRETT

Two hours per week. Two semester hours.

16. Oral French.

MR. WILCOX

Two hours per week and additional laboratory work. Two semester hours.

21. Romance Languages.

MR. WILCOX

Preparation for teaching French. For third-year students. Three hours per week. Three semester hours.

22. Conversation.

DR. GARRETT

Prerequisite: French 16 and permission of the instructor. Two hours per week. Two semester hours.

#### **ITALIAN**

Study in Italian is open to students who have completed the language requirement for graduation.

1. Elementary Italian.

MR. ROBERTS

Three hours per week. Three semester hours.

2. Elementary Italian.

MR. ROBERTS

Prerequisite: Italian 1. Three hours per week. Three semester hours.

\*3. Intermediate Italian.

MR. WILCOX

Three hours per week. Three semester hours.

\*4. Intermediate Italian.

MR. WILCOX

Prerequisite: Italian 3. Three hours per week. Three semester hours.

# SPANISH

Spanish majors should meet the following requirements:

Spanish 5, 7, 8, 13, 14; History 117, 118, and 103, 104 or 105, 106; Latin 1, 2, 3, 4 (or equivalent, i.e., four years of Latin in secondary school).

1. Elementary Spanish.

MR. WILCOX

Three hours per week. Three semester hours.

2. Elementary Spanish.

MR. WILCOX

Prerequisite: Spanish 1. Three hours per week. Three semester hours.

3. Intermediate Spanish.

MR. ROBERTS

Prerequisite: Spanish 2 or equivalent (i.e., satisfactory completion of two years of Spanish in secondary school). Three hours per week. Three semester hours.

<sup>\*</sup>This course is not offered in 1957-1958.

MR. WILCOX

4. Intermediate Spanish.  Prerequisite: Spanish 3. Three hours per week. Three semester hours.	MR. ROBERTS
3a. Intermediate Spanish.  For students planning further work in Spanish. Prerequisite: Spanish 2 of Three hours per week. Three semester hours.	DR. GARRETT or equivalent.
4a. Intermediate Spanish.  Prerequisite: Spanish 3a. Three hours per week. Three semester hours.	DR. GARRETT
*5. Advanced Grammar. Two hours per week. Two semester hours.	DR. GARRETT
*6. Commercial Spanish. Two hours per week. Two semester hours.	DR. GARRETT
7. Spanish Literature since 1800. Two hours per week. Two semester hours.	MR. WILCOX
8. Spanish Literature of the Golden Age. Two hours per week. Two semester hours.	MR. WILCOX
*9. Spanish American Literature. Two hours per week. Two semester hours.	MR. WILCOX
*10. Spanish American Literature.  Prerequisite: Spanish 9. Two hours per week. Two semester hours.  Courses 7 and 8 alternate with courses 9 and 10.	MR. WILCOX
13. Advanced Composition and Conversation. Three hours per week. Three semester hours.	MR. WILCOX
14. Advanced Composition and Conversation.  Three hours per week. Three semester hours.  Courses 5 and 6 alternate with courses 13 and 14.	MR. WILCOX

# Three semester hours. RUSSIAN

21. Romance Languages.

PROFESSOR HARTZELL

Study in Russian is open to students who have completed the language requirement for graduation.

Preparation for teaching Spanish. For third-year students. Three hours per week.

1. Elementary Russian.

DR. HARTZELL
Essentials of grammar; elements of conversation; reading. Three hours per week.
Three semester hours.

2. Elementary Russian. DR. HARTZELL Continuation of Russian 1. Emphasis upon reading and conversation. Three hours per week. Three semester hours.

<sup>\*</sup>This course is not offered in 1957-1958.

#### 3. Intermediate Russian.

DR. HARTZELL

Grammar review, reading, composition, conversation. Three hours per week. Three semester hours.

#### 4. Intermediate Russian.

DR. HARTZELL

Continuation of Russian 3. Emphasis upon reading and conversation. Three hours per week. Three semester hours.

# SOCIOLOGY

DR. J. A. MILLER

1. Introduction to Sociology.

DR. J. A. MILLER

A course designed to give the student a more scientific understanding of man's social nature and of the social world in which he lives. In addition to fundamental concepts and theories particular attention is focused on problems arising from race relations and personality disorganization. Not open to freshmen. Three hours per week. Three semester hours.

# 2. Introduction to Sociology.

DR. J. A. MILLER

A continuation of Sociology 1. Problems to which particular attention is given include urbanization, the family, and crime and delinquency. Prerequisite, Course 1. Three hours per week. *Three semester hours*.

#### **SPANISH**

See under Romance Languages

#### **SWEDISH**

See under Germanic Languages

# Departmental Requirements

	BIOLO	GY (B.S.) Ad	viser-Professor Wagner
First Year	Second Year	Third Year	Fourth Year
Eng. Comp. 1, 2 6 Foreign Language 6	Eng. Comp. 3, 4	Philosophy	Bio. 7, 8 or Bio. 19 (Bio. 20 also
Hist. 1, 2 or Chem. 101, 1026 or 8	(or equiv.)	Psychology	recommended)8 or 4 Bio. 21, 22, or both 4 or 2
Bio. 103, 104 8	(if not completed) 6	Ec. 3, 4	Bio. 6 (if not pre-
Mat. 1, 2	Chem. 101, 102 or Hist. 1, 28 or 6	Bio. 19 (Bio. 20 also recommended)8 or 4	professional) 3 Bio. 23, 24 Seminar
	Physics 1, 2 8 Electives4 to 10	Electives10 to 14	Bio. 25 or 26 recom-
			mended
32 to 34	30 to 32	30	28 to 30
	CHEMIS	TRY (B.S.) Ad	lviser—Professor Sturgis
First Year	Second Year	Third Year	Fourth Year
English Comp. 1, 2 6 Hist. 1, 2 6	English Comp. 3, 4 2 English Lit. 3, 4 4 Fr. or Ger. 3, 4	Econ. 3, 4 or Pol. Sci. 1, 2 6	Chem. 109, 110
Fr. or Ger. 1, 2 or 3, 4	Fr. or Ger. 3, 4 (if not completed) 6	Chem. 105	Chem. 117 3 Chem. 118 3
or 3, 4	Chem. 103 4 Chem. 104 4	Physics 1, 2	Electives15
Phys. Ed. 101, 102	Math. 5, 6	Phil 3	
32	32	32	30
32	32	32	30
	CLASSI	CS (B.A.)	Adviser-Professor Baker
First Year	Second Year	Third Year	Fourth Year
Eng. Comp. 1, 2 6	Eng. Comp. 3, 4 2	Pol. Sci. 1, 2 or Econ. 3, 4 6	Philosophy
Eng. Comp. 1, 2 6	Eng. Comp. 3, 4 2	Pol. Sci. 1, 2 or Econ. 3, 4	Philosophy       3         Greek 7       3         Latin or Greek       3
Eng. Comp. 1, 2	Eng. Comp. 3, 4 2 Eng. Lit. 3, 4 4 Science 6 Psych. 1 3 Greek 3, 4 6	Pol. Sci. 1, 2 or Econ. 3, 4 6	Philosophy       3         Greek 7       3         Latin or Greek       3
Eng. Comp. 1, 2	Eng. Comp. 3, 4. 2 Eng. Lit. 3, 4. 4 Science 6 Psych. 1 3 Greek 3, 4 6 Latin 6	Pol. Sci. 1, 2 or Econ. 3, 4	Philosophy       3         Greek 7       3         Latin or Greek       3
Eng. Comp. 1, 2	Eng. Comp. 3, 4. 2 Eng. Lit. 3, 4. 4 Science 6 Psych. 1 3 Greek 3, 4 6 Latin 6	Pol. Sci. 1, 2 or Econ. 3, 4	Philosophy       3         Greek 7       3         Latin or Greek       3
Eng. Comp. 1, 2	Eng. Comp. 3, 4     2       Eng. Lit. 3, 4     4       Science     6       Psych. 1     3       Greek 3, 4     6       Latin     6       Electives     3	Pol. Sci. 1, 2 or Econ. 3, 4	Philosophy 3 Greek 7 3 Latin or Greek 3 Electives 21
Eng. Comp. 1, 2	Eng. Comp. 3, 4	Pol. Sci. 1, 2 or Econ. 3, 4	Philosophy 3 Greek 7 3 Latin or Greek 3 Electives 21
Eng. Comp. 1, 2	Eng. Comp. 3, 4	Pol. Sci. 1, 2 or Econ. 3, 4	Philosophy
Eng. Comp. 1, 2 6 Hist. 1, 2 6 Greek 1, 2 9 Latin 1, 2 or 3, 4 or 5, 6 6 Elective 3 Phys. Ed. 101, 102 —	Eng. Comp. 3, 4	Pol. Sci. 1, 2 or Econ. 3, 4	Philosophy 3 Greek 7 3 Latin or Greek 3 Electives 21
Eng. Comp. 1, 2 6 Hist. 1, 2 6 Greek 1, 2 9 Latin 1, 2 or 3, 4 or 5, 6 6 Elective 3 Phys. Ed. 101, 102 —	Eng. Comp. 3, 4	Pol. Sci. 1, 2 or Econ. 3, 4	Philosophy
Eng. Comp. 1, 2 6 Hist. 1, 2 6 Greek 1, 2 9 Latin 1, 2 or 3, 4 or 5, 6 6 Elective 3 Phys. Ed. 101, 102 —	Eng. Comp. 3, 4	Pol. Sci. 1, 2 or Econ. 3, 4	Philosophy 3 Greek 7 3 Latin or Greek 3 Electives 21
Eng. Comp. 1, 2 6 Hist. 1, 2 6 Greek 1, 2 9 Latin 1, 2 or 3, 4 or 5, 6 6 Elective 3 Phys. Ed. 101, 102 —	Eng. Comp. 3, 4	Pol. Sci. 1, 2 or Econ. 3, 4	Philosophy 3 Greek 7 3 Latin or Greek 3 Electives 21
Eng. Comp. 1, 2 6 Hist. 1, 2 6 Greek 1, 2 9 Latin 1, 2 or 3, 4 or 5, 6 6 Elective 3 Phys. Ed. 101, 102 —	Eng. Comp. 3, 4	Pol. Sci. 1, 2 or Econ. 3, 4	Philosophy 3 Greek 7 3 Latin or Greek 3 Electives 21
Eng. Comp. 1, 2 6 Hist. 1, 2 6 Greek 1, 2 9 Latin 1, 2 or 3, 4 or 5, 6 6 Elective 3 Phys. Ed. 101, 102 —	Eng. Comp. 3, 4	Pol. Sci. 1, 2 or Econ. 3, 4	Philosophy 3 Greek 7 3 Latin or Greek 3 Electives 21
Eng. Comp. 1, 2 6 Hist. 1, 2 6 Greek 1, 2 9 Latin 1, 2 or 3, 4 or 5, 6 6 Elective 3 Phys. Ed. 101, 102 —	Eng. Comp. 3, 4	Pol. Sci. 1, 2 or Econ. 3, 4	Philosophy 3 Greek 7 3 Latin or Greek 3 Electives 21
Eng. Comp. 1, 2 6 Hist. 1, 2 6 Greek 1, 2 9 Latin 1, 2 or 3, 4 or 5, 6 6 Elective 3 Phys. Ed. 101, 102 —	Eng. Comp. 3, 4	Pol. Sci. 1, 2 or Econ. 3, 4	Philosophy 3 Greek 7 3 Latin or Greek 3 Electives 21

	ENGLISI	H (B.A.)	Adviser-Professor Yost
First Year	Second Year	Third Year	Fourth Year
Eng. Comp. 1, 2	Eng. Comp. 3, 4	Philosophy 3 Eng. Lit. 5, 6 or 7, 8 6 Eng. Lit. 19, 20 or 9, 10 6 Hist. 113, 114 6 Electives 9	Electives18
30	30	30	30
	GERMAN	N (B.A.) Ad	viser-Professor Hartzeli
First Year	Second Year	Third Year	Fourth Year
Eng. Comp. 1, 2	Eng. Comp. 3, 4	Ger. 5, 6 (if not completed) 6 Ger. 7, 8 or 9, 10 4 Ger. 11, 12 or 13, 14 4 Additional language 6 Eng. Lit. 7, 8 or 9, 10 6 Electives 4	11, 12 9
30	30	30	30
HEALTH	AND PHYSICAL EDUCA	ATION (B.S.) Advise	r-Professor Vanderslice
First Year	Second Year	Third Year	Fourth Year
Eng. Comp. 1, 2		Econ. 3, 4 or , Pol. Sci. 1, 2	Philosophy 3 History 116 3 Ed. 5 8 Phys. Ed. 9, 10 6 Phys. Ed. 19, 20 5 Phys. Ed. 22 2 Phys. Ed. 207, 208 4
32	33	33	31
	HISTORY	(B.A.) Advis	er-Professor Armstrong
First Year	Second Year	Third Year	Fourth Year
Eng. Comp. 1, 2	Eng. Comp. 3, 4	Philosophy 3   Sociology 3   Hist. 103, 104, or 105, 106 or 107, 108. 6   Hist. Seminar 2   Electives 16	History 8 Electives 22
30	30	30	30
	MATHEMATI	CS (B.S.) Adv	ser—Professor Manning
First Year	Second Year	Third Year	Fourth Year
Eng. Comp. 1, 2	Eng. Comp. 3, 4. 2 Eng. Lit. 3, 4 (or equiv.) 4 Foreign Language 3, 4 (if not completed) 6 Econ. 3, 4 or Pol. Sci. 1, 2. 6 Physics 1, 2 8 Math. 5, 6 6	Philosophy 3 Psych 1 3 Math 6 Electives 18	Math. 6 Electives
30	32	30	28

	PHYSICS	(B.S.) Advis	er-Professor Heilemann
First Year	Second Year	Third Year	Fourth Year
Eng. Comp. 1, 2	Eng. Comp. 3, 4. 2 Eng. Lit. 3, 4. 4 Foreign Language 3, 4 (if not completed) 6 History 1, 2. 6 Physics 3, 4. 8 Math. 5, 6 6	Econ. 3, 4 or Pol. Sci. 1, 2	Philosophy 3 Physics 7, 8 6 Physics 7a, 8a 2 Math. 21, 22 6 Electives 13
32	32	34	30
	POLITICAL SCIE	CNCE (B.A.) Adviser-	-Professor E. H. Miller
First Year	Second Year	Third Year	Fourth Year
Eng. Comp. 1, 2	Eng. Comp. 3, 4. 2 Eng. Lit. 3, 4 (or equiv.) 4 Foreign Language 3, 4 (if not completed) 6 Psych. 1 3 Econ. 3, 4 6 Fol. Sci. 5, 6 6 Electives 3	Philosophy 3 Sociology 1, 2 6 Hist. 113, 114 6 Pol. Sci 6 Electives 9	Pol. Sci
30	30	30	30
	PSYCHOLOGY	(B.S.)	Adviser—Professor Tyson
First Year	Second Year	Third Year	Fourth Year
Eng. Comp. 1, 2 6 History 1, 2 6 Foreign Language 6 Bio. 3, 4 6 Econ. 3, 4 or Pol. Sci. 1, 2 6 Phys. Ed. 101, 102 —	Eng. Comp. 3, 4	Sociology 1, 2	Philosophy 3 Psych. 6, 4 6 Psych. 7 1 Psych. 10 4 Psych. 12 3 Electives 13
30	30	30	30
	ROMANCE L	ANGUAGES	
	FRENCH		dviser-Professor Wilcox
First Year  Eng. Comp. 1, 2	Second Year           Eng. Comp. 3, 4         2           Eng. Lit. 3, 4         4           Psych. 1         3           Fr. 5, 6         4           Fr. 9, 10 or 15, 16         4           Latin. 3, 4 (if not completed)         6           Electives         7	Third Year  Econ. 3, 4 or Pol. Sci. 1, 2 6 Philosophy 3 Hist. 103, 104 or 105, 106 6 Electives 5 Fr. 11, 12 or 13, 14 6 Fr. 9, 10 or 15, 16 4	Fourth Year Electives30
30	30	30	30
	SPANISH	(B.A.) A	dviser-Professor Wilcox
First Year  Eng. Comp. 1, 2	Second Year           Eng. Comp. 3, 4.         2           Eng. Lit. 3, 4.         4           Psych. 1.         3           Spanish 5.         2           Latin 3, 4 (if not completed)         6           History 117, 118.         6           Electives         7	Third Year  Econ. 3, 4 or Pol. Sci. 1, 2 6 Philosophy 3 History 103, 104 or 105, 106 6 Spanish 7, 8 4 Spanish 13, 14 6 Electives 5	Fourth Year Electives30
30	30	30	30

FIVE YEAR COMBINED LIBERAL ARTS — ENGINEERING PROGRAM

URSINUS COLLEGE (B.A.) AND THE UNIVERSITY OF PENNSYLVANIA (B.S. in Eng.)

Adviser—Dean Petiti

#### PLAN I FOR ELECTRICAL, CIVIL OR MECHANICAL ENGINEERS

Eng. Comp. 1, 2	Eng. Comp. 3, 4. 2 Eng. Lit. 3, 4 4 Psych. 1 3 Philosophy 3 Physics 3, 4 8 Drafting 3	Math. 9, 10 6	to be completed at the University of
35	32	35	

# PLAN II FOR CHEMICAL OR METALLURGICAL ENGINEERS

Eng. Comp. 1, 2 6 Chem. 101, 102 8 Foreign Language 3, 4 6 Math. 1a 3 Math. 3, 4 6 Electives 3	Eng. Comp. 3, 4 2 Eng. Lit. 3, 4 4 Hist. 1, 2 6 Chem. 103 4 Chem. 104 4 Physics 1, 2 8 Drafting 3	Math. 7 3	to be completed at the University of
32	37	36	

STUDENTS WHO WISH TO PREPARE FOR TEACHING, THE MINISTRY, OR FOR ADMISSION TO PROFESSIONAL SCHOOLS OF MEDICINE, DENTISTRY, VETERINARY MEDICINE, LAW, OR NURSING SHOULD REFER TO PAGES 29 TO 31 WHERE SUGGESTED MAJORS ARE INDICATED.

# Prizes, Honors, Degrees

# AWARDED IN 1956

The Philip H. Fogel Memorial Prize—Martha Judith Bean, '56
The Paisley Prize for Women—Barbara Anne Hunt, '57
The Paisley Prize for Men—Maury Hoberman, '56
The Elizabeth Rockefeller McCain Prize—Walter William Montgomery, '58
The Boeshore Prize for Men—Richard C. Hause, Jr., '57
The Duttera Prize—Jerry Charles Crossley, '58
The Peters Prize—Jerry Charles Crossley, '58
The Ursinus Women's Club Prize—Ruth Tonetta Heller, '56
The Ursinus Circle Prize—Robin Mary Blood, '56
The Ellen Beaver Schlaybach Memorial Prize—Ruth Tonetta Heller, '56
The George Ditter Prize—William John Hottenstein, '56
The Rosicrucian Prize—Linda Lee Odorizzi, '59
The Elizabeth B. White Prize—JoAnne Amelia Myers, '56
The Leibensperger Character Award—Helen Agnes Stevenson, '57
The J. Harold Brownback Prize—George W. Aucott, Jr., '56
The Ehret Prize—Paul Neborak, '56

#### HONORS

GRADUATION HONORS

Valedictorian: Ruth Tonetta Heller

Salutatorian: Burton Paul Goldfine

# MAGNA CUM LAUDE George William Aucott, Jr.

Burton Paul Goldfine

Ruth Tonetta Heller

#### CUM LAUDE

Martha Judith Bean Marilyn Ann Durn Wayne Edmund Engle Jean Ann Hain Joan Louise Kutzer David Mayer Leivy Caroll Lee Shaw Joseph David Shrager Ann Regina Wertz

# DEGREES, 1956

DOCTOR OF DIVINITY (HONORARY)

Oliver William Nace R. Norris Wilson

DOCTOR OF LAWS (HONORARY)
Paul Edgar Elicker

Paul Edgar Elic Tadao Oda William Daniel Reimert Malcolm A. Schweiker

DOCTOR OF LETTERS (HONORARY)
Millard Ellwood Gladfelter

# BACHELOR OF ARTS

Richard Arlen Barndt June Ann Barron Ruth Wilck Beekhuis Morgan Benjamin Beemer Karl David Billman Lillian Bistremovitz Robin Mary Blood Fred Cooper Booth **James Christian Brosious** Patricia Ann Burns Nancy Carson Eric Cecil Duckworth, Jr. Ray Kenneth Drum John Alan Edson Naomi Long Faust Vinton Day Fisher, Jr. Elizabeth Casper Fogg Jeanette Yeager Foreman Mary Ann Frantz Kathleen Clemens Fretz Constantina Georgaris Paul Anthony Graf, Jr. Jean Ann Hain Richard Hector David Lloyd Heyser William John Hottenstein Philip Harrison How Charles David Hudnut Joseph Lawrence Hyer Donald Gordon Jewitt Shirley Ann Jones Toivo W. Karppinen Samuel Charles Katz Frank Horn Kehler Thomas Paul Kerr Henry Herman Knabe, Jr. Barbara Carol Koch Margaret Ann Kramer Joan Louise Kutzer Neil G. Kyde Lillian Kyritsis Arlin Durrell Lapp Lavinia Carol Loper Eleanor Louise Marcon Roderick Duncan Mathewson Barbara Ann Mayor Thomas Carroll McCoy Jean Eleanor Moore James Edgar Morris Joann Amelia Myers Paul Neborak Josephine Anne Neff Hazel K. Okino Marjorie Ann Parkhurst Donald Sylvester Poliwoda Earl John Rehmann, Jr. Ronald John Reinhardt

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Bell, Emma Darlington Ventnor, N. J.	Burger, David I. Philadelphia
Bellairs, Rosalie H. Havertown	Burhans, Jeanne E. North Hills
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Behling, Helmut Heinrich	Bushay, Judith Louisa
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Benoliel, Walter Ronald Philadelphia	Buxton, Anne Curtis Elizabethville

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Fay, Lucy

Scotch Plains, N. J.

Davis, Elizabeth J.

Fenstermacher, Sandra Lee

Finkbiner, E. Stephen

Fisher, Carol Angeline

Fitzgerald, Charles Irvin

Finney, Alice Joan

Souderton

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Lau	rel Springs, N. J.
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Foard, Linda Barbara	Dover, Del.
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Forrest John Navine	Tamaqua
Forrest, John Nevins Fox, Calvin William	Tamaqua
Fox, Calvin William	Spring City
Francis, Rebecca K.	Collegeville
Frank, Allen Thatcher Fraser, William Christie	Quakertown
Fraser, William Christie	Pottstown
French, Ward Monroe, Jr	. Malvern
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Garlick, Beverly H.	Norristown
	llingswood, N. J.
Centens Innet Louise	Norristown
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Gilinger Martha Iane	Lafayette Hills
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Gotshalk Mary R	Camden, N. J.
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Haberl Franz Poter	Linz, Austria
Haberl, Franz-Peter Hagey, Donald Souder Haigh, Elmer, Jr.	
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Haigh, Elmer, Jr.	Mt. Holly, N. J.
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]	Hause, Richard C., Jr.	Darby
]	Hayes, Ronald Wesly	West Chester
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	Holcombe, Bruce Jay Holcombe, Ted Sergean	Erdenheim
-	Holcombe, 1ed Sergean	
		Dunellen, N. J.
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]	Hoover, Conrad Charles	Trappe
	Horrocks, William L. Hostetter, Kenneth Milto	Philadelphia
3	Hostetter, Kenneth Milto	n Kinzer
	Houser, Ben Philip	Tamaqua
1	Houser Orin G. B	ordentown, N. J.
1	Houser, Orin G. B Houser, Philip Edward	Tamaqua
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		ucester City, IV. J.
	Howard, Harry Robert	
		untingdon Valley
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LeCato, Jeanne Esther Haddonfield, N. J.	Haddon Heights, N. J.
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Meier, Rosalind Edna	Glenside
Meier, Walter E.	Green Lane
Meitzner, Lee	Glenside
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Montgomery, Walter	W. Schwenksville
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Moore, Kathryn E.	Stone Harbor, N. J.
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Moverey Jane Louise	Plymouth Meeting
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Myers, John Fritz	York
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Neborak, Mary	Royersford
Neely, John Edward	Broomall
Nelson, Harry E.	Jamaica, N. Y.
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