

M36H

1924/25

OFFICIAL PUBLICATION
of the
University of Maryland

Vol. 21

June, 1924

No. 2

CATALOGUE
1924-1925



Containing general information concerning the University,
Announcements for the Scholastic Year 1924-1925
and Records of 1923-1924

Issued monthly by the University of Maryland at College Park, Md.,
as second-class matter, under Act of Congress of July 16, 1894.

Withdrawn

THE UNIVERSITY OF MARYLAND

Official pub.

CATALOGUE

1924-1925

Containing general information concerning the University, Announcements for the Scholastic Year 1924-1925, and Records of 1923-1924

Withdrawn

378.73
M3G H
1924/25

Withdrawn

Contents

CALENDAR OF MONTHS.....	4
UNIVERSITY CALENDAR	5
BOARD OF REGENTS, UNIVERSITY SENATE, EDUCATIONAL UNITS, OFFICERS OF INSTRUCTION, COMMITTEES, ETC.....	
9	
GENERAL INFORMATION	21
Location	23
Historical statement	23
Buildings	24
Scholarships and Fellowships	28
Honors and awards	28
Organizations	30
Administration	33
Extension and research	34
Income	36
Admission and requirements	36
Fees and Expenses	41
Administrative procedure	45
EDUCATIONAL UNITS	
College of Agriculture	47
College of Arts and Sciences	65
College of Commerce and Business Administration	81
School of Dentistry	86
College of Education	90
College of Engineering.....	98
Graduate School	106
College of Home Economics	111
Law School	116
School of Medicine	119
Department of Military Science and Tactics	125
School of Nursing	128
School of Pharmacy	133
Department of Physical Education and Recreation	137
Summer School	138
COURSES OF INSTRUCTION.....	140
LIST OF DEGREES CONFERRED, AWARDS, REGISTER OF STUDENTS, SUM- MARY OF STUDENTS	
206	

Withdrawn

Calendar for 1924, 1925, 1926

1924							1925							1926																	
JULY							JANUARY							JULY							JANUARY										
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S				
..	..	1	2	3	4	5	..	..	..	..	1	2	3	..	..	..	1	2	3	4	..	..	..	..	1	2	3
6	7	8	9	10	11	12	4	5	6	7	8	9	10	5	6	7	8	9	10	11	3	4	5	6	7	8	9				
13	14	15	16	17	18	19	11	12	13	14	15	16	17	12	13	14	15	16	17	18	10	11	12	13	14	15	16				
20	21	22	23	24	25	26	18	19	20	21	22	23	24	19	20	21	22	23	24	25	17	18	19	20	21	22	23				
27	28	29	30	31	..	..	25	26	27	28	29	30	31	26	27	28	29	30	31	..	24	25	26	27	28	29	30		
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	31	..	..	..	..	..	..
AUGUST							FEBRUARY							AUGUST							FEBRUARY										
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S				
..	..	..	..	..	1	2	1	2	3	4	5	6	7	..	..	..	..	..	1	2	..	..	..	..	..	1	2
3	4	5	6	7	8	9	8	9	10	11	12	13	14	2	3	4	5	6	7	8	7	8	9	10	11	12	13				
10	11	12	13	14	15	16	15	16	17	18	19	20	21	9	10	11	12	13	14	15	14	15	16	17	18	19	20				
17	18	19	20	21	22	23	22	23	24	25	26	27	28	16	17	18	19	20	21	22	21	22	23	24	25	26	27				
24	25	26	27	28	29	30	..	..	..	..	..	..	..	23	24	25	26	27	28	29	28	..	..	..	..	..	..
31	..	..	..	..	..	..	..	..	..	..	..	..	..	30	31	..	..	..	..	..	..	..	..	..	..	..	..
SEPTEMBER							MARCH							SEPTEMBER							MARCH										
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S				
..	1	2	3	4	5	6	1	2	3	4	5	6	7	1	2	3	1	2	3		
7	8	9	10	11	12	13	8	9	10	11	12	13	14	6	7	8	9	10	11	12	7	8	9	10	11	12	13				
14	15	16	17	18	19	20	15	16	17	18	19	20	21	13	14	15	16	17	18	19	14	15	16	17	18	19	20				
21	22	23	24	25	26	27	22	23	24	25	26	27	28	20	21	22	23	24	25	26	21	22	23	24	25	26	27				
28	29	30	..	..	..	..	29	30	31	..	..	..	..	27	28	29	30	..	..	..	28	29	30	31	..	..	..	
..				
OCTOBER							APRIL							OCTOBER							APRIL										
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S				
..	1	2	3	4	1	2	3	4	1	2	3	1	2	3
5	6	7	8	9	10	11	5	6	7	8	9	10	11	4	5	6	7	8	9	10	4	5	6	7	8	9	10				
12	13	14	15	16	17	18	12	13	14	15	16	17	18	11	12	13	14	15	16	17	11	12	13	14	15	16	17				
19	20	21	22	23	24	25	19	20	21	22	23	24	25	18	19	20	21	22	23	24	18	19	20	21	22	23	24				
26	27	28	29	30	31	..	26	27	28	29	30	..	..	25	26	27	28	29	30	31	25	26	27	28	29	30	..		
..				
NOVEMBER							MAY							NOVEMBER							MAY										
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S				
..	1	1	2	1	2	3	1		
2	3	4	5	6	7	8	3	4	5	6	7	8	9	2	3	4	5	6	7	8	2	3	4	5	6	7	8				
9	10	11	12	13	14	15	10	11	12	13	14	15	16	9	10	11	12	13	14	15	9	10	11	12	13	14	15				
16	17	18	19	20	21	22	17	18	19	20	21	22	23	16	17	18	19	20	21	22	16	17	18	19	20	21	22				
23	24	25	26	27	28	29	24	25	26	27	28	29	30	23	24	25	26	27	28	29	23	24	25	26	27	28	29				
30	..	..	..	..	..	..	31	..	..	..	..	..	..	30	31	..	..	..	..	..	30	31	..	..	..	..	..
..				
DECEMBER							JUNE							DECEMBER							JUNE										
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S				
..	1	2	3	4	5	6	..	1	2	3	4	5	6	1	2	3	1	2	3		
7	8	9	10	11	12	13	7	8	9	10	11	12	13	6	7	8	9	10	11	12	6	7	8	9	10	11	12				
14	15	16	17	18	19	20	14	15	16	17	18	19	20	13	14	15	16	17	18	19	13	14	15	16	17	18	19				
21	22	23	24	25	26	27	21	22	23	24	25	26	27	20	21	22	23	24	25	26	20	21	22	23	24	25	26				
28	29	30	31	..	..	..	28	29	30	..	..	..	..	27	28	29	30	31	..	..	27	28	29	30	..	..	..	
..				

UNIVERSITY CALENDAR 1924-1925

Unless otherwise indicated, this calendar refers to the activities at College Park.

1924		
June 16-21	Monday-Saturday	Rural Women's Short Course.
June 25-	Wednesday	Summer School begins.
Aug. 5	Tuesday	Summer School ends.
Aug. 7-12		Boy's and Girl's Club Week.

FIRST SEMESTER

Sept. 15	Monday	Instruction for first semester begins—School of Law.
Sept. 17-18	Wednesday-Thursday	Entrance examinations.
Sept. 22-23	Monday-Tuesday	Registration for all students.
Sept. 22	Monday	Registration for the first semester begins—College of Commerce.
Sept. 22-27	Monday-Saturday	Examinations for advance standing—School of Medicine.
Sept. 24	Wednesday, 8.20 a. m.	Instruction for first semester begins. No admission to classes without class cards.
Sept. 24	Wednesday, 11.30 a. m.	First Student Assembly. President's Annual Address.
Sept. 26	Friday, 8 p. m.	President's reception for new students.
Sept. 26	Friday	Opening exercises—College of Commerce.
Sept. 29	Monday	Last day to register without payment of additional fee.
Sept. 29	Monday	Instruction for first semester begins— School of Medicine. School of Dentistry. School of Pharmacy. College of Commerce.
Sept. 29	Monday	Last day to register— School of Medicine. School of Law.
Oct. 2	Wednesday	Last day to change registration or to file schedule card in Registrar's office without payment of fine.

Oct. 6	Monday	Last day to register— School of Dentistry. School of Pharmacy. College of Commerce.
Nov. 11	Tuesday	Observance of Armistice Day.
Nov. 14	Friday, 8 p. m.	Freshman Entertainment.
Nov. 27	Thursday	Thanksgiving Day Holiday.
Dec. 20	Saturday, 12 m.	Christmas recess begins.
Dec. 20	Saturday	Christmas recess begins after last class period— School of Medicine. School of Law. School of Pharmacy. School of Dentistry. College of Commerce.
1925		
Jan. 5	Monday, 8.20 a. m.	Christmas recess ends. Classes begin.
Jan. 5	Monday	Instruction resumed with first class period— School of Medicine. School of Law. School of Dentistry. School of Pharmacy. College of Commerce.
Jan. 15-24	Thursday-Saturday	First semester examinations. School of Law.
Jan. 19-24	Monday-Saturday	Registration for second semester.
Jan. 19	Monday	Registration for second semester. School of Law.
Jan. 26-31	Monday-Saturday	First semester examinations. College of Commerce.
Feb. 2-7	Monday-Saturday	First semester examinations.

SECOND SEMESTER

Jan. 26	Monday	Instruction for second semester begins— School of Law.
Jan. 26	Monday	Registration for second semester begins— College of Commerce.
Feb. 2	Monday	Instruction for second semester begins— College of Commerce.
Feb. 9	Monday, 8.20 a. m.	Instruction for second semester begins. No admission to classes without class cards.

Feb. 9	Monday	Last day to register. School of Law. College of Commerce.
Feb. 16	Monday	Last day to change registration or to file schedule card in Registrar's office without pay- ment of fine.
Feb. 22	Sunday	Washington's Birthday.
Feb. 23	Monday	Holiday following Washington's Birthday— School of Medicine. School of Law. School of Dentistry. School of Pharmacy. College of Commerce.
Mar. 25	Wednesday, 11.20 a. m.	Maryland Day Exercises.
Apr. 9	Thursday, 12 m.	Easter recess begins.
Apr. 9	Thursday	Easter recess begins after last class period— School of Medicine. School of Law. School of Dentistry. School of Pharmacy. College of Commerce.
Apr. 14	Tuesday	Instruction resumed with first class period— School of Medicine. School of Law. School of Dentistry. School of Pharmacy. College of Commerce.
Apr. 15	Wednesday, 8.20 a. m.	Easter recess ends. Classes be- gin.
May 13	Wednesday	Festival of Music.
May 14	Thursday	Festival of Music.
May 18-23	Monday-Saturday	Second semester examinations. College of Commerce.
May 18-30	Monday-Saturday	Second semester examinations. School of Law.
May 30	Saturday	Decoration Day.
June 1-6	Monday-Saturday	Second semester examinations for seniors.

June 6	Saturday	Commencement Day. School of Medicine. School of Law. School of Dentistry. School of Pharmacy. College of Commerce. School for Nurses.
June 4-10	Thursday-Wednesday	Second semester examinations.
June 7	Sunday, 11 a. m.	Baccalaureate Sermon.
June 11	Thursday	Class Day.
June 12	Friday	Reunion Day. Final student Assembly. President's address.
June 13	Saturday, 11 a. m.	Commencement Day. Second semester ends.
June 15-20	Monday-Saturday	University entrance examinations.
June 15-20	Monday-Saturday	Rural Women's Short Course.
June 24-	Wednesday	Summer School begins.
Aug. 4	Tuesday	Summer School ends.
Aug. 6-11		Boy's and Girl's Club Week.

BOARD OF REGENTS

(Members appointed by the Governor for terms of nine years):

SAMUEL M. SHOEMAKER, Chairman.....	1916-1925
Eccleston, Baltimore County	
ROBERT CRAIN	1924-1933
Mt. Victoria, Charles County	
JOHN M. DENNIS, Treasurer.....	1923-1932
Union Trust Co., Baltimore	
DR. J. FRANK GOODNOW.....	1922-1931
6 West Madison Street, Baltimore	
JOHN E. RAINE.....	1921-1930
413 East Baltimore Street, Baltimore	
CHARLES C. GELDER.....	1920-1929
Princess Anne, Somerset County	
DR. W. W. SKINNER, Secretary.....	1919-1928
Kensington, Montgomery County	
B. JOHN BLACK.....	1918-1927
Randallstown, Baltimore County	
HENRY HOLZAPFEL	1917-1926
Hagerstown, Washington County	

COMMITTEES

EXECUTIVE

SAMUEL M. SHOEMAKER, Chairman
DR. FRANK J. GOODNOW
B. JOHN BLACK
ROBERT CRAIN
JOHN M. DENNIS

UNIVERSITY AND EDUCATIONAL WORK

DR. FRANK J. GOODNOW, Chairman
ROBERT CRAIN
DR. W. W. SKINNER

EXPERIMENT STATION AND INVESTIGATIONAL WORK

B. JOHN BLACK, Chairman
DR. W. W. SKINNER
HENRY HOLZAPFEL

EXTENSION AND DEMONSTRATION WORK

ROBERT CRAIN, Chairman
B. JOHN BLACK
JOHN E. RAINE

INSPECTION AND CONTROL WORK

JOHN M. DENNIS, Chairman
HENRY HOLZAPFEL
CHARLES C. GELDER

ADMINISTRATIVE COUNCIL

ALBERT F. WOODS, A.M., D. Agr., LL.D., President
H. C. BYRD, B.S., Assistant to the President
DEANS AND DIRECTORS
J. E. PALMER, Executive Secretary
MAUDE F. MCKENNEY, Financial Secretary
G. S. SMARDON, Comptroller
W. M. HILLEGEIST, Registrar
ALMA H. PREINKERT, M.A., Assistant Registrar
H. L. CRISP, M.M.E., Superintendent of Buildings
T. A. HUTTON, Purchasing Agent and Manager of Students'
Supply Store

THE UNIVERSITY SENATE

ALBERT F. WOODS, A.M., D.Agr., LL.D., President of the University.
H. C. BYRD, B.S., Assistant to the President.
H. J. PATTERSON, D.Sc., Director of the Agricultural Experiment Station.
T. B. SYMONS, M.S., D.Agr., Director of the Extension Service.
P. W. ZIMMERMAN, M.S., Dean of the College of Agriculture.
A. N. JOHNSON, S.B., Dean of the College of Engineering.
FREDERIC E. LEE, Ph.D., Dean of the College of Arts and Sciences.
J. M. H. ROWLAND, M.D., Dean of the School of Medicine.
HENRY D. HARLAN, LL.D., Dean of the School of Law.
E. FRANK KELLY, Phar.D., Dean of the School of Pharmacy.
T. O. HEATWOLE, M.D., D.D.S., Dean of the School of Dentistry.
W. S. SMALL, Ph.D., Dean of the College of Education.
M. MARIE MOUNT, A.B., Acting Dean of the College of Home Economics.
C. O. APPLEMAN, Ph.D., Dean of the Graduate School.
R. H. LEAVITT, Lieutenant Colonel, U. S. A., Head of the Department of
Military Science and Tactics.

THE GRADUATE SCHOOL COUNCIL

ALBERT F. WOODS, A.M., D.Agr., LL.D., President.
C. O. APPLEMAN, Ph.D., Dean of the Graduate School, Chairman.
~~E. S. JOHNSTON, Ph.D., Secretary.~~
H. J. PATTERSON, D.Sc., Director of Agricultural Experiment Station.
✓ T. H. TALIAFERRO, C.E., Ph.D., Professor of Mathematics.
E. N. CORY, M.S., Professor of Entomology.
H. C. HOUSE, Ph.D., Professor of English Language and Literature.
A. G. MCCALL, Ph.D., Professor of Geology and Soils.
DEVOE MEADE, Ph.D., Professor of Animal Husbandry.
N. E. GORDON, Ph.D., Professor of Physical Chemistry.
H. F. COTTERMAN, B.S., M.A., Professor of Agricultural Education.
FREDERIC E. LEE, Ph.D., F.R.E.S., Professor of Sociology and Political
Science.

OFFICERS OF INSTRUCTION

ALBERT F. WOODS, M.A., D.Agr., LL.D., President.

PROFESSORS

- C. O. APPLEMAN, Ph.D., Professor of Plant Physiology and Biochemistry.
Dean of the Graduate School.
- E. C. AUCHTER, Ph.D., Professor of Horticulture.
- L. B. BROUGHTON, M. S., Professor of Industrial Chemistry, Chairman of
the Premedical Committee.
- O. C. BRUCE, M.S., Professor of Soils.
- H. C. BYRD, B.S., Assistant to the President, Director of Athletics.
- RAY W. CARPENTER, A.B., Professor of Agricultural Engineering.
- E. N. CORY, M.S., Professor of Entomology, State Entomologist.
- H. F. COTTERMAN, B.S., M.A., Professor of Agricultural Education and
Rural Sociology, Associate Dean of the College of Education.
- MYRON CREESE, B.S., E.E., Professor of Electrical Engineering.
- S. H. DEVAULT, A.M., Ph.D., Professor of Agricultural Economics.
- J. A. GAMBLE, M.S., Professor of Dairy Husbandry.
- F. W. GEISE, M.S., Professor of Olericulture.
- N. E. GORDON, Ph.D., Professor of Physical Chemistry, State Chemist.
- HARRY GWINNER, M.E., Professor of Mechanical Engineering, Vice-Dean
of the College of Engineering.
- H. C. HOUSE, Ph.D., Professor of English and English Literature,
Director of Choral Music.
- A. N. JOHNSON, B.S., Professor of Highway Engineering, Director of
Engineering Research, Dean of the College of Engineering.
- R. H. LEAVITT, Lieutenant Colonel, Infantry, D.O.L., U. S. A., Professor of
Military Science and Tactics.
- FREDERIC E. LEE, Ph.D., F.R.E.S., Professor of Sociology and Political
Science, Dean of the College of Arts and Sciences.
- A. G. MCCALL, Ph.D., Professor of Geology and Soils.
- FRIEDA M. MCFARLAND, A.B., Professor of Textiles and Clothing.
- EDNA B. MCNAUGHTON, B.S., Professor of Home Economics Education.
- DEVOE MEADE, Ph.D., Professor of Animal Husbandry.
- J. E. METZGER, B.S., Professor of Agronomy.
- M. MARIE MOUNT, A.B., Professor of Home and Industrial Management,
Acting Dean of the College of Home Economics.
- J. B. S. NORTON, M.S., D.Sc., Professor of Systematic Botany and Mycol-
ogy.
- E. M. PICKENS, D.V.M., A.M., Professor of Bacteriology, Animal Path-
ologist of the Biological and Live Stock Sanitary Laboratories.
- C. J. PIERSON, A.B., A.M., Professor of Zoology.
- M. M. PROFFITT, Ph.B., Professor of Psychology and Industrial Educa-
tion.
- R. C. REED, Ph.B., D.V.M., Professor of Animal Pathology.
- C. S. RICHARDSON, A.M., Professor of Public Speaking and Extension
Education.

- W. S. SMALL, Ph.D., Dean of the College of Education, Professor of
Education, Director of the Summer School.
- THOS. H. SPENCE, A.M., Professor of Classical Languages and Literature,
Dean Emeritus of the College of Arts and Sciences.
- ADELE STAMP, B.S., Dean of Women, Instructor in Physical Education.
- S. S. STEINBERG, B.E., C.E., Professor of Civil Engineering.
- T. H. TALIAFERRO, C.E., Ph.D., Professor of Mathematics.
- W. T. L. TALIAFERRO, A.B., D.Sc., Professor of Farm Management.
- C. E. TEMPLE, M.A., Professor of Plant Pathology, State Plant Patholo-
gist.
- T. B. THOMPSON, Ph.D., Professor of Economics and Business Adminis-
tration.
- R. V. TRUITT, B.S., M.S., Professor of Aquiculture.
- ROY H. WAITE, B.S., Professor of Poultry Husbandry.
- SEWELL WRIGHT, Ph.D., Collaborating Professor in Genetics.
- P. W. ZIMMERMAN, M.S., Professor of Plant Physiology and Ecology,
Dean of the College of Agriculture.
- A. E. ZUCKER, Ph.D., Professor of Modern Languages.

ASSOCIATE PROFESSORS

- C. G. EICHLIN, A.B., M.S., Associate Professor of Physics.
- E. S. JOHNSTON, Ph.D., Associate Professor of Plant Physiology.
- W. B. KEMP, B.S., Associate Professor of Genetics and Agronomy.
- M. KHARASCH, Ph.D., Associate Professor of Chemistry.
- C. F. KRAMER, A.M., Associate Professor of Modern Languages.
- J. N. G. NESBIT, B.S., M.E., E.E., Associate Professor of Mechanical
Engineering.
- G. J. SCHULZ, A.B., Associate Professor of History and Political Science.
- A. S. THURSTON, M.S., Associate Professor of Floriculture and Landscape
Gardening.
- R. C. WILEY, M.S., Associate Professor of Chemistry.

ASSISTANT PROFESSORS

- LESLIE E. BOPST, B.S., Assistant Professor of Chemistry.
- K. A. CLARK, M.S., Assistant Professor of Animal Husbandry.
nomics.
- G. EPPLEY, B.S., Assistant Professor of Agronomy.
- JOHN H. GARDINER, Ph.D., Assistant Professor of Chemistry.
- MALCOLM R. HARING, Ph.D., Assistant Professor of Chemistry.
- SUSAN HARMAN, M.A., Assistant Professor of English.
- S. H. HARVEY, M.S., Assistant Professor of Dairy Husbandry.
- L. J. HODGINS, B.S., Assistant Professor of Electrical Engineering.
- H. B. HOSHALL, B.S., Assistant Professor of Mechanical Engineering.
- BEATRICE JOHNSON, M. A., Assistant Professor of English.
- G. E. JACOBI, D.V.M., Assistant Professor of Bacteriology.
- F. M. LEMON, A.M., Assistant Professor of English.

H. LINDEN, Captain, Infantry, D.O.L. (B.S. in Engineering), Assistant Professor of Military Science and Tactics.
 W. H. McMANUS, Warrant Officer, U.S.A., Assistant Professor of Military Science and Tactics.
 A. J. NEWMAN, M.A., Assistant Professor of Economics and Business Administration.
 L. J. POELMA, D.V.M., Assistant Professor of Bacteriology.
 *GEORGE O. SMITH, M.S., Assistant Professor of Animal Husbandry.
 J. T. SPANN, B.S., Assistant Professor of Mathematics.
 J. W. STANLEY, Captain, Infantry, D.O.L., Assistant Professor of Military Science and Tactics.
 CLARIBEL P. WELSH, B.S., Assistant Professor of Foods.
 M. F. WELSH, D.V.M., Assistant Professor of Bacteriology.
 PAUL WERNICKE, Ph.D., Assistant Professor of Physics.
 P. M. WHEELER, M.A., Assistant Professor of English.
 W. E. WHITEHOUSE, M.S., Assistant Professor of Pomology.
 W. B. YANCEY, Captain, Infantry, D.O.L., Assistant Professor in Military Science and Tactics.

LECTURERS

F. W. BESLEY, A.B., M.F., D.Sc., Lecturer on Forestry.
 FRANK COLLIER, Ph.D., Lecturer on Social Psychology.
 FREDERICK JUCHHOFF, L.L.M., C.P.A., Ph.D., Lecturer on Accountancy.
 GEORGE E. LADD, A.M., Ph.D., Lecturer on Engineering Geology.
 J. H. SHEPHERD, B.A., L.L.B., Special Lecturer on Commercial Law.

INSTRUCTORS

PEARL ANDERSON, A.B., Instructor in Zoology.
 R. W. AUSTERMANN, Ph.B., Instructor in Physics.
 GRACE BARNES, B.S., B.L.S., Instructor in Library Science, Librarian.
 BENJAMIN BERMAN, B.S., Instructor in Civil Engineering.
 J. B. BLANDFORD, Instructor in Horticulture, Horticultural Superintendent.
 V. R. BOSWELL, M.S., Instructor in Horticulture.
 M. D. BOWERS, M.B., Instructor in Journalism.
 F. J. DOAN, B.S., Instructor in Dairy Husbandry.
 B. L. GOODYEAR, B.S., B. Mus., Teacher of Voice and Piano.
 W. A. GRIFFITH, M.D., Instructor in Hygiene, College Physician.
 HELEN R. HOUCK, A.B., Instructor in Education.
 L. W. INGHAM, M.S., Instructor in Dairy Husbandry.
 D. C. LICHTENWALNER, M.S., Instructor in Chemistry.
 M. A. PYLE, B.S., Instructor in Civil Engineering.
 J. H. SCHAD, B.S., Instructor in Mathematics.
 W. H. SIMMONS, Sergeant, D.E.M.L., U.S.A., Military Instructor.
 CONSTANCE E. STANLEY, B.A., Instructor in Modern Languages.
 E. B. STARKEY, M.S., Instructor in Chemistry.

*On leave of absence during 1924-1925.

ASSISTANTS

JESSIE BLAISDELL (Mrs.), Assistant in Music.
 F. R. DARKIS, M.S., Assistant Chemist and Inspector.
 F. D. DAY, B.S., Assistant in Agricultural Education.
 E. C. DONALDSON, M.S., Assistant Chemist and Inspector.
 E. E. ERICKSON, B.A., Assistant in English.
 A. L. FLENNER, B.S., Assistant Chemist and Inspector.
 D. C. HENNICK, Assistant in Mechanical Engineering.
 AUDREY KILLIAM, B.S., Assistant in Home Economics.
 O. P. H. REINMUTH, B.S., Assistant Chemist and Inspector.
 H. B. SHIPLEY, Assistant in Physical Education.
 ADA ZOUCK, A.M., Assistant in Education.
 L. H. VAN WORMER, M.S., Assistant Chemist.
 H. R. WALLS, Assistant Chemist and Inspector.
 R. M. WATKINS, B.A., Assistant in Public Speaking.

SPECIAL INSTRUCTORS IN REHABILITATION DEPARTMENT.

T. H. BARTILSON, B.S., Instructor in Poultry.
 B. L. BURNSIDE, M.S., Instructor in Horticulture.
 F. H. LEUSCHNER, B.S., Instructor in Poultry.
 M. A. MCMASTER, B.S., Instructor in Floriculture.
 ALBERT F. VIERHELLER, M.S., Instructor in Horticulture.

FELLOWS AND ASSISTANTS

E. H. VANDEN BOSCHE, B.S., Fellow in Chemistry.
 B. S. BRUNSTETTER, M.A., Fellow.
 IRWIN C. CLARE, B.S., Fellow in Chemistry.
 J. W. ELDER, B.S., Fellow in Chemistry.
 J. N. FIELDS, B.S., Fellow in Dairy Husbandry.
 J. E. FLYNN, B.S., Fellow in Plant Pathology.
 MILDRED GRAFFLIN, B.S., Fellow in Chemistry.
 F. S. LAGASSE, B.S., Fellow in Horticulture.
 G. S. LANGFORD, B.S., Fellow in Entomology.
 H. G. LINDQUIST, B.S., Fellow in Dairy Husbandry.
 W. G. MALCOLM, B.S., Fellow in Bacteriology.
 R. E. MARKER, B.S., Fellow in Chemistry.
 G. F. POLLOCK, B.S., Fellow in Dairy Husbandry.
 F. C. SKILLING, B.S., Fellow in Bacteriology.
 A. M. SMITH, M.S., Fellow in Soils.
 V. S. TROY, B.S., Fellow in Bacteriology.
 C. E. WHITE, B.S., Fellow in Chemistry.

AGRICULTURAL EXPERIMENT STATION STAFF

HARRY J. PATTERSON.....Director and Chemist
 J. B. S. NORTON.....Botany and Plant Pathology
 THOS. H. WHITE.....Vegetables and Floriculture
 CHAS. O. APPLEMAN.....Plant Physiology
 ROY H. WAITE.....Poultry
 E. N. CORY.....Entomology
 A. G. MCCALL.....Soils
 J. E. METZGER.....Agronomy
 E. M. PICKENS.....Animal Pathology
 E. C. AUCHTER.....Horticulture
 ALBERT WHITE.....Superintendent Ridgely Farm
 F. S. HOLMES.....Seed Inspection
 DEVOE MEADE.....Animal Husbandry
 J. A. GAMBLE.....Dairy Husbandry
 F. W. GEISE.....Vegetable Breeding
 H. B. McDONNELL.....Pathological Chemist
 R. A. JEHL.....Associate, Plant Pathology

LOCAL AGENTS

Southern Maryland.*J. F. ARMSTRONG (Col.).....Seat Pleasant
 Eastern Shore.....*L. H. MARTIN (Col.).....Princess Anne

HOME DEMONSTRATION AGENTS

<i>County.</i>	<i>Name</i>	<i>Headquarters</i>
Allegheny.....	*BESSIE VOLK.....	Cumberland
Anne Arundel.....	*MRS. G. LINTHICUM.....	Annapolis
Baltimore.....	*MARY GRAHAM.....	Towson
Caroline.....	*EMILY KELLOGG, B.S.....	Denton
Carroll.....	*ISABELLE COBB, A.B. & M. A.....	Westminster
Cecil.....	*LILLIAN GRIMM, B.S.....	Elkton
Charles.....	*MRS. E. S. BOHANNAN.....	La Plata
Dorchester.....	*SARA COYNE, B.S.....	Cambridge
Frederick.....	*ELIZABETH THOMPSON, B.S.....	Frederick
Harford.....	*EVA K. SCHURR, B.S.....	Bel Air
Kent.....	*SUSAN HILL.....	Chestertown
Montgomery.....	*BLANCHE CORWIN, B.S.....	Rockville
Prince Georges.....	*ELLEN DAVIS.....	Hyattsville
St. Mary's.....	*ETHEL JOY.....	Leonardtwn
Talbot.....	*MRS. O. K. WALLS.....	Easton
Washington.....	*SUSAN GARBERTSON.....	Hagerstown
Wicomico.....	*FLORENCE MASON, B.S.....	Salisbury
Worcester.....	*LUCY J. WALTER.....	Snow Hill

LOCAL AGENT

Charles & St. Mary's*LEAH D. WOODSON (Col.).....La Plata

GARDEN SPECIALIST

Madison & Lafayette
 Aves., Administra-
 tion Building.....ADELAIDE DERRINGER (Mrs.).....Baltimore

*In cooperation with the U. S. Department of Agriculture.
 †Devoting part time to Extension Work.

FACULTY COMMITTEES—1924-1925

College Park.

ALUMNI.

Messrs. Bomberger, Hoshall, Byrd, Hillegeist, Cory, Eppley and Truitt.

BUILDINGS.

Messrs. Crisp, Johnson, Meade, Pierson, Bruce and Mackert.

CATALOGUE, STUDENT ENROLLMENT AND ENTRANCE.

Messrs. Small, Zimmerman, Lee, Johnson, Appleman and Misses Mount, Stamp and Preinkert.

COMMENCEMENT.

Messrs. T. H. Taliaferro, Richardson, House, Leavitt, Thurston, Truitt, and Miss Mount.

COURSES OF STUDY.

Messrs. Cotterman, Creese, Gordon, Kemp, Leavitt, Mrs. McFarland, Miss Preinkert and Deans ex-officio.

EDUCATIONAL STANDARDS.

Messrs. Appleman, McCall, Gordon, Johnson, Small, Lee and Hillegeist.

FARMERS' DAY.

Messrs. Patterson, Symons, Zimmerman and Miss Mount.

GROUNDS AND ROADS.

Messrs. Auchter, Thurston, Crisp, Patterson, Steinberg, Metzger and Carpenter.

PRE-MEDICAL EDUCATION.

Messrs. Broughton, Cory, Davis, Lee, Spence, Wiley and McGlone.

SANITATION.

Messrs. Pickens, Griffith, Reed, W. T. L. Taliaferro, Pyle and Miss Mount.

STUDENT AFFAIRS.

Messrs. Small, Byrd, Broughton, Johnson, Spence, Kemp, and Miss Stamp.

STUDENT BUSINESS AND AUDITING.

Miss McKenney, and Messrs. Spann, Hoshall, Mackert, Shadick, Bowers and President of the Students' Assembly.

CLASS ASSIGNMENT.

Messrs. Carpenter, Eppley, Welsh, Pyle, Hennick, Mrs. Welsh and Misses Houck, Anderson, Harman, and one member from the Military Department.

GENERAL INFORMATION

The University of Maryland

Location

The University of Maryland is located at College Park in Prince George's County, Maryland, on the line of the Washington branch of the Baltimore and Ohio Railroad, eight miles from Washington and thirty-two miles from Baltimore. At least eight trains a day from each city stop at College Station, thus making the place easily accessible from all parts of the State. Telephone connection is made with the Chesapeake and Potomac lines.

The grounds front on the Baltimore and Washington Boulevard. The suburban town of Hyattsville is two miles to the south, and Laurel, the largest town in the county, is ten miles to the north on the same road. Access to these towns and to Washington may be had by steam and electric railway. The site of the University is particularly beautiful. The broad rolling campus and most of the buildings occupy a commanding hill, which is covered with forest trees and overlooks the surrounding country. In front, on either side of the boulevard, lie the drill ground and the athletic field. The buildings of the Agricultural Experiment Station face the boulevard. The farm of the College of Agriculture contains about 300 acres, and is devoted to fields, gardens, orchards, vineyards, poultry yards, etc., which are used for experimental purposes and demonstration work in agriculture and horticulture.

The general appearance of the grounds is exceedingly attractive. They are tastefully laid off in lawns and terraces ornamented with shrubbery and flower beds.

The location of the University is healthful; the sanitary conditions are excellent. No better proof of this can be given than that there has been practically no serious case of illness among the students for many years.

The Schools of Medicine, Pharmacy, Dentistry, Law, and the College of Commerce and Administration of the University are located in Baltimore at the corner of Lombard and Greene Streets.

History

The history of the present University of Maryland practically combines the histories of two institutions. It begins with the chartering of the College of Medicine of Maryland in Baltimore in 1807, which graduated its first class in 1810. In 1812 the institution was empowered to annex other departments and was by the same act "constituted an University by the name and under the title of the University of Maryland." As such, its Law and Medical schools have since been especially prominent in the South and widely known throughout the country. The Medical School building in Baltimore, located at Lombard and Greene Streets, erected in 1814-1815, is the oldest structure in America devoted to medical teaching.

For more than a century the University of Maryland stood almost as organized in 1812, until an act of the Legislature in 1920 merged it with the Maryland State College, and changed the name of the Maryland State College to the University of Maryland. All the property formerly held by the old University of Maryland was turned over to the Board of Trustees of the Maryland State College, the name of which was changed to Board of Regents of the University of Maryland.

The Maryland State College first was chartered in 1856 under the name of the Maryland Agricultural College, the second agricultural college in the Western Hemisphere. For three years the College was under private management. In 1862 the Congress of the United States, recognizing the practical value and increasing need of such colleges, passed the Land Grant Act. This act granted each State and Territory that should claim its benefits a proportionate amount of unclaimed Western lands, in place of scrip, the proceeds from the sale of which should apply under certain conditions to the "endowment, support and maintenance of at least one college where the leading object shall be, without excluding other scientific and classical studies, and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts, in such a manner as the Legislatures of the States may respectively prescribe, in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions of life." This grant was accepted by the General Assembly of Maryland. The Maryland Agricultural College was named as the beneficiary of the grant. Thus the College became, at least in part, a State institution. In the fall of 1914 its control was taken over entirely by the State. In 1916 the General Assembly granted a new charter to the College and made it the Maryland State College.

The University is coeducational and under the charter every power is granted necessary to carry on an institution of higher learning and research, in which Agriculture and Engineering hold a dominant place along with the Liberal Arts and the Professions. This is in full accord with the Morrill Act of the National Congress and the subsequent acts. This institution, therefore, is the representative of the State and the Nation in higher education and research. The charter provides that it shall receive and administer all existing grants from the national government and all future grants which may come to the State for this purpose.

BUILDINGS

Some twenty buildings have been erected on the University campus for research, extension, and residence educational purposes. The buildings comprised in the groups are the Agricultural Building, Calvert Hall, Silvester Hall, the Library, Engineering Buildings, Chemical Building, Morrill Hall, Horticultural Building, the Hospital, Stock Judging Pa-

vilion, Poultry Building, Gymnasium, Dairy Building, Stadium, temporary dining-hall, temporary dormitory, Gerneaux Hall, Practice House, and the Agricultural Experiment Station group. Other buildings are located in Baltimore.

Agricultural Building

The Executive Offices, the College of Agriculture, College of Education, College of Home Economics, and the Agricultural and Home Economics Extension Service are housed in the Agricultural Building. This structure was completed and occupied in April, 1918. The building also contains biological, soils and bacteriological laboratories.

Buildings in Baltimore

The buildings of the University in Baltimore are located at the corner of Lombard and Greene streets. They consist of the original building erected in 1814, and more modern buildings adjoining, of which one is devoted to Law and another is the University Hospital.

Calvert Hall

Excellent dormitory accommodations for men are provided in Calvert Hall, a modern fireproof structure erected and occupied in 1914. It took in part the place of the two dormitories destroyed by fire in 1912.

Silvester Hall

This large, modern, four-story building was completed in 1921. It is used as a men's dormitory and has been dedicated as Silvester Hall, in honor of Dr. R. W. Silvester, who served as president of the institution for 20 years.

Morrill Hall

The College of Arts and Sciences is partially housed in Morrill Hall, which is a three-story building erected in 1898. This building formerly was used for the work in agriculture and engineering.

Chemical Building

The Chemical Building provides a place for instruction in Chemistry and for the state work in analysis of feeds, fertilizers and agricultural lime. It has classrooms, laboratories, and offices for all undergraduate work in chemistry.

Engineering Buildings

The Mechanical Building was the first of the Engineering group constructed, having been completed and occupied by the Department of Mechanical Engineering in 1898. The Civil Engineering and Electrical Engineering additions, with accompanying shops, were built in 1910. The three buildings are connected by closed passageways.

Dairy Building

The Dairy Building is a modern building equipped for handling market milk and dairy manufactures. It will be used for the development of dairying in its commercial as well as its scientific aspects.

Gymnasium

The Ritchie Gymnasium is a large building 144 feet long and 72 feet wide, completed in the Fall of 1923. It provides ample room for the Military Department, as well as for physical education. The equipment to be installed will be modern in every respect.

Stadium

The Byrd Stadium, erected in 1923, is a structure which provides adequate accommodation for about 5,000 spectators at outdoor contests. It is provided with dressing-rooms for contestants, rest rooms for patrons and facilities for receiving and transmitting information concerning games at other institutions.

The Infirmary

The infirmary was erected in 1901 and makes possible excellent treatment for students in cases of sickness. It has a private ward for segregation of contagious diseases, quarters for the trained nurse, operating room, doctor's office, special culinary equipment, and accommodations for twenty patients.

The Horticultural Building

Classrooms, propagation rooms, and offices are in the Horticultural Building, completed in 1915. Ten modern greenhouses are constructed as a part of this building.

The Stock Judging Pavilion

This building is used for stock judging competitions, for stock shows, and to house a part of the equipment of the dairy husbandry and farm machinery departments of the College of Agriculture. Connecting this building with the Agricultural Building is an auditorium in which 600 persons may be seated.

The Poultry Buildings

Research in poultry projects and laboratory practice is carried on in the Poultry Building. The main building contains classrooms, laboratories, offices and incubating rooms.

Experiment Station Group

The main building of the experiment station group is a large brick structure of the colonial period. It contains the office of the Director of the Station, the chemical and physiological laboratories, and a laboratory for research in soils. Other buildings of this group contain seed and milk testing laboratories and classrooms. There are also greenhouses, an Agronomy Building, a secondary horticultural building, barns, farm machinery buildings, silos, etc.

Temporary Dining-Hall

A temporary wooden structure has been erected to serve as a dining-hall until the Legislature appropriates money to put up a permanent building. This wooden structure is well built and contains kitchen equipment and other facilities for comfortably taking care of about 500 persons.

Other Buildings

Another wooden structure used for several years as an auditorium is serving as a dormitory. The University also maintains a laundry building in which it handles the students' laundry at cost. It also has two frame dwelling-houses in which it houses part of its labor. A brick powerhouse contains apparatus for pumping all water for University use. Another small frame house contains machinery for canning and drying fruits and vegetables.

The Filtration Plant

Recently completed is a modern filtration plant for furnishing an ample supply of water for use in the dormitories and general university buildings. This plant consists of a reservoir with a reserve supply of 1,500,000 gallons, sediment tanks, filter beds, pumps, etc.

Gerneaux Hall

This building is a dormitory for girls, and is fitted with many conveniences for their use.

Practice House

This house, built in 1921, is equipped with all appliances of a modern home. It also serves as a dormitory for girls.

Library Building

The Library is housed in a separate two-story building on the first floor of which is collected material relating to agriculture. The special catalogue cards issued by the United States Department of Agriculture make accessible the large number of state and national bulletins on agricultural and related scientific subjects. The second floor is used for general reading and reference work.

Through the Inter-Library Loan systems of the Library of Congress and the United States Department of Agriculture the University Library is able to supplement its reference material either by arranging for personal work in these Washington libraries or by actually borrowing the books from them.

The Library contains 14,120 bound books and 5,750 United States Government documents and unbound reports and pamphlets. All material is on open shelves where students can easily locate it. The Library is open from 8.30 A. M. to 5.30 P. M., Monday to Friday, inclusive; Saturday from 8.30 A. M. to 12.30 P. M.; Sunday afternoon from 2.30 P. M. to 5.30 P. M.; and all evenings except Saturday, from 6 P. M. to 10 P. M.

SCHOLARSHIPS AND FELLOWSHIPS

High School Scholarships

While the University has neither endowment nor loan funds with which to assist students, it has established for each high and preparatory school in Maryland and the District of Columbia one scholarship each year. For the three counties of Maryland which do not have high schools, Calvert, Charles and St. Mary's, one scholarship each year is given. These scholarships have a value of fifty dollars and are credited to the holder's account.

These scholarships are offered under the following conditions:

1. The holder must be a graduate of a high or preparatory school and qualified to enter the freshman class.
2. The appointment to the scholarships must be made by the county school superintendent upon recommendation of the principal of the high school. In making recommendations high school principals should take into consideration not only class standing but also inability to meet the expenses of a university education.
3. The appointment shall be made for the term normally required to complete the curriculum selected.
4. The scholarship will be forfeited by indifference to scholastic work or by disregard of rules of the University.
5. Scholarships awarded to preparatory schools and to high schools of Baltimore and Washington shall be given on recommendation of the principals direct to the University. Recipients of these scholarships must be qualified to enter the freshman class.
6. Appointees from Charles, St. Mary's and Calvert counties may take one of the non-collegiate curriculums or they may, if qualified, take one of four-year curriculums leading to a degree.

Fellowships

The University also offers a number of fellowships. These may be given either to its own graduates or the graduates of other colleges who desire to pursue courses in the Graduate School leading to advance degrees. Fellowships are available in the College of Agriculture, College of Engineering and College of Arts and Sciences. These fellowships carry stipends of from \$500 to \$1,000 per year. For further information look under the general heading Graduate School.

HONORS AND AWARDS

Honorable mention is given to students for excellence in undergraduate work in the upper one-fifth of each college as follows: The upper one-tenth is given first honors, and the rest second honors, provided that the student's course average is at least B.

Debating and Oratory

An annual debate is held each year in January between the Poe and New Mercer Literary societies for the "President's Cup," given by Dr. H. J. Patterson.

A gold medal is awarded by the Alumni Association each year to the best debater in the University, the test being a debate between picked teams from the two literary societies.

The Oratorical Association of Maryland Colleges, consisting of Washington College, Western Maryland College, St. John's College, and University of Maryland, offers each year gold medals for first and second places in an oratorical contest that is held between representatives of the four institutions.

Athletics

The class of 1908 offers annually to "the man who typifies the best in college athletics" a gold medal. The medal is given in honor of former President R. W. Silvester and is known as "The Silvester Medal for Excellence in Athletics."

The Military Medal

The class of 1899 offers each year a gold medal to the member of the battalion who proves himself the best drilled soldier.

The Company Sword

The class of 1897 awards annually to the captain of the best drilled company of the University battalion a silver mounted sword.

The Citizenship Prize

A gold medal is presented annually by H. C. Byrd, a graduate of the class of 1908, to the member of the senior class who during his collegiate career has nearest typified the model citizen and who has done most for the general advancement of the interests of the University.

Citizenship Prize for Women

The Citizenship Prize is offered by Mrs. Albert F. Woods to the woman member of the senior class who, during her collegiate career, has typified the modern citizen and has done most for the general advancement of the interests of the University.

The Goddard Medal

The James Douglas Goddard Memorial Medal is awarded annually to the man from Prince George's County making the highest average in his studies and who at the same time embodies the most manly attributes. The medal is given by Mrs. Annie K. Goddard James of Washington, D. C.

Sigma Phi Sigma Medal

The Delta Chapter of Sigma Phi Sigma Fraternity offers annually a gold medal to that freshman who makes the highest scholastic average during the first semester.

Alpha Zeta Medal

The Honorary Agricultural Fraternity of Alpha Zeta awards annually a medal to the agricultural student in the freshman class who attains the highest average record in academic work. The mere presentation of the medal does not elect the student to the fraternity, but simply indicates recognition of high scholarship.

Public Speaking Prize

W. D. Porter, of Hyattsville, Maryland, offers annually a prize of \$25.00 in gold to that student who shows greatest advancement in public speaking, not as a great orator "but just to acquire that practicable knowledge which enables one to stand and think and so express those thoughts while standing as to transmit them to his fellowmen accurately and in a common sense way."

ORGANIZATIONS

The Alumni Association

The Alumni Association is an organization composed of alumni of the University. This Association has an office at the University and has several branch associations. It publishes a monthly paper, The State University Alumnus. The Association is active in legislative and other measures for the support of the University.

The Student Assembly

The Student Assembly is composed of all the students and is organized to carry out a system of student self-government. The Student Executive Council is the executive committee of the Student Assembly and acts in co-operation with the faculty in the management of student affairs.

The Dramatic Club

The Dramatic Club is organized for the purpose of presenting at least one play each year. It is made up of students who have had experience in this work since coming to the University or in high school.

Fraternities and Sororities

There are at the University four national fraternities, Kappa Alpha, Sigma Nu, Sigma Phi Sigma, Phi Alpha; three local fraternities, Nu Sigma Omicron, Delta Psi Omega, Sigma Tau Alpha; two local sororities, Sigma Delta, Lambda Tau.

Societies

Two literary societies are maintained by the students, the Poe and New Mercer. These hold weekly meetings at which regular programs are presented.

The Maryland Chemical Club is made up of students specializing in chemistry. Special lectures by students and specialists in certain branches

of chemistry and open discussions of various chemical questions are featured.

The Engineering Society is composed of students in the College of Engineering.

The Agricultural Club is organized according to special interests into the Horticultural Society, the Agronomy Society, and the Animal Husbandry Society.

Programs are offered in the Engineering Society and Agricultural Club similar to that of the Chemical Club, except that the subjects pertain to engineering or agriculture.

Student Grange

The University is fortunate in having a chapter of the time-honored national fraternity known as "The Grange." With the exception of two faculty advisers, the Student Grange membership is made up entirely from the student body. New members are elected by ballot when they have proven their fitness for the organization.

The general purposes of the Student Grange are to furnish a means through which students keep in touch with state and national problems of agricultural, economic or general educational nature; to gain experience in putting into practice our parliamentary rules; to learn the meaning of leadership and to learn how to assume leadership that aids in the ultimate task of serving in one's community.

Economics Club

This club is composed of students preparing for business careers in the Department of Social and Political Science of the College of Arts and Sciences.

Phi Kappa Phi

Phi Kappa Phi is a national honorary association open to honor students in all branches of learning.

Two classes of students may become eligible for election to membership in Phi Kappa Phi. First, any senior who ranks in scholarship among the upper one-fourth of the graduating class; second, any graduate student who would have been eligible as an undergraduate and who has made an honorable record in graduate work.

The prime object of the fraternity is to emphasize the attainment of scholarship and character and to stimulate mental achievement through the prize of membership.

Alpha Zeta

Alpha Zeta is a National Honorary Agricultural Fraternity open to students who have been in the institution at least two semesters, and who are in the upper two-fifths of the class so far as scholastic standing is concerned. From this number students are elected to the fraternity who show signs of scholarship and leadership, and have won the respect of the faculty and student body. The object, therefore, of the fraternity is to foster scholarship, leadership and good fellowship.

Phi Mu

Phi Mu is a local Honorary Engineering Fraternity. Membership is based on high scholastic standing, and is composed of juniors and seniors matriculated in the College of Engineering who rank among the first one-fourth of their respective classes. The object of the fraternity is to mark in a fitting manner those who have attained high scholarship and to foster a spirit of liberal culture in the College of Engineering.

Le Cercle Francais

This club was organized in 1919 by the Department of French. Its membership is composed of the faculty of the department, students pursuing courses in French, and others interested in the study of that language. The aims of the club are to awaken a live interest in French literature, culture, history and customs, and to acquire facility in the use of the language. Although fostered by the College of Arts and Sciences, this club is not restricted to students enrolled therein, but is open to all who are interested.

Clubs

The Rifle Club is affiliated with the National Rifle Association and engages in matches with other colleges and rifle organizations.

The Chess and Checker Club is organized for the promotion of these games among those that engage in them. Annual tournaments are conducted for which gold medals are awarded.

The County Clubs are organizations of students from the same counties. The Baltimore City Club and District of Columbia Club are organizations of the same nature.

The Rossbourg Club is the student organization which has charge of most of the formal dances of the students. This club is open to all students.

The Keystone Club came into being when a score of men from the "Keystone State" found each other on the campus. All Pennsylvanians are eligible. Its aim is to promote a feeling of interest and good fellowship among the students from Pennsylvania.

The Christian Associations

The Young Men's and Young Women's Christian Associations are organized to be of general service to the students. They perform important functions in matters of obtaining employment for worthy students, in receiving new students, and in helping to maintain generally a high morale and a state of good fellowship in the student body.

STUDENT PUBLICATIONS

The Diamondback

A weekly five-column newspaper, The Diamondback, is published by the students. This publication reflects the news and atmosphere of general college life.

Terra Mariae

The Terra Mariae is a student annual put out by the Junior Class to reflect the college atmosphere of the students.

ADMINISTRATION

The government of the University is vested by law primarily in a Board of Regents, consisting of nine members, each of whom is appointed by the Governor for a term of nine years. The administration of the University is vested in the President. The University Senate and the Administrative Council act in an advisory capacity to the President. The composition of these bodies is given elsewhere. The faculty of each college or school constitutes a group which passes on all questions that have exclusive relationship to the unit represented.

For purposes of administration and coordination of similar groups of studies, the following educational organizations are in effect:

- College of Agriculture.
- College of Arts and Sciences.
- College of Commerce and Business Administration.
- College of Education.
- College of Engineering.
- College of Home Economics.
- Department of Military Science and Tactics.
- Department of Physical Education and Recreation.
- Graduate School.
- School of Dentistry.
- School of Law.
- School of Medicine.
- School of Pharmacy.
- Summer School.

The College of Agriculture offers curricula in: (1) General Agriculture; (2) Agronomy; (3) Farm Management; (4) Geology and Soils; (5) Pomology; (6) Vegetable Gardening; (7) Floriculture; (8) Landscape Gardening; (9) Economic Entomology; (10) Animal Husbandry; (11) Dairy Husbandry; (12) Two-Year Agriculture.

The College of Arts and Sciences offers courses of study with majors in: (1) Biological Sciences; (2) Classical Languages and Literature; (3) English, including Journalism and Public Speaking; (4) History and the Social Sciences; (5) Mathematics; (6) Modern Languages and Literature (French, German and Spanish); (7) Philosophy and Psychology; (8) Physical Sciences, including Chemistry, Physics and Geology. Courses are also offered in Music and Library Science. Special curricula are offered in the Pre-Medical Group, and in Industrial, General and Agricultural Chemistry.

The College of Education offers curricula in: (1) Agricultural Education; (2) General Education; (3) Home Economics Education; (4) Industrial Education.

The College of Engineering offers curricula in: (1) Civil Engineering; (2) Electrical Engineering; (3) Mechanical Engineering.

The College of Home Economics offers a curriculum in which may

be obtained the general principles of home economics, a knowledge of home economics for teaching purposes, or a specialized knowledge of particular phases which deal with the work of the dietitian or institutional manager.

The Department of Military Science and Tactics has charge of the work of the Reserve Officers' Training Corps unit established by the War Department. During the first two years of the male student's stay at the University he is required to take the Basic R.O.T.C. courses. In case of physical disability a course covering an equivalent number of credit hours may be required. During his junior and senior years he may, if eligible, elect each year six semester credit hours in the Reserve Officers' Training Corps.

The Department of Physical Education and Recreation works in close cooperation with the military department and supervises all physical training, general recreation and intercollegiate athletics.

The Graduate School offers courses in any of the subjects given in the colleges of the University in which a graduate may desire to obtain an advanced degree. The Graduate School consists of all students taking graduate work in the various departments. Those qualified to supervise graduate work in the various departments constitute the faculty of the Graduate School, presided over by a research specialist designated as Dean.

Information in regard to offerings of the School of Medicine, the Schools of Pharmacy and Dentistry and the School of Law and the College of Commerce and Business Administration will be found elsewhere.

The Summer School of six weeks offers courses in subjects given during the regular session of the University, with the exception of Medicine, Dentistry, Pharmacy and Law, and in special subjects, such as school administration, classroom management and principles of secondary education for high school and elementary school teachers. Certain courses given in the Summer School are of collegiate grade and may be counted toward the bachelor's degree. Advanced courses may count toward the master's degree.

EXTENSION AND RESEARCH

Agriculture and Home Economics

The agricultural and home economics extension service of the University, in co-operation with the United States Department of Agriculture, carries to the people of the State through practical demonstrations conducted by specialists of the College of Agriculture and county agents, the results of investigations in the fields of agriculture and home economics. The organization consists of the administrative forces, including the director, assistant director, specialists and clerical force, the county agricultural demonstration agents, and the home demonstration agents in each

county and in the chief cities of the State. The county agents and the specialists jointly carry on practical demonstrations under the several projects in the production of crops or in home-making, with the view of putting into practice on the farms of the State improved methods of agriculture and home economics that have stood the test of investigation, experimentation and experience. Movable schools are held in the several counties. At such schools the specialists discuss phases of agriculture and home economics in which the people of the respective counties are particularly interested.

The work of the Boys' Agricultural Clubs is of especial importance from an educational point of view. The specialists in charge of these projects, in co-operation with the county agricultural agent and the county school officers and teachers, organize the boys of the several communities of the county into agricultural clubs for the purpose of teaching them by actual practice the principles underlying agriculture. The boys hold regular meetings for the discussion of problems connected with their several projects and for the comparison of experiences. Prizes are offered to stimulate interest in the work.

The home economics specialists and agents organize the girls into clubs for the purpose of instructing them in the principles underlying canning, drying and preserving fruits and vegetables, cooking, dressmaking and other forms of home economics work.

The educational value of the demonstrations, farmers' meetings, movable schools, clubs and community shows is incalculable. They serve to carry the institution to the farmer and to the home-maker.

General Extension

This phase of the extension service of the University is conducted in co-operation with the United States Bureau of Education, and is intended to make the general branches of the educational curriculum of greater service to the people of the State.

Agricultural Experiment Station

Intimately associated with the extension service is the experimental work in agriculture.

In 1847 an act was passed making provision for a State laboratory in which the application of chemistry to agriculture was to be undertaken. In 1858 experimentation was undertaken on the College farm. After two or three years this work was interrupted by the general financial distress of the time and by the Civil War. In 1888 under the provisions of the Hatch Act of the preceding year, the Agricultural Experiment Station was established.

This act states the object and purpose of the experiment stations as follows:

That it shall be the object and duty of said Experiment Stations to conduct original researches or verify experiments on the physiology of plants and animals; the diseases to which they are severally subject, with the

remedies for the same; the chemical composition of useful plants at their different stages of growth; the comparative advantages of rotative cropping as pursued under a varying series of crops; the capacity of new plants or trees for acclimation; the analysis of soils and water; the chemical composition of manures, natural or artificial, with experiments designed to test their comparative effects on crops of different kinds; the adaptation and value of grasses and forage plants; the composition and digestibility of the different kinds of food for domestic animals; the scientific and economic questions involved in the production of butter and cheese; and such other researches or experiments bearing directly on the agricultural industry of the United States as may in each case be deemed advisable, having due regard to the varying conditions and needs of the respective States or Territories.

Prior to the establishment of the experiment stations there was practically no agricultural science in this country. The work done by these institutions during the past quarter of a century has given a science of agriculture to teach, and laid a broad foundation for development.

The placing of agricultural demonstrations and extension work on a national basis has been the direct outgrowth of the work of the experiment station.

The students of the University, taking courses in the College of Agriculture, are kept in close touch with the investigations in progress.

The Eastern Branch

The Eastern Branch of the University of Maryland is located at Princess Anne, Somerset County. It is maintained for the education of negroes in agriculture and the mechanic arts.

INCOME

The University is supported entirely by funds appropriated for its use by the State and Federal Governments. The appropriations from the Federal Government are derived from the original Land Grant Act, from the second Morrill Act, the Nelson Act, the Smith-Hughes and Smith-Lever Acts and the Hatch and Adams Acts. The University, with the exception of its professional schools in Baltimore, charges no tuition and consequently has no funds from that source.

ADMISSION

General Statement

An applicant for admission to any of the colleges or schools of the University must be at least sixteen years of age.

Women are admitted to all of the departments under the same conditions and on the same terms as men.

Students may be admitted at the beginning of either semester but should enter, if possible, at the beginning of the first semester (in 1923,

September 17). Students can seldom enter the University to advantage except at the opening of the school year.

In general the requirements for admission to the freshman class are the same as those prescribed for graduation by the approved high schools of Maryland.* A candidate for admission by *certificate* must be a *graduate* of an approved high school or other accredited school. Applicants who have not been graduated from accredited schools must pass entrance examinations designated by the University Entrance Board.

Number of Units Required

At least fifteen units of high school or other secondary school work in acceptable subjects must be offered by every candidate.

A unit represents a year's study in any subject in a secondary school and constitutes approximately a quarter of a full year's work. It presupposes a school year of 36 to 40 weeks, recitation periods of from 40 to 60 minutes, and for each study four or five class exercises a week. Two laboratory periods in any science or vocational study are considered as equivalent to one class exercise.

Required and Elective Subjects

*Prescribed Units

English	3
†Mathematics	2
Science	1
History	1
Total	7

*In addition to the prescribed units listed, two years of any one foreign language are required for admission to the pre-medical curriculum.

†An additional unit of mathematics is required for admission to the College of Engineering. The additional unit should include Algebra, $\frac{1}{2}$, and Solid Geometry, $\frac{1}{2}$. An opportunity to acquire additional half unit in Solid Geometry is afforded in the Summer School.

Elective Subjects

To be selected from the following subjects:

Agriculture	Geology
Astronomy	History
Biology	Home Economics
Botany	Industrial Subjects
Chemistry	Language
Civics	Mathematics
Commercial Subjects	Music
Drawing	Physical Geography
Economics	Physics
English	Physiology
General Science	Zoology

Methods of Admission

The credits required for admission to the undergraduate departments may be secured as follows:

- (a) By certificate
- (b) By examination
- (c) By transfer from another university or college of recognized standing

(a) Admission by Certificate

Blank certificates for students wishing to enter the University by certificate from an approved high school or other secondary school may be had of the Registrar. They should be obtained early and filled out and sent to the Registrar for approval as soon as possible after the close of the high school in June.

The State Board of Education prepares a list of approved high schools each year. The University accepts graduates from these schools without question. Other preparatory schools may be visited by the high school inspector upon request.

Entrance credit will also be accepted on certificate from the following sources:

- (1) From schools accredited by the Association of Colleges and Preparatory Schools of the Southern States.
- (2) From schools accredited by the North Central Association of Colleges and Secondary Schools.
- (3) From schools accredited to the state universities which are included in the membership of the North Central Association of Colleges and Secondary Schools.
- (4) From schools approved by the New England College Entrance Certificate Board.
- (5) From high schools and academies registered by the Regents of the University of the State of New York.
- (6) From College Entrance Examination Board of New York.
- (7) From high and preparatory schools on the accredited list of other state boards of education where the requirements for graduation are equivalent to the standard set by the Maryland State Board of Education.
- (8) From the state normal schools of Maryland and other state normal schools having equal requirements for graduation.

(b) Admission by Examination

1. The University Entrance Examinations.

The University entrance examinations are given at the University in College Park immediately before the opening of the first semester in September. *Students who need to take the examinations should make all*

necessary preparations several weeks in advance. These examinations cover all the subjects required or accepted for entrance outlined.

An examination fee of \$5.00 is charged for entrance examinations.

II. The Examinations of the College Entrance Examination Board.

The certificate of the College Entrance Examination Board, showing a grade of 60 per cent. or higher will be accepted for admission in any elective subject. These examinations will be held only once a year beginning the third Monday in June.

All applications for examination must be addressed to the Secretary of the College Entrance Examination Board, 431 West 117th Street, New York, N. Y., and must be made upon a blank form to be obtained from the Secretary of the board on application.

Applications for examinations at points in the United States east of the Mississippi River and at points on the Mississippi River must be received by the Secretary of the Board at least three weeks in advance of the examinations; applications for examinations at points in the United States west of the Mississippi River must be received at least four weeks in advance of the examinations; and applications for examinations outside of the United States must be received at least six weeks in advance of the examinations.

Applications received later than the time specified will be accepted when it is possible to arrange for the admission of the candidate concerned, but only on payment of \$6.00 in addition to the usual fee.

The examination fee is \$6.00 for all candidates examined at points in the United States, and \$20.00 for all candidates examined outside of the United States. The fee, which cannot be accepted in advance of the application, should be remitted by postal order, express order or draft on New York to the order of the College Entrance Examination Board.

III. The New York Regents' Examinations.

Credit will be accepted also from the examinations conducted by the Regents of the University of the State of New York.

(c) Admission by Transfer From Other Colleges or Universities

A person who has been admitted to another college or university of recognized standing will be admitted to this University by presenting a certificate of honorable dismissal from the institution from which he comes and an official statement of the subjects upon which he was admitted to such institution, provided that the entrance requirements are equivalent to those of the University of Maryland.

Students intending to transfer to the University of Maryland must present an official statement of their college credits to the Registrar.

A student transferring to the University of Maryland from another university or college is required to submit, in addition to the official transfer of credits from the institution, certificates as to his good character and loyal citizenship from the President and Dean of the institution from

which he comes, and also from three reputable citizens of his home town or city.

Special Requirements of Colleges and Schools

Requirements for admission to the Schools of Medicine, Law, Pharmacy and Dentistry will be found elsewhere under chapters given to these schools.

Admission to Advanced Standing

A student coming from a standard college or university may secure advanced standing by presenting a statement of his complete academic record certified by the proper officials. This statement must be accompanied by a set of secondary school credentials presented for admission to the college or university. Full credit is given for work done in other institutions when found to be equivalent in extent and quality to that required at this University. An applicant may request examination for advanced credit in any subject. In case the character of a student's work in any subject is such as to create doubt as to the quality of that which preceded it elsewhere, the University reserves the right to revoke at any time any credit assigned on certificate.

Regardless of the amount of advanced standing a student may secure, in no case will he be given the baccalaureate degree with less than one year of resident work.

Unclassified Students

Mature persons who have had insufficient preparation to pursue any of the four-year curricula may, with the consent of the Committee on Entrance, matriculate for such subjects as they are fitted to take. Such students, however, will be ineligible for degrees.

GRADUATION, DEGREES, DIPLOMAS AND CERTIFICATES

All undergraduate four-year courses at College Park lead to the degree of Bachelor of Science or Bachelor of Arts. The total requirements for graduation vary, according to the type of work in the different colleges and schools. A credit hour is one lecture or recitation each week for one semester; two or three hours of laboratory or field work are counted equivalent to one lecture or recitation. All practical work is scheduled for two or three hours, depending upon the nature of the work. To find full information of requirements, the student should refer to the description of the school in which interested.

Candidates are recommended for graduation after they have completed the prescribed course of study, including all the required work and enough electives to total the credit hours required in the various colleges and schools.

The University confers the following degrees: Bachelor of Arts, Bachelor of Science, Bachelor of Business Administration, Master of Arts, Master of Science, Doctor of Philosophy in Arts, Doctor of Philosophy in Science, Civil Engineer, Mechanical Engineer, Electrical Engineer, Bachelor of Laws, Doctor of Medicine, Doctor of Dental Surgery, Graduate in Pharmacy and Pharmaceutical Chemist.

Degrees are not granted to the students in the two-year curricula, but at graduation time certificates are awarded.

A diploma is awarded in the School of Nursing to students who have satisfactorily completed the course.

FEEES AND EXPENSES

MAKE ALL CHECKS PAYABLE TO THE UNIVERSITY OF MARYLAND FOR THE EXACT AMOUNT OF THE SEMESTER CHARGES.

In order to reduce the cost of operation, all fees are due and payable as a part of the student's registration and *all persons must come prepared to pay the full amount of the semester charges. No student will be admitted to classes until such payment has been made.*

The following listed charges represent the fees which must be paid by all students who room and board at the University. Special fees will be found in the following paragraphs:

	<i>First Semester</i>	<i>Second Semester</i>	<i>Total for Year</i>
Fixed Charges	\$37.50	\$37.50	\$75.00
Board (36 weeks at \$6.75).....	135.00	108.00	243.00
Lodging (38 weeks at \$2.00)	40.00	36.00	76.00
Laundry (36 weeks at 60c).....	12.00	9.60	21.60
*Reserve Fee	10.00	....	10.00
**Athletic Fee	15.00	....	15.00
	<hr/>	<hr/>	<hr/>
	\$249.50	\$191.10	\$440.60

A matriculation fee of \$5.00 will be charged all students registering at the University for the first time.

*The Reserve Fee will be returned at the close of the year, less damage charges, if any, except to those students who have occupied rooms without first signing the room register kept by the Dormitory Manager at his office in Room 121, Silvester Hall, or who have moved from rooms assigned to them, or have removed articles of furniture, without his approval, in which case the entire fee will be forfeited, and damages or other charges which may be shown on their clearance slips will be made against them.

**The Athletic Fee constitutes a fund which is collected from all students in the University at College Park for the maintenance of athletics, and the entire amount is turned over to the Athletic Board for disbursement.

Special Fees

	<i>First Semester</i>	<i>Second Semester</i>	<i>Total for Year</i>
Non-resident students (not including D. C. Students)	\$62.50	\$62.50	\$125.00
Non-resident Pre-medical students.....	100.00	100.00	200.00
Resident Pre-medical Students	25.00	25.00	50.00
Special Condition Examinations (each)	1.00	1.00	....
Fee for changes in registration after first week	1.00	1.00	....
Fee for failure to register within seven days after opening semester	2.00	2.00	....
Graduation fee payable prior to Graduation		10.00	....
Fee for failure to file schedule card in Registrar's office within seven days after opening of semester	1.00	1.00	....
Certificate fee payable prior to graduation.	5.00	5.00	....

No diploma will be conferred upon, nor any certificate granted to a student who has not made satisfactory settlement of accounts.

Graduate Fees

Each graduate student must pay a matriculation fee of \$10.00, a fixed charge of \$1.50 per semester credit hour, and a diploma fee of \$10.00. Laboratory fees will be the same as for under-graduates.

ROOM RESERVATIONS. All students who desire to reserve rooms in the dormitories must register their names and their selection of rooms with the Dormitory Manager, depositing \$10.00 with him as a reserve fee. (See table of expenses). This fee will be deducted from the first semester charges if a student returns. If not, it will be forfeited. For further information regarding this fee see following paragraph. Students who fail to make reservations may not be able to obtain rooms upon their return. Reservations may be made at any time during the closing month of the year by students already in the University, and by new students up to September 1, 1924.

No credits will be issued to students who leave the University without having turned in the required clearance slip to the Financial Department and paid all charges shown thereon.

The cost of books, supplies and personal needs is not taken into consideration in the foregoing statement. It depends largely upon the tastes and habits of the individual student. Books and supplies average about \$40.00 a year.

The Fixed Charges made to all students are a part of the overhead expenses, such as janitor service, hospital and doctor's fees, general laboratory fees, library, physical training, etc.

Board, lodging and other charges may vary from semester to semester, but every effort will be made to keep expenses as low as possible.

In case of illness requiring special nurse or special medical attention, the expense must be borne by the student.

Board and lodging may be obtained at boarding houses or in private families, if desired.

Students rooming outside the University may obtain board and laundry at the same rates as those living in the dormitories.

Day students may get lunches at nearby lunchrooms.

All the University property in possession of the individual student will be charged against the student and the parent or guardian must assume responsibility for its return without injury other than results from ordinary wear.

All students assigned to dormitories are required to provide themselves with one pair of blankets for single bed, two pairs of sheets for single bed, four pillow cases, six towels, one pillow, two laundry bags, one broom and one waste basket.

Refunds

NO FIXED CHARGE WILL BE REFUNDED. By "Fixed Charge" is meant the general overhead fee of \$75.00, the Athletic Fee of \$15.00 and the Matriculation Fee of \$5.00.

No refunds will be made to students without the consent of their parents or guardians, except to students who pay their own expenses.

No refund will be given on board, lodging, laundry, non-resident fee, laboratory fee or pre-medical fee except for withdrawal from the University. In such cases the following charges will be made for the period during which the student was on the campus: Board, \$7.00 per week, Lodging, \$2.00 per week, and Laundry, 75 cents per week. If the student withdraws within the first month, one-fifth of the non-resident and one-fifth of the pre-medical fees will be charged. After the first month, no refunds will be made except for board, lodging and laundry.

No student will be given cash for any portion of his or her refund until all outstanding checks have been honored by the banks on which they are drawn.

Withdrawals

A student desiring to withdraw from the University must secure the written consent of parent or guardian, to be attached to the withdrawal slip, which must be approved by the Dean and presented to the Registrar at least one week in advance of withdrawal. **CHARGES FOR FULL TIME WILL BE CONTINUED UNLESS THIS IS DONE.** Withdrawal slips must bear the approval of the President or the Assistant to the President and the Financial Secretary before being presented to the cashier for refund.

Baltimore Schools

The fees and expenses for these schools located in Baltimore are:

	Matriculation	Tuition		Lab- aratory	Grad- uation
		Resident	Non- Resident		
Medicine	\$10.00 (once only)	\$250.00	\$300.00	\$10.00 yr.	\$10.00
*Dentistry ...	10.00 " "	200.00	250.00	10.00 yr.	10.00
Pharmacy	10.00 " "	200.00	250.00	10.00 yr.	10.00
Law	10.00 " "	150.00	200.00	.....	10.00

Applicants for admission to any of the schools are charged a record investigation fee of \$2.00.

*Students are required to pay, once only, a dissecting fee of \$15.00.

COLLEGE OF COMMERCE AND BUSINESS ADMINISTRATION, UNIVERSITY OF MARYLAND

FEES.

I. Preliminary Fees.

Required of Regular and Special Students, payable at time of registration.

1. Matriculation Fee—\$10 payable once.
2. Record Investigation Fee—\$2.
3. Late Registration Fee—\$5 extra is charged regular and special students who register after the dates indicated in the calendar.
4. Non-Resident Fee—Charged students who are not residents of Maryland. \$50 annually, payable \$25 each semester.

II. Tuition Fees—Not including Summer Session—based upon \$5 per credit hour, per semester.

6 Courses—18 periods per week—for the year.....	\$216
5 Courses—15 periods per week—for the year.....	180
4 Courses—12 periods per week—for the year.....	144
3 Courses— 9 periods per week—for the year.....	108
2 Courses— 6 periods per week—for the year.....	72
1 Course — 3 periods per week—for the year.....	36
1 Late afternoon course—2 periods per week—for year....	24
1 Course — 3 periods per week—for one semester..	20
1 Late afternoon course— 2 periods per week—for one semester	16

III. Graduation Fee.

For Diploma and Degree, or for Certificate payable May 1, before commencement

10

IV. Special Examinations.	
Arranged upon request. Per subject.....	2
V. Summer Session.	
Evening. Per Subject.....	20
Day—3 periods	35

ADMINISTRATIVE PROCEDURE

Date of Registration and Penalty for Late Registration

Registration for the first semester takes place during the first two days of the term. Students register for the second semester during the week beginning January 19, 1925.

After seven days from the opening of a semester fees are imposed for a change of registration or for late registration.

Students, who for any reason are more than seven days late in registering, must secure permission from the instructors in charge for admission to courses. Such permission must be given in writing to the student's dean before course cards will be issued.

Physical Examination and Physical Training

All students who enter the University undergo a physical examination by the physician in charge. This is conducted in cooperation with the Military Department under the direction of which most of the work in physical training is done. The examination is also a measure for protecting the health of the student body.

Maximum and Minimum Schedule

The prescribed number of credit hours that a student ordinarily may carry ranges from 15 to 19. No student may register for less than the ordinary number without permission from his dean.

A student who obtains an average grade of "B" in any semester may, with the permission of his dean, be allowed to carry such additional courses in the succeeding semester as may be scheduled. This privilege is forfeited if the student's average grade falls below "B".

No regular student working for a degree may carry less than 12 credit hours.

Examinations

Examinations are given at the end of each semester. The final grade is derived from the average daily grade and the examination grade.

Grading System

Students are graded with the following marks: A, B, C, D, E, and F. A, B, C, and D are passing; E represents a condition and F a failure.

Student Advisory and Honor System

A Committee comprising five members of the faculty acts as the advisory board to the Students' Executive Council of the Students' Assembly. The Students' Executive Council, with the aid of the Advisory Board, manages all student affairs. The Honor System is in effect for all students, and each student always is on his honor to live up to the highest principles of democratic government.

The Students' Assembly

All students assemble in the Auditorium at 11:20 o'clock every Wednesday. Every other Wednesday is turned over to the students to transact business which concerns the whole student body. The Department of Public Speaking arranges the programme for the remaining Wednesdays.

General Suggestions to New Students

Candidates for admission to the University should correspond with the Registrar at College Park, who in turn will supply them with the necessary forms for transferring preparatory credits. It is advisable for prospective students to dispose of the preliminaries early in the year in order to prevent disappointments, for if a student comes to the University without taking the preliminary steps he may find that he does not have enough credits to enter. The Registrar is always glad to advise with the students concerning their preparation. The Registrar sends out a general statement of the procedure for new students to follow after they are duly admitted to the University.

College of Agriculture

P. W. ZIMMERMAN, Dean.

Agriculture is the great primary pursuit of the human race. Permanent prosperity is in direct proportion to the producing capacity of the land. Land-Grant Colleges were founded, therefore, to foster the teaching of scientific agriculture. The primary aim of the College of Agriculture of the University of Maryland is to teach the best and most practical methods of farm production, the economics of marketing and distribution, and methods to improve the economic and social position of the farmer. Agriculture is constantly changing; no cropping system can be worked out once and for all time; new as well as old pests and diseases must be constantly combatted; better feeding and breeding of live stock and more efficient marketing methods must be substituted for the old and inefficient methods if agriculture is to maintain its importance with the other industries. Above all agriculture must be made profitable to the tiller of the soil and must be established as a great paying business for those who engage in it as well as for town and city dwellers.

The curricula of the College of Agriculture are planned to give the student a thorough and practical course in agriculture and related sciences, and at the same time afford an opportunity to specialize along the lines in which he is particularly interested. Likewise, instruction is given which will prepare students for teaching positions in agriculture, for governmental investigation and experimental work, for positions as county agents, farm bureau leaders, farm supervisors, as well as for farming.

Departments

The College of Agriculture includes the following departments: (1) Agricultural Economics; (2) Agricultural Education (see College of Education); (3) Agricultural Engineering; (4) Agronomy (including Forage Crops, Grain Crops, Genetics); (5) Animal Husbandry; (6) Bacteriology; (7) Dairy Husbandry; (8) Entomology and Bee Culture; (9) Farm Forestry; (10) Farm Management; (11) Horticulture (including Pomology, Vegetable Gardening, Landscape Gardening and Floriculture); (12) Plant Pathology; (13) Plant Physiology and Bio-chemistry; (14) Poultry Husbandry; (15) Soils; (16) Veterinary Medicine.

Admission

The college is open on equal terms to both sexes. To be admitted to full standing the applicant must be a graduate of an approved high school or its equivalent. Non-graduates of high school must present by exami-

nation or certificate fifteen units of secondary school work. Of the fifteen units seven are required as follows:

English	3
Mathematics	2
Science	1
History	1
Total.....	7

A list of elective subjects and other general information may be found in the fore part of the catalogue under the heading "Admission".

Requirements for Graduation

One hundred and thirty-six semester credit hours are required for graduation. The prescribed work is the same for all freshmen and sophomores (except for those specializing in Floriculture, Landscape Gardening, Farm Forestry and Entomology); thereafter the work required varies according to the major and minor subjects pursued by the students.

Major Subject

Before the beginning of the third year the student chooses a department in which he will do his major work. After choosing his major subject some member of the department (appointed by the head of the department) will become the student's advisor in the selection of courses. The advisor may designate a minor subject if he deems it necessary.

The minimum requirements for a major in one department are fourteen semester credit hours, and the maximum hours permitted to count toward a degree are thirty-five semester credit hours.

Farm Practice

Students without farm experience do not, as a rule, secure full benefit from any of the agricultural courses. A committee has been appointed for the purpose of assisting all students coming to the college without farm training to obtain a fair knowledge of actual farm practice. Some time during the year the committee will examine all members of the freshman class to determine whether or not their experience satisfies the farm practice requirements. Those not able to pass this examination will be required to spend at least three months on a farm designated by or having the approval of the committee. If the student has had no experience whatsoever before entering college, he may be required to spend six to nine months on a farm. The committee reserves the right also to call on all students so placed for written reports showing the experience gained while on these farms.

Agricultural Experiment Station

The College of Agriculture works in cooperation with the Agricultural Experiment Station. Much of the subject matter in agricultural courses is tested by the station or furnished as original from its re-

searches. Methods and material which are valuable in one state are often worthless in another, and the station makes it a point to find what is best for the State of Maryland.

The general farm, orchards, gardens and herds at the Experiment Station are available for laboratory and class use by the college.

Fellowships

A limited number of graduate fellowships which carry remuneration of \$500 to \$1,000 yearly are available to graduate students. Students who hold these fellowships spend a portion of their time assisting in classes and laboratories. The rest of the time may be used for original investigation or assigned study. The time required for a degree depends upon the nature of the fellowship held.

Curricula in Agriculture

All students registered for agriculture take the same work in the freshman and sophomore years, except those registered for landscape gardening, floriculture and entomology. At the end of the sophomore year they may elect to specialize along the lines in which they are particularly interested.

FRESHMAN YEAR		Semester:	
		I	II
Gen'l Chem. and Qual. Analysis (Chem. 101).....	4	4	4
*General Zoology (Zool. 101).....	4	..	..
*General Botany (Bot. 101).....	..	..	4
Composition and Rhetoric (Eng. 101).....	3	3	3
Public Speaking (P. S. 101 and 102).....	1	1	1
Basic R. O. T. C. (M. I. 101).....	2	2	2
(Elect one of the following groups)			
Group A—			
Types and Breeds (A. H. 101).....	3	..	..
Principles of Vegetable Culture (Hort. 111).....	..	..	3
Group B—			
Language	3	3	3
Group C—			
Mathematics	3	3	3
SOPHOMORE YEAR		Semester:	
		I	II
Agricultural Chemistry (Chem. 116).....	3	3	3
Geology (Geol. 101).....	3	..	..
Principles of Soil Management (Soils 101).....	..	..	3
Elementary Pomology (Hort. 101).....	3	..	..
Field Crop Production (Agron. 101-102).....	3	3	3
Feeds and Feeding (A. H. 102).....	3	..	..
Dairying (D. H. 101).....	..	..	3
Elements of Social Science (Soc. Sci. 101).....	..	..	4
Basic R. O. T. C. (M. I. 102).....	2	2	2

*Offered each semester.

*Small Birds
New Int.*

AGRICULTURAL ENGINEERING

The Department of Agricultural Engineering is organized to offer students of agriculture training in those branches of agriculture which are based upon engineering principles. These subjects may be grouped under three heads: farm machinery, farm buildings, and farm drainage.

The modern tendency in farming is to replace hand labor, requiring the use of many men, by large machines which do the work of many men yet require only one man for their operation. In many cases horses are being replaced by tractors to supply the motive force for these machines. Trucks and automobiles are used on many farms. It is highly advisable that the student of any branch of agriculture have a working knowledge of the construction and adjustments of these machines.

About one-sixth of the total value of farms is invested in the buildings. The study of the design of the various buildings, from the standpoint of convenience, economy and appearance, is, therefore, important.

The study of drainage includes the principles of tile drainage, the layout and construction of tile drain systems, the use of open ditches, and a study of the Maryland drainage laws.

AGRONOMY

The curriculum in agronomy aims to give the student the fundamental principles of crop production. Special attempt is made to adapt the work to the young man who wishes to apply scientific principles of field crop culture and improvement on the farm. At the same time enough freedom is given the student in the way of electives so that he can register for subjects which might go along with the growing of crops on his particular farm. A student graduating from the course in agronomy should be well fitted for general farming, investigational work in the State or Federal Experiment Stations, or county agent work.

The Agronomy Department has a large, well equipped laboratory in the new Agricultural Building and a greenhouse for student use, besides free access to the Experiment Station fields and equipment.

Curriculum

JUNIOR YEAR		<i>Semester:</i>	
		<i>I</i>	<i>II</i>
Genetics (Agron. 110)	.....	3	..
Grain and Hay Judging (Agron. 104)	.....	1	..
Grading Farm Crops (Agron. 103)	.....	..	2
Crop Varieties (Agron. 112)	.....	..	2
General Bacteriology (Bact. 101)	.....	3	..
Soil Micro-Biology (Soils 107)	.....	..	3
Expository Writing (Eng. 105 and 106)	.....	2	2
Plant Physiology (Plt. Phy. 101)	.....	4	..
Agricultural Economics (A. E. 101)	.....	3	..
Electives	.....	2	4

SENIOR YEAR

	<i>Semester:</i>	
	<i>I</i>	<i>II</i>
Crop Breeding (Agron. 113)	2	..
Advanced Genetics (Agron. 111)	3	..
Methods of Crop Investigation (Agron. 121)	..	2
Cropping Systems and Methods (Agron. 120)	..	2
Soil Survey and Classification (Soils 105)	3	..
Farm Drainage (Agr. Eng. 107)	..	2
Farm Machinery (Agr. Eng. 101)	3	..
Farm Forestry (For. 101)	..	3
Farm Management (F. M. 102)	4	..
Seminar (Agron. 129)	1	1
Electives	1	7

AGRICULTURAL EDUCATION

The Department of Agricultural Education was organized primarily to train students who are preparing to teach agriculture in secondary schools. In addition to the regular entrance requirements of the University, students electing to specialize in Agricultural Education must present evidence of having acquired adequate farm experience after reaching the age of fourteen years.

Students must arrange their work so that approximately forty per cent will be spent on technical agriculture, twenty-five per cent on scientific subjects, twenty per cent on subjects of a general educational character and from twelve to fifteen per cent on subjects pertaining to professional education.

Students electing Agricultural Education for their major work may register in either the College of Agriculture or College of Education.

(For detailed description of the curriculum in agricultural education see the College of Education.)

ANIMAL HUSBANDRY

The courses in animal husbandry have been developed with the idea of teaching the essential principles underlying the breeding, feeding, growth, development and management of livestock, together with the economics of the livestock industry.

The curriculum in animal husbandry is so planned as to allow of plenty of latitude in the selection of courses outside of the department, thus giving the student a broad, fundamental training and fitting him to become the owner, manager or superintendent of general or special livestock farms.

Opportunity for specialization is offered to those who may desire to become instructors or investigators in the field of animal husbandry.

Some livestock are maintained at the university. In addition, there are available, for use in instruction, the herds of livestock owned by the Federal Bureau of Animal Industry at Beltsville, Maryland. Through the courtesy of Maryland breeders, some private herds are also available for inspection and instruction.

Curriculum

JUNIOR YEAR

	Semester:	
	I	II
Expository Writing (Eng. 105 and 106).....	2	2
General Bacteriology (Bact. 101 and 102).....	3	3
Agricultural Economics (A. E. 101).....	3	..
Principles of Breeding (A. H. 103).....	..	3
Swine Production (A. H. 104).....	3	..
Horse and Mule Production (A. H. 106).....	..	2
Dairy Production (D. H. 103).....	..	4
Anatomy Physiology (V. M. 101).....	3	..
Genetics (Agron. 110).....	3	..
Electives .....	..	3

SENIOR YEAR

	Semester:	
	I	II
Farm Management (F. M. 102).....	4	..
Sheep Production (A. H. 107).....	..	3
Farm Machinery (Agr. Eng. 101).....	3	..
Animal Diseases (V. M. 102).....	..	3
Meat and Meat Products (A. H. 108).....	2	..
Farm Drainage (Agr. Eng. 107).....	..	2
Physiological Chemistry (Chem. 119).....	4	..
Seminar (A. H. 112).....	1	1
Electives	3	8

BACTERIOLOGY

The present organization of this department was brought about with two main purposes in view. The first is to give all the students of the University an opportunity to obtain a general knowledge of the subject. This is of prime importance, as bacteriology is a basic subject and is of as much fundamental importance as physics or chemistry. The second purpose, and the one for which this curriculum was designed, is to fit students for positions along bacteriological lines. This includes dairy bacteriologists and inspectors; soils bacteriologists; federal, state and municipal bacteriologists for public health positions; research positions; commercial positions, etc. At present, the demand for individuals qualified for this work is much greater than the supply, and with the development of the field this condition is bound to exist for some time.

Curriculum

SOPHOMORE YEAR

	Semester:	
	I	II
Agricultural Chemistry (Chem. 116).....	3	3
*Physics (Phys. 103) or Elements of Social Science (Soc. Sci. 101).....	..	4
Language	3	3
Feeds and Feeding (A. H. 102).....	3	..
Dairying (D. H. 101).....	..	3
Geology (Geol. 101).....	3	..
Electives	3	3
Basic R. O. T. C. (M. I. 102).....	2	2

JUNIOR YEAR

	Semester:	
	I	II
General Bacteriology (Bact. 101 and 102).....	3	3
Expository Writing (Eng. 105 and 106).....	2	2
Language	3	3
Agricultural Economics (A. E. 101).....	3	..
Dairy Production (D. H. 103).....	..	4
Market Milk (D. H. 106)	4	..
Electives	2	5

SENIOR YEAR

	Semester:	
	I	II
Advanced Bacteriology (Bact. 104).....	2-5	2-5
Dairy Bacteriology (Bact. 103).....	3	3
Physiological Chemistry (Chem. 119).....	4	..
Seminar (Bact. 108).....	1	1
Electives	4-7	8-11

*Only those students who are excused from Physics will take Economics.

DAIRY HUSBANDRY

The courses in dairy husbandry are organized to give the student a working knowledge of the basic principles underlying successful dairy production, market milk, dairy manufacturing and marketing. The options offered in dairy production are planned to meet the needs of students desiring to become breeders of purebred dairy cattle, farm managers and teachers. The options offered in dairy manufactures are planned to meet the needs of students desiring to enter commercial work in the manufacture of butter, cheese and ice cream and those desiring to become inspectors of these products.

A dairy herd is maintained for experimental purposes as well as for teaching, the care, feeding and management of dairy cattle. Graduates from these courses should be fitted to take up dairy farming, teaching, or experiment station work. Students are sent throughout the state to supervise Advanced Registry tests and to study general conditions as they exist on leading dairy farms.

The graduate courses are designed to meet the needs of those who desire to take up advanced work in dairy husbandry. Proximity to the laboratories and libraries of the Department of Agriculture in Washington and the Government herds at Beltsville place this department in a splendid position to offer an exceptional opportunity in graduate work in the fields of production, manufacture and marketing to those desiring such training.

Five Weeks' Course in Dairy Husbandry

Testing milk and cream. One week, December 29 to January 3, 1925.
Dairy production or Dairy Manufacture. Four weeks, January 5 to 31, 1925.

The subject matter in these courses is entirely practical, consisting of

work in the testing and manufacturing laboratories and with the herd, supplemented by lectures.

In the Babcock testing course, the history, volume and value of dairy products are taken up as well as the study of the secretion of milk, the composition of milk, cream, condensed, evaporated milks and powders, the proper sampling of dairy products, and their accurate testing.

In the dairy production course which begins at the close of the milk testing work, practice will be given in the care, feeding and management of dairy cows, including feeds and feeding, breeds and breeding, Cow Testing Association and Advanced Registry work.

The Dairy Manufacturing course which also begins at the end of the week on testing takes up the pasteurization and processing of milk into butter, cheese and ice cream.

The purpose of the testing course is to supply milk and cream testers for milk plants and creameries; the production course to provide cow testers for Association and Advanced Registry work, and provide farm boys with information concerning dairy improvement and the manufacturing course to supply training to those interested in farm butter making and in factory work.

Admission and Expenses

The requirements for entrance are that the applicants be at least 18 years of age and have a good common school education. No entrance examination is required. Persons having practical experience on the farm or who are working in milk receiving stations or milk plants should derive the greatest benefit from these courses. No tuition is charged to residents of Maryland. A fee of \$5 to cover cost of materials supplied in the various laboratories is assessed in this three weeks' course.

Room and board may be had with private families for from \$10 to \$15 per week. For additional information address inquiries to Dairy Husbandry Department, University of Maryland, College Park, Maryland. Lack of space limits the course to 25 persons.

DAIRY PRODUCTION

Curriculum

JUNIOR YEAR	Semester:	
	I	II
Expository Writing (Eng. 105 and 106)	2	2
General Bacteriology (Bact. 101)	3	..
Dairy Bacteriology (Bact. 103)	3	3
Dairy Production (D. H. 104)	4	..
Farm Dairying (D. H. 103)	3	..
Judging of Dairy Cattle and Breed Study (D. H. 102) ....	..	2
Principles of Breeding (A. H. 103) .....	..	3
Agricultural Economics (A. E. 101)	3	..
Electives .....	..	3

SENIOR YEAR	Semester:	
	I	II
Market Milk (D. H. 106)	4	..
Animal Diseases (V. M. 102) .....	..	3
Advanced Testing (D. H. 107) .....	..	4
Thesis (D. H. 109)	2	2
Seminar (D. H. 108)	1	1
Electives	10	7

DAIRY MANUFACTURES

Curriculum

SOPHOMORE YEAR	Semester:	
	I	II
Agricultural Chemistry (Chem. 116)	3	3
Geology (Geol. 101)	3	..
Physics (Phy. 103) .....	..	4
Basic R. O. T. C. (M. I. 102)	2	2
Field Crop Production (Agron. 101)	3	..
Dairying (D. H. 101) .....	..	3
Elements of Social Science (Soc. Sci. 101)	3	4
Electives	3	1

JUNIOR YEAR	Semester:	
	I	II
Expository Writing (Eng. 105 and 106)	2	2
Agricultural Economics (A. E. 101)	3	..
General Bacteriology (Bact. 101)	3	..
Dairy Bacteriology (Bact. 103) .....	..	3
Accountancy (Econ. 120)	3	3
Farm Dairying (D. H. 103)	3	..
Market Milk (D. H. 106)	4	..
Marketing and Grading of Dairy Products (D. H. 110) ....	..	3
Electives .....	..	6

SENIOR YEAR	Semester:	
	I	II
Dairy Manufacture (D. H. 105)	3	3
Advanced Testing (D. H. 107) .....	..	4
Seminar (D. H. 108)	1	1
Thesis (D. H. 109)	2	2
Electives	11	7

ENTOMOLOGY AND BEE CULTURE

This department is concerned with the teaching of entomology to all agricultural students as basic for future work in economic entomology and in the preparation of technically trained entomologists.

The success of the farmer and particularly the fruit grower is in a large measure dependent upon his knowledge of the methods of preventing or combating the pests that menace his crops each year. Successful methods of control are emphasized in the economic courses.

There is an ever-increasing demand for trained entomologists. The entomological work of the Experiment Station, the Extension Service, the College of Agriculture and the office of the State Entomologist being in one administrative unit, enables the student in this department to avail himself of the many advantages accruing therefrom. Advanced students have special advantages in that they may be assigned to work on station projects already under way.

Courses in beekeeping are offered and new courses will be added as the demand warrants. The field for specialists in beekeeping is especially attractive now and commercial beekeeping is productive of greater profits each year.

Curriculum

SOPHOMORE YEAR

	Semester:	
	I	II
Embryology (Zool. 120).....	..	4
General Entomology (Ent. 101).....	..	3
Physics (Physics 101).....	4	4
Expository Writing (Eng. 105 and 106).....	2	2
Organic Chemistry (Chem. 110).....	4	4
Basic R. O. T. C. (M. I. 102).....	2	2
Electives	6	4

JUNIOR YEAR

	Semester:	
	I	II
Advanced Entomology (Ent. 102).....	4	4
Economic Zoology (Zool. 104).....	..	1
General Bacteriology (Bact. 101-102).....	3	3
Electives	10	9

SENIOR YEAR

	Semester:	
	I	II
Economic Entomology (Ent. 103).....	5	5
Thesis (Ent. 105).....	2	2
Seminar (Ent. 110).....	1	1
Electives	9	9

FARM FORESTRY

Designed to furnish instruction to students in the College of Agriculture who wish to specialize in farm forestry. In the eastern third of the United States the woodland on farms constitutes 37 per cent of the total farm acreage, while the improved land on farms constitutes 52 per cent, the remaining 11 per cent is largely waste land, unsuited for field crops, that should be planted in timber crops to make it productive. Farm forestry is therefore of vital importance in the conduct of farm operations. The field for graduates in this course might properly include:

1. Managers of large tracts or estates principally woodland, but partly devoted to growing field crops.
2. County agents, or teachers of agriculture in sections consisting largely of forest land.

3. Farm managers where woodlands constitute a considerable part of the farm acreage.

4. An undergraduate training in forestry that will give advanced standing in a graduate forestry school.

Freshman Year

Same as general agricultural course.

Sophomore Year

Same as general agricultural course except substitution of systematic botany for principles of dairying and the addition of forestry, 101-102.

JUNIOR YEAR

	Semester:	
	I	II
Forest Botany	2	..
Silviculture	3	3
Plane Surveying (Surv. 101 and 102).....	1	2
Plant Anatomy (Bot. 104).....	2	..
Expository Writing (Eng. 105-106).....	2	2
Elements of Social Science (Soc. Sci. 101).....	..	4
Forest Entomology .....	..	2
Electives	6	2

SENIOR YEAR

	Semester:	
	I	II
Forest Measurements	2	2
Management of Woodlands.....	2	2
Protection of the Forest.....	..	1
Wood Technology .....	..	1
Utilization of Forest Products.....	2	..
Wood Preservation .....	..	1
Forest Pathology (Plt. Path. 102).....	..	1
Farm Management (F. M. 102).....	4	..
Plant Ecology (Plt. Phys. 102).....	..	3
Soil Surveying and Classification (Soils 105).....	3	..
Electives	4	6

FARM MANAGEMENT AND AGRICULTURAL ECONOMICS

In this department are grouped courses in farm management and agricultural economics.

Farm management has been defined as the business of the individual farmer to organize his business so as to produce the greatest continuous profit. This can be done, however, only when the organization is in accordance with the broader principles of agricultural economics. It requires not only knowledge of the many factors involved in the production of crops and animals, but also administrative ability to coordinate them into the most efficient farm organization. Farming is a business and as such demands for its successful conduct the use of business meth-

ods. As a prerequisite to the technical farm management course there is offered a course in farm accounting. This course is not elaborate, but is designed to meet the need for a simple yet accurate system of farm business records.

The aim of the farm management course is to assist the student to perceive the just relationship of the several factors of production and disposition as applicable to local conditions and to develop in him executive and administrative capacity.

Agricultural economics considers the fundamental principles underlying production, distribution and consumption, more especially as they bear upon agricultural conditions. Land, labor and capital are considered in their relationship to agriculture.

The farmer's work does not end with the production of crops or animal products. More and more it is evident that economical distribution is as important a factor in farming as is economical production.

Students well trained in farm management and agricultural economics are in demand for county agent work, farm bureau work, experiment station or United States Government investigation and college or secondary school teaching.

Curriculum

JUNIOR YEAR		<i>Semester:</i>		<i>I</i>	<i>II</i>
Agricultural Economics (A. E. 101)	3	..			
Marketing of Farm Products (A. E. 102)	..	3			
Farm Accounting (F. M. 101)	..	3			
Business Law (Econ. 118)	3	3			
American Literature (Eng. 109 and 110)	3	3			
Grading Farm Crops (Agron. 103)	..	2			
General Bacteriology (Bact. 101)	3	..			
Expository Writing (Eng. 105 and 106)	2	2			
Electives	5	3			
SENIOR YEAR		<i>Semester:</i>		<i>I</i>	<i>II</i>
Cooperation in Agriculture (A. E. 103)	3	..			
Transportation of Farm Products (A. E. 104)	..	3			
Seminar in Marketing (A. E. 105)	1-3	..			
Seminar (A. E. 106)	..	1-3			
Farm Management (F. M. 102)	4	..			
Farm Machinery (Agr. Eng. 101)	3	..			
Farm Drainage (Agr. Eng. 107)	..	2			
Corporation Finance (Econ. 116)	..	3			
Principles and Practices of International Trade (Econ 123)	..	3			
Electives	5-7	7-9			

GENERAL AGRICULTURE

Those who do not care to specialize in any particular phase of agriculture will pursue the following curriculum:

JUNIOR YEAR		<i>Semester:</i>		<i>I</i>	<i>II</i>
Diseases of Plants (Plt. Path. 101)	3	..			
Plant Physiology (Plt. Phy. 101)	4	..			
General Bacteriology (Bact. 101)	3	..			
Expository Writing (Eng. 105 and 106)	2	2			
Poultry (P. H. 101)	..	3			
Genetics (Agron. 110)	3	..			
Farm Accounting (F. M. 101)	..	3			
Principles of Breeding (A. H. 103)	3	..			
Agricultural Economics (A. E. 101)	..	3			
Electives	..	3			
SENIOR YEAR		<i>Semester:</i>		<i>I</i>	<i>II</i>
Farm Management (F. M. 102)	4	..			
Farm Machinery and Farm Shop (Agr. Eng. 101)	3	..			
Farm Dairying (D. H. 103)	3	..			
Gas Engines, Tractor and Automobiles (Agr. Eng. 102)	..	4			
Cropping Systems and Methods (Agron. 120)	..	2			
Farm Drainage (Agr. Eng. 107)	..	2			
Farm Forestry (Forestry 101)	..	3			
Electives	4	6			

HORTICULTURE

There are several reasons why the State of Maryland should be pre-eminent in the different lines of horticulture and offers such excellent opportunities for horticultural enterprises. A few of the more evident ones are the wide variation in soil and climate from the Eastern Shore to the mountainous counties of Allegany and Garrett in the west, the nearness to all of the large eastern markets and the large number of railroads, interurban lines and waterways, all of which combine to make marketing easy and comparatively cheap.

The Department of Horticulture offers four major lines of work, namely: pomology, olericulture, floriculture and landscape gardening. Students wishing to specialize in horticulture can arrange to take either a general course during the four years or enough work is offered in each division to allow students to specialize during the last two years in any of the four divisions. The courses have been planned to cover such subject matter that upon their completion students should be fitted either to engage in commercial work, county agent work, or teaching and investigational work in the state and federal institutions.

The department has at its disposal about twenty acres of ground devoted to vegetable gardening, eighteen acres of orchards, small fruits and vineyards, and twelve greenhouses, in which flowers and forcing crops are grown. Members of the teaching staff are likewise members of the

experiment station staff and thus students have an opportunity to become acquainted with the research which the department is carrying on. Excellent opportunity for investigating new problems is afforded to advanced undergraduates and to graduate students.

Curricula

Students who intend to specialize in pomology or olericulture are required to take the same subjects which other agricultural students take during the first two years. Students who specialize in floriculture or landscape gardening, however, will take a slightly different curricula. It is felt that such students require certain special courses, which it is unnecessary to require of all agricultural students. The curricula follow:

POMOLOGY

JUNIOR YEAR

	<i>Semester:</i>	
	<i>I</i>	<i>II</i>
Systematic Pomology (Hort. 103).....	3	..
Small Fruit Culture (Hort. 105).....	..	2
Fruit and Vegetable Judging (Hort. 107).....	2	..
Expository Writing (Eng. 105 and 106).....	2	2
Plant Physiology (Plt. Phys. 101).....	4	..
General Floriculture (Hort. 121).....	2	..
Diseases of Plants (Plt. Path. 101).....	3	..
General Entomology (Ent. 101).....	..	3
Genetics (Agron. 110).....	3	..
Electives .....	..	10

SENIOR YEAR

	<i>Semester:</i>	
	<i>I</i>	<i>II</i>
Commercial Fruit Growing (Hort. 102).....	3	..
Economic Fruits of the World (Hort. 106).....	..	2
Horticultural Seminar (Hort. 143).....	1	1
General Landscape Gardening (Hort. 131).....	..	2
Farm Management (F. M. 102).....	4	..
Horticultural Breeding Practice (Hort. 141).....	..	1
Horticultural Research and Thesis (Hort. 142).....	2	2
Electives	7	9

OLERICULTURE

JUNIOR YEAR

	<i>Semester:</i>	
	<i>I</i>	<i>II</i>
Small Fruit Culture (Hort. 105).....	..	2
Diseases of Plants (Plt. Path. 101).....	3	..
Genetics (Agron. 110).....	3	..
Expository Writing (Eng. 105 and 106).....	2	2
General Floriculture (Hort. 121).....	2	..
Plant Physiology (Plt. Phys. 101).....	4	..
Truck Crop Production (Hort. 113).....	..	3
Vegetable Forcing (Hort. 116).....	..	3
Electives	3	7

SENIOR YEAR

	<i>Semester:</i>	
	<i>I</i>	<i>II</i>
Farm Management (F. M. 102).....	4	..
General Landscape Gardening (Hort. 127).....	..	2
Horticultural Breeding Practice (Hort. 141).....	..	1
Tuber and Root Crops (Hort. 112).....	2	..
Systematic Olericulture (Hort. 114).....	3	..
Advanced Truck Crop Production (Hort. 115).....	..	2
Horticultural Research and Thesis (Hort. 142).....	2	2
Horticultural Seminar (Hort. 143).....	1	1
Electives	5	9

FLORICULTURE

SOPHOMORE YEAR

	<i>Semester:</i>	
	<i>I</i>	<i>II</i>
Agricultural Chemistry (Chem. 101).....	3	3
Plant Physiology (Plt. Phy. 101).....	4	..
General Geology (Geol. 101).....	3	..
Principles of Soil Management (Soils 101).....	..	3
General Floriculture (Hort. 121).....	2	..
General Landscape Gardening (Hort. 131).....	..	2
Expository Writing (Eng. 105-106).....	2	2
Basic R. O. T. C. (M. I. 102).....	2	2
Electives	2	6

JUNIOR YEAR

	<i>Semester:</i>	
	<i>I</i>	<i>II</i>
Elementary Pomology (Hort. 101).....	3	..
Greenhouse Management (Hort. 122).....	3	3
Floricultural Practice (Hort. 123).....	2	2
Floricultural Trip (Hort. 127).....	..	1
Greenhouse Construction (Hort. 124).....	..	2
Garden Flowers (Hort. 126).....	3	..
Principles of Economics (Econ. 105).....	..	4
Diseases of Plants (Plt. Path. 101).....	3	..
Systematic Botany (Bot. 102).....	..	2
Elements of Landscape Design (Hort. 133).....	3	..
Electives .....	..	3

SENIOR YEAR

	<i>Semester:</i>	
	<i>I</i>	<i>II</i>
Commercial Floriculture (Hort. 125).....	3	3
Plant Materials (Hort. 132).....	2	2
Vegetable Forcing (Hort. 116).....	..	3
Agricultural Economics (A. E. 101).....	3	..
Horticultural Breeding and Practice (Hort. 141).....	..	1
Horticultural Seminar (Hort. 143).....	1	1
Horticultural Research and Thesis (Hort. 142).....	2	2
Diseases of Ornamentals (Plt. Path. 106).....	2	..
Electives	4	5

LANDSCAPE GARDENING

FRESHMAN YEAR

	<i>Semester:</i>	<i>I</i>	<i>II</i>
Gen. Chem. and Qual. Anal. (Inorg. Chem. 101).....		4	4
General Zoology (Zool. 101).....		4	..
General Botany (Bot. 101).....		..	4
Composition and Rhetoric (Eng. 101).....		3	3
Public Speaking (P. S. 101-102).....		1	1
Algebra; Trigonometry (Math. 101).....		3	3
Basic R. O. T. C. (M. I. 101).....		2	2

SOPHOMORE YEAR

	<i>Semester:</i>	<i>I</i>	<i>II</i>
French or German.....		3-4	3-4
Plant Physiology (Plt. Phy. 101).....		4	..
General Geology (Geol. 101).....		3	..
Principles of Soil Management (Soils 101).....		..	3
Plane Surveying (Sur. 101-102).....		1	2
General Landscape Gardening (Hort. 131).....		..	2
Expository Writing (Eng. 105-106).....		2	2
Engineering Drafting (Dr. 101).....		1	1
Basic R. O. T. C. (M. I. 102).....		2	2
Electives		1-0	2-1

JUNIOR YEAR

	<i>Semester:</i>	<i>I</i>	<i>II</i>
Elementary Pomology (Hort. 101).....		3	..
Plant Materials (Hort. 132).....		2	2
History of Landscape Gardening (Hort. 135).....		..	1
Elements of Landscape Design (Hort. 133).....		3	..
Garden Flowers (Hort. 126).....		3	..
Principles of Economics (Econ. 101).....		..	4
Diseases of Plants (Plt. Path. 101).....		3	..
Systematic Botany (Bot. 102).....		..	2
Farm Drainage (Agr. Eng. 107).....		..	2
Electives		6	6

SENIOR YEAR

	<i>Semester:</i>	<i>I</i>	<i>II</i>
Highways (C. E. 103).....		4	4
Landscape Design (Hort. 134).....		3	3
Landscape Construction and Maintenance (Hort. 136).....		..	1
Civic Art (Hort. 137).....		2	..
Horticultural Research and Thesis (Hort. 142).....		2	2
Horticultural Seminar (Hort. 143).....		1	1
Electives		5	6

POULTRY HUSBANDRY

The course in Poultry Husbandry is designed to give the student a broad view of the practices of poultry raising. Those students who expect to develop into teachers, extension workers or investigators should choose

as electives such subjects as psychology, economic history, sociology, philosophy, political science and kindred subjects.

Curriculum

	<i>Semester:</i>	<i>I</i>	<i>II</i>
JUNIOR YEAR			
Poultry Production (Poultry 103).....		..	4
Expository Writing (Eng. 105 and 106).....		2	2
General Bacteriology (Bact. 101-102).....		3	3
Genetics (Agron. 110).....		3	..
Poultry Keeping (Poultry 102).....		4	..
Agricultural Economics (A. E. 101).....		3	..
Electives		2	4

SENIOR YEAR

	<i>Semester:</i>	<i>I</i>	<i>II</i>
Farm Management (F. M. 102).....		4	..
Farm Accounting (F. M. 101).....		..	4
Animal Diseases (V. M. 102).....		..	3
Poultry Breeds (Poultry 104).....		4	..
Poultry Management (Poultry 105).....		..	4
Marketing Farm Products (A. E. 102).....		..	3
Electives		6	3

SOILS

The Department of Soils gives instruction in the physics, chemistry and biology of the soil, the courses being designed to equip the future farmer with a complete knowledge of his soil and also to give adequate training to students who desire to specialize in soils. Students who are preparing to take up research or teaching are expected to take graduate work in addition to the regular undergraduate courses that are offered. The department possesses the necessary equipment and facilities for the instruction in these subjects, and in addition affords opportunities for the student to come in contact with the research at the Agricultural Experiment Station, especially in the pot culture laboratories and on the experimental fields at the station and in other parts of the State.

Graduate students will find unusual opportunities to fit themselves for teaching soils in agricultural colleges, to conduct research in experiment stations, and to carry on work with the Bureau of Soils, United States Department of Agriculture.

Curriculum

	<i>Semester:</i>	<i>I</i>	<i>II</i>
JUNIOR YEAR			
Expository Writing (Eng. 105 and 106).....		2	2
Agricultural Economics (A. E. 101).....		3	..
General Bacteriology (Bact. 101).....		3	..
Soil Micro-biology (Soils 107).....		..	3
Fertilizers and Manures (Soils 102).....		3	..
Soil Fertility (Soils 103).....		..	3
Plant Physiology (Plt. Phys. 101).....		4	..
Cropping Systems and Methods (Agron. 120).....		..	2
Electives		5	4

SENIOR YEAR

	<i>Semester:</i>	<i>I</i>	<i>II</i>
Farm Management (F. M. 102)		4	..
Methods of Soil Investigation (Soils 110)	2
Soil Surveying and Classification (Soils 105)		3	..
Soil Technology (Soils 109)		3	3
Farm Drainage (Agr. Eng. 107)	2
Seminar (Soils 111)		1	1
Electives		7	5

VETERINARY MEDICINE

A definite project dealing with the genital diseases of domestic animals is now being developed. This research course is offered for those graduates of approved veterinary colleges who desire to lay special emphasis on this subject in connection with their work for an advanced degree.

The nearness to the libraries and laboratories of the various Federal Departments in Washington offers special facilities for the investigator.

SHORT COURSE IN AGRICULTURE

A. Students who have had four years of high school training or its equivalent may follow a two-year curriculum of regular college courses designated by the dean. A certificate is granted by the college upon completion of the work. If, after the student has been awarded a certificate, he is desirous of taking work for a degree, he may continue for two years with a regular college curriculum.

B. Another two-year curriculum, commonly known as "The Two-Year Agricultural Course," is sub-collegiate in nature. To enter this two-year work the applicant must have preparation at least equal to the work given in the seventh grade of the public schools. At the conclusion of the course students having completed the regular work as outlined are given a certificate stating the studies pursued during the time spent in the college. No college credit toward a degree is given for work done in any of these courses.

College of Arts and Sciences

FREDERIC E. LEE, Dean.

The College of Arts and Sciences provides four years of liberal training in biological sciences, economics and business administration, history, languages and literature, mathematics, philosophy, physical sciences, political science, psychology and sociology. It thus affords the student an opportunity to acquire a general education which shall serve as a foundation for success in whatever profession or vocation he may choose. It particularly prepares the way and lays the foundation for the learned professions of law, medicine, theology, teaching and even for the more technical professions of engineering, public health service and business administration.

This College is an outgrowth of the Division of Language and Literature of Maryland State College and later of the School of Liberal Arts of the University. In 1921 the School of Liberal Arts and the School of Chemistry were combined and other physical and biological sciences were brought into the newly formed College of Arts and Sciences, thus making it a thoroughly standardized Arts and Science College. In 1922-1923 the scope and program of the various groups and departments of the College were extensively reorganized in order to broaden and amplify the courses of instruction offered.

Requirements for Admission

The requirements for admission to the College of Arts and Sciences are in general the same as those for admission to any college or school of the University. At least fifteen units of high school or other secondary school work in acceptable subjects must be offered by every candidate for admission, among which the following are prescribed:*

English	3
Mathematics	2
Science	1
History	1
<hr style="width: 10%; margin-left: auto; margin-right: 0;"/>	
Total	7

Two years of any one foreign language are required in addition to the above units for admission to the pre-medical curriculum.

Credentials and all correspondence relating to admission to the College of Arts and Sciences should be addressed to the Registrar, University of Maryland.

*Students entering with conditions in prescribed subjects must remove such conditions before enrolling for a second year in this college.

Degrees

The degrees conferred upon students who have met the prescribed conditions for a degree in the College of Arts and Sciences are:

- Bachelor of Arts.
- Bachelor of Science.

Departments Offering Courses in the College

Courses of instruction are offered in the following Groups and Departments:

Groups	Departments
I. Biological Sciences:	Bacteriology* Botany Entomology* Zoology and Aquiculture
II. Classical Languages and Literatures:	Classical Languages
III. English:	English Language and Literature Public Speaking
IV. History and the Social Sciences:	History Social and Political Science
V. Mathematics:	Mathematics
VI. Modern Languages:	Modern Languages and Literatures
VII. Philosophy:	Philosophy and Psychology**
VIII. Physical Sciences:	Chemistry Geology* Physics
IX. Pre-Medical:	Pre-Medical Curriculum
X. Miscellaneous and Work from other Colleges:	Home Economics Education Library Science Military Science Music Physical Education

Credit Hours

The semester credit hour represents one lecture or recitation hour per week throughout the semester. Two or three hours of laboratory or field work are counted as equivalent to one lecture or recitation. For

*These Departments are not physically within the College of Arts and Sciences but the courses offered by them are open to students of this College.
**Courses offered but no Department organized at present.

each credit hour in any course the student is expected to devote himself for three hours either in the classroom or laboratory, or in outside preparation.

Major and Minor Requirements

(a) A major shall consist of not less than 45 and of not more than 60 credit hours in Group I to VIII. Students majoring in Group II may count not to exceed fifteen credit hours in Modern Languages as part of their major requirements; and students majoring in Groups III or VI may count not to exceed ten credit hours in Classical Languages as part of their Major requirements.

(b) A minor shall consist of not less than 20 and of not more than 30 credit hours in a group related to the major group. Any hours taken in excess of this maximum in the minor group will not count as credit hours toward a degree.

(c) At the beginning of his Junior year each student (except those following prescribed curricula) must select a major in one of Groups I to VIII, and before graduation must complete one major and one minor. In certain exceptional cases two minors may be allowed but in no case will any hours above the maximum of 30 in either minor be counted for credit toward a degree.

(d) The courses constituting a major must be chosen under the supervision of the faculty of the department in which the majority of the work is done and must include a substantial number of courses not open to freshmen and sophomores.

Requirements for the Degree of Bachelor of Arts or Bachelor of Science

The Bachelor of Arts degree may be conferred upon students who have completed majors in Groups II, III, IV, V, VI or VII and minors in cognate groups. The Bachelor of Science degree may be conferred upon students who have completed majors in Groups I, IV, V, or VIII and minors in related groups.

The baccalaureate degree from the College of Arts and Sciences may be conferred upon a student who has satisfied all entrance requirements and has secured credit for a minimum of 129 credit hours including eight hours of military science for all able-bodied men students and eight hours of physical education for all women students and one hour of library science for all students, except those taking the special curricula in chemistry in which there are special requirements.

Scholarship Requirements

In conformity with the University policy not less than three-fourths of the credits required for graduation must be earned with grades of A, B, or C. Students entering with advanced standing will not receive credit for more than one-fourth of those courses in which the grade has been D.

Normal Load

The normal load for the Freshman year will be eighteen hours for the first semester, including one hour of library science and two hours of military science or physical education, and seventeen hours for the second semester and throughout the Sophomore year, two hours of which shall be military science or physical education.

The normal load for the Junior and Senior years will be fifteen hours per week.

Students will not be allowed to enroll for more nor less than the normal load without the consent of the Dean.

Absolute Maximum

Students whose average grade for the preceding year is a straight B or above may be permitted to take additional hours for credit with the approval of the Dean, *but in no case shall the absolute maximum of 19 hours per week be exceeded.* In the majority of cases it is better for the student to put in four full years in meeting the requirements for a degree than to try to cover the course in a shorter period by taking additional hours.

Prescribed Curricula

The work of the Freshman and Sophomore years of the College of Arts and Sciences has been co-ordinated as follows for all students other than those taking prescribed curricula in the Chemistry Department and in the Pre-Medical Group.

Curriculum	Semester	
	I	II
FRESHMAN YEAR		
Composition and Rhetoric (Eng. 101).....	3	3
Basic R. O. T. C. (M. I. 101) or Physical Education (Phys. Ed. 101).....	2	2
Reading and Speaking (P. S. 101-102).....	1	1
Foreign Language (Fren. 101; Fren. 102; Germ. 101; Germ. 102; Gk. 101; Gk. 102; Lat. 101; Lat. 102; Span. 101; Span. 102).....	4	4
Library Methods (L. S. 101).....	1	..
(One of these)		
Modern and Contemporary History (H. 101-102).....	3	3
Elements of Literature (Eng. 102).....	3	3
*Mathematics (Math. 101 and 102).....	3	3
(One of these)		
General Botany (Bot. 101) Either Semester.....	4	4
General Zoology (Zool. 101) Either Semester.....	4	4
*Inorganic Chemistry (Chem. 101 A or 101 B).....	4	4
TOTAL HOURS	18	17

*Freshmen students intending to follow the Special Curricula in Chemistry are required to take both Mathematics 101 and Chemistry 101 during the Freshman year. Students expecting to take Arts Physics 101 in their Sophomore year are required to take Mathematics 101 during the Freshman year.

The curriculum of the Sophomore year has been arranged on the basis of a wider election of courses than has heretofore prevailed but the selection of these courses must be strictly within the limits set forth below under Freshman-Sophomore requirements.

Regulations Governing the Selection of Courses

The selection of courses from the following list must be within certain limits in order to insure against too early specialization and to provide for a broad foundation before a major is selected.

Freshman-Sophomore Requirements

(a) Before the beginning of the Junior year the student must have completed sixty credit hours in basic courses, at least four or five hours of which must be taken from each of six of the first eight groups.

(b) Not more than twenty of these hours may be taken in one department.

(c) Freshmen and sophomores may not carry more than twelve hours in one group at a time.

SOPHOMORE YEAR	Semester:	
	I	II
Basic R. O. T. C. (M. I. 102) or Physical Education (Phys. Ed. 102).....	2	2
Advanced Public Speaking (P. S. 103) or Debate (P. S. 117)	2	..
In the First Semester thirteen and in the Second Semester fifteen additional hours may be elected from the following list of courses within the limitations set forth above.		
English (Two or three hour courses).....	2-3	2-3
Economic Geography and Industry (Econ. 102).....	3	..
Elements of Psychology (Psych. 101).....	2	2
American History (Hist. 103 and 104).....	2	2
Modern and Contemporary History (Hist. 101-102).....	3	3
Mathematics (Math. 101-102).....	3	3
Plane Analytical Geometry (Math. 104).....	3	..
Calculus (Math. 105).....	..	3
Economic History of England (Econ. 103).....	3	..
Economic History of the United States (Econ. 104).....	..	3
Modern or Classical Languages (Three or four hour course)	3-4	3-4
Elements of Social Science (Soc. Sci. 101).....	..	4
General Botany (Bot. 101) Either Semester.....	4	4
General Zoology (Zool. 101) Either Semester.....	4	4
Advanced Zoology Courses.....	4	4
General Chemistry and Qualitative Analysis (Chem. 101).....	4	4
Advanced Chemistry Courses.....	4	4
General Geology (Geol. 101).....	3	..
General Entomology (Ent. 101).....	..	3
Arts Physics (Phys. 101).....	4	4
Public Education in the United States (Ed. 101).....	2	..
Educational Hygiene (Ed. 102).....	..	2
TOTAL HOURS	17	17

Junior-Senior Requirements

The work in the Junior and Senior years will be elective within the limits set by the Major and Minor requirements.

Students With Advanced Standing

Students entering the Junior year of the College of Arts and Sciences with advanced standing from other universities or from other colleges of this university will be required to meet the requirements respecting studies of the first two years only to the extent of their deficiencies in credits in Arts and Science subjects for full junior standing. Scholarship requirements as outlined above will apply to all courses offered for advanced standing.

Credit for Professional Courses

A limited number of courses may be counted for credit in the College of Arts and Sciences for work done in professional schools or for courses of a professional character in other colleges of the University.

Student Responsibility

The individual student will be held responsible for the selection of his courses and major in conformity with the preceding regulations.

Advisers

Each new student may be assigned to a member of the faculty as his personal adviser who will assist him in the selection of his courses, the arrangement of his schedule, and any other matters on which he may need assistance or advice. The faculty adviser acts in this capacity as assistant and representative of the Dean, who is charged with the execution of all of the foregoing rules and regulations.

SPECIAL CURRICULA

Special curricula are provided in the Department of Chemistry and for the Pre-Medical course. The scope of these curricula is outlined below.

CHEMISTRY

At the close of this first quarter of the twentieth century we find chemistry not only taking its place as a recognized profession, but we find special acknowledgments by certain professions such as medicine, pharmacy, agriculture, etc., saying that the education received in a chemical training course affords a splendid preparation for these specific fields. Also one only has to view the responsible positions held by trained chemists during the past twenty-five years, to realize that chemistry is second to none in preparing men for callings in public and private life. This means that if a man spends four years in a chemical training course and finds that he does not wish to follow chemistry as a profession he has acquired a scientific knowledge and attitude of mind that are great assets to him in later life.

In order that the chemistry departments of the College of Arts and Sciences may best serve the various demands laid upon it by the University and State, it is divided into the following Divisions:

- | | | |
|--------------|-----------------------------|---------------|
| 1. Inorganic | 3. Analytical | 5. Physical |
| 2. Organic | 4. Agricultural and
Food | 6. Industrial |

7. State Control work of fertilizers, feed and lime analysis.

The above mentioned divisions, except 7, furnish courses to give the basic principles of chemistry which serve as a necessary part of a general education and which lay a foundation for scientific and technical work such as medicine, engineering, agriculture, dentistry, pharmacy, etc.

Besides serving in this fundamental way the Divisions furnish courses for the following careers:

1. *Industrial Chemist.*—The State of Maryland, including the chemistry bureaus of Washington, is a great center of chemical industry. Rarely a week passes that some industry or bureau does not call for a man well trained in chemistry. Fundamental chemistry is becoming more and more to be realized as the basis of many industries. Many apparently efficient chemical industries have been greatly improved by the application of modern chemistry. Chemical corporations employ chemists to manage and develop units of their plants. See curriculum II.

2. *Food and Agricultural Chemist.*—There has never been a greater demand for food chemists than at the present time. Various bureaus and food laboratories are calling for men who have a good grounding in modern chemistry including microscopy. Courses have been arranged to meet this demand. Curriculum III may be so adjusted through its electives to fit a man for agricultural experiment stations, bureaus of soils, geological surveys, as well as for food laboratories.

3. *Teachers of Chemistry.*—There is a growing need of suitably trained chemistry teachers. The American Chemical Society is now taking steps to encourage better teaching of chemistry in high schools, colleges and universities. The Chemistry Department feels that it is its duty to help carry this message to the teachers of Maryland by encouraging a better correlation between the high school chemistry and college chemistry and also by giving courses where students may find a good preparation for the profession of teaching chemistry. Curriculum I, as outlined not only offers the Science, but in co-operation with the College of Education, the students are able to take the educational subjects which are required to obtain the special teacher's diploma. To prepare for college teaching it is necessary to take graduate work leading, at least, to a master's degree.

4. *Research Chemist.*—There is no line of work more important to the state than chemical research. During the war people had this brought home to them in a very definite way. Since the war, chemists have turned their attention to constructive chemical research work.

Perhaps the two most prominent pieces of constructive work are the eradicating of diseases of both plants and animals, and the increase of

production in both farming and industry. The research at the University of Maryland is being fundamentally directed along these lines. Special work is being done by the department in eradicating tuberculosis.

In this state we find an increasing number of progressive corporations establishing chemical research laboratories. Their laboratories are run with the main purpose of improving old processes and devising new ones. Highly trained chemists are sought to take charge of these laboratories. The chemistry department gives courses leading to higher degrees which fit men for these positions. See Graduate School.

Arrangements have been made with certain industries so that students of high average ability, by utilizing their summers, may take a four year course leading to a B. S. in chemistry and at the same time earn sufficient money to meet a large part of their expenses during the last two years. It has many advantages. For particulars write to the Department of Chemistry.

Curricula in Chemistry

I. GENERAL CHEMISTRY

FRESHMAN YEAR	<i>Semester:</i>	
	<i>I</i>	<i>II</i>
Composition and Rhetoric (Eng. 101).....	3	3
Modern Language (Fr. or Germ. 101).....	4	4
Mathematics (Math. 101-102).....	3	3
Public Speaking (P. S. 101-102).....	1	1
Library Methods (L. S. 101).....	1	..
General Chemistry (Chem. 101).....	4	4
Basic R. O. T. C. (M. I. 101).....	2	2

SOPHOMORE YEAR	<i>Semester:</i>	
	<i>I</i>	<i>II</i>
Physics (Phys. 102).....	5	5
Plane Analytics and Calculus (Math. 104 and 105).....	3	3
Qualitative Analysis (Chem. 103).....	2	..
Elements of Physical Chemistry (Chem. 112).....	2	2
Elementary Collodial Chemistry (Chem. 113).....	..	2
Elements of Psychology (Psych. 101).....	2	2
Public Speaking (P. S. 107-108).....	1	1
Basic R. O. T. C. (M. I. 102).....	2	2

JUNIOR YEAR	<i>Semester:</i>	
	<i>I</i>	<i>II</i>
Public Speaking (P. S. 109-110).....	2	2
Advanced Composition and Rhetoric (Eng. 103).....	2	2
Bacteriology (Bact. 101).....	3	..
Economics (Econ. 105).....	..	4
Organic Chemistry (Chem. 110).....	4	4
Quantitative Analysis (Chem. 107).....	4	4
Chemical Calculations (Chem. 104).....	1	1

SENIOR YEAR	<i>Semester:</i>	
	<i>I</i>	<i>II</i>
Physical Chemistry (Chem. 114 and 115).....	4	4
Industrial Chemistry (Chem. 124).....	3	3
Physics (Phys. 105).....	3	..
Electives.....	5	8

II. INDUSTRIAL CHEMISTRY

FRESHMAN YEAR	<i>Semester:</i>	
	<i>I</i>	<i>II</i>
English (Eng. 101).....	3	3
Modern Language (Fr. or Germ. 1).....	4	4
Mathematics (Math. 103).....	5	5
Inorganic Chemistry (Chem. 101).....	4	4
Drafting (Dr. 101).....	1	1
Basic R. O. T. C. (M. I. 101).....	2	2

SOPHOMORE YEAR	<i>Semester:</i>	
	<i>I</i>	<i>II</i>
Public Speaking (P. S. 101-102).....	1	1
Physical Chemistry (Chem. 112).....	2	2
Elementary Collodial Chemistry (Chem. 113).....	..	2
Qualitative Analysis (Chem. 103).....	2	..
Physics (Phys. 102).....	5	5
Plane Analytics and Calculus (Math 104 and 105).....	5	5
Descriptive Geometry (Dr. 102).....	2	2
Basic R. O. T. C. (M. I. 102).....	2	2

JUNIOR YEAR	<i>Semester:</i>	
	<i>I</i>	<i>II</i>
Engineering Geology (Engr. 102).....	1	1
Engineering Mechanics (Mech. 101-102).....	4	3
Prime Movers (Engr. 101).....	2	2
Organic Chemistry (Chem. 110).....	4	4
Analytical Chemistry (Chem. 107).....	4	4
Chemical Calculations (Chem. 104).....	1	1
Mineralogy and Assaying (Chem. 106).....	..	2

SENIOR YEAR	<i>Semester:</i>	
	<i>I</i>	<i>II</i>
Physical Chemistry (Chem. 114-115).....	4	4
Industrial Chemistry (Chem. 124-125-126).....	6	6
Eng. Jurisprudence (Engr. 103).....	1	..
Development of Industrial Chemistry (Chem. 129).....	..	2
Technology of Fuels and Chemistry of Power Plants (Chem. 130).....	2	..
Mech. Lab. (M. E. 107).....	1	1
Thermodynamics (Chem. 211).....	3	..
Metallurgy (Chem. 128).....	..	2
Seminar (Chem. 223).....	1	1

III. AGRICULTURAL AND FOOD CHEMISTRY

FRESHMAN YEAR		<i>Semester:</i>	
	<i>I</i>	<i>II</i>	
Composition and Rhetoric (Eng. 101)	3	3	
Public Speaking (P. S. 101-102)	1	1	
Chemistry (Chem. 101)	4	4	
Modern Language (Fr. or Germ. 101)	4	4	
Botany (Bot. 101)	4	..	4
Zoology (Zool. 101) .....	..	4	
Mathematics (Math. 101-102)	3	3	
Basic R. O. T. C. (M. I. 101)	2	2	
SOPHOMORE YEAR		<i>Semester:</i>	
	<i>I</i>	<i>II</i>	
Physical Chemistry (Chem. 112)	2	2	
Elementary Colloidal Chemistry (Chem. 113) .....	..	2	
Qualitative Analysis (Chem. 103)	2	..	
Feeds and Feeding (A. H. 102)	3	..	
Dairy Products (D. H. 107) .....	..	3	
Geology (Geol. 101)	3	..	
Soils (Soils 102) .....	..	3	
Arts Physics (Phys. 101)	4	4	
Basic R. O. T. C. (M. I. 102)	2	2	
JUNIOR YEAR		<i>Semester:</i>	
	<i>I</i>	<i>II</i>	
Organic Chemistry (Chem. 110)	4	4	
Agricultural Chemistry (Chem. 119)	4	4	
English (Eng. 103 and 104)	2	2	
Electives in Agricultural and Food Chemistry	8	8	
SENIOR YEAR		<i>Semester:</i>	
	<i>I</i>	<i>II</i>	
Physical Chemistry (Chem. 114 and 115)	4	4	
Agricultural Chemistry (Chem. 120)	4	4	
Economics (Econ. 105) .....	..	4	
Electives in Agricultural and Food Chemistry	9	6	

THE PRE-MEDICAL CURRICULUM

The pre-medical curriculum includes the subjects and hours prescribed by the Council on Medical Education of the American Medical Association, together with additional subjects and hours totaling 68 semester hours exclusive of military drill.

Preference will be given students entering the School of Medicine of the University of Maryland, who present the credits obtained by the successful completion of this curriculum or its equivalent of 68 hours in 1924. In 1923 all students must satisfy the sixty (60) semester hour requirement of the Council on Medical Education of the American Medical Association.

In addition a combined seven-year curriculum is offered leading to the degrees of Bachelor of Science and Doctor of Medicine. The first three years are taken in residence at College Park and the last four years in Baltimore at the Medical School. The Pre-Medical Curriculum constitutes the first two years' work and a third year following the general outline given below, with the electives approved by the chairman of the pre-medical curriculum and the Dean of the College of Arts and Sciences, completes the studies at College Park.

Upon the successful completion of the first year in the Medical School and the recommendation of the Dean, the degree of Bachelor of Science may be conferred by the College of Arts and Sciences at College Park.

Students are urged to consider carefully the advantages this combination course offers over the minimum requirements of the two years. By completing three years the training may be greatly broadened by a wider latitude in the election of courses in the arts subjects.

Requirements for admission may be found following the pre-medical curriculum.

Two Years

FRESHMAN YEAR		<i>Semester:</i>	
	<i>I</i>	<i>II</i>	
Composition and Rhetoric (Eng. 101)	3	3	
Mathematics (Math. 101)	3	3	
General Zoology (Zool. 102-103)	4	4	
Elements of Psychology (Psych. 101)	2	2	
General Chemistry (Chem. 101)	4	4	
Basic R. O. T. C. (M. I. 101)	2	2	
	—	—	
	18	18	
SOPHOMORE YEAR		<i>Semester:</i>	
	<i>I</i>	<i>II</i>	
Physics (Phys. 101)	4	4	
Organic Chemistry (Chem. 110)	4	4	
Zoology (Zool. 108)	3	..	
Public Speaking (P. S. 101-102)	1	1	
Elements of Social Science (Soc. Sci. 101) .....	..	4	
French or German	4	4	
Basic R. O. T. C. (M. I. 102)	2	2	
	—	—	
	18	19	

Combined Seven-Year Course

JUNIOR YEAR		<i>Semester:</i>	
	<i>I</i>	<i>II</i>	
Advanced Composition (Eng. 103 and 104)	2	2	
Embryology (Zool. 120) .....	..	4	
Quantitative Analysis (Chem. 105) .....	..	3	
Bacteriology (Bact. 101) either Semester	3	..	
Physical Chemistry (Chem. 112)	3	3	
Economics (Econ. 105) either Semester	4	..	
Electives	5	5	

SENIOR YEAR

The curriculum of the first year of the medical school. The students may also elect the fourth year's work from advanced courses offered in the College of Arts and Sciences.

Requirements for Entrance

Admission to the curriculum in medicine is by a completed Medical Student Certificate issued by the registrar of the University of Maryland. This certificate is obtained on the basis of satisfactory credentials, or by examination and credentials, and is essential for admission to any class.

The requirements for the issuance of the Medical Student's Certificate are:

(a) The completion of a standard four-year high school course or the equivalent, and in addition:

(b) Two years, sixty semester, or ninety trimester hours of college credits, including chemistry, biology, physics and English in 1923. In 1924 the completion of 68 semester hours as outlined in the Pre-Medical Curriculum, or its equivalent, will be required.

Women are admitted to the Medical School of this University.

(a) Details of the High School Requirements

For admission to the Pre-Medical Curriculum students,

1. Shall have completed a four-year course of 15 units in a standard accredited high school or other institution of standard secondary school grade or;

2. Shall have the equivalent as demonstrated by successfully passing entrance examinations in the following subjects:

Credits for admission to the pre-medical course may be granted for the subjects shown in the following list and for any other subject counted by a standard accredited high school as a part of the requirement for its diploma provided that at least eleven units must be offered in Groups I-V:

Schedule of Subjects Required or Accepted for Entrance to the Pre-Medical Curriculum

Subjects	Units	Required
GROUP I.—English:		
Literature and composition.....	3-4	3
GROUP II.—Foreign Languages:		
Latin	1-4	*2
Greek	1-3	..
French or German	1-4	..
Other foreign languages	1-4	..

*Both of the required units of Foreign Language must be of the same language, but the two units may be presented in any one of the languages specified.
Of the fifteen units of high school work seven units are required, as indicated in the foregoing schedule: the balance may be made up from any of the other subjects in the schedule.

Subjects	Units	Required
GROUP III.—Mathematics:		
Elementary Algebra	1	1
Advanced Algebra	1/2-1	..
Plane Geometry	1	1
Solid Geometry	1/2	..
Trigonometry	1/2	..
GROUP IV.—History:		
Ancient History	1/2-1	..
Medieval and Modern History	1/2-1	..
English History	1/2-1	..
American History	1/2-1	..
Civil Government	1/2-1	..
GROUP V.—Science:		
Botany	1/2-1	..
Zoology	1/2-1	..
Chemistry	-1	..
Physics	-1	..
Physiography	1/2-1	..
Physiology	1/2-1	..
Astronomy	1/2	..
Geology	1/2-1	..
GROUP VI.—Miscellaneous:		
Agriculture	1-2	..
Bookkeeping	1/2-1	..
Business Law	1/2	..
Commercial Geography	1/2-1	..
Domestic Science	1-2	..
Drawing—Freehand and Mechanical	1/2-2	..
Economics and Economic History	1/2-1	..
Manual Training	1-2	..
Music—Appreciation or Harmony	1-2	..
Stenography	1	..

MISCELLANEOUS AND WORK FROM OTHER COLLEGES

MUSIC

The Department of music serves students of the University of two general classes: those who make a specialty of the subject with a view to becoming musical artists or music teachers and those who pursue musical studies for purposes of enjoyment and general culture. For the former group extensive private instruction is provided with attention to technical development along particular lines; while as large provision as possible

is made for all, in the various club activities and public lectures and recitals.

For courses in music see the section of the catalogue known as Courses of Instruction.

Chorus

Membership in the Chorus is free to all students, and to persons residing in the community. Oratorios and standard part-songs are studied. The Chorus presents an annual festival of music in May.

Glee Club

A Glee Club, of limited membership, is recruited from the best vocal talent among the men of the University. Admission is gained through tests, or "try-outs", conducted at the beginning of the school year. The club holds two rehearsals per week. Public concerts are given.

Military Band

This organization, of limited membership, is a part of the military organization of the University, and is subject to the restrictions and discipline of the Department of Military Science and Tactics, but the direction of its work is under the Department of Music.

Voice

Courses in voice culture are offered, covering a thorough and comprehensive study of tone production, based on the Italian method of singing.

The work required to develop a singer is begun with the most fundamental principles of correct breathing. Scale and arpeggio exercises, and all intervals, the portamento, legato, and staccato, and trill, and other embellishments to develop the technique of singing are studied through the medium of vocal exercises arranged by the greatest authorities on the voice, under the careful supervision of the instructor.

The study of songs and ballads is adapted to the ability and requirements of each singer, a thorough training being given in diction and phrasing, through the medium of sacred and secular ballads, leading to the oratorio and opera.

Opportunities are afforded all voice pupils who are capable to make public appearances in the regular pupils' recitals, as well as in the churches of the community.

Tuition

One lesson per week, term of eighteen weeks.....\$24

The above price for lessons in voice are those offered to students of the University who are pursuing regular academic courses. Terms for private instruction outside the University may be secured from the instructor in voice.

Piano

Elementary piano courses. Work for beginners, based on the Leschetizky method.

Advanced piano courses. The college work in piano presupposes three years of preparatory study of the piano part or all of which may be taken at the University.

Lessons are taken twice a week. A four-year college course is as follows:

First Year—Technical studies based on the modern weight and rotary method: Heller Etudes, Sonatas of Haydn, Mozart, and Beethoven; selections from classic and modern composers.

Second Year—Bach Preludes; concertos by classic masters; Jensen Etudes; selections from classic, romantic, and modern composers.

Third Year—Leschetizky technic; Chopin Preludes and Waltzes; Bach Inventions; Mendelssohn Concertos, Beethoven Sonatas; selections from romantic and modern composers.

Fourth Year—Leschetizky technic; Chopin Etudes; Bach Well-Tempered Clavichord; sonatas and concertos by Grieg, McDowell, Schutt, Beethoven, etc., concert pieces by modern and romantic composers.

Tuition

One lesson per week, term of eighteen weeks.....\$24

Note.—Music tuitions are due in advance. Ten per cent. is added to all tuitions not paid in advance.

LIBRARY SCIENCE

A course in Library Methods is required of all students registered in the College of Arts and Sciences.

This course is intended to help students use the library with greater facility. Instruction will be given by practical work with the various catalogs, indexes and reference books. This course considers the general classification of the library according to the Dewey system. Representative works of each division are studied in combination with the use of the library catalogue. Attention is given to periodical literature, particularly that indexed in the Reader's Guide and in the Agricultural Index; and to various much used reference books which the student will find helpful throughout his college course.

MILITARY SCIENCE AND PHYSICAL EDUCATION

The requirements for all students of the College of Arts and Sciences in these fields are explained above in the section dealing with Requirements for the Degree of Bachelor of Arts or Bachelor of Science. A description of the courses and work required will be found elsewhere in the catalogue.

ELECTIVES IN OTHER COLLEGES AND SCHOOLS

A certain number of courses in the Colleges of Agriculture, Education, Engineering, and Home Economics may be taken as electives by advanced undergraduate students upon the approval of the dean and the authorization of the dean of the college in which the courses are offered.

College of Commerce and Business Administration

ADMINISTRATIVE COUNCIL

- ALBERT F. WOODS, A.M., D. Agr. LL.D., President of the University.
FREDERIC E. LEE, Ph.D., F. R. E. S., Advisory Dean.
MAYNARD A. CLEMENS, M.A., Acting Dean.
A. W. RICHESON, B.S., Assistant and Secretary of the Faculty.
LESLIE W. BAKER, M.C.S., C.P.A., (Accounting.)
MORRIS E. SPEARE, Ph.D., (English.)
PERCY L. KAYE, Ph.D., (Economics.)
ORMAND MILTON, B.A., (Banking and Investments.)
FREDERICK JUCHHOFF, LL.M., Ph.D., C.P.A., (Business Administration and
Accountancy.)
K. E. CARLSON, Ph.D., (Foreign Trade.)
W. R. MANNING, Ph.D., (Foreign Trade.)
RICHARD B. PUE, (Real Estate.)
WILLIAM H. WILHELM, M.A., (Commercial Mathematics.)
ANDREW H. KRUG, Ph.D., (Salesmanship.)
VICTOR RAY JONES, M.A., (Modern Languages.)
PETER PECK, A.B., LL.B., (Business Law.)
ALTON R. HODGKINS, M.A., (Economic Geography and Industry.)
CHARLES S. RICHARDSON, M.A., (Public Speaking.)

GENERAL STATEMENT

In response to repeated requests from men and women in Baltimore, the University of Maryland opened in that city in the fall of 1921 Extension Courses in Commerce to provide systematic instruction in those subjects which would be of benefit to those who were engaged in or who expected to engage in business. The demand for such courses proved to be so great—over five hundred students having been enrolled during the academic year 1922-1923—it was decided in the spring of 1923 to create, on the foundation of these Extension Courses, a College of Commerce and Business Administration which would be closely articulated with the College of Arts and Sciences of the University. In order to maintain a close relationship between the two colleges the dean of the College of Arts and Sciences was made Advisory Dean of the College of Commerce and Business Administration, and all matters pertaining to standards, faculty, degrees, courses of study, etc., are handled jointly by the advisory and the acting deans.

The rapid expansion of business in recent years has placed upon universities the duty of giving students systematic preparation for a business career. Modern business is now, in its higher forms, as much a learned profession as law, medicine, engineering or agriculture, and demands of those who enter it a professional training more definite and practical than that usually afforded by the general college course. These demands of modern business are being partially met by the University in its Department of Social and Political Science of the College of Arts and Sciences at College Park, in which students may major in the work of this department in courses leading to a B.S. or a B.A. degree. To provide for other types and classes of students of the state, however, and for a more technical preparation in this line, this reorganization of the courses in commerce in the city of Baltimore has taken place. The object of making this reorganization was to standardize the courses offered in this field in order that fully qualified students might complete a college course and receive, upon its completion, a standard collegiate degree. The courses and departments of study of this college are designed to meet the needs of three classes of students:

- I. Graduates of high schools who wish a thorough professional training for business careers, supplemented by the elements of a broad, liberal culture.
- II. Employed men and women who have completed one or more years of a college course and who desire to continue their education and complete the requirements for a university degree.
- III. A limited number of special students who desire to pursue certain courses in order to increase their efficiency, without reference to candidacy for a degree. Such special students must satisfy the instructors that they have adequate preparation for carrying the courses desired.

Late Afternoon and Evening Courses

In response to the needs of the greater number of students of the College of Commerce and Business Administration the work of the college for the present is centered in the late afternoon and evening classes, conducted in the buildings of the University of Maryland at the corner of Lombard and Greene streets, Baltimore. Students who desire full-time day work in this field may enroll in the College of Arts and Sciences at College Park and transfer later to the more professional courses in Baltimore.

Requirements for Admission

I. The requirements for admission to the College of Commerce and Business Administration for regular students who are candidates for a degree are, in general, the same as those for admission to any other undergraduate college or school of the University. Such students must present evidence of the completion of a four-year high school course of 15 units or its equivalent. Only such can obtain the Bachelor's Degree.

II. Special students of mature age who have only partially completed a four-year high school course or its equivalent may be admitted, and allowed to carry certain courses and to become candidates for a certificate. The admission of such students will depend entirely upon the extent of their education and business experience. These students cannot obtain a degree unless the complete entrance requirements are made up. Upon completion of a prescribed course, totaling at least 72 semester credit hours, they will be granted a Certificate of Proficiency. Students who have fulfilled all entrance requirements and have no immediate intention of completing a four-year course for a degree may also become candidates for a certificate.

III. Unclassified students may be admitted to special courses of study but not as candidates for a degree or certificate. Upon full matriculation in the University by the fulfillment of all entrance requirements, credits received for such courses may be then counted toward a degree or certificate.

Admission to Advanced Courses

Full credit is given for work in acceptable subjects completed at institutions which maintain standards of admission and graduation equal to those of this University. Students who have been regularly admitted and have pursued college courses in Liberal Arts and Science subjects in creditable institutions for a period of two years or more will be able to complete the requirements for a degree from this College in two years or by the completion of sixty semester credit hours of work. The last thirty hours of credit toward a degree, however must be secured in a college of the University of Maryland.

Requirements for the Degree

The College of Commerce and Business Administration is a professional college. Its graduates who have fulfilled all entrance requirements and have completed one of the required or approved courses of study, and

have secured credit for a minimum of 120 semester credit hours in liberal and professional subjects will be granted the degree of *Bachelor of Business Administration*.

Students who have successfully completed two years of college study in an approved institution may be granted the degree of *Bachelor of Business Administration* when they have successfully completed a minimum of 60 credit hours in required professional courses. Business demands to-day particularly men who are broadly trained and not men narrowly drilled in routine. It needs managers; not rank and file. Hence, two years of liberal college training are very desirable for students desiring to enter a business career.

Requirements for Certificate

Students not candidates for a degree who have pursued approved courses of study and have secured a total of 72 semester credit hours may be granted a Certificate of Proficiency. Such courses of study ordinarily require a period of four years of three evenings a week.

Credits

The "credit hour" represents one lecture or recitation hour per week throughout a semester.

To encourage a high grade of scholarship a system of credit for quality has been established.

For the purpose of evaluation to determine graduation, the following values of grades apply:

The grade "A" gives 1.2 times the normal credit.

The grade "B" gives 1.1 times the normal credit.

The grade "C" gives 1.0 times the normal credit.

The grade "D" gives .9 times the normal credit.

Thus a grade of "A" received in a 3-credit course has a value of 3.6 credits; a grade of "B" 3.3 credits; a grade of "C" 3 credits; a grade of "D" 2.7 credits.

The grades of "A", "B", "C", and "D" are the only ones carrying university credit. All other grades signify failure or condition. Not less than three-fourths of the credits required for graduation must be earned with grades of "A", "B", or "C".

Courses and Programs

The following fields of business training are provided for in the College of Commerce and Business Administration:

1. Accounting
2. Business Administration
3. Banking and Investments
4. Foreign Trade and Commerce
5. Real Estate and Insurance

FEEES

I.—Preliminary Fees

Required of Regular and Special Students, payable at time of registration.

1. Matriculation Fee—\$10 payable once.
2. Record Investigation Fee—\$2.
3. Late Registration Fee—\$5 extra is charged regular and special students who register after the dates indicated in the calendar.
4. Non-Resident Fee—Charged students who are not residents of Maryland. \$50 annually payable \$25 each semester.

The above fees are not returnable.

II.—Tuition Fees—Not including Summer Session—based upon \$6 per credit hour, per semester.

6 Courses—18 periods per week—for the year.....	\$216
5 Courses—15 periods per week—for the year.....	180
4 Courses—12 periods per week—for the year.....	144
3 Courses— 9 periods per week—for the year.....	108
2 Courses— 6 periods per week—for the year.....	72
1 Course — 3 periods per week—for the year.....	36
1 Late afternoon course—2 periods per week—for year....	24
1 Course — 3 periods per week—for one semester.....	20
1 Late afternoon course—2 periods per week—for one semester	16

III.—Graduation Fee

For Diploma and Degree or for Certificate, payable May 1 before commencement

IV.—Special Examinations

Arranged upon request. Per subject.....

V.—Summer Session

Evening. Per subject..... 20
Day—3 periods

Payment of Fees

All fees are payable in advance before beginning class attendance. Fees, however, amounting to \$72 or more may be paid in two payments—two-thirds at the beginning of the first semester and one-third at the beginning of the second semester.

No exceptions to this regulation will be permitted unless the student's circumstances entitle him to special consideration. In such a case he must make satisfactory arrangements with the Comptroller at the time of registration.

Special Bulletin

Full detailed information regarding courses of study, fees, etc., may be obtained from a special bulletin of the College of Commerce and Business Administration which may be secured by addressing Maynard A. Clemens, Acting Dean, College of Commerce and Business Administration, University of Maryland, Baltimore, or the President of the University of Maryland, College Park, Maryland.

School of Dentistry

FACULTY OF THE SCHOOL OF DENTISTRY

J. BEN ROBINSON, D. D. S., F. A. C. D., Dean

T. O. HEATWOLE, M.D., D.D.S., Lecturer on Dental Ethics and Dental Jurisprudence.
R. P. BAY, M.D., Professor of Oral Surgery.
R. L. MITCHELL, Phar.G., M.D., Professor of Bacteriology and Pathology.
H. J. MALDEIS, M.D., Professor of Embryology and Histology.
NEIL E. GORDON, Ph.D., Professor of Chemistry.
EDWARD HOFFMEISTER, A.B., D.D.S., Professor of Materia Medica and Therapeutics.
A. Y. RUSSELL, D.D.S., Professor of Prosthetic Dentistry and Radiodontia.
O. H. GAVER, D.D.S., Professor of Physiology and Chief of Clinic.
M. B. MILNER, D.D.S., Professor of Orthodontia.
JESSE S. MYERS, D.D.S., Professor of Operative Dentistry.
HOWARD LEE HURST, D.D.S., Professor of Exodontia.
J. LEROY WRIGHT, M.D., Professor of Anatomy and Biology.
GERALD I. BRANDON, D.D.S., Professor of Crown and Bridge.
GEORGE S. KOSHI, D.D.S., Professor in Crown and Bridge and Dental Anatomy.
GEO. M. ANDERSON, D.D.S., Professor of Orthodontia.
J. H. FERGUSON, D.D.S., Professor of Crown and Bridge.
R. P. MAY, D.D.S., Professor of Oral Hygiene and Dental History.
S. P. PLATT, Instructor of Mechanical Drawing.
GRAYSON W. GAVER, D.D.S., Assistant Professor Prosthetic Dentistry.
MYRON S. AISENBERG, D.D.S., Assistant Professor Embryology and Histology.
E. B. STARKEY, M.S., Instructor in Chemistry.
F. M. LEMON, A.M., Assistant Professor of English.
P. M. WHEELER, M.S., Assistant Professor of English.
C. G. EICHLIN, M.S., Associate Professor of Physics.
B. B. IDE, D.D.S., Special Lecturer on Dental Economics.
D. EDGAR FAY, M.D., Associate Professor of Physical Diagnosis.
ADELBERT ZELWIS, A.M., D.D.S., Associate in Prosthetic Technic.

C. R. GOLDSBOROUGH, M.D., Assistant in Science Laboratories.
C. A. BOCK, D.D.S., Associate in Exodontia and Radiodontia.
W. F. SOWERS, M.D., Assistant Professor Bacteriology and Pathology.
ALLAN BETTS, D.D.S., Demonstrator Exodontia Anaesthesia and Radiodontia.
L. R. BINGHAM, D.D.S., Demonstrator Clinical Operative Dentistry.
CHARLES HIGHSTEIN, D.D.S., Demonstrator Clinical Prosthetic Dentistry.
W. BUCKLEY CLEMSON, D.D.S., Demonstrator Crown and Bridge Technic.
G. C. KARN, D.D.S., Demonstrator Clinical Prosthetic Dentistry.
HAROLD VAN WINKLE, D.D.S., Instructor Operative Technics.
ETHELBERT LOVETT, D.D.S., Demonstrator Crown and Bridge Technics.
GEORGE H. ULRICH, Ph.D., Professor of Biology.
HARRY B. MCCARTHY, D.D.S., Demonstrator Clinical Operative Dentistry.
L. E. KAYNE, D.D.S., Demonstrator Clinical Orthodontia.

Administrative Officers

W. M. HILLEGEIST, Registrar
GEORGE S. SMARDON, Comptroller
RUTH LEE BRISCOE, Librarian
KATHARINE TOOMEY, Secretary to Dean
SARAH KELLY, Extracting Room Nurse
PAULINE D. POSEY, Clinical Supply Clerk
VIOLA M. KELLER, Senior Stenographer
MRS. MARY C. REED, Clinical Supply Clerk
ELSA BACHMAN, Clerk—Prosthetic Department

Announcement

UNIVERSITY OF MARYLAND SCHOOL OF DENTISTRY AND BALTIMORE COLLEGE OF DENTAL SURGERY 1924-1925

The *Eighty-Fourth Regular Session* of the University of Maryland School of Dentistry and the Baltimore College of Dental Surgery will begin October 1, 1924, and continue until June 1, 1925.

Full attendance during this period is required in order to secure promotion to succeeding classes. Class examinations for the Session will be held in September, January and May.

The School of Dentistry of the University of Maryland is a member, in good standing, of the National Association of Dental Faculties, and conforms to all the rules and regulations of that body.

Aside from and independent of the Regular Session, this institution maintains a Summer Course, which follows immediately the termination of each Regular Session and continues until October 1st. This course is devoted to practical work only; credit for time thus put in is allowed toward work required of Junior and Senior students. The many advantages of the summer session for actual practice cannot be overestimated, as the number of patients applying for dental services is always very large.

Requirements for Matriculation

The requirements for matriculation in the Dental Department of the University of Maryland are those established by the Dental Educational Council of America, viz, graduation from an accredited high school having a four-year course, or its equivalent.

Entrance credentials of new students should be in the hands of the Registrar by September 15th. A blank form for entrance credentials is issued by the University. A copy may be secured from the Dean's Secretary who will send it on request. This blank must be filled out and signed by the principal of the high school, or other preparatory school from which the prospective dental student graduated. It must then be returned to the Registrar's office, Baltimore, Maryland.

Attendance Requirements

In order to receive credit for a full session, each student must have entered and be in attendance not later than ten days after the beginning and remain until the close of the Regular Session, the dates for which are announced in the Annual Catalogue.

In case of serious personal illness as attested to by a physician a student may register not later than the twentieth day following the advertised opening date.

EACH student is required to be in attendance at least eighty-five percent of the time.

Advanced Standing

Graduates from reputable and accredited colleges and universities are admitted to the Sophomore year, but will be required to take the dental subjects taught in the first year of the dental curriculum. Such courses must be taken so as not to diminish the efficiency of the regular work of the second year, and must be completed before the work of the third year is begun.

A student who desires to transfer to this school from another recognized dental school, must present credentials signed by the Dean, Secretary, or Registrar of the school from which he is transferring. No student who has incurred a condition, or a failure in any subject at the dental school from which he desires to transfer, will be accepted. The transferring student must furnish evidence that he is in possession of the proper high school credits.

Requirements for Graduation

The degree of Doctor of Dental Surgery is conferred upon the completion of the four year course of study, each year to consist of thirty-two weeks, and each week to consist of six days of school work. The candidate must be twenty-one years of age and must possess a good moral character, and must have passed in all branches of the curriculum.

Fees for Regular Course

Matriculation fee (paid only once)	\$10.00
Tuition, resident student	200.00
Tuition, non-resident student	250.00
Dissecting fee (paid only once)	15.00
Laboratory fee	10.00
Graduation fee	10.00

Matriculation fee must be paid when registration card is issued. Tuition fee may be paid as follows: One-half on October 1st, the balance on February 1st. Dissecting fee must be paid to secure class card for admission to clinics. Laboratory fee must be paid at the beginning of the session. Graduation fee must be paid on May 1st.

These requirements will be rigidly enforced.

Students may matriculate by mail, by sending amount of fee to W. M. Hilligeist, Registrar, University of Maryland, Lombard and Green Streets, Baltimore, Maryland.

College of Education

WILLARD S. SMALL, Dean.

The College of Education is an organization of the various activities of the University concerned with the preparation of individuals for positions in the educational profession. Its courses are planned to serve three classes of students: First, those preparing to teach agriculture, arts and science, home economics and industrial subjects in high schools; second, prospective principals of high schools, educational supervisors, county agents, home demonstrators, boys' and girls' club workers, and other educational specialists; third, those majoring in special fields who desire courses in education for their professional and informational value.

Requirements for Admission

The requirements for admission to the College of Education are in general the same as for the admission to any other college or school of the University. Fifteen units of secondary school work in acceptable subjects must be offered by every candidate for admission, including the following prescribed subjects:*

English	3 units
Mathematics	2 units
Science	1 unit
History	1 unit
<hr/>	
Total	7 units

Degrees

The degrees conferred upon students who have met the prescribed conditions for a degree in the College of Education are: Bachelor of Arts; Bachelor of Science.

Teachers' Special Diplomas

The degrees granted for work done in the College of Education indicate primarily the quantity of work completed. Teachers' special diplomas certify to the professional character of such work. Teachers' special diplomas will be granted only to those who, besides qualifying for a degree, give promise of superior professional ability as evidenced by their personality, character, experience and success in supervised teaching.

Teachers' special diplomas will be granted in agricultural education, arts and science education, home economics education, manual training and industrial education.

The recipient of a teacher's special diploma is eligible for certification by the State Superintendent of Schools without examination.

*Students entering with conditions in prescribed subjects must remove such conditions before enrolling a second year.

Departments

The College of Education is organized into two general divisions: General Education and Vocational Education. The College includes work in the following departments offering general and professional training for teachers: Agricultural Education, Arts and Science Education, Home Economics Education and Industrial Education.

Curricula

Two types of curriculum are offered. These correspond with the two general divisions of the college organization: General Education and Vocational Education.

The first of these is designed to prepare teachers of the arts and sciences in the high schools and to prepare specialists for the profession of Education. It therefore provides a wide range of electives. The basic requirements are fixed and definite, but the student may select from a number of subjects the major and minor subjects in which he expects to qualify for teaching. The student may secure the degree either of Bachelor of Arts or Bachelor of Science, depending upon his major content subject.*

The curricula in Vocational Education are designed for the definite purpose of preparing teachers and supervisors of agriculture, home economics, manual training and industrial subjects. They permit, therefore, comparatively little choice of subjects. As the University of Maryland is the institution designated by the State Board of Education for the training of teachers of vocational agriculture, home economics, and trades and industries under the provisions of the Smith-Hughes vocational educational act, the curricula in this class have been organized to meet the objectives set up in the act and in the interpretations of the Federal Board for Vocational Education and the State Board of Education. These curricula lead to the degree of Bachelor of Science.

As an integral part of every curriculum of the College of Education leading to a degree, a minimum of 20 credits in Education is required. This minimum includes the following prescribed subject units:

Public Education in the United States.....	2
Educational Hygiene	2†
Educational Psychology	3
Technic of Teaching.....	3
Special Methods	3
Principles of Secondary Education.....	3
Supervised Teaching	3

Upon completion of 134 credits in conformity with the requirements specified above and in conformity with general requirements of the University, the appropriate degree will be conferred.

*For information in regard requirements for degrees of B. A. and B. S. see page—. On account of other requirements in this college the minimum number of credits for the major may be 36 instead of 45.

†Except in the Agricultural Curriculum.

Facilities

In addition to the general facilities offered by the institution as a whole, by special arrangement with the county and state school authorities the high school located at Hyattsville within two miles of the University provides opportunity for college credit work in supervised teaching. The observation work necessary for efficient teacher training is conducted in Washington and in nearby Maryland schools. The nearness of these schools to the institution and of the federal offices and libraries in Washington dealing with education provide unusual opportunities for contact with actual classroom situations and current administrative problems in education.

Special Courses

By special arrangement extension courses in education are offered evenings and Saturdays to teachers in service and to others who may desire to qualify for teaching in the schools of Maryland after having had such work. College credit may be granted for this work if taken in course. With present facilities only a limited amount of service of this kind can be undertaken.

As the need for evening classes in industrial and home economics education arises, special courses will be offered at centers throughout the State. The number and location of these centers will depend entirely upon the need and demand for such instruction. The courses will be organized on the short unit basis and will be maintained only so long as the demand justifies them. Upon the satisfactory completion of such curricula, students will be issued certificates stating the amount and character of work done.

In the summer session special courses are offered for the benefit of teachers in service and such individuals as may be able to qualify for teaching upon the completion of the work.

Professional Preparation for Prospective Teachers

The State Board of Education will certify to teach in the approved high schools of the State only such persons as have had satisfactory professional preparation. In terms of quantity this requires a minimum of 20 semester hours of professional education courses. Students who hope to teach in approved high schools of the State must, therefore, secure this professional preparation.

The State Department of Education is stimulating and encouraging instruction in music and athletics in the high schools of the State. In the majority of these schools the instruction in these subjects will have to be carried on by teachers who teach other subjects as well. Training in either or both of these subjects will be valuable for prospective teachers.

All students wishing to prepare for teaching should consult the Dean of the College of Education regarding possible combinations and the arrange-

ment of their work. At the time of matriculation each student is expected to make a provisional choice of the subjects which he desires to prepare to teach and to secure the advice and approval of the head of the department which offers these subjects. The previous training, the experience and the probable future needs of the student will govern the head of the department in his recommendations.

ARTS AND SCIENCE EDUCATION

Upon registration for this curriculum students should state the subjects in which they expect to qualify for teaching, designating a major and a minor interest.

Students electing this curriculum may register either in the College of Education or the College of Arts and Sciences. In any case they will register with the College of Education for the special teacher's diploma.

Curriculum	<i>Semester:</i>	
	<i>I</i>	<i>II</i>
FRESHMAN YEAR		
Composition and Rhetoric (Eng. 101).....	3	3
Educational Guidance (Ed. 100).....	1	1
Reading and Speaking (P. S. 101-102).....	1	1
Basic R. O. T. C. (M. I. 101) or Physical Education (Phys. Ed. 101)	2	2
Foreign Language (French, German, Spanish, Latin, Greek)	4	4
*Inorganic Chemistry (Chem. 101-A or 101-B).....	4	4
(One of these)		
Modern and Contemporary History (H. 101-102).....	3	3
English Literature (Eng. 102).....	3	3
Mathematics (Math. 101-102)	3	3
SOPHOMORE YEAR		
	<i>Semester:</i>	<i>I</i>
Public Education in the United States (Ed. 101).....	2	..
Educational Hygiene (Ed. 102).....	..	2
Basic R. O. T. C. (M. I. 102) or Physical Education (Phy. Ed. 102)	2	2
Elements of Social Science (Soc. Sci. 101).....	..	4
General Zoology (Zool. 101).....	4	..
†Electives	10	10
JUNIOR YEAR		
	<i>Semester:</i>	<i>I</i>
Educational Psychology (Ed. 103).....	3	..
Technic of Teaching (Ed. 104).....	..	3
English (one three hour course).....	3	3
†Electives	10	10

*This requirement may be modified in case of students who enter with two years of Chemistry in the high school. Such students, with the advice and consent of the Head of the Department of Chemistry, may elect advanced Chemistry; or with the consent of the Dean may substitute some other subject. Students purposing to major in Chemistry see page — for requirements.

†The electives will be determined by the student's choice of major and minor subjects.

SENIOR YEAR		Semester:	
	I	II	
Special Methods and Supervised Teaching (Ed. 110, 111, 112, 113, 114)	3	3	
Principles of Secondary Education (Ed. 105) .....	..	3	
*Electives	12	9	

*The electives will be determined by the student's choice of major and minor subjects, and by requirements of Education courses.

AGRICULTURAL EDUCATION

In addition to the regular entrance requirements of the University, involving graduation from a standard four-year high school, students electing the agricultural education curriculum must present evidence of having acquired adequate farm experience after reaching the age of fourteen years.

The electives allowed by this curriculum may be selected from any of the courses offered by the University for which the student has the necessary prerequisites. A student is expected, however, to confine his elections to subjects relating to farming and to teaching. Though opportunity is afforded for specialization in a particular field of agriculture, such as animal husbandry, agronomy, pomology, vegetable gardening or farm management, students should arrange their work so that approximately forty per cent of their time will have been spent on technical agriculture, twenty-five per cent on scientific subjects, twenty per cent on subjects of a general educational character, and from twelve to fifteen per cent on subjects in professional education.

Students electing this curriculum may register either in the College of Education or the College of Agriculture. In either case they will register with the College of Education for the special teacher's diploma.

Curriculum

FRESHMAN YEAR		Semester:	
	I	II	
Educational Guidance (Ed. 100)	1	1	
Types and Breeds (A. H. 101)	3	..	
Principles of Vegetable Culture (Hort. 111) .....	..	3	
General Chemistry (Chem. 101-A or 101-B)	4	4	
General Botany (Bot. 101)	4	..	
General Zoology (Zool. 101) .....	..	4	
Composition and Rhetoric (Eng. 101)	3	3	
Basic R. O. T. C. (M. I. 101)	2	2	
SOPHOMORE YEAR		Semester:	
	I	II	
Public Education in the United States (Ed. 101)	2	..	
Agricultural Chemistry (Chem. 116)	3	3	
Field Crop Production (Agron. 101-102)	3	3	
Geology (Geol. 101)	3	..	
Principles of Soil Management (Soils 101) .....	..	3	
Feeds and Feeding (A. H. 102)	3	..	
Dairying (D. H. 101) .....	..	3	
Elementary Pomology (Hort. 101)	3	..	
Elements of Social Science (Soc. Sci. 101) .....	..	4	
Basic R. O. T. C. (M. I. 102)	2	2	

JUNIOR YEAR		Semester:	
	I	II	
Educational Psychology (Ed. 103)	3	..	
Technic of Teaching (Ed. 104) .....	..	3	
Public Speaking (P. S. 101)	1	1	
Farm Machinery and Farm Shop (Agr. Eng. 101)	3	..	
Poultry (Poultry 101) .....	..	3	
Bacteriology (Bact. 101)	3	..	
Landscape Gardening (Hort. 131) .....	..	2	
Agricultural Economics (A. E. 101)	3	..	
Marketing of Farm Products (A. E. 102) .....	..	3	
Electives	3-5	3-6	

SENIOR YEAR		Semester:	
	I	II	
Teaching Secondary Vocational Agriculture (Ed. 121) ..	4	4	
Principles of Secondary Education (Ed. 105) .....	..	3	
Rural Sociology and Educational Leadership (Ed. 122) ..	..	3	
Farm Management (F. M. 102)	4	..	
Expository Writing (Eng. 105)	2	2	
Electives	5-7	3-5	

HOME ECONOMICS EDUCATION

In addition to the regular entrance requirements of the University, involving graduation from a standard four-year high school, students electing home economics education must present evidence of two years' experience in the home as a house daughter, during which time a large share of the responsibility in the management of the home was assumed.

Students may elect in other colleges such courses as they may be qualified to enter. They are expected, however, to confine their election primarily to subjects related to home-making and to teaching. The curriculum should be so arranged that approximately forty per cent of the students' time will be spent on technical home economics subjects, twenty-five per cent on scientific subjects, twenty per cent on subjects of general academic character, and from twelve to fifteen per cent on subjects of a professional character.

Students electing this curriculum may register either in the College of Education or the College of Home Economics. In either case they will register with the College of Education for the special teacher's diploma.

Curriculum

FRESHMAN YEAR		Semester:	
	I	II	
Educational Guidance (Ed. 100)	1	1	
Composition and Rhetoric (Eng. 101)	3	3	
General Chemistry (Inorg. Chem. 101-A or 101-B)	4	4	
General Zoology (Zool. 101)	4	..	
General Botany (Gen. Bot. 101) .....	..	4	
Modern and Contemporary History (Hist. 101 and 102)	3	3	
Reading and Speaking (P. S. 101-102)	1	1	
Physical Education (Phys. Ed. 101)	2	2	

SOPHOMORE YEAR

	<i>Semester:</i>	
	<i>I</i>	<i>II</i>
Public Education in the U. S. (Ed. 101)	2	..
Educational Hygiene (Ed. 102) .....	..	2
Organic Chemistry (Chem. 111)	3	..
Elementary Foods (H. E. 101)	3	3
Composition and Design (H. E. 117)	3	..
Costume Design (H. E. 118) .....	..	3
Textiles (H. E. 116)	2	..
Garment Construction (H. E. 111) .....	..	2
Elements of Social Science (Soc. Sci. 101) .....	..	4
Physical Education (Phys. Ed. 102)	2	2
Electives	3	3

JUNIOR YEAR

	<i>Semester:</i>	
	<i>I</i>	<i>II</i>
Educational Psychology (Ed. 103)	3	..
Technic of Teaching (Ed. 104) .....	..	3
General Bacteriology (Bact. 101)	3	..
Drafting and Elementary Dress Design (H. E. 112)	3	..
Physics (Physics 103) .....	..	4
Nutrition (H. E. 102-103)	3	3
Education of Women (Ed. 130)	3	..
Child Care and Welfare (Ed. 131) .....	..	3
Home Nursing (H. E. 109) .....	..	2

SENIOR YEAR

	<i>Semester:</i>	
	<i>I</i>	<i>II</i>
Teaching Vocational Home Economics: Methods and Practice (Ed. 132-133)	3	3
Principles of Secondary Education (Ed. 105) .....	..	3
Home Architecture and Interior Decorating (H. E. 119) ..	3	..
Dressmaking (H. E. 113) or Millinery (H. E. 115) .....	..	3
Home Management and Mechanics of the Household (H. E. 107)	3	..
Practice House (H. E. 108) .....	..	4
Marketing and Buying (H. E. 106)	3	..

INDUSTRIAL EDUCATION

Three types of curricula are offered in Industrial Education, viz., a four year curriculum, a two year curriculum and a special curriculum. The first two are offered as resident work at the University and the third is offered at special centers in the State where occasion demands.

Four-Year Curriculum in Industrial Education for Teachers of Related Subjects

In addition to the regular entrance requirement of the University, involving graduation from a standard four-year high school, students electing the four-year curriculum in industrial education must be willing

to engage in the trades or industries during the three summer vacations.

The electives allowed by this curriculum may be chosen from any of the courses offered in the University for which the student has the necessary prerequisite.

Two-Year Curriculum in Industrial Education for Teachers of Related Subjects

This curriculum is designed for mature students who have had considerable experience in some trade or industry.

In addition to the above, applicants for admission to this curriculum must have as a minimum requirement an elementary school education or its equivalent and must be willing to engage in the trades and industries during the summer vacation.

The curriculum will not be rigidly required as laid down, but will be made flexible, in order that it may be adjusted to the needs of students who present advanced credits for certain of the required courses.

Special Courses for Teachers of Trades and Related Trade Subjects

To meet the needs for industrial teacher training in Baltimore and other industrial centers, two types of extension courses are offered: one for teachers of trade subjects, the other for teachers of related trade subjects.

Applicants for admission to these classes must have had considerable experience in the line of work they expect to teach, and must have, as a minimum requirement an elementary school education or its equivalent. The credit allowed for these courses depends upon the amount and character of the work completed.

For teachers of trade subjects the term's work deals with the analysis and classification of trade knowledge for instructional purposes, the mechanics and technique of teaching, shop and class-room management, and the organization of industrial classes. The work for teachers of related subjects is similar to that described for teachers of trade subjects except that emphasis is placed upon the analysis of their specialties in relationship to the different trades with which they are articulated.

(Special announcements of the extension courses will be issued in September 1924 and may be obtained from the office of the Registrar either in Baltimore or College Park.)

College of Engineering

A. N. JOHNSON, Dean.

Whether a man follows engineering as his life's work or enters other fields it is well recognized that the training received in the engineering colleges of today affords a splendid preparation that fits him for many callings in public and private life outside of the engineering profession.

The College of Engineering, which includes the Departments of Civil, Electrical and Mechanical Engineering, has been reorganized. The general purpose has been to broaden the courses of instruction the better to prepare young men to enter the public service. The large public works program contemplated in practically every state in the Union makes urgent the demand for engineers trained for such work. The public service demands the electrical and mechanical as well as the civil engineer. Maryland needs such men to carry on her great highway work and large public undertakings contemplated in various cities and counties. Such training seems pre-eminently a function of the State's University.

The subject matter of the courses is not essentially different from that usually given, but the viewpoint of the student and the application of the principles are those of public service. In order to give the time necessary both to the technical subjects and to those of a more general character, a careful revision of all courses of study was made so that the utmost time available in each semester may be used to the best advantage.

Beginning with the college year of 1921, the curriculum was arranged so as to prescribe the same courses of study for all freshmen and all sophomores, respectively, in the Engineering College. Among other advantages that accrue from such a change, is the very important one that a young man will not be called upon to decide the branch of engineering in which he will specialize until his junior year.

These changes necessitate a somewhat greater amount of preparation than formerly prescribed, and the hearty and sympathetic cooperation of the high schools of the state is asked that Maryland boys may be even better prepared for their university work to the end that they may be well qualified to enter on their life's work with the best possible university training.

Engineering research is recognized today as one of the most needed useful contributions that the engineering college can make to the state. Work of this character is under way at the University of Maryland, where, through cooperation with the U. S. Bureau of Public Roads and the Maryland State Roads Commission highway research problems are being studied, the solution of which will prove of utmost value to the people of the State. It is planned to develop as rapidly as possible this phase of the work which will have, aside from its great economic value

to the State, an important educational value due to the close contact the students will have with the live engineering problems of today.

The war brought prominently before all people the work done by the engineers and now a most important part is played by the profession in the reconstruction problems that confront, not alone the countries of Europe, but the United States as well. The opportunities for the well-trained engineer were never greater than at present. Great projects are under way and even greater contemplated, which the engineer of the future will be called upon, not only to build, but to initiate. He will require the broadest training he can secure. He must know more than merely the technique of his profession; he must be able to grasp the economic problems that underlie all great public works. It is towards such a training and understanding that the courses in the College of Engineering are being developed.

Admission Requirements

The requirements for admission to the College of Engineering are, in general, the same as elsewhere described for admission to the undergraduate departments of the University, except as to the requirements in mathematics.

The high school units that are required for entrance to the College of Engineering are as follows:

English	3
Algebra complete	1-½
Plane Geometry	1
Solid Geometry	½
Science	1
History	1
Electives	7
	—
Total	15

Bachelor Degrees in Engineering

Courses leading to the degree of Bachelor of Science are offered in Civil, Electrical and Mechanical Engineering, respectively.

Not less than three-quarters of the credits required for graduation must be earned with grades of A, B or C.

Master of Science in Engineering

The degree of Master of Science in Engineering is given to those students registered in the Graduate School, who hold Bachelor Degrees in Engineering, prerequisite for which requires a similar amount of preparation and work as required for Bachelor Degrees in the Engineering College of the University of Maryland.

Candidates for the degree of Master of Science in Engineering are accepted in accordance with the procedure and requirements of the Graduate School, as will be found explained in the catalogue under the head of Graduate School.

Professional Degrees in Engineering

The degrees of Civil Engineer, Electrical Engineer or Mechanical Engineer will be granted only to graduates of the University who have obtained a bachelor's degree in engineering. The applicant must satisfy the following conditions:

1. He shall have engaged successfully in acceptable engineering work for three years.
2. His registration for a degree must be approved at least 12 months prior to the date at which the degree is sought. He shall present with his application a complete report of his engineering experience and an outline of his proposed thesis.
3. He shall present a satisfactory thesis on an approved subject.
4. He must be considered eligible by a committee composed of the Dean of the College of Engineering and the heads of the Departments of Civil, Electrical and Mechanical Engineering.

Equipment

The Engineering building is provided with lecture-rooms, recitation-rooms, drafting-rooms, laboratories and shops for all phases of engineering work.

Drafting-Rooms

The drafting-rooms are equipped for practical work. Engineering students must provide themselves with an approved drawing outfit, material and books, the cost of which during the freshman year amounts to about \$40.00

Electrical Engineering Laboratory

The equipment includes many of the various types of direct current and alternating current generators and motors, rotary converter, distribution transformers, control apparatus and the measuring instruments essential to practical electrical testing. For experimental work electrical power is obtained from engine driven units and a turbine generator; a storage battery is used for constant voltage testing purposes.

Instruments are available for measuring the candle power of lamps and for the determination of illumination intensities. The standardizing laboratory apparatus includes primary and secondary standards used in calibrating laboratory instruments.

The telephone laboratory is equipped with apparatus for experimental work on magneto and common battery systems. The radio apparatus is limited, at present, to receiving sets.

Mechanical Engineering Laboratory

The apparatus consists of Corliss and plain slide valve engines, steam turbine set, fans, pumps, indicators, gauges, feed water heaters, tachometers, injectors, flow meters, apparatus for determination of the B. T. U. in coal, gas and liquid fuels, pyrometers, draft gauges, planimeters, ther-

mometers and other necessary apparatus and equipment for a mechanical laboratory.

Materials Laboratory

Apparatus and equipment are provided for making standard tests on various construction materials as steel, concrete, timber and brick.

Equipment includes two 100,000 pound universal testing machines, cement testing apparatus, extensometer and micrometer gauges, and other special devices for ascertaining the elastic properties of different materials.

Special apparatus which has been designed and made in the shops of the University is also made available for student work.

Highway Research Laboratory

Certain problems in highway research have been undertaken and are actively under way, being carried on in co-operation with the U. S. Bureau of Public Roads and the State Roads Commission.

A study of the traffic over the Maryland State Highway system is in progress and a preliminary traffic map has already been prepared.

A special investigation into the elastic properties of concrete is well under way, this work directly coordinating with the general program of research problems undertaken by the U. S. Bureau of Public Roads. In connection with this study, there have been taken over sixteen hundred samples in the past two summers from the concrete roads of the State, these samples consisting of cores which were cut from the road by a special core drill apparatus mounted upon a specially equipped truck. The results that have been obtained from the testing of these concrete cores will be studied in connection with the laboratory investigations which are being made upon the fatigue of concrete. The fatigue of concrete is being studied by means of a specially devised machine which was designed and built at the University laboratory.

Machine Shops and Foundry

The machine shops and foundry are well lighted and fully equipped. Shops for wood working, metal, forge and foundry practice are provided for engineering students.

The wood working shop has full equipment of hand and power machinery.

The machine shops are equipped with various types of lathes, planers, milling machines and drill presses.

The foundry is provided with an iron cupola, a brass furnace and coke oven.

The shop equipment not only furnishes practice, drill and instruction for students, but makes possible the complete production of special apparatus for conducting experimental and research work in engineering.

Surveying Equipment

Surveying equipment for plane, topographic and geodetic surveying is provided sufficient properly to equip several field parties. A wide variety

of types of instruments is provided, including domestic as well as foreign makes.

Special Models and Specimens

A number of models illustrating various types of highway construction and highway bridges are available for students in this branch of engineering.

There has also been collected a wide variety of specimens of the more common minerals and rocks from various sections of the country, particularly from Maryland.

Library

Each department contains a well-selected library of books for reference and the standard engineering magazines.

The class work, particularly in the higher courses, requires that the students consult special books of reference and current technical literature.

Curricula

The normal curriculum of each department is outlined on the following pages. Students are also required to attend and take part in the meetings of the Engineering Society and Seminar and engineering lectures.

All members of the freshman engineering class are required to attend a series of twenty to twenty-five lectures a year, the speakers, for the most part, being other than engineers.

Each student is required to hand in a very brief written summary of each lecture.

In addition to the requirements of the regular courses of study, all students in the Engineering College are required, during each of the three summer vacations, to obtain employment in some line of commercial work, preferably that which relates to engineering. Unless the student can offer some adequate reason why he has not been so employed during at least two months of each of his summer vacation periods, it may be considered sufficient cause for withholding his degree.

The proximity of the University to Baltimore and Washington, and to other places where there are great industrial enterprises, offers an excellent opportunity for engineering students to observe what is being done in their chosen field. An instructor accompanies students on all trips of inspection.

FRESHMAN YEAR

Required of all students in Engineering

	<i>Semester:</i>	
	<i>I</i>	<i>II</i>
Composition and Rhetoric (Eng. 101).....	3	3
Modern Language	4	4
Freshman Mathematics (Math. 103).....	5	5
General Chemistry (Chem. 101)	4	4
Engineering Drafting (Dr. 101).....	1	1
Shop and Forge Practice (Shop 101).....	1	1
Basic R. O. T. C. (M. I. 101).....	2	2
Engineering Lectures .....	..	..

SOPHOMORE YEAR

Required of all students in Engineering.

	<i>Semester:</i>	
	<i>I</i>	<i>II</i>
Oral English (Pub. Sp. 105 and 106).....	1	1
‡Modern Language (Adv. Course)	3	3
‡Modern and Contemporary History (Hist. 101 and 102) ..	3	3
Sophomore Mathematics (Math. 106).....	5	5
Physics (Phys. 102).....	5	5
Descriptive Geometry (Dr. 102).....	2	2
Machine Shop Practice (Shop 102-103), M. & E.....	1	2
Civil.....	1	..
Basic R. O. T. C. (M. I. 102).....	2	2
Plane Surveying (Surv. 101-102), M. & E.....	1	..
Civil.....	1	2
Engineering Lectures .....	..	..

‡Alternatives.

CIVIL ENGINEERING CURRICULUM

JUNIOR YEAR

	<i>Semester:</i>	
	<i>I</i>	<i>II</i>
*Political Economy (Econ. 108).....	3	3
*Oral English (Pub. Sp. 109 and 110).....	2	2
*Engineering Geology (Engr. 102).....	1	1
*Engineering Mechanics (Mech. 101).....	4	3
*Prime Movers (Engr. 101).....	2	2
Design Steel Structures, Elements (C. E. 102).....	..	5
*Materials of Engineering (Mech. 102).....	..	2
Advanced Surveying (Surv. 103).....	3	..
Railroads, Elements of (C. E. 101).....	3	..
Engineering Lectures .....	..	..

* Required of all Engineering Students.
Junior and senior engineers with requisite standing may elect extra hours not to exceed three hours per semester.

SENIOR YEAR

	<i>Semester:</i>	
	<i>I</i>	<i>II</i>
*Oral English (Pub. Sp. 111 and 112).....	1	1
*Engineering Jurisprudence (Engr. 103).....	1	..
*Public Utilities (Engr. 104).....	..	1
*Engineering Chemistry (Chem. 127).....	1	1
Highways (C. E. 103).....	4	4
Design-Masonry Structures (C. E. 104).....	4	4
Design-Steel Structures (C. E. 105).....	3	3
Sanitation (C. E. 106).....	3	3
‡Railroads (C. E. 107).....	1	1
‡Sanitary Science (Public Health) (C. E. 108).....	1	1
‡Drainage and Irrigation (C. E. 109).....	1	1
Engineering Lectures .....	..	..

*Required of all engineering students.
 ‡Alternatives.
 Junior and senior engineers with requisite standing may elect extra hours not to exceed three hours per semester.

ELECTRICAL ENGINEERING CURRICULUM

JUNIOR YEAR

	<i>Semester:</i>	
	<i>I</i>	<i>II</i>
*Political Economy (Econ. 108).....	3	3
*Oral English (Pub. Sp. 109 and 110).....	2	2
*Engineering Geology (Engr. 102).....	1	1
*Engineering Mechanics (Mech. 101).....	4	3
*Materials of Engineering (Mech. 102).....	..	2
Design-Machine, Elements (M. E. 101).....	1	..
Direct Currents (E. E. 101).....	5	5
*Prime Movers (Engr. 101).....	2	2
Engineering Lectures .....	..	..

SENIOR YEAR

	<i>Semester:</i>	
	<i>I</i>	<i>II</i>
*Oral English (Pub. Sp. 111 and 112).....	1	1
*Engineering Jurisprudence (Engr. 103).....	1	..
*Public Utilities (Engr. 104).....	..	1
*Engineering Chemistry (Chem. 127).....	1	1
Alternating Currents (E. E. 102).....	5	5
Design-Electric Machine (E. E. 103).....	1	2
Electric Railways (E. E. 104).....	2	..
Telephones and Telegraphs (E. E. 105).....	..	4
Radio Telephony and Telegraphy (E. E. 106).....	4	..
Illumination (E. E. 107).....	..	2
Electric Power Transmission (E. E. 108).....	..	2
Thermodynamics (Mech. 104).....	3	..
Engineering Lectures .....	..	..

* Required of all Engineering Students.
 Junior and senior engineers with requisite standing may elect extra hours not to exceed three hours per semester.

MECHANICAL ENGINEERING CURRICULUM

JUNIOR YEAR

	<i>Semester:</i>	
	<i>I</i>	<i>II</i>
*Political Economy (Econ. 108).....	3	3
*Oral English (Pub. Sp. 109 and 110).....	2	2
*Engineering Geology (Engr. 102).....	1	1
*Engineering Mechanics (Mech. 101).....	4	3
*Materials of Engineering (Mech. 102).....	..	2
Foundry Practice (Shop 104).....	..	1
Advanced Course (M. I. 103).....	..	..
Design-Machine, Elements (M. E. 102).....	5	..
*Prime Movers (Engr. 101).....	2	2
Kinematics (Mech. 103).....	1	4
Engineering Lectures .....	..	..

SENIOR YEAR

	<i>Semester:</i>	
	<i>I</i>	<i>II</i>
*Oral English (Pub. Sp. 111 and 112).....	1	1
*Engineering Jurisprudence (Engr. 103).....	1	..
*Public Utilities (Engr. 104).....	..	1
*Engineering Chemistry (Chem. 127).....	1	1
Design-Prime Movers (M. E. 103).....	3	3
Design-Power Plants (M. E. 104).....	2	1
Design-Pumping Machinery (M. E. 105).....	..	2
Thermodynamics (Mech. 104-105).....	3	3
Sanitation (C. E. 106).....	3	3
Factory Organization (M. E. 106).....	..	2
Mechanical Laboratory (M. E. 107).....	1	1
Heating and Ventilation (M. E. 108).....	2	..
Engineering Lectures .....	..	..

* Required of all Engineering students.
 Junior and senior engineers with requisite standing may elect extra hours not to exceed three hours per semester.

The Graduate School

C. O. APPLEMAN, Dean.

Graduate work is offered, under the supervision of the Dean of the Graduate School by competent members of the various faculties of instruction and research. These constitute the Faculty of the Graduate School.

The general administrative functions of the faculty are delegated to the Dean and Secretary of the School and a Graduate Council.

Work in accredited research laboratories of the U. S. Department of Agriculture and other local national research agencies under competent supervision is accepted, when previously arranged, as work in residence for part of the requirement. These laboratories are located in easy reach of the University. When previously arranged, certain approved courses, satisfactorily completed, at the American University, will also be accepted for part of the residence requirement for higher degrees.

Admission to the Graduate School

Graduates of colleges and universities of good standing are admitted to the Graduate School. Before entering upon graduate work all applicants must present evidence that they are qualified by their previous work to pursue with profit the graduate courses desired. Application blanks for admission to the Graduate School are obtained from the office of the Dean. After approval of the application, a matriculation card, signed by the Dean, is issued to the student. This card permits the student to register in the Graduate School. After payment of the fees the matriculation card is stamped and returned to the student. It is the student's certificate of membership in the Graduate School and may be called for at any succeeding registration.

All applicants for graduate study in the University must matriculate in the Graduate School even though they are not candidates for higher degrees. This includes the members of the Summer Session.

Admission to the Graduate School does not necessarily imply admission to candidacy for an advanced degree.

Registration

All students pursuing graduate work in the University, even though they are not candidates for higher degrees, are required to register in the office of the Dean of the Graduate School at the beginning of each semester. Students taking graduate work in the summer school are also required to register in the Graduate School at the beginning of each session. The program of work for the semester or summer session is entered upon three course cards which are first signed by the professor in charge of the student's major subject and then by the Dean of the Graduate School. Two cards are retained in the office of the Graduate School. One

is filed for record and the other returned to the professor in charge of the student's major subject. The student takes the third card and in case of new students, also the matriculation card, to the Registrar's office where a charge slip for the fee is issued. The charge slip, together with the course card, are presented at the office of the Financial Secretary for adjustment of fees. After certification by the Financial Secretary, class cards are issued by the Registrar. Students will not be admitted to graduate courses without class cards. Course cards may be obtained at the Registrar's office or from the secretary in the Dean's office. The heads of departments usually keep a supply of these cards in their office.

Credits

Classification in courses carrying full graduate credit is ordinarily limited to a maximum of thirty credit hours for the year. Exceptions to this rule must have the approval of the Dean and will only be allowed when the student has made a grade of "B" or better in all of the courses of the previous semester. No exception to the rule will be made in case of students holding \$500 fellowships on a nine months basis. On the recommendation of the student's advisor, these fellows may carry more than fifteen credits for one semester of the year, if the normal load for the other semester is correspondingly reduced. Students holding graduate assistantships are usually limited to eight credit hours per semester. One or two extra credits may be allowed if four or five of the total constitute Seminar and Research work.

Admission to Candidacy for Advanced Degrees

Applications for admission to candidacy for either the Master's or the Doctor's degrees are made on application blanks, which are obtained at the office of the Dean of the Graduate School. These are filled out in duplicate and first approved by the professor in charge of the major subject, after consultation with the professors in charge of the minor subjects, before they are acted upon by the Graduate Council. If not already on file in the Dean's office, the application must be accompanied by an official transcript of the student's undergraduate record, and a statement of the graduate courses which the student has completed at other institutions. This statement must be issued by the Dean, Registrar, or other officer of the Graduate School in which the work was done.

A student making application for admission to candidacy for the degree of Doctor of Philosophy must also obtain from the Head of the Modern Language department, a statement that he possesses a reading knowledge of French and German. A certificate from the Modern language department of another standard institution indicating that the language requirement for the degree of Doctor of Philosophy has been satisfied, may be accepted.

The thesis subject for either the Master's or Doctor's degree is filed with the application.

Each candidate for the Master's degree is required to make applica-

tion for admission to candidacy not later than the first week of the second semester of the academic year in which the degree is expected to be granted, but not until at least the equivalent of one semester's work has been completed.

Candidates for the Doctor's degree must be admitted to candidacy at a date not later than October first of the academic year in which the degree is sought.

The admission of a student to candidacy in no case assures the candidate of a degree, but merely indicates that he has fulfilled all of the preliminary requirements and, in the judgment of his professors and the Graduate Council, possesses the ability to continue the type of work required for the degree sought.

Requirements for the Master's Degree

The degree of Master of Science, Master of Arts or Master of Science in Engineering, will be conferred upon resident graduates who meet the following requirements:

1. The prospective candidate is required to make application for admission to candidacy as prescribed under that heading.
2. The candidate must have received the Bachelor's degree from a college or university of sufficiently high standing and must have the necessary prerequisites for the field of advanced work chosen.
3. During a period of at least one academic year, the student must pursue a course of approved graduate study. Such a course is equivalent to 30 semester credits, including a thesis approved by a committee of the faculty. From 10 to 12 credits must lie outside the major subject and form a coherent group of courses intended to supplement and support the major work. At least 18 credits, including the thesis credits, must be devoted to the major subject. The number of major credits allowed for thesis work will range from 6 to 10, depending upon the amount of work done and upon the course requirements in the major subject. The maximum credit for the one hour per week seminar courses is limited to four semester hours in the major subject and to two semester hours in the minor subjects. Graduate students must elect courses designated in the catalogue "For Graduates" or "For Advanced Undergraduates and Graduates." In special cases a student may with the approval of the professor in charge of the major subject and the Dean, elect for graduate credit, one or two courses not listed for graduates. For such courses, only partial graduate credit will be allowed or extra work will be required for full graduate credit.
4. The thesis required for the Master's degree should be typewritten on a good quality of paper 11x8½ inches in size and one copy bound in a special cover, obtained at the book store. This copy must be filed in the office of the Graduate School not later than two weeks before commencement.
5. The candidate must pass a final oral examination on all graduate work, including the thesis.

Doctor of Philosophy

1. As prerequisites for admission to candidacy for the Doctor's degree the candidate must be a graduate of a standard college, must have a reading knowledge of French and German, and the necessary basic training in the chosen field for advanced work.
2. Three years of graduate study will usually be required. The first two of these years may be spent in other institutions offering standard graduate work. On a part-time basis the time needed will be correspondingly increased. The degree is not given merely as a certificate of residence and work, but is granted only upon sufficient evidence of high attainments in scholarship and ability to carry on independent research in the special field in which the major work is done.
3. The candidate must select a major and one or two closely related minor subjects, constituting a single field of research.
4. The candidate must present a dissertation within the field of research selected. This must be in the hands of the Dean of the Graduate School in printed or typewritten form at least two weeks before the time at which degrees are granted.
5. The candidate must pass a final oral examination in the major and minor subjects. The examination will be given by a committee appointed by the Dean.

Advanced Professional Degrees in Engineering

The degrees of Civil Engineer, Electrical Engineer or Mechanical Engineer will be granted only to graduates of this University who have obtained a Bachelor's degree in engineering. The applicant must satisfy the following conditions:

1. He shall have been engaged successfully in acceptable engineering work for three years.
2. His registration for a degree must be approved at least 12 months prior to the date at which the degree is sought. He shall present with his application a complete report of his engineering experience and an outline of his proposed thesis.
3. He shall present a satisfactory thesis on an approved subject.
4. He must be considered eligible by a committee composed of the Dean of the College of Engineering and the heads of the Departments of Civil, Electrical and Mechanical Engineering.

Graduate Fees

Each graduate student is subject to a matriculation fee of \$10.00, a fixed charge of \$1.50 per semester credit and a diploma fee of \$10.00.

Graduate Work in the Summer

Work done in the Summer Session of the University under the rules and regulations of the Graduate School may be counted as residence toward a graduate degree.

Students taking their major work in the field of Education may satisfy

the requirements for the Master's degree by attending the Summer School for four summers and submitting a satisfactory thesis. These students are required to make application for admission to candidacy not later than the first week of the second semester of the academic year following the completion of the second summer's work.

Fellowships and Graduate Assistantships

A number of fellowships and graduate assistantships have been established by the University. They are open to graduates of standard colleges and universities. All applications for both fellowships and graduate assistantships should be filed with the Dean of the Graduate School not later than May 15 of each year. Blanks for this purpose may be obtained from the office of the Graduate School. Applications must be accompanied by sufficient evidence of necessary training and ability to pursue with profit the graduate work desired. Such evidence will include testimonials from instructors and an official transcript of the undergraduate work.

The fellowships are worth \$500 and it is possible to complete the requirements for the Master's degree in one academic year. In certain cases fellows may be required to spend two or three summer months in addition to the nine months of the college year. Each fellow is expected to give a limited portion of his time to instruction or perform equivalent prescribed duties for his major department.

The stipend attached to the graduate assistantships is \$1000 per annum and the appointments are made for twelve months with one month's vacation. The minimum time required for the Master's degree is two years, since one-half of the assistant's time is devoted to instruction or research. Several \$1000 research assistantships are offered by the Experiment Station and the service required is in connection with research projects. Graduate students holding appointments as fellows or graduate assistants are exempt from all fees except the diploma fee and laboratory fees in certain minor courses.

The College of Home Economics

M. MARIE MOUNT, Acting Dean.

Research into the sciences and the development of industries, art and professions has so changed the philosophy of our educational system that it is now recognized that any educational system must include training of a technical nature. It must encourage the student's natural desire for work of a productive nature with a vital connection between theory and practice. These views have now been generally accepted and the result is noted in the combination of vocational, technical and scientific work with the general studies to form a new course of study for young men and women.

The subjects taught in home economics are designed to fit young women to be capable workers and home makers in whatever sphere of life they may enter. The knowledge they gain from these subjects should give them contentment, industry, order and a womanly feeling of independence and responsibility.

The courses of instruction given are planned to meet the needs of three classes of students: (1) those students who desire a knowledge of the general facts and principles of home economics; (2) those students who wish to make a specialty of home economics for the purpose of teaching the subject in secondary schools and colleges; (3) those who are interested in certain phases of home economics which deal with the work of the dietitian or of the institutional manager.

Departments

For administrative purposes and for ease of instruction the College of Home Economics is organized into the departments of: Foods and Cookery, Textiles and Clothing, and of Home and Institutional Management.

Equipment

In addition to the usual class room and laboratory facilities, the College maintains a newly built and equipped practice house in which the students will keep house for a period of six weeks during their senior year.

Requirements for Admission

The requirements for admission to the college of Home Economics are, in general, the same as those for admission to any college or school of the University. At least fifteen units of high school or other secondary school work in acceptable subjects must be offered by every candidate for admission, among which the following are prescribed:*

English	3
Mathematics	2
Science	1
History	1
	7
Total	7

*Students entering with conditions must remove such conditions before enrolling for a second year in this college.

Laboratory Fees

A special Laboratory fee of \$3.00 a semester is charged for all Foods Courses; \$1.00 a semester for Clothing and Textile courses.

Degrees

The degree of Bachelor of Science is conferred for the satisfactory completion of four years of prescribed courses, or 136 semester hours.

In accordance with the University policy, not less than 3-4 of the credits for graduation must be earned with grades of A, B or C.

Load

The normal load for the Freshman year will be 18 hours for the 1st semester, including one hour Library Science and two hours Physical Education, and 17 hours a semester for remainder of the four years with the exception of the second semester of Sophomore year when, in order to include the required subjects it is necessary to include 18 hours.

After the Freshman year a student whose average grade for the preceding year is a straight B or above may, with the Dean's consent, be permitted to take additional hours for credit, but not to exceed 19 or 20 hours.

Prescribed Curricula

All students registered in the College of Home Economics are required to take the same work during the first two years. At the beginning of the third year they may elect to continue with General Home Economics, in which case the outline of General Home Economics course has been planned, or they may elect to specialize in a particular department, following the courses prescribed in those departments.

Electives may be selected from any of the courses offered by the University for which the student has the necessary prerequisites. A list of suggested electives for the student of Home Economics follows the outline of courses.

HOME ECONOMICS

All students in the College of Home Economics take the same curriculum for the first two years.

FRESHMAN YEAR	Semester:	I	II
Composition and Rhetoric (Eng. 101).....		3	3
General Chemistry and Qual. Analysis (Chem. A 101 or B 101)		4	4
General Zoology (Zool 101)		4	..
General Botany (Gen. Bot. 101).....		..	4
Physical Education (Phys. Ed. 101)		2	2
Library Methods (L. S. 101)		1	..
Language (1st year, 2nd year)		4	4
		<hr/>	<hr/>
		18	17

SOPHOMORE YEAR	Semester:	I	II
Organic Chemistry (Chem. 111).....		3	..
Physics (Phys. 103)	4
Elementary Foods (H. E. 101)		3	3
Composition of Design (H. E. 117)		3	..
Costume Design (H. E. 118)	3
Textiles (H. E. 116)		2	..
Garment Construction (H. E. 111)	2
Language or History		3	3
Physical Education (Phys. Ed. 102)		2	2
Reading and Speaking (P. S. 101-102)		1	1
		<hr/>	<hr/>
		17	18

JUNIOR YEAR	General Home Economics	Semester:	I	II
General Bacteriology (Bact. 101)			3	..
Chemistry of Foods (Chem. 117) or Chemistry of Textiles (Chem. 118).....			..	3
Elements of Social Science (Soc. Sci. 101)			4	..
Drafting and Elementary Dress Design (H. E. 112).....			3	..
Dressmaking (H. E. 113) or Millinery (H. E. 115)	3
Nutrition (H. E. 102-103)			3	3
*Electives			4	8
			<hr/>	<hr/>
			17	17

SENIOR YEAR	Semester:	I	II
Home Management and Mechanics of the Household (H. E. 107)		3	..
Practice House (H. E. 108).....		..	4
Marketing and Buying (H. E. 106).....		3	..
Home Nursing (H. E. 109).....		..	2
Child Care and Welfare (Ed. 131).....		..	3
Home Architecture and Interior Decoration (H. E. 119)...		3	..
*Electives		8	8
		<hr/>	<hr/>
		17	17

JUNIOR YEAR	Foods Curriculum	Semester:	I	II
General Bacteriology (Bact. 101)			3	..
Chemistry of Foods (Chem. 117).....			..	3
Preservation and Demonstration of Foods (H. E. 104)....			3	..
Nutrition (H. E. 102 and 103).....			3	3
Advanced Foods (H. E. 105).....			..	3
General Economics (Econ. 105)	4
Elements of Social Science (Soc. Sci. 101).....			4	..
*Electives			4	4
			<hr/>	<hr/>
			17	17

*See suggested electives for General Home Economics.

SENIOR YEAR	<i>Semester:</i>	<i>I</i>	<i>II</i>
Home Management and Mechanics of the Household (H. E. 107)		3	..
Practice House (H. E. 108)	4
Marketing and Buying (H. E. 106)		3	..
Home Architecture and Interior Decoration (H. E. 119)		3	..
Child Care and Welfare (Ed. 131)	2
Home Nursing (H. E. 109)	2
Institutional Management (H. E. 110)		3	3
*Electives		5	6
		<u>17</u>	<u>17</u>

Textiles and Clothing Curriculum

JUNIOR YEAR	<i>Semester:</i>	<i>I</i>	<i>II</i>
General Bacteriology (Bact. 101)		3	..
Drafting and Elementary Dress Design (H. E. 112)		3	..
Dressmaking (H. E. 113)	3
Millinery (H. E. 115)	3
Nutrition (H. E. 102)		3	..
Chemistry of Textiles (Chem. 118)	3
Elements of Social Science (Soc. Sci. 101)		4	..
Extempore Speaking (P. S. 115-116)		1	1
*Electives		3	7
		—	—
		17	17

SENIOR YEAR	<i>Semester:</i>	<i>I</i>	<i>II</i>
Home Management and Mechanics of the Household (H. E. 107)		3	..
Practice House (H. E. 108)	4
Marketing and Buying (H. E. 106)		3	..
Advanced Clothing (H. E. 114)	2
Art and Handicraft (H. E. 120)	1
Home Architecture and Interior Decoration (H. E. 119)		3	..
Home Nursing (H. E. 109), or Child Care and Welfare (Ed. 131)	2
Social Psychology (Soc. 110)		3	3
*Electives		5	5
		—	—
		17	17

*See suggested electives for General Home Economics.

Suggested Electives

Elements of Psychology (Psychol. 101)	2	2
Public Education in the U. S. (Ed. 101)	2	..
{ Educational Hygiene (Ed. 102) or .....	..	2
{ Educational Psychology (Ed. 103)	3	..
{ Technic of Teaching (Ed. 104) or .....	..	3
{ Methods of Teaching Secondary Vocational Home Economics (Ed. 132 and 133)	3	..
English (Eng. 103-104), or (Eng. 105-106), or Eng. 117-118)	2	2
English (Eng. 102), or (Eng. 107-108), or (Eng. 109-110), or (Eng. 111-112), or (Eng. 113-114), Eng. (115-116)	3	3
History (H. 103 and 104) or (H. 105)	2	2
History (H. 101 and 102) or (H. 110)	3	3
Political Science	2	2
Sociology (Soc. 102), (Soc. 103), (Soc. 105), (Soc. 106), (Soc. 110)	3	3
Economics (Econ. 102), (Econ. 103), (Econ. 104)	3	3
Economics 105 .....	..	4
Foreign Language (adv.) (Span. 103-104), (Fren. 102-103)	3	3
Supervised Teaching Secondary Vocational Home Economics (Ed. 132 and 133) .....	..	..
Vegetable Gardening (Hort. 111)	3	..
Landscape Gardening (Hort. 131)	2	..
General Economics (Econ. 105)	4	..
Bacteriology (Bact. 102, 104)	3	2
Biological Sciences	2-3	2-3
Home Economics Electives .....	..	..

The School of Law

THE FACULTY COUNCIL

HON. HENRY D. HARLAN, A.M., LL.B., LL.D., Dean.

HON. ALFRED S. NILES, A.M., LL.B.

HON. JOHN C. ROSE, LL.B., LL.D.

RANDOLPH BARTON, JR., Esq., A.B., LL.B.

EDWIN T. DICKERSON, Esq., A.M., LL.B., Secretary.

HON. JAMES P. GORTER, A.M., LL.D.

CHARLES MCHENRY HOWARD, Esq., A.B., LL.B.

HON. MORRIS A. SOPER, A.B., LL.B.

The 1924-5 session of the Law School will commence on Monday, September 15, 1924.

While the first faculty of law of the University of Maryland was chosen in 1813, and published in 1817 "A Course of Legal Study Addressed to Students and the Profession Generally," which the North American Review pronounced to be "by far the most perfect system for the study of law which has ever been offered to the public," and which recommended a course of study so comprehensive as to require for its completion six or seven years, no regular school of instruction in law was opened until 1823. This was suspended in 1836 for lack of proper pecuniary support. In 1869 the Law School was organized, and in 1870 regular instruction therein was again begun. From time to time the course has been made more comprehensive and the staff of instructors increased in number. Its graduates now number more than two thousand, and included among them are a large proportion of the leaders of the Bench and Bar of the State and many who have attained prominence in the profession elsewhere.

The Law School Building adjoins the Medical School and part of its equipment is a large library maintained for the use of the students, which contains carefully selected text-books on the various subjects embraced in the curriculum, reports of American and English Courts, digests and standard encyclopedias. No fee is charged for the use of the library. Other libraries also are available for students.

Courses of Instruction

The courses of instruction in the Law School extend through three scholastic years of thirty-five weeks each, with an average of at least ten hours of classroom work each week, and aim to present a general and complete view of the science of law, with reference not only to its

growth by judicial exposition, but also to the principles which have been engrafted upon it by positive enactment. The course of study embraces both the theory and the practice of law, and is designed thoroughly to equip the student for the practice of his profession when he attains the Bar.

Scientific education is afforded in the principles of the Common Law, Equity, the Statutory Law of the State of Maryland and the Public Law of the United States.

The Law School endeavors to uphold a high standard of legal education and it aims to give the student a comprehensive view of the whole field of the law and particularly a knowledge of the fundamentals of American Law, in order to enable him to pass the examination for the Bar, if he has chosen the legal profession for his life work, or to fit him to care properly for his business interests if he desires legal education merely as the accomplishment of the well-equipped man of business or man of culture.

Instruction is given by discussion of assigned cases and by lectures. The lectures are intended to present all the leading principles of the common law applicable to the subject, and the modification of the common law by statute, and to give illustrations of the application of the common and statute law. Special attention is given to the statutes in force in Maryland, and to peculiarities of the law in that State, where there are such; but the reasons for these statutory modifications and local peculiarities are explained so that the student may in a short time acquaint himself with the local peculiarities of the law in any State in which he may practice.

Readings from text-books and adjudicated cases are assigned on the subjects treated in the lectures.

The full course of study extends over three years and as the Faculty is satisfied that students, who have not made considerable progress in the law before entering the Law School, would do themselves and the school an injury by attempting to graduate in a shorter period, no student will be permitted to receive the degree of LL.B. until after three full years of study at this school, or if admitted to advanced standing, until after one year of residence and study at this school.

Requirements for Admission

Applicants for admission to the Law School must present evidence of good moral character and if candidates for the degree of Bachelor of Laws, must have completed at the time of admission to the School a four years' High School Course or its equivalent.

The Faculty Council will consider that students are properly qualified for entrance as candidates for the degree of Bachelor of Laws who have received a bachelor's degree from any reputable college or university, or certificate of graduation from any of the Normal or High Schools of the State of Maryland, or any reputable institution of a similar character, or have certificates showing that they have passed the entrance exami-

nations to one of the principal colleges or universities in Maryland or a college or university maintaining a standard equal thereto. In the absence of such degree or certificate, applicants for admission as a candidate for the degree of Bachelor of Laws must pass satisfactorily the entrance examinations on subjects equivalent to fifteen units, as rated by the State Board of Education.

Matriculation	Tuition	Laboratory	Graduation
\$10.00 (once only)	\$125.00	.....	\$10.00

The fees appearing above may be modified in the annual catalog to be issued later by this school.

Further information and a special catalogue of the School of Law may be had upon application to W. M. Hillegeist, Registrar, Lombard and Greene Streets, Baltimore, Md.

The School of Medicine

AND

COLLEGE OF PHYSICIANS AND SURGEONS

J. M. H. ROWLAND, M. D., Dean.

MEDICAL COUNCIL

- ARTHUR M. SHIPLEY, M.D., Sc.D.
- GORDON WILSON, M.D.
- HARRY FRIEDENWALD, A.B., M.D.
- WILLIAM S. GARDNER, M.D.
- STANDISH McCLEARY, M.D.
- JULIUS FRIEDENWALD, A.M., M.D.
- J. M. H. ROWLAND, M.D.
- ALEXIUS McGLANNAN, A.M., M.D.
- BARTGIS McGLONE, A.B., Ph.D.
- HUGH R. SPENCER, M.D.
- H. BOYD WYLIE, M.D.
- CARL L. DAVIS, M.D.
- WILLIAM H. SCHULTZ, Ph.B., Ph.D.
- MAURICE C. PINCOFFS, S.B., M.D.

BOARD OF INSTRUCTION

EMERITUS PROFESSORS

- RANDOLPH WINSLOW, A.M., M.D., LL.D.....Surgery
- SAMUEL K. MERRICK, M.D.....Rhinology and Laryngology
- HIRAM WOODS, A.M., M.D.....Ophthalmology and Otology
- CHARLES G. HILL, A.M., M.D.....Psychiatry
- A. C. POLE, M.D.....Anatomy
- J. FRANK CROUCH, M.D.....Clinical Ophthalmology and Otology
- CHARLES O'DONOVAN, A.M., M.D., LL.D..Clinical Medicine and Pediatrics
- JOHN R. WINSLOW, A.B., M.D.....Rhinology and Laryngology
- EDWARD N. BRUSH, M.D.....Psychiatry
- JOHN C. HEMMETER, M.D., Ph.D., Sc.D., LL.D.....Clinical Medicine
- L. E. NEALE, M.D., LL.D.....Obstetrics

ARTHUR M. SHIPLEY, M.D., Sc.D., Professor of Surgery.
 GORDON WILSON, M.D., Professor of Medicine.
 WILLIAM ROYAL STOKES, M.D., Sc.D., Professor of Bacteriology.
 HARRY FRIEDENWALD, A.B., M.D., Professor of Ophthalmology and Otology.
 ARCHIBALD C. HARRISON, M.D., Professor of Surgery.
 CARY B. GAMBLE, JR., A.M., M.D., Professor of Medicine.
 WILLIAM S. GARDNER, M.D., Professor of Gynecology.
 STANDISH MCCLEARY, M.D., Professor of Pathology and Clinical Medicine.
 JULIUS FRIEDENWALD, A.M., M.D., Professor of Gastro-Enterology.
 J. M. H. ROWLAND, M.D., Professor of Obstetrics and Dean of the Faculty.
 ALEXIUS MCGLANNAN, A.M., M.D., Professor of Surgery.
 BARTGIS MCGLONE, A.B., Ph.D., Professor of Physiology.
 H. R. SPENCER, M.D., Professor of Pathology.
 H. BOYD WYLIE, M.D., Professor of Biological Chemistry.
 CARL L. DAVIS, M.D., Professor of Anatomy.
 WM. H. SCHULTZ, Ph.B., Ph.D., Professor of Pharmacology.
 MAURICE C. PINCOFFS, S.B., M.D., Professor of Medicine.
 GEORGE W. DOBBIN, A.B., M.D., Professor of Obstetrics.
 THOMAS C. GILCHRIST, M.R.C.S., L.S.A., M.D., Professor of Dermatology.
 G. MILTON LINTHICUM, A.M., M.D., Professor of Diseases of the Rectum and Colon.
 W. B. PERRY, M.D., Professor of Clinical Gynecology.
 TILGHMAN B. MARDEN, A.B., M.D., Professor of Histology and Embryology.
 J. MASON HUNDLEY, M.D., Professor of Clinical Gynecology.
 R. TUNSTALL TAYLOR, A.B., M.D., Professor of Orthopedic Surgery.
 JOS. E. GICHNER, M.D., Professor of Clinical Medicine and Physical Therapeutics.
 CHARLES W. McELFRESH, M.D., Professor of Clinical Medicine.
 IRVING J. SPEAR, M.D., Professor of Neurology and Clinical Psychiatry.
 C. HAMPSON JONES, M.D., C.M. (Edinburgh), M.D., Professor of Hygiene and Public Health.
 JOHN RUHRAH, M.D., Professor of Pediatrics.
 CHARLES F. BLAKE, A.M., M.D., Professor of Proctology.
 FRANK DYER SANGER, M.D., Professor of Diseases of Throat and Nose.
 S. GRIFFITH DAVIS, A.B., M.D., Professor of Anaesthesia.
 G. CARROLL LOCKARD, M.D., Professor Clinical Medicine.
 CHARLES E. BRACK, Ph.G., M.D., Professor of Clinical Obstetrics.
 HARVEY G. BECK, M.D., Sc.D., Professor of Clinical Medicine.
 ALBERTUS COTTON, A.M., M.D., Professor of Orthopedic Surgery and Roentgenology.
 ANDREW C. GILLIS, A.M., M.D., Professor of Neurology and Clinical Psychiatry.
 JOSEPH H. BRANHAM, M.D., Professor of Clinical Surgery.
 BERNARD PURCELL MUSE, M.D., Professor of Clinical Obstetrics.
 CHARLES L. SUMMERS, M.D., Professor of Pediatrics.
 ANTON G. RYTINA, A.B., M.D., Professor of Genito-Urinary Diseases.

HENRY J. WALTON, M.D., Professor of Roentgenology.
 R. M. CHAPMAN, M.D., Professor of Psychiatry.
 NATHAN WINSLOW, A.M., M.D., Clinical Professor of Surgery.
 PAGE EDMUNDS, M.D., Clinical Professor of Industrial Surgery.
 WALTER D. WISE, M.D., Clinical Professor of Surgery.
 EDGAR B. FRIEDENWALD, M.D., Clinical Professor of Pediatrics.
 COMPTON RIELY, M.D., Clinical Professor of Orthopedic Surgery.
 W. S. SMITH, M.D., Clinical Professor of Gynecology.
 JOSEPH W. HOLLAND, M.D., Clinical Professor of Surgery.
 E. B. FREEMAN, B.S., M.D., Clinical Professor of Gastro-Enterology.
 J. C. LUMPKIN, M.D., Clinical Professor of Surgery.
 T. FRED LEITZ, M.D., Clinical Professor of Gastro-Enterology.
 J. W. DOWNEY, M.D., Clinical Professor of Otology.
 EDWARD A. LOOPER, M.D., D.Oph., Clinical Professor of Diseases of Nose and Throat.
 SYDNEY M. CONE, A.B., M.D., Associate Professor of Pathology.
 HUGH BRENT, M.D., Associate Professor of Gynecology.
 MELVIN ROSENTHAL, M.D., Associate Professor of Dermatology.
 ABRAHAM SAMUELS, Ph.G., M.D., Associate Professor of Gynecology.
 GEORGE W. MITCHELL, M.D., Associate Professor of Diseases of Throat and Nose.
 LEWIS J. ROSENTHAL, M.D., Associate Professor of Proctology.
 C. C. CONSER, M.D., Associate Professor of Physiology.
 H. J. MALDEIS, M.D., Associate Professor of Medical Jurisprudence.
 J. DAWSON REEDER, M.D., Associate Professor of Proctology.
 H. C. BLAKE, M.D., Associate Professor of Clinical Surgery.
 FRANK S. LYNN, M.D., Associate Professor of Surgery.
 G. M. SETTLE, A.B., M.D., Associate Professor of Neurology and Clinical Medicine.
 C. C. W. JUDD, A.B., M.D., Associate Professor of Medicine.
 ELLIOTT H. HUTCHINS, A.B., M.D., Associate Professor of Surgery.
 THOMAS R. CHAMBERS, A.B., M.D., Associate Professor of Surgery.
 R. W. LOCHER, M.D., Associate Professor of Operative and Clinical Surgery.
 H. D. McCARTY, M.D., Associate Professor of Clinical Medicine.
 O. GLENN HARNE, A.B., Associate Professor of Pharmacology.
 JOHN EVANS, M.D., Associate Professor of Roentgenology.
 CLYDE A. CLAPP, M.D., Associate Professor of Ophthalmology.
 F. W. HACHTEL, M.D., Associate Professor of Bacteriology.
 WM. J. CARSON, M.D., Associate Professor of Pathology.
 WILLIAM H. SMITH, M.D., Associate Professor of Clinical Medicine.
 PAUL W. CLOUGH, B.S., M.D., Associate Professor of Medicine.
 SIDNEY R. MILLER, A.B., M.D., Associate Professor of Medicine.
 L. H. DOUGLASS, M.D., Associate Professor of Obstetrics.
 M. RANDOLPH KAHN, M.D., Associate Professor of Ophthalmology.

J. MCFARLAND BERGLANDS, M.D., Associate Professor of Obstetrics.
S. LLOYD JOHNSON, A.B., M.D., Assistant Professor of Medicine.
C. L. JOSLIN, M.D., Assistant Professor of Pediatrics.

The School of Medicine of the University of Maryland is one of the oldest foundations for medical education in America, ranking fifth in point of age among the medical colleges of the United States. In the school building at Lombard and Greene Streets in Baltimore was founded one of the first medical libraries and the first medical college library in America.

Here for the first time in America dissecting was made a compulsory part of the curriculum; here instruction in Dentistry was first given (1837), and here were first installed independent chairs for the teaching of diseases of women and children (1867), and of eye and ear diseases (1873).

This School of Medicine was one of the first to provide for adequate clinical instruction by the erection in 1823 of its own hospital, and in this hospital intramural residency for senior students first was established.

Clinical Facilities

The University Hospital, property of the University, is the oldest institution for the care of the sick in Maryland. It was opened in September, 1823, and at that time consisted of four wards, one of which was reserved for eye cases.

Besides its own hospital, the Medical School has control of the clinical facilities of the Mercy Hospital, in which were treated last year more than 30,000 persons.

In connection with the University Hospital an outdoor obstetrical clinic is conducted. During the past year about 1200 cases were treated in the hospital and outdoor clinic.

The hospital now has about 275 beds—for medical, surgical, obstetrical, and special cases, and furnishes an excellent supply of clinical material for third and fourth year students.

Dispensaries and Laboratories

The dispensaries associated with the University Hospital and Mercy Hospital are organized on a uniform plan in order that teaching may be the same in each. Each dispensary has departments of Medicine, Surgery, Children, Eye and Ear, Genito-Urinary, Gynecology, Gastro Enterology, Neurology, Orthopedics, Proctology, Dermatology, Throat and Nose, and Tuberculosis. All students in their junior year work one day of each week in one of these dispensaries; all students in the senior year work one hour each day. About 89,000 cases treated last year give an idea of the value of these dispensaries for clinical teaching.

Laboratories conducted by the University purely for medical purposes are the Anatomical, Chemical, Experimental Physiology, Physiological Chemistry, Histology and Embryology, Pathology and Bacteriology, and Clinical Pathology.

Prizes and Scholarships

To stimulate study among the candidates for graduation the Faculty of the School of Medicine offers a gold medal to the candidate who passes the best general examination. Certificates of Honor are awarded to the five candidates standing next highest.

A prize of \$50 is given each year by Mrs. Jose L. Hirsch as a memorial to the late Dr. Jose L. Hirsch, former Professor of Pathology in this School, and is awarded to the student in the third year who has done the most satisfactory work in Pathology.

The Dr. Samuel Leon Frank Scholarship was established by Mrs. Bertha Frank as a memorial to the late Dr. Samuel Leon Frank, an alumnus of the University, and entitles the holder to exemption from payment of one-half of the tuition fee for the year. It is awarded each year upon the nomination of the Faculty "to a medical student who in the judgment of the said Faculty is of good character and in need of pecuniary assistance to continue his medical course."

From a bequest to the School of Medicine by the late Charles M. Hitchcock, M. D., an alumnus of the University, two scholarships have been established which entitle the holders to exemption from payment of one-half of the tuition fees for the year.

These scholarships are awarded annually by the Faculty of Physic to students who have meritoriously completed the work of at least the first year of the curriculum in medicine, and who present to the Faculty satisfactory evidence of good moral character and of inability to continue the course without pecuniary assistance.

The Randolph Winslow Scholarship, established by Prof. Randolph Winslow, M.D., LL.D., entitles the holder to exemption from the payment of one-half of the tuition fee of that year.

It is awarded annually by the Trustees of the Endowment Fund of the University, upon nomination of the Faculty of Physic, to "a needy student of the senior, junior or sophomore class of the Medical School. He must have maintained an average grade of 85 per cent in all his work up to the time of awarding the scholarship. He must be a person of good character and must satisfy the Faculty of Physic that he is worthy of and in need of assistance."

The University scholarship entitles the holder to exemption from payment of the tuition fee of the year and is awarded annually by the Faculty of Physics to a student of the senior class who presents to the Faculty satisfactory evidence that he is of good moral character and is worthy of and in need of assistance to complete his work.

The St. John's College scholarship is awarded annually by the Faculty of Physic upon the nomination of the president of St. John's College, of Annapolis, Md.

It entitles the holder to exemption from the payment of the tuition fee of that year.

The Frederica Gehrman Scholarship was established by bequest of the

late Mrs. Frederica Gehrman and entitles the holder to exemption from payment of tuition fees. This scholarship is awarded to a second-year student who at the end of the year passes the best practical examination in Anatomy, Physiology, Physiological Chemistry and Pharmacology. This examination is competitive.

The Dr. Leo Karlinsky Scholarship, established by Mrs. Leo Karlinsky in memory of her husband, Dr. Leo Karlinsky, entitles the holder to exemption from payment of tuition fee of that year to the extent of \$200.00. It is awarded annually by the Trustees of the Endowment Fund of the University upon nomination of the Medical Council, "to a needy student of the senior, junior or sophomore class of the Medical School. He must have maintained an average grade of 85 per cent in all his work up to the time of awarding the scholarship. He must be a person of good character and must satisfy the Medical Council that he is worthy of and in need of assistance."

Requirements for Entrance

Admission to the curriculum in medicine is by a completed Medical Student Certificate issued by the Registrar of the University. This certificate is obtained on the basis of satisfactory credentials, or by examination and credentials, and is essential for admission to any class.

The requirements for the issuance of the Medical Student Certificate are:

- (a) The completion of a standard four-year high school course or the equivalent, and in addition,
- (b) Two years, sixty semester, or ninety trimester hours, of college credits, including chemistry, biology, physics and English.

Women are admitted to the Medical School of this University.

Fees and Expenses

Following are the fees for students in the Medical School:

Matriculation	Tuition		Laboratory	Graduation
	Resident	Non-Resident		
\$10.00 (once only)	\$250.00	\$300.00	\$10.00 (yearly)	\$10.00

Estimated living expenses for students in Baltimore:

ITEMS	Estimated living expenses for students in Baltimore:		
	Low	Average	Liberal
Books	\$27	\$48	\$75
College incidentals	20	20	20
Board, eight months.....	200	322	400
Room rent	64	80	100
Clothing and laundry.....	50	80	150
All other expenses.....	25	50	75
*Total	\$386	\$600	\$820

*Students take the pre-medical work at College Park, for which there is no charge for tuition and for which other expenses are detailed in the first part of the catalogue.

Department of Military Science and Tactics

R. H. LEAVITT, Professor.

RESERVE OFFICERS' TRAINING CORPS

The work in this department is based upon the provisions of Special Regulations, No. 44, War Department, 1921.

Authorization

An infantry unit of the Senior Division of the Reserve Officers' Training Corps was established at the University under the provisions of the Act of Congress of June 3, 1916, as amended by the acts of June 3, 1916, and September 8, 1916.

Object

The primary object of the Reserve Officers' Training Corps is to provide systematic military training at civil educational institutions for the purpose of qualifying selected students of such institutions as reserve officers in the military forces of the United States. It is intended to attain this object during the time that students are pursuing their general or professional studies with the least practical interference with their civil careers, by employing methods designed to fit men, physically, mentally and morally for pursuits of peace as well as pursuits of war. It is believed that such military training will aid greatly in the development of better citizens.

Required to Take Instruction

All male students, if citizens of the United States whose bodily condition indicates that they are physically fit to perform military duty or will be upon arrival at military age, whether pursuing a four-year or a two-year course of study, are required to take for a period of two years, as a prerequisite to graduation, the military training required by the War Department.

Advanced Work

Students who complete the Basic Course satisfactorily and who are recommended by the Professor of Military Science and Tactics, and whose application is approved by the President, may continue their military training for a period of two years in the Advanced Course.

Time Allotted

For first and second year, basic course, three periods a week of not less than one hour each are devoted to this work, of which at least one hour is utilized for theoretical instruction.

For third and fourth years, advanced courses, elective, five periods a

week of not less than one hour each are devoted to this work, of which at least three periods are utilized for theoretical instruction.

Physical Training

Physical training forms an important part in military instruction, and it is the policy of the Military Department to encourage and support the physical training given by civilian teachers, thus co-operating in an effort to promote a vigorous manhood.

Physical Examination

All members of the Reserve Officers' Training Corps are required to be examined physically at least once after entering the University.

Uniforms

Members of the Reserve Officers' Training Corps must appear in proper uniforms at all military formations and at other specified times.

Uniforms, or commutation in lieu of uniforms for the Reserve Officers' Training Corps, will be furnished free by the Government. The uniforms are the regulation uniforms of the United States Army, with certain distinguishing features, or if commutation of uniforms is furnished, then such uniform as may be adopted by the University. Such uniforms must be kept in good condition by the student. They are the property of the Government and, though intended primarily for use in connection with military instruction, may be worn at any other time unless the regulations governing their use are violated. The uniform cannot be worn in part. Uniforms which are furnished by the Government will be returned to the Military Department at the end of the year or before, if the student leaves the University. In case commutation of uniforms is furnished, the uniform becomes the property of the student upon completion of two years' work.

Commutation

Those students who elect the advanced course and who have signed the contract with the Government to continue in the Reserve Officers' Training Corps for the two remaining years of the advanced course are entitled to commutation of subsistence from and including the date of contract until they complete the course at the institution.

Summer Camps

An important and excellent feature of the Reserve Officers' Training Corps is the summer camp. In specially selected parts of the country camps are held for a period not exceeding six weeks for students who are members of the Reserve Officers' Training Corps. These camps are under the strict supervision of army officers and are intended primarily to give a thorough and comprehensive practical course of instruction in the different arms of the service.

Parents may feel assured that their sons are carefully watched and safeguarded. Wholesome surroundings and associates, work and healthy recreation are the keynote to contentment. Social life is not neglected and the morale branch exercises strict censorship over all social functions.

The attendance at summer camps is compulsory only for those students who are taking the advanced course. The War Department recommends that as many basic students as possible attend the summer camps.

The students who attend the summer camps are under no expense. The Government furnishes transportation from the institution to the camp and from the camp to the institution, or to the student's home, unless the mileage is greater than that from the camp to the institution. In this case, the amount of mileage from the camp to the institution is allowed the student. Quarters and food are furnished. The Advanced Course men, in addition to receiving quarters and food, are paid seventy cents (\$0.70) for each day spent in camp.

Commissions

(a) Each year upon completion of the Advanced Course, students qualified for commissions in the Reserve Officers' Corps will be selected by the head of the institution and the professor of Military Science and Tactics.

(b) The number to be selected from each institution and for each arm of the service will be determined by the War Department.

Credits

Military instruction at this University is on a par with other university work and the requirements of this department are proficiency the same as with other departments.

Students who have completed satisfactorily the prescribed training with a unit of the S. A. T. C. may be credited with one year of the Basic Course prescribed for the R. O. T. C., and those students who have received military training at any educational institution under the direction of an army officer detailed as professor of military science and tactics may receive credit for instruction equivalent to that given in the senior division R. O. T. C., if over fourteen years of age.

School of Nursing

FACULTY AND INSTRUCTORS

Superintendent of Nurses and Director of School of Nursing
ANNIE CREIGHTON, R. N.

Assistant Superintendent of Nurses
STELLA U. RICKETTS, R. N.

Instructor in Nursing
JANET NESBIT SMITH, R. N.

Instructor in Nursing and Supervisor of Wards
LOUISE SAVAGE, R. N.

Assistant Instructor in Nursing and Supervisor of Wards,
GRACE L. ELGIN, R. N.

Instructor in Surgical Technique for Nurses and
Supervisor of Operating Pavilion
ELIZABETH AITKENHEAD, R. N.

Instructor in Dietetics
JANET WHITNEY

Instructor in Massage
EDITH WALTON

Instructor in Social Service
GRACE PEARSON, R. N.

RUTH CLEMENT, R. N.....Night Supervisor.
MARY E. ROLPH, R. N.....Supervisor—Nurses Home.
JANE MOFFATT, R. N.....Supervisor—Dispensary.
FRANKIE MORRISON, R. N.....Head Nurse—Obstetrical Ward.
MARGARET LAUPER, R. N.....Head Nurse—Men's Medical
Ward.
BESSIE MASTON, R. N.....Head Nurse—Men's Surgical
Ward.
MARY JONES, R. N.....Head Nurse—Accident Ward.
IDA NAGEL, R. N.....Head Nurse—Women's Medical,
Surgical and Gynecological
Ward.
ELIZABETH MARSH, R. N.....Head Nurse—Private Hall.

LECTURERS FROM THE SCHOOL OF MEDICINE

Anatomy and Physiology
JOSEPH W. HOLLAND, M.D.

Bacteriology
F. W. HACHTEL, M.D.

Materia Medica
C. C. HABLSTON, M.D.

Medicine
MAURICE C. PINCOFFS, M.D.
LOUIS KRAUSE, M.D. H. M. STEIN, M.D.

Surgery
ARTHUR M. SHIPLEY, M.D.

Obstetrics
L. H. DOUGLAS, M.D.

Gynecology
HUGH BRENT, M.D.

Pediatrics
CHARLES L. SUMMERS, M.D.

Psychiatry and Neurology
G. M. SETTLE, M.D.

Skin and Venereal Diseases
HARRY M. ROBINSON, M.D.

Otology and Ophthalmology
HARRY FRIEDENWALD, M.D.

Laryngology and Rhinology
E. A. LOOPER, M.D.

Orthopedic Surgery
R. TUNSTALL TAYLOR, M.D.

Chemistry
W. T. WILLEY, M.D. FRANK N. OGDEN, M.D.

General Statement

The University of Maryland School for Nurses was established in the year 1889.

Since that time it has been an integral part of the University of Maryland Hospital.

The school is non-sectarian, the only religious services being morning prayers.

The University of Maryland Hospital is a general hospital containing

about 285 beds. It is equipped to give young women a thorough course of instruction and practice in all phases of nursing including experience in the operating room.

The school offers the student nurse unusual advantages in its opportunity for varied experience and in its thorough curriculum taught by well qualified instructors and members of the medical staff of the University.

Admission Requirements

In order to become a candidate for admission to the Training School, application must be made in person or by letter, to the superintendent of nurses. An application by letter should be accompanied by a statement from a clergyman testifying to good moral character and from a physician certifying to sound health and unimpaired faculties. No person will be considered who is not in a good physical condition between the ages of 18 and 35. She must also show that she has a high school education or its equivalent. This is the minimum requirement, for women of superior education and culture are given preference provided they meet the requirements in other particulars.

The fitness of the applicant for the work and the propriety of dismissing or retaining her at the end of her term of probation, is left to the decision of the superintendent of nurses. Misconduct, disobedience, insubordination, inefficiency, or neglect of duty are causes for dismissal at any time by the superintendent of nurses with the approval of the president of the University.

TIME: Students are admitted in February, June and September.

HOURS ON DUTY: During the probation term the students are on duty not more than six hours daily. During the Junior, Intermediate and Senior years, the students are on eight hour day duty, with six hours on Sunday and holidays, and ten hour night duty. The night duty periods are approximately two months each, with one day at the termination of each term for rest and recreation. The period of night duty is approximately five or six months during the three years.

SICKNESS: A physician is in attendance each day, and when ill all students are cared for gratuitously. The time lost through illness in excess of two weeks, during the three years must be made up. Should the authorities of the school decide that through the time lost the theoretical work has not been sufficiently covered to permit the student to continue in that year, it will be necessary for her to continue her work with the next class.

VACATIONS: Vacations are given between June and September. A period of three weeks is allowed the student at the completion of first and second years.

EXPENSE: A student receives her board, lodging and a reasonable amount of laundry from the date of entrance. During her period of

probation she provides her own uniforms made in accordance with the hospital regulations. After being accepted as a student nurse she wears the uniform furnished by the hospital. The student is also provided with text-books and in addition to this is paid five dollars (\$5.00) a month. Her personal expenses during the course of training and instruction will depend entirely upon her individual habits and tastes.

General Plan of Instruction

The course of instruction covers a period of three years.

Junior Year

The Junior Year is divided into two periods. The first term is the preparatory period (4 mos.) and the second the junior term.

In the preparatory term the student is given practical instruction in:—

Junior Year—First Term

1. The making of hospital and surgical supplies. The cost of hospital materials, apparatus and surgical instruments.
2. Household economics and the preparation of foods.
3. The hospital outpatients department and dispensary.

During this term the practical work is done under constant supervision, and teaching is given correlatively.

Excursions are made to markets, hygienic dairies, linen rooms, laundry and store room.

The maximum number of hours per week in formal instruction divided into lecture and laboratory periods is thirty hours and includes courses in anatomy and physiology, dietetics, materia medica, personal hygiene, drugs and solutions, household economics, short course in ethics and history of nursing.

At the close of the first half of junior year the students are required to pass satisfactorily both the written and oral tests, and failure to do so will be sufficient reason to terminate the course at this point.

Subsequent Course

The course of instruction, in addition to the probationary period, occupies two and three-fourth years, and students are not accepted for a shorter period.

After entering the wards, the students are constantly engaged in practical work under the immediate supervision and direction of the head nurses and instructors.

Throughout the three years, regular courses of instruction and lectures are given by members of the medical and nursing school faculties.

Junior Year—Second Term

During this period the students receive theoretical instruction in massage, general surgery and general medicine. Practical instruction is received in the male and female, medical, surgical and children's wards.

Intermediate Year

During this period the theoretical instruction includes pediatrics, infectious diseases, obstetrics and gynecology. The practical work provides experience in the nursing of obstetrical and gynecological patients in the operating rooms and the outpatient department.

Senior Year

During this period the student receives short courses of lectures on subjects of special interest. This includes a consideration of the work of institutions of public and private charities, of settlements, and various branches of professional work in nursing.

Experience is given in executive and administration work to those showing exceptional ability in the senior year. With these students conferences are held on administration and teaching problems.

GRADUATION. The diploma of the school will be awarded to those who have completed satisfactorily the full term of three years, and have passed successfully the final examinations.

SCHOLARSHIPS. One scholarship has been established by the alumnae of the training school. It entitles a nurse to six weeks course at Teachers College, New York. This scholarship is awarded at the close of the third year to the student whose work has been of the highest excellence, and who desires to pursue post-graduate study and special work.

An alumnae pin is presented by the Woman's Auxiliary Board to the student who at the completion of three years shows exceptional executive ability.

The School of Pharmacy

FACULTY

E. F. KELLY, Phar. D., *Dean.*

B. OLIVE COLE, Phar. D., LL.B., *Secretary*

PHARMACY—

E. F. KELLY, Phar. D., Professor of Pharmacy.

J. CARLTON WOLF, B.Sc., Phar. D., Professor of Dispensing.

JOHN C. KRANTZ, JR., Ph. C., Phar. B., Associate Professor of Pharmacy.

LOUIS J. BURGER, Phar. G., LL.B., Lecturer on Pharmaceutical Jurisprudence.

WM. L. REINDOLLAR, Phar. G., Assistant in Pharmacy.

STANLEY L. CAMPBELL, Phar. G., Assistant in Dispensing.

MATERIA MEDICA—

DAVID M. R. CULBRETH, A.M., Phar. G., M.D., Professor Emeritus of Botany and Materia Medica.

CHAS. C. PLITT, Phar. G., Sc.D., Professor of Botany and Materia Medica.

B. OLIVE COLE, Phar. D., LL.B., Associate Professor of Botany and Materia Medica.

CHEMISTRY—

NEIL E. GORDON, Ph.D., Professor of Chemistry.

H. E. WICH, Phar. D., Associate Professor of Chemistry.

MARVIN JACKSON ANDREWS, Ph.C., Assistant in Chemistry.

PHYSIOLOGY and HYGIENE and BACTERIOLOGY—

ROBT. L. MITCHELL, Phar. D., M.D., Professor of Physiology and Hygiene, and Bacteriology.

H. J. MALDEIS, M.D., Associate Professor of Bacteriology.

GENERAL EDUCATIONAL SUBJECTS—

W. E. CUTCHIN, Phar.D., LL.B., Professor of Business Administration.

R. G. FROUNICK, A.B., Instructor in Modern Languages.

J. H. SCHAD, M.A., Instructor in Mathematics.

F. M. LEMON, A.M., Assistant Professor of English.

E. E. ERICKSON, B.A., Assistant in English.

C. G. EICHLIN, M.S., Professor of Physics.

R. W. AUSTERMANN, Ph.B., Instructor in Physics.

GEO. S. SMARDON, Comptroller.

W. M. HILLEGEIST, Registrar.

The school of Pharmacy was organized in 1841, largely at the instance of members of the Faculty of Medicine, and, for a time, the lectures were delivered at the Medical School. Later it became separated and continued an independent organization, as the Maryland College of Pharmacy, until it finally became part of the University in 1904. With but one short intermission, previous to 1865, it has continuously exercised its functions as a teaching school of pharmacy.

Location

The School of Pharmacy is located at the northeast corner of Lombard and Greene Streets, with the Schools of Medicine, Law and Dentistry.

Policy and Degrees

The chief purpose of this college has been to prepare its matriculants for the intelligent practice of dispensing pharmacy, without overlooking the fact that there exist other divisions of the profession and that all need to be scientifically taught. With this in view, the School of Pharmacy has arranged a graded course, so that it may, first, build for the student a well ordered foundation, upon which the pharmaceutical specialist can be developed. Upon completion of the first two years of the course, the diploma of Graduate in Pharmacy (Ph.G.) is awarded, which admits the holder to the board examinations in the various states for registration as a pharmacist. In this basic division of the course, in addition to the work as specified in the Pharmaceutical Syllabus, general educational subjects are included, sufficient to give the successful students full collegiate credit, and they become eligible for admission into the Medical School of the University of Maryland upon further completion of six semester hours in Zoology.

The diploma of Pharmaceutical Chemist (Ph. C.) will be awarded upon the completion of the work prescribed for the third year of the course.

In accordance with the decision of the American Conference of Pharmaceutical Faculties to discontinue the two year course in 1925, the diploma of Graduate in Pharmacy will be given to students registering in 1925 and thereafter, until further notice, upon the completion of three years of the course as then outlined, and the diploma of Pharmaceutical Chemist will then be discontinued.

The degree of Bachelor of Pharmacy will be given upon completion of the work prescribed for the entire course of four years.

Recognition

This school holds membership in the American Conference of Pharmaceutical Faculties. The object of the Conference is to promote the interests of pharmaceutical education and all institutions holding membership must maintain certain minimum requirements for entrance and graduation. Through the influence of this Conference uniform and higher standards of education have been adopted from time to time and the fact that several states by law or by Board ruling recognize the standards of the Conference is evidence of its influence.

This school is registered in the New York Department of Education, and by the Boards of Pharmacy of Ohio and other states that maintain a registration bureau.

Its diploma is recognized in all states.

Requirements for Matriculation

The applicant must have completed a four-year standard high school course, or its equivalent. A minimum age of seventeen years is demanded except when the candidate is a graduate of an accredited high school or of an institution of equal grade.

Admission to the course in pharmacy is by certificate issued by the Registrar of the University of Maryland, Lombard and Greene Streets, Baltimore, Md. The certificate is issued on the basis of credentials, or by examination, or both.

Applicants whose credentials do not meet the requirements must stand an examination in appropriate subjects to make up the required number of units. The fee for such examination is one dollar per subject; five dollars for the entire number of subjects.

Credit will be given for first year pharmaceutical subjects to those students coming from schools of pharmacy holding membership in the American Conference of Pharmaceutical Faculties, provided they present a proper certificate of the satisfactory completion of such subjects and meet the entrance requirements of this school. Credit for general educational subjects will be given to those students presenting evidence of having completed work of equal value.

Requirements for Graduation

1. The candidate must possess a good moral character.
2. He or she must have successfully completed the work specified in the first two years of the course if a candidate for the Graduate in Pharmacy (Ph.G.) diploma; or three years if a candidate for the Pharmaceutical Chemist (Ph.C.) diploma; in each instance the last year to be taken in this school.

Table of Fees

Matriculation	Tuition		Laboratory \$10.00 (yearly)	Graduation \$10.00
	Resident	Non-Resident		
\$10.00 (once only)	\$200.00	\$250.00		

Matriculation and Registration

The Matriculation Tickets must be procured from the office of the School of Pharmacy, and must be taken out before entering the classes. All students after proper certification are required to register at the Office of the Registrar. The last date of registration is October 11th.

Payments

Tuition for the first semester and breakage fee shall be paid to the Comptroller at the time of registration; and tuition for the second semester and graduation fee (returned in case of failure) on or before February 1, 1924.

A special bulletin of the course in Pharmacy may be obtained by addressing the School of Pharmacy, University of Maryland, Baltimore, Md.

Department of Physical Education and Recreation

H. C. BYRD, Director

The Department of Physical Education and Recreation has been organized to control all physical training, recreation, intramural and intercollegiate athletics. All work is closely co-ordinated and the ideal is to see that every man in the institution gets opportunities to take part in competitive sports. The plan under which the department is to operate may be summed up as follows:

1. A series of exercises arranged for every student in the institution and compulsory for all, the exercises to be based on mass exercises common in Germany and Scandinavian countries. Neither the German nor Scandinavian system is to be used in its entirety, but a combination of the heavy gymnastic drills of the former with the lighter squad drills of the latter. All students will be given physical examination and placed in various classes according to their individual physical needs. Students will receive different kinds of work and be encouraged to take part in those games which provide the exercise of which they are most in need.

2. A general system of intramural athletics is carried out under a regular schedule with teams representing different units of the University. All students take part in one or more of these branches of sport and the University encourages enough sports to give each an opportunity. It is the aim of each class to have its own wrestling team, basket-ball team, baseball team, volley-ball team, track team, and so on for just as many teams as there are students to fill the positions. The games between these teams are carried out with regularity of schedule and supervision. Besides these, there are general competitions such as cross-country runs and interclass track meets in which representatives of all classes may compete at the same time. A regular playground is in process of construction on which will be available tennis courts, volley-ball courts, tether ball polls, stakes for pitching quoits, etc.

3. All physical training of the students, including mass exercises, intramural sports, intercollegiate competitions, and military training, are a part of the general educational system of the University.

For the present practically all general training, such as comes under the head of gymnastics and squad exercises, is conducted under the direction of the Military Department.

The new gymnasium and stadium add greatly to the facilities for general athletics and physical education. Combined they give the University the most modern plant in the South.

Summer School

WILLARD S. SMALL, Director.

A summer session of six weeks is conducted at College Park. The program is designed to serve the needs of three classes of students: teachers and supervisors of the several classes of school work—elementary, secondary, and vocational; special students, as farmers, breeders, dairymen, home makers, chemists, public speakers, graduate students; and students who are candidates for degrees in agriculture, arts and science, education, engineering and home economics.

Terms of Admission

Teachers and special students not seeking a degree are admitted without examination to the courses of the summer session for which they are qualified. All such selection of courses, however, must be approved by the Director of the Summer School.

The admission requirements for those who desire to become candidates for degrees are the same as for any other session of the University. Before registering, a candidate for a degree will be required to consult the Dean of the School in which the candidate wishes to secure the degree.

Credits and Certificates

The semester hour is the unit of credit as in other sessions of the University. A semester credit hour is one lecture or recitation a week for a semester. Two or three hours of laboratory or field work are counted as equivalent to one lecture or recitation. During the summer session a lecture course meeting five times a week for six weeks requiring the standard amount of outside work, is given a weight of two semester hours, or one year hour. All credit is listed as semester credit hours.

Educational courses satisfactorily completed will be credited by the State Superintendent of Schools toward meeting the minimum requirements of professional preparation as follows:

- (1) For teaching in the elementary schools of the State, viz., at least six weeks' attendance at a school of pedagogy; a renewal of elementary teachers' certificates which requires six weeks' additional professional training for those of second and third grade; to meet the requirement for advancing the grade of elementary teachers' certificates.
- (2) For teaching in high schools of the State and for renewal of high school certificates.
- (3) For teachers of vocational agriculture and home economics and the renewal of vocational teachers' certificates.
- (4) For high school principalships.
- (5) For supervisorships.

Summer Graduate Work

Special arrangements have been made for persons wishing to do graduate work in summer. Teachers and other graduate students working for a degree on the summer plan must meet the same requirements and proceed in the same way as do students enrolled in the other sessions of the University.

For detailed information in regard to the summer session consult the special summer school announcement issued annually in April.

Courses of Instruction

The purpose of this section is to offer an explanation of the subject matter of the various courses of instruction offered at College Park.

The subjects are listed alphabetically for convenience of persons using the catalogue.

The following list shows the College in which particular subject is offered:

College of Agriculture	Page
Agricultural Economics	141-142
Agricultural Engineering	142-143
Agronomy	143-144
Animal Husbandry	144-146
Bacteriology	146-147
Biochemistry	195
Dairy Husbandry	156-158
Entomology and Bee Culture.....	176
Farm Forestry	177
Farm Management	178
Geology	178
Horticulture	182-187
Plant Pathology	193
Plant Physiology	194-195
Poultry Husbandry	197-198
Soils	202-203
Veterinary Medicine	204

College of Arts and Sciences	Page
Astronomy	146
Botany	147-148
Chemistry	148-155
Economics	158
English Language and Literature.....	173-176
French	178
German	179
Greek	179
History	179-180
Latin	188
Library Science	188-189
Mathematics	189-190
Music	192
Philosophy	192
Physics	192-193

	Page
Political Science	196-197
Psychology	198
Public Speaking	198-200
Sociology	200
Spanish	203-204
Zoology (and Aquiculture)	204-205

College of Education	Page
Agricultural Education and Rural Sociology.....	164-165
Education: History and Principles.....	161-163
Home Economics Education	165
Industrial Education	165-166
Methods in Arts and Science Subjects.....	163-164

College of Engineering	Page
Civil Engineering	166-167
Drafting	169
Electrical Engineering	167-169
General Engineering	169-170
Mechanical Engineering	171-172
Mechanics	170-171
Shop	172
Surveying	172-173

College of Home Economics	Page
Foods and Cookery	180
Home and Institutional Management.....	181
Textiles and Clothing	182
Department of Military Science and Tactics	190

AGRICULTURAL ECONOMICS

A. E. 101. *Agricultural Economics*—First semester. Three credits. Three lectures or recitations. Prerequisite, Econ. 101.

A general course in Agricultural Economics, with special reference to population trend, agricultural wealth, land tenure, farm labor, agricultural credit, the tariff, price movements and marketing and co-operation.

A. E. 102. *The Marketing of Farm Products*—Second semester. Three credits. Three lectures or recitations. Open to juniors and seniors. Prerequisite, Econ. 101.

A complete analysis of the present system of transporting, storing and

distributing farm products and a basis for intelligent direction of effort in increasing the efficiency of marketing methods.

A. E. 103. *Co-operation in Agriculture*—First semester. Three credits. Three lectures or recitations. Open to juniors and seniors. Prerequisite, Econ. 101.

Historical and comparative development of farmers' co-operative organizations, stressing particularly present tendencies.

A. E. 104. *Transportation of Farm Products*—Second semester. Three credits. Three lectures or recitations. Open to juniors and seniors.

A study of the development of transportation in the United States, the different agencies for transporting farm products, with special attention to such problems as tariffs, rate structure and the development of fast freight lines, refrigerator service, etc.

For Advanced Undergraduates and Graduates

A. E. 105. *Seminar in Marketing*—First semester. One to three credits. Open to seniors and graduate students.

This course will consist of special reports by students on subjects relating to the marketing of farm products, and a discussion and criticism of the same by the members of the class and the instructor. (DeVault.)

A. E. 106. *Seminar*—Second semester. One to three credits. Open to seniors and graduate students.

With the permission of the instructor, students will be permitted to work on any research problem in agricultural economics which they may choose, or a special list of subjects will be made up from which the students may select their research problems. There will be occasional class meetings for the purpose of reports on progress of work, methods of approach, etc. (DeVault.)

For Graduates

A. E. 201. *Research and Thesis*—The year. Eight credits. Students will be assigned research work in Agricultural Economics under the supervision of the instructor. The work will consist of original investigation in problems of Agricultural Economics, and the results will be presented in the form of a thesis.

AGRICULTURAL ENGINEERING

AGR. ENG. 101. *Farm Machinery and Farm Shop*—First semester. Three or four credits. Two lectures and one or two laboratory periods.

A study of the design and adjustments of modern horse and tractor drawn machinery. Laboratory work consists of detailed study of actual machines, their calibration, adjustments and repair. Extra optional laboratory period consists of shop work exercises.

AGR. ENG. 102. *Gas Engines, Tractors and Automobiles*—Second semester. Four credits. Three lectures and one laboratory period.

A study of the design and operation of the various types of internal combustion engines used in farm practice.

AGR. ENG. 103. *Advanced Gas Engines*—First semester. Two credits. One lecture and one laboratory period. Prerequisite, Agr. Eng. 102. An advanced study of the four cylinder gasoline engine.

AGR. ENG. 105. *Farm Buildings*—First semester. Two credits. Two lectures.

A study of all types of farm structures, also of farm heating, lighting, water supply and sanitation systems.

AGR. ENG. 107. *Farm Drainage*—Second semester. Two credits. One lecture and one laboratory period.

A study of farm drainage systems, including the theory of tile under-drainage, the depth and spacing of laterals, calculation of grades and methods of construction. A smaller amount of time will be spent upon drainage by open ditches, and the laws relating thereto.

AGRONOMY

AGRON. 101. *Field Crop Production*—First semester. Three credits. Two lectures and one laboratory period.

History, distribution, adaptation, culture, improvement and uses of cereal, forage, pasture, cover and green manure crops.

AGRON. 102. *Field Crop Production*—Second semester. Three credits. Two lectures and one laboratory period.

Continuation of Agron. 101.

AGRON. 103. *Grading Farm Crops*—Second semester. Two credits. One lecture and one laboratory period. Prerequisite, Agron. 101 and 102. Market classifications and grades as recommended by the United States Bureau of Markets and practice in determining the grades.

AGRON. 104. *Grain and Hay Judging*—First semester. One credit. One laboratory period. Prerequisite, Agron. 101 and 102.

Practice in judging the cereals for milling, seeding and feeding purposes and practice in judging hay.

AGRON. 105. *Tobacco Production*—Second semester. Two credits. One lecture and one laboratory period. Offered only in even years; 1924, 1926, etc.

This course takes up in detail the handling of the crop from preparation of the plant bed through marketing, giving special attention to Maryland types of tobacco.

AGRON. 109. *Research and Thesis*—The year. Four credits. Students are given a chance to do investigation work either in collecting information or in solving some problem in the laboratory, field or greenhouse.

For Advanced Undergraduates and Graduates

AGRON. 110. *Genetics*—First semester. Three credits. Two lectures and one laboratory period.

General courses in genetics designed to prepare students for later courses in the breeding of animals or crops in which they are specializing. (Kemp.)

AGRON. 111. *Advanced Genetics*—First semester. Three credits. Two lectures and one laboratory period. Prerequisite, Agron. 110.

This course takes up further details of mutants and chromosome irregularities, interference and coincidence, interspecies crosses and the results of physical attempts to modify germplasm. (Kemp.)

AGRON. 112. *Crop Varieties*—Second semester. Two credits. One lecture and one laboratory period. Prerequisites, Agron. 101 and Botany 101.

A study of the cereal classifications that have been adopted by the American Society of Agronomy with brief consideration of variety characteristics of other crop plants. (Kemp.)

AGRON. 113. *Crop Breeding*—First semester. Two credits. One lecture and one laboratory period. Prerequisite, Agron. 110.

The principles of breeding as applied to field crops and methods used in crop improvement. (Kemp.)

AGRON. 120. *Cropping Systems and Methods*—Second semester. Two credits. Two lectures. Prerequisites, Agron. 101 and Soils 101.

Principles and factors influencing cropping systems in the United States; study of rotation experiments; theories of cropping methods; and practice in arranging type farming systems. (Metzger.)

AGRON. 121. *Methods of Crop Investigations*—Second semester. Two credits. One lecture and one laboratory period.

A consideration of crop investigation methods at the various experiment stations and the standardization of such methods. (Kemp.)

AGRON. 129. *Seminar*—The year. Two credits. One report period each week.

The seminar is devoted largely to reports by students on current scientific publications dealing with problems in agronomy.

ANIMAL HUSBANDRY

A. H. 101. *Types and Breeds*—First semester. Three credits. Two lectures and one laboratory period.

The origin, history, characteristics and adaptability of the various breeds of livestock.

A. H. 102. *Feeds and Feeding*—First semester. Three credits. Two lectures and one laboratory period.

Elements of nutrition, source, characteristics and adaptability of the various food stuffs to the several classes of livestock. Feeding standards, the calculation and compounding of rations.

A. H. 103. *Principles of Breeding*—Second semester. Three credits. Two lectures and one laboratory period. Junior year.

This course covers the practical aspects of animal breeding including

heredity, variations, selections, growth, development, systems of breeding and pedigree work.

A. H. 104. *Swine Production*—First semester. Three credits. Two lectures and one laboratory period.

The care, feeding, breeding, management and judging of swine and the economics of the swine industry.

A. H. 105. *Beef Production*—Second semester. Two credits. One lecture and one laboratory period.

The care, feeding, breeding, management of beef herds, fattening and the economics of the beef industry.

A. H. 106. *Horse and Mule Production*—Second semester. Two credits. One lecture and one laboratory period. Junior year.

The care, feeding, breeding and management of horses. Market classes and grades and judging.

A. H. 107. *Sheep Production*—Second semester. Three credits. Two lectures and one laboratory period. Senior year.

Care, feeding, breeding and management of the farm flock. Judging of sheep and the grading of wool.

A. H. 108. *Meat and Meat Products*—First semester. Two credits. Two laboratory periods. Senior year.

The slaughtering of farm livestock and the production, preparation and handling of meat and meat products.

A. H. 109-110. *Advanced Judging*—The year. Two credits. One laboratory period. Junior or senior year.

First Semester—The comparative and competitive judging of sheep and swine. Second Semester—The comparative and competitive judging of horses and beef cattle. Various trips to stock farms throughout the state will be made. Such judging teams as may be chosen to represent the University will be selected from among those taking this course.

A. H. 111. *Markets and Marketing*—First semester. Three credits. Two lectures and one laboratory. Senior year.

History and development, organization and status of the meat, wool and horse industries. Market classes and grades of livestock. American livestock markets and how they function.

A. H. 112. *Seminar*—The year. Two credits. One lecture period. Senior and graduate students only.

Problems, readings, and discussions on subjects relating to animal husbandry.

A. H. 113. *Research and Thesis*—The year. Six credits. Work to be done by assignment under supervision. Original investigation in problems in animal husbandry, the results of which research are to be presented in the form of a thesis.

Advanced Undergraduate and Graduate Courses

A. H. 114. *Nutrition*—Second semester. Three credits. Two lectures and one laboratory. Senior year.

A study of digestion, assimilation, metabolism, protein and energy

requirements. Methods of investigation and studies in the utilization of food and nutrients. (Meade.)

A. H. 115. *Animal Genetics and Statistical Methods*—First semester. Three credits. Two lectures and one laboratory period. Senior year.

Prerequisite Agron. 110 Genetics and statistical methods as applied more especially to animal breeding. (Meade.)

Graduate Courses

A. H. 201. *Research*—The year. Credit to be determined by the amount and character of work done.

AQUICULTURE (See under Zoology)

ASTRONOMY

ASTR. 101. *Astronomy*—First or second semester. Three credit hours. Three lectures either semester. Elective. Prerequisite, a knowledge of the elements of trigonometry.

An elementary course in descriptive astronomy.

BACTERIOLOGY

BACT. 101. *General Bacteriology*—First semester. Repeated second semester. Three credits. One lecture and two laboratory periods. Junior year.

A brief history of bacteriology; microscopy; bacteria and their relation to nature; morphology, classification; preparation of culture media; sterilization and disinfection; microscopic and macroscopic examination of bacteria; classification, composition and uses of stains; isolation, cultivation and identification of aerobic and anaerobic bacteria; vital activities of bacteria.

BACT. 102. *General Bacteriology*—Second semester. Three credits. One lecture and two laboratory periods.

Continuation of Bact. 101. Bacteria in relation to water, milk, food, soil and air; Pathogens and immunity.

For Advanced Undergraduates and Graduates

BACT. 103. *Dairy Bacteriology*—The year. Six credits. One lecture and two laboratory periods. Senior year. Prerequisite Bact. 101.

Historical sketch; relation of bacteria to dairy products; preparation of media; plating by dilution method; direct microscopic examination; kinds of bacteria in milk and their development; pasteurization by flash and hold methods; sources of contamination of milk, including stable atmosphere, udder, exterior of animals, equipment and attendants; kind of utensils and their sterilization; sedimentation test, centrifugalization; methylene blue reduction test; leucocyte determination; anerobic spore

test; fresh and old milk; baby and special milk; market milk; graded milk; certified milk; sour milk; whey; cream; butter; cheese; condensed milk; powdered milk and milk starters. (Poelma.)

BACT. 104. *Advanced Bacteriology*—The year. Four to ten credits. Senior year. Prerequisite, Bact. 101.

This course is intended primarily to give the student a chance to develop his own initiative. He will be allowed to decide upon his project and work it out as much as possible in his own way under proper supervision. In this manner he will be able to apply his knowledge of bacteriology to a given problem in that particular field in which he is interested. He will get to know something of the methods of research. Familiarity with library practices and current literature will be included. (Pickens.)

BACT. 105. *Hematology*—First semester. Two credits. Senior year. Prerequisite, Bact. 101.

Procuring blood; estimating the amount of hemoglobin; color index; examination of red cells and leucocytes in fresh and stained preparations; numerical count of erythrocytes and leucocytes; differential count of leucocytes; sources and development of the formed elements of blood; pathological forms and counts. (Pickens.)

BACT. 106. *Urinalysis*—Second semester. Two credits. Senior year. Prerequisite, Bact. 101.

BACT. 107. *Thesis*—The year. Four credits. Senior year. Prerequisites, Bact. 101 and at least one of the advanced courses.

Investigation of given project, results of which are to be presented in the form of a thesis and submitted for credit toward graduation. (Pickens.)

BACT. 108. *Seminar*—The year. Two credits. Senior year.

The work will consist of making reports on individual projects and on recent scientific literature. (Pickens and Staff.)

For Graduate Students Only

BACT. 201. *Research Bacteriology*—The year. Four to twelve credits. Prerequisites, Bact. 101 and in certain cases, Bact. 103, depending upon the project. (Pickens.)

BOTANY

BOT. 101. *General Botany*—First or second semester. Four credits. Two lectures and two laboratory periods.

General introduction to botany, touching briefly on all phases of the subject and planned to give the fundamental prerequisites for study in the special departments.

BOT. 102. *Systematic Botany*—Second semester. Two credits. One lecture and one laboratory period. Prerequisite, Bot. 101.

A study of the local flora. A study is made of floral parts and the essential relations between the groups of flowering plants. Students become familiar with the systematic key used to identify plants.

BOT. 103. *Mycology*—Second semester. Two credits. One lecture and one laboratory period.

Introductory comparative study of the morphology, life history and classification of economic fungi.

For Advanced Undergraduates and Graduates

BOT. 104. *Methods in Plant Histology*—First semester. Three credits. One lecture and two laboratory periods. Prerequisite, Bot. 101.

Primarily a study in technique. It includes methods of killing, fixing, imbedding, sectioning, staining and mounting of plant materials.

BOT. 105. *Advanced Taxonomy*—First or second semester. Three credits. One lecture and two laboratory periods. Prerequisite, Bot. 101.

The course is offered for students who want more proficiency in systematic botany than the elementary course affords. A student who completes the course should be able to classify the grasses and other common plants of the state.

BOT. 106. *Advanced Mycology*—First or second semester. Two credits. One lecture and one laboratory period. Prerequisite, Bot. 101 and Bact. 101.

A detailed treatment of the classification, morphology and economics of the fungi, with studies of life histories in culture and identification of field materials.

For Graduates

BOT. 202. *Special Studies of Fungi*—Credit hours according to work done. Prerequisite, Bot. 103 or 106.

Special problems in the structure or life history of fungi or the monographic study of some group of fungi.

BOT. 203. *Aquatic Plants*—Credit hours according to work done. Prerequisite, Bot. 101.

Taxonomy, distribution, life history and economics of algae and other plants of Maryland waters.

BOT. 204. *Special Plant Taxonomy*—Credit hours according to work done. Prerequisite, Bot. 105.

Original studies in the taxonomy of some group of plants.

CHEMISTRY

General Chemistry

CHEM. 101-A. *General Chemistry and Qualitative Analysis*—The year. Eight credits. Two lectures and two laboratory periods each semester.

A study of the non-metals and metals, the latter being studies from a qualitative standpoint. One of the main purposes of the course is to develop original work, clear thinking and keen observation. This is accomplished by the project-method of teaching.

Course A is intended for students who have never studied chemistry,

or have passed their high school chemistry with a grade of less than B. CHEM. 101-B. *General Chemistry and Qualitative Analysis*—The year. Eight credits. Two lectures and two laboratory periods each semester.

This course covers much the same ground as Chemistry 101-A, except that the subject matter is taken up in more detail with emphasis on chemical theory and important generalization. The laboratory work deals with fundamental principles, the preparation and purification of compounds and a systematic qualitative analysis of the more common bases and acids.

Course B is intended for students who have passed an approved high school chemistry course, with a grade of not less than B.

For Advanced Undergraduates and Graduates

CHEM. 102. *Inorganic Preparations*—The year. Six credits. Two afternoons laboratory and one conference each semester. Prerequisite, Chem. 105.

The theory and practice of the preparation of pure, inorganic compounds. (Haring.)

For Graduates

CHEM. 201. *Research in Inorganic Chemistry*—The year. Twelve credits. Open to students working for the higher degrees. Prerequisite, a bachelor's degree in Chemistry or its equivalent. (Gordon and Haring.)

Analytical Chemistry

CHEM. 103. *Qualitative Analysis*—First semester. Two credits. Two laboratory periods. Prerequisite, Chem. A or B 101.

A course in qualitative analysis for students in chemistry.

CHEM. 104. *Chemical Calculations*—The year. Two credits. One each semester. Prerequisite, Chem. 101.

Chemical problems relating to analytical chemistry.

CHEM. 105. *Quantitative Analysis*—Second semester. Three credits. Three laboratory periods. Prerequisite, Chem. 101.

Quantitative analysis for premedical students with special reference to volumetric methods.

CHEM. 106. *Determinative Mineralogy and Assaying*—Second semester. Two credits. One lecture and one laboratory period. Prerequisite, Chem. 101.

The more important minerals are identified by their characteristic physical and chemical properties. Assays of gold, silver, copper, and lead are made.

CHEM. 107. *Quantitative Analysis*—The year. Eight credits. One lecture and three laboratory periods. Prerequisite, Chem. 101.

The principal operations of gravimetric analysis. Standardization of weights and apparatus used in chemical analysis. The principal operations of volumetric analysis. Study of indicators, typical volumetric and colorimetric methods. Required of all students majoring in chemistry.

CHEM. 108. *Electro-Chemical Analysis*—The year. Two credits. One lecture and one laboratory period. Prerequisite, Chem. 112.

For Advanced Undergraduates and Graduates

CHEM. 109. *Advanced Quantitative Analysis*—The year. Eight credits. Two lectures and two laboratory periods each semester. Prerequisites, Chem. 101; Chem. 107.

A continuation of course 107. (Wiley.)

Organic Chemistry

CHEM. 110. *Elementary Organic Chemistry*—The year. Eight credits. Two lectures and two laboratory periods each semester. Prerequisite, Chem. 101.

The course is devoted to a study of the behavior of fundamental types of organic compounds from the standpoint of the electronic conception of valence.

The course is so balanced as to meet the needs of students specializing in chemistry and also premedical students.

CHEM. 111. *Elementary Organic Chemistry*—First semester. Three credits. Two lectures and one laboratory period. Prerequisite, Chem. 101.

The course is particularly designed for students in Home Economics.

For Graduates

Organic Chemistry 110 is required of all students taking graduate work in Organic Chemistry.

CHEM. 202. *Advanced Organic Chemistry*—The year. Eight credits. Two lectures and assigned laboratory work each semester. Prerequisites, Chem. 110.

A more advanced treatment of the aliphatic and aromatic compounds, with special emphasis on the most recent theories of structure of organic compound in the light of our modern conception of matter. (Kharasch.)

CHEM. 203. *Identification of Organic Compounds*—Second semester. Five credits. Prerequisite, Chem. 202.

A systematic study of methods of identifying organic compounds. A thorough review of the most important chemical and physical properties of the fundamental types of organic compounds; methods of separating organic mixtures, etc. Consent of Instructor. (Kharasch.)

CHEM. 204. *Elementary Organic Analysis. (Combustions)*—First or second semester. Three credits. One lecture and two laboratory periods. (Kharasch.)

CHEM. 205. *Organic Preparations*—The year. Four credits. One lecture and three laboratory periods. Eight hours of organic preparations are essential before a student is eligible for research. The laboratory work consists in preparing compounds described in the literature. No text book. (Kharasch.)

CHEM. 206. *Color in Relation to Chemical Constitution*—Second sem-

ester. One credit. Prerequisites, Chem. 201.

A discussion of the theory of quinoidation, color in dyestuffs, colors of second order, etc. (Kharasch.)

CHEM. 207. *Carbohydrates*—Second semester. One credit. Prerequisite, Chem. 110. (Kharasch.)

CHEM. 208. *Synthetic Drugs*—Three credit hours. One lecture and two laboratory periods. Prerequisite, Chem. 202. (Kharasch.)

CHEM. 209. *Selected Topics in Organic Chemistry*—Second semester. Two credits. Two lectures.

Discussion of the theories of tautomerism, electromerism, molecular rearrangements, etc. Consent of Instructor. (Kharasch.)

CHEM. 210. *Research in Organic Chemistry*—(Kharasch.)

Physical Chemistry

CHEM. 112. *Elementary Physical Chemistry*—The year. Four credits for those specializing in chemistry; six for all others. Two lectures and one laboratory period each semester. Lectures only for chemists. Prerequisites, Chem. 101; Physics 101; Math. 101.

The course is intended to review the more theoretical points of inorganic chemistry from an advanced standpoint, to prepare the way for an extensive treatment of physical chemistry, and to furnish an elementary course in the subject for those who cannot pursue it farther.

CHEM. 113. *Elementary Colloid Chemistry*—Second semester. Two credits. Two afternoons laboratory with conferences and lectures. Prerequisite, Chem. 112.

Required of those specializing in chemistry. Elective for others. The fundamental principles of colloid chemistry and its practical applications will be considered.

For Advanced Undergraduates and Graduates

CHEM. 114. *Physical Chemistry*—First semester. Four credits. Two lectures and two laboratory periods. Prerequisites, Chem. 107, Physics 102; Math. 105.

The gas laws, kinetic theory, liquids, solutions, elementary thermodynamics and thermo-chemistry, colloids, etc. (Haring.)

CHEM. 115. *Physical Chemistry*—Second semester. Four credits. Two lectures and two laboratory periods. Prerequisite, Chem. 114.

A continuation of Chem. 114. Equilibrium, chemical kinetics electrolytic conductivity, electromotive chemistry, structure of matter, etc. (Haring.)

For Graduates

Chem. 114-115 or its equivalent is prerequisite for all the following courses.

CHEM. 211. *Thermodynamics*—First semester. Three credits. Three lectures. Designed for graduate students who wish an advanced mathematical treatment of chemical phenomena. Mellor's Chemical Statics

and Dynamics will be applied to Lewis' System of Physical Chemistry. (Gordon.)

CHEM. 212. *Colloid Chemistry*—The year. Six credits. Two lectures and one laboratory period each semester.

Special topics will be taken up with emphasis on the most recent theories and research going on in colloid chemistry at the present time. (Gordon.)

CHEM. 213. *The Phase Rule*—First semester. Two credits. Two lectures.

A systematic study of heterogeneous equilibria. One, two and three component systems will be considered with practical applications of each. (Haring.)

CHEM. 214. *Structure of Matter*—Second semester. Two credits. Two lectures.

Subjects considered will be radioactivity, isotopes, the Bohr and Lewis-Langmuir theories of atomic structure, and allied topics. (Haring.)

CHEM. 215. *Catalysis*—First semester. Two credits. Two lectures.

This course will consist of lectures on the theory and use of catalysts in various reactions. (Haring.)

CHEM. 216. *Theory of Solutions*—Second semester. Two credits. Two lectures. A detailed study will be made of the modern theory of ideal solutions, the theory of electrolytic dissociation, anomaly of strong electrolytes, etc. (Haring.)

CHEM. 217. *Research in Physical Chemistry*—The year. Twelve credits. Open to students working for the higher degrees. Prerequisite, a bachelor's degree in chemistry or its equivalent. (Haring and Gordon.)

Industrial Chemistry

Agricultural and Food Group

CHEM. 116. *General Agricultural Chemistry*—The year. Six credits. One lecture and two laboratory periods first semester. One lecture and two laboratory periods second semester. Prerequisite, Chem. 101.

An introductory survey of organic and inorganic chemistry and its application to plant and animal life.

The laboratory work in this course will be of a quantitative and synthetical nature, dealing as far as possible with agricultural material.

CHEM. 117. *The Chemistry of Foods*—Second semester. Three credits. Two lectures and one laboratory period. Prerequisite, Chem. 101.

The purpose of this course is to present the principles of the chemistry of foods and nutrition with special reference to the fats, carbohydrates, proteins, enzymes, etc.

CHEM. 118. *Chemistry of Textiles*—Second semester. Three credits. Two lectures and one laboratory period. Prerequisites, Chem. 101, Chem. 111.

A study of the principal textile fibers, their chemical and mechanical

structure; chemical methods are given for identifying the various fibers, dyes and mordants.

For Advanced Undergraduates and Graduates

CHEM. 119. *General Physiological Chemistry*—First semester. Four credits. Two lectures and two laboratory periods. Prerequisite, Chem. 115 or its equivalent.

A study of the chemistry of the fats, carbohydrates, proteins, and other compounds of biological importance, and the general chemistry of the metabolism of animals. This course is intended for students majoring in biological subjects, and as a prerequisite to certain advanced courses in this department. (Broughton.)

CHEM. 120. *Food Inspection and Analysis*—The year. Eight credit hours. Lectures and laboratory to be assigned. Prerequisite, Chem. 119, or acceptable courses in organic chemistry and quantitative analysis.

Lectures on the composition of foods, methods of analysis and the detection of adulteration in foods. Laboratory work includes the analysis of cereal-foods, the use of the microscope in the detection of adulterants in spices, the identification of added colors, the detection and determination of chemical food preservatives. Analysis of edible fats and oils, sugars and syrups, vinegars, flavoring extracts, and beverages.

This course is designed to give preparation for the analytical work connected with the state control of the sale of foods.

CHEM. 121. *Dairy Chemistry*—First semester. Three credits. One lecture and two laboratory periods. Prerequisite, Chem. 116.

Lectures and assigned reading on the constituents of dairy products. The laboratory work is designed to teach the methods of analysis of milk and its products.

CHEM. 122. *Plant Analysis*—First semester. Three credits. One lecture and two laboratory periods. Prerequisite, Chem. 116 or its equivalent.

A discussion and the application of the analytical methods used in determining the inorganic and organic plant constituents.

CHEM. 123. *Soils and Fertilizer Analysis*—Second semester. Three credits. One lecture and two laboratory hours. Prerequisite, Chem. 116.

A complete analysis of soils and fertilizers with training in the more refined analytical procedures as applied.

For Graduates

CHEM. 218. *Special Problems*—First or second semester. Four to eight credit hours. A total of eight credit hours may be obtained in this course by continuing the course for two semesters. Laboratory, Library, and conference work amounting to ten hours each week. Prerequisite, Chem. 119 and the consent of the instructor.

This course consists of studies of special methods, such as the separation of the fatty acids from a selected fat, the preparation of certain carbohydrates or amino acids, the determination of the distribution of

nitrogen in a protein. The students will choose, with the advice of the instructor, the particular problem to be studied. (Broughton.)

CHEM. 219. *Research*—First or second semester. Five to ten credit hours. Agricultural chemical problems will be assigned to graduate students who wish to gain an advanced degree. (Broughton.)

Industrial Chemistry Group

CHEM. 124. *Industrial Chemistry*—The year. Six credits. Three lectures each semester. Prerequisites, Chem. 101; Chem. 103.

A fundamental course in industrial chemistry, dealing with the problems of the chemical industries. The work in the first half of the year deals largely with the inorganic industries, while that of the second half is related to the organic industries. Students are required to go on inspection trips and make satisfactory written report on the work of the trip.

CHEM. 125. *Metallurgical Analysis*—First semester. Three credits. One lecture. Two laboratory periods. Prerequisites, Chem. 103-106.

Analysis of industrial ores, alloys, fuels, oils and gases.

CHEM. 126. *Industrial Organic Analysis*—Second semester. Three credits. One lecture. Two laboratory periods. Prerequisites, Chem. 101. Chem. 103, Chem. 110.

Analysis of organic industrial materials, including fertilizers, feeds, sugars, dye intermediates, etc.

CHEM. 127. *Engineering Chemistry*—The year. Two credits. One lecture both semesters. Prerequisite, Chem. 101.

A lecture course dealing with the value of fuels, coal, oils, and gases, from their chemical analysis. The significance of the fuel gas analysis. Comparison of specifications, particularly chemical requirements, of various states, manufacturers, and large corporations for fuels, lubricating oils, and paints. This course is given primarily for students in engineering.

CHEM. 128. *Metallurgy*—Second semester. Two credits. Two lectures. Prerequisite, one semester of Chem. 124.

A course in general metallurgy, with particular emphasis on iron and steel, and the ferro alloys.

CHEM. 129. *Development of Industrial Chemistry*—Second semester. Two credits. Two lectures. Prerequisite, Chem. 101.

A study of the historical developments of Chemistry, with special emphasis on the chemical industries.

CHEM. 130. *Technology of Fuels and Chemistry of Power Plants*—First semester. Two credits. Two lectures. Prerequisite, registration in, or completion of, Chem. 123.

The chemistry of fuels and combustion and boiler room operation.

CHEM. 131. *Process Development and Plant Design*—Second semester. Three credits. One lecture. Two laboratory periods. Prerequisite, one semester of Chemistry 124.

A study of some commercial chemical process, followed by the designing of a plant to carry out that process.

For Graduates

CHEM. 220. *Photochemistry*—Second semester. One credit. One lecture. Prerequisite, graduate standing, and the consent of the instructor. A lecture course on the action of light in chemical reactions, with particular emphasis on organic syntheses and photography. (Gardner.)

CHEM. 221. *Plant Design*—First semester. One credit. One lecture. Prerequisite, Chem. 124, and graduate standing.

A seminar course in chemical plant equipment and construction. (Gardner.)

CHEM. 222. *Research in Industrial Chemistry*—The year. Twelve credits. Prerequisite, graduate standing and the consent of the instructor.

The investigation of special problems in industrial chemistry, and the preparation of a thesis towards an advanced degree. (Gardner.)

CHEM. 223. *Chemistry Seminar*—The year. Two credits.

During these periods there is a discussion of the latest bulletins and scientific papers on all phases of chemistry by the graduate students and chemistry staff. Required of seniors and graduates.

CHEM. 224. *Chemical Education*—First semester. Two credits. Two lectures. Prerequisite, Educational psychology and Chem. 101.

The latest developments in the field of Chemical Education dealing with methods, laboratory design, etc. Required of all students qualifying for college chemistry teaching. (Gordon.)

COMMERCE

(See under Economics and Business Administration and also special bulletin, College of Commerce and Business Administration, Baltimore.)

COMPARATIVE LITERATURE

For Advanced Undergraduates and Graduates

COMP. LIT. 201. *Introduction to Comparative Literature*—The year. Six credits. Lectures, recitations, and collateral reading. Study in English translation of material typical of the main currents of thought from Homer to Ibsen. The debt of modern literature to the Greek, the Hebrew, and the Medieval traditions is discussed. The origins of typical forms of literary expression—such as epic, tragedy, comedy, lyric, romance, essay—are illustrated. (Omitted, 1924-1925.) (Zucker.)

COMP. LIT. 202. *Development of the European Drama*—The year. Six credits. Lectures, recitations and collateral reading. This course is devoted to a study of the origin of the theater in Greece and in medieval Europe. Representative Greek and Roman plays as well as dramas by Spanish, French, German, and other continental authors are read in English translation. (Zucker.)

the dairy business and value of products. Composition of milk and Babcock testing. A study of production and handling of milk and milk products on the farm and the care, feeding and management of the farm herd of dairy cattle.

D. H. 102. *Judging of Dairy Cattle and Breed Study*—Second semester. Two credits. One lecture and one laboratory period. Junior year.

Practice in the selection of dairy animals for production and exhibition. The feeding, fitting and showing of dairy animals, systems of breeding and pedigree study. Trips to stock farms about the state will be taken in this course and such judging teams as may be chosen to represent the University will be selected from among those taking this course.

For Advanced Undergraduates and Graduates

D. H. 103. *Farm Dairying*—First semester. Three credits. Two lectures and one laboratory period.

The secretion of milk and factors effecting the same; how bacteria and dirt get in; how they may be kept out; straining and handling during milking; surface coolers and precooling; milk cooling tanks; washing and sterilizing dairy utensils; practical work in the production of milk of low bacteria and low sediment content; practice in the handling of milking machines. Dairy barn arrangement and equipment and practices which influence quality in milk. Special problems will be assigned to graduate students taking this course.

D. H. 104. *Dairy Production and Barn Practices*—First semester. Four credits. Three lectures and one laboratory period. Junior year.

The care, feeding and management of dairy cattle, including selection of feeds; systems of herd feeding; feeding silage standards, soiling crops and pasture; selection, care, feeding and management of the sire; dairy young stock and dairy herd development and management; method of keeping and forms for herd records; dairy cost accounts and barn practices which influence quantity in milk. Requirements for advanced registry; the management of long and short time tests; breed association rules; care and testing of samples; cow testing associations; bull associations. Paid supervisors at \$3.00 per day are selected for work over week-ends from those taking this course. Special problems will be assigned to graduate students taking this course.

D. H. 105. *Dairy Manufactures*—The year. Six credits. One lecture and two laboratory periods on successive days. Prerequisite, D. H. 101.

Manufacturing of butter, cheese, ice cream and preparation of culture buttermilks. Theory and practice of cream separation, pasteurization and processing of milk and cream. Plant management, storage of products and refrigeration.

milk supply, methods of testing milk; milk contractors; systems of handling milk in the city milk plants; dairy farm and city milk inspection, including dairy farm and dairy plant score cards, milk grading, standards, regulations, methods of appointment and duties of dairy and milk inspectors, control of milk supply in cities and towns.

D. H. 107. *Advanced Testing*—Second semester. Four credits. One lecture and two four-hour laboratory periods.

This course is designed to give the student a working knowledge and laboratory practice in the systematic analysis of all dairy products, especially work linked with the manufacturing of these products or with their classification under the food laws. Practice is given in the detection of milk watering, using the cryoscope and serum methods, the addition of preservatives or colors, the comparison of butter and oleomargarine, the examination of filled milks and products, etc. Methods of working out a quality grading system for receiving stations and the preparation, standardization and use of solutions involved will be considered. Mojonnier methods will be taken up and each student showing sufficient progress will be given an opportunity to do individual work of practical value.

D. H. 108. *Seminar*—The year. One or more credits. Senior year.

The seminar is devoted largely to reports by students on current bulletins and scientific papers in dairy production, manufacturing and market milk problems.

D. H. 109. *Thesis*—The year. Four credits. Senior year.

Students are given opportunities to conduct investigational work, either in collecting information or original research in Dairy Production, Manufactures and Market Milk.

D. H. 110. *Marketing and Grading of Dairy Products*—Second semester. Three credits. Two lectures and one laboratory. Elective. Junior or Senior year.

History, development and organization of dairy marketing from the standpoint of producer, dealer and consumer. Market grades and judging of dairy products.

D. H. 111. *Manufacture of Concentrated and Powdered Milks*—First semester. Two credits. One or two lectures. Elective. Senior year.

Evaporated milk, condensed milks, powdered milks—history of industry; location of factories; equipment; processes; standards and standardizing; filling; labelling; wrapping; packing of finished products; uses of and work in commercial testing.

For Graduates

D. H. 201. *Research*—The year. Eight credits.

With the approval of the head of the department, students will be al-

lowed to work on any problem in dairy production, manufactures or market milk they may choose, or be given a list of problems from which to select a research project.

Insofar as schedules permit, students will be encouraged to visit the U. S. Dairy Division Laboratories and become acquainted with the dairy research problems in process and the methods of attack. This acquaints the student with the broad phases of research in dairy production and market milk.

D. H. 202. *Seminar*—Credits according to work done during the year.

ECONOMICS AND BUSINESS ADMINISTRATION

(See also special bulletin, College of Commerce and Business Administration, Baltimore.)

Soc. Sci. 101. *Elements of Social Science*—Second semester. Four credits. Four lectures and assignments.

This course deals with the basis and nature of society; the process of social evolution; the economic organization of society; the rise of government and law as institutions; and the nature and extent of social control of man's activities. It forms the foundation upon which the principles of economics, the principles of sociology and the science of government are based.

ECON. 102. *Economic Geography and Industry*—First semester. Three credits. Three lectures.

An examination of the principal geographical phenomena which form the basis of the economic life of man. The principal natural resources utilized in modern civilization; their distribution upon the surface of the earth in characteristic regions, the development of those regions industrially; routes of trade between the major producing regions.

ECON. 103. *Economic History of England*—First semester. Three credits. Three lectures.

A study of the general development of agriculture, industry, and commerce in England from the tenth century to the present time. The course is designed to show the gradual evolution of an industrial society, and to trace those changes by which modern England has attained her present economic position.

ECON. 104. *Economic History of the United States*—Second semester. Three credits. Three lectures.

Attention is given to colonial agriculture, industry and trade as an introduction to the course. After 1789 the main lines of study are the banking, transportation, and tariff history of the United States, with special attention to the development of the natural resources, the rise of manufactures, and the expansion of corporate methods in industry and trade.

For Advanced Undergraduates and Graduates

ECON. 105. *Principles of Economics*—First or second semester. Four credits either semester. Four lectures and recitations. Prerequisite, Soc. Sci. 101.

A study of the general more advanced principles of economics; production, exchange, distribution and consumption of wealth; the monetary system; public finance; land and labor problems; monopolies, taxation and other similar topics. (Thompson.)

ECON. 106. *The Mathematical Theory of Investment*—First semester. Three credits. Three lectures or recitations.

The application of mathematics to financial transactions; compound interest and discount, construction and use of interest tables, sinking funds, annuities, depreciation, valuation and amortization of securities, building and loan associations, life insurance, etc. (Spann.)

ECON. 107. *Elements of Statistics*—Second semester. Three credits. Three lectures or recitations. A continuation of Econ. 106. Prerequisite, Econ. 106.

A study of the fundamental principles used in statistical investigation. (Spann.)

ECON. 108. *Economics for Engineers*—The year. Six credits. Three lectures or recitations each semester.

General principles of economics offered for convenience of engineering students. (Newman.)

ECON. 110. *Money and Banking*—First semester. Three credits. Three lectures and recitations. Prerequisite, Soc. Sci. 101.

A study of the nature and functions of money; standards of value and prices; credit; bank clearings and exchanges; history of American and foreign banking; the stock exchange and the money market. (Thompson.)

ECON. 111. *Public Finance*—Second semester. Three credits. Three lectures and recitations. Prerequisite, Soc. Sci. 101.

A study of the public expenditures, receipts, indebtedness and financial administration, theories of public expenditures; theories of taxation; the growth and nature of public credit; the forms of public debts; federal, state and municipal budgets. (Thompson.)

ECON. 113. *Practicum*—Two (or one) credit hours. Prerequisite, Soc. Sci. 101.

Study of a leading trade journal. (Thompson.)

ECON. 115. *Business Organization*—First semester. Three credits. Three lectures and recitations. Prerequisite, Soc. Sci. 101.

An examination of the modern forms of organization especially as applied to the large-scale business, associations, combinations, anti-trust legislation and its interpretation. The problem of organization from the view-point of the business man and of society. (Newman.)

ECON. 116. *Corporation Finance*—Second semester. Three credits. Three lectures and recitations. Prerequisite, Soc. Sci. 101.

Methods employed in the promotion, capitalization, financial management, consolidation and reorganization of business corporations. (Thompson.)

ECON. 118. *Business Law*—The year. Six credits. Three lectures and recitations each semester.

The aim of this course is to train students for practical business affairs by giving the legal information necessary to prevent common business errors. The following are some of the phases of the work: Requisites and forms of contracts and remedies for their breach; sales, passages of title, warranties; negotiable instruments, assignment and liability of signers; agency, title, abstracts, mortgages, leases, etc. (Shepherd.)

ECON. 120. *General Accountancy*—The year. Six credits. Three lectures with problems each semester.

The fundamental principles of single and double entry book-keeping; subsidiary records and controlling accounts; partnership accounts and adjustments; corporation accounts; types of stocks and bonds; sinking funds; voucher systems; manufacturing accounts. Preparation of balance sheet. (Juchhoff.)

ECON. 121. *Railway Transportation*—Second semester. Three credits. Three lectures or recitations.

Development of the railway net of the United States; railroad finance and organization; problems of railway maintenance and methods of conducting transportation; theory of railway rates; personal and local discrimination; geographical location and market competition; railway agreements; regulation by State and Federal governments; recent legislation. (Omitted, 1924-1925. Alternates with Econ. 122.) (Newman.)

ECON. 122. *Public Utilities*—Second semester. Three credits. Three lectures or recitations.

An examination of the fundamental basis for the concept of certain forms of business as peculiarly essential to the public welfare. Problems of rates, management and finance of corporations engaged supplying electricity, gas, street railway, telegraph and telephone service to the public. Government regulation and supervision of rates and finance. (Alternates with Econ. 121.) (Newman.)

ECON. 123. *Principles and Practices of International Trade*—Second semester. Three credits. Three lectures and discussions. Prerequisites, Soc. Sci. 101, Econ. 105.

Commercial and Trade relations of the United States with foreign countries; the forces governing the import and export markets; the geographical, social and economic factors affecting commercial development and expansion; the mechanism of international exchange and the financing of foreign trade. (Newman.)

A. E. 101. *Agricultural Economics*—First semester. Three credits. Three lectures or recitations. Prerequisite, Soc. Sci. 101.

A general course in Agricultural Economics, with special reference to population trend, agricultural wealth, land tenure, farm labor, agricultural credit, the tariff, price movements and marketing and co-operation. (DeVault.)

A. E. 102. *The Marketing of Farm Products*—Second semester. Three credits. Three lectures or recitations. Open to juniors and seniors. Prerequisite, Soc. Sci. 101.

A complete analysis of the present system of transporting, storing and distributing farm products and a basis for intelligent direction of effort in increasing the efficiency of marketing methods. (DeVault.)

A. E. 103. *Co-operation in Agriculture*—First semester. Three credits. Three lectures or recitations. Open to juniors and seniors. Prerequisite, Soc. Sci. 101.

Historical and comparative development of farmers' co-operative organizations, stressing particularly present tendencies. (DeVault.)

A. E. 104. *Transportation of Farm Products*—Second semester. Three credits. Three lectures or recitations. Open to juniors and seniors.

A study of the development of transportation in the United States, the different agencies for transporting farm products, with special attention to such problems as tariffs, rate structure and the development of fast freight lines, refrigerator service, etc. (DeVault.)

For Graduates

ECON. 201. *History of Economic Theory*—The year. Four credits. Two lectures and assignments each semester. Prerequisite, Econ. 105.

History of economic doctrines and theories from the eighteenth century to the modern period, with special reference to the theories of value and distribution. (Omitted, 1924-1925.) (Thompson.)

ECON. 210. *Economics and Business Administration Seminar*—The year. Two or four credits. Open to students interested in research with proper training in general economics. (Department.)

ECON. 220. *Labor Problems*—The year. Three credits each semester. Three lectures and assignments each semester. Prerequisite, general knowledge of the field of Sociology and Economics.

A study of labor from the point of view of the employer, the employee and the public; the conflicts between labor and capital; methods employed to obtain industrial peace. (Thompson.)

EDUCATION

A. History and Principles

ED. 100. *Educational Guidance*—The year. Two credits. One lecture each semester. Open to all freshmen. Required of freshmen in Education.

This course is designed to assist students in adjusting themselves to the demands and problems of college and professional life and to guide them in the selection of college work during subsequent years. Among the topics discussed are the following: student finances; student welfare; intellectual ideals; recreation and athletics; general reading; student organization; student government; the purpose of the college; the election of courses and the selection of extra curriculum activities.

ED. 101. *Public Education in the United States*—First semester. Two credits. Two lectures. Required of all sophomores in Education.

The evolution of public education in the United States as the expres-

sion and promoter of democracy, emphasizing particularly vocational education and present tendencies in reorganization; recent state and federal school laws; proposed legislation.

ED. 102. *Educational Hygiene*—Second semester. Two credits. Two lectures. Open to sophomores and juniors. Required of sophomores in Education.

Elements of general, individual and group hygiene; causes of health and disease; habits; knowledge and ideals of health; health as an objective of education.

ED. 103. *Educational Psychology*—First semester. Three credits. Open to juniors and seniors. Required of all juniors in Education.

General characteristics and use of original tendencies; principles of mental development; the laws and methods of learning; experiments in rate improvement; permanence and efficiency; causes and nature of individual differences; principles underlying mental tests; principles which should govern school practices.

ED. 104. *Technic of Teaching*—Second semester. Three credits. Four lectures and one laboratory period. Open to juniors and seniors. Required of juniors in Education. Prerequisite, Ed. 103.

The nature of educational objectives; steps of the lesson plan; observation and critiques; survey of teaching methods; type lessons; lesson planning; class management.

For Advanced Undergraduates and Graduates

ED. 105. *Principles of Secondary Education*—Second semester. Three credits. Required of all seniors in Education.

Evolution of secondary education; articulation of the secondary school with the elementary school, college, technical school, and with the community and the home; the junior high school; programs of study and the reconstruction of curricula; the teaching staff and student activities.

ED. 106. *History of Education*—First semester. Three credits. Three lectures.

History of the evolution of educational theory, institutions, and practices. (Small.)

ED. 107. *Educational Sociology*—First semester. Three credits. Three lectures.

The sociological foundations of education; educational objectives in terms of group needs; educational institutions; the program of studies; need for special organizations; possibilities of the special group leader in adult education; community program of education; education and nationalism. (Cotterman.)

ED. 108. *Advanced Educational Psychology*—Second semester. Three credits. Three lectures. Prerequisite, Ed. 103 and Ed. 104.

Characteristics of original tendencies; the individual's equipment of instincts; forms of behavior; theories as to the order and dates for the appearance and disappearance of original tendencies and their effect upon curricula; value and use of original tendencies; the laws of learning;

amount, rate, limit, and permanency of improvement; experiments in rate of improvement; individual differences, causes and effect on school practice. (Houck.)

ED. 109. *Theory of Vocational Education*—Second semester. Three credits.

Evolution of vocational education, educational and social forces behind the movement; terminology; types of vocational schools; technical high schools; vocational education for girls; vocational education in rural communities; recent legislation. (Proffitt.)

For Graduates

ED. 201. *Seminar in Education*—The year. Six credits. (The course is organized in semester units).

Problems in educational organization and administration. Study of current literature; individual problems. (Small.)

ED. 204. *Chemical Education*—The year. Two credits. One lecture. Prerequisites: Ed. 103 and Chem. 101.

The latest developments in the field of chemical education dealing with methods, laboratory design, etc. Required of all students qualifying for college chemistry teaching. (Gordon.)

B. Methods in Arts and Science Subjects

ED. 110. *English in Secondary Schools*—The year. Six credits. Special Methods and supervised teaching. Required of seniors preparing to teach English. Prerequisite, Ed. 104.

Objectives in English in the different types of secondary schools; selection of subject matter; State requirements and State courses of study; evaluation of the course of study in terms of modern practice and group needs; the organization of the materials; lesson plans; measuring results; observations; class teaching; critiques.

ED. 111. *History and Civics in Secondary Schools*—The year. Six credits. Special methods and supervised teaching. Required of seniors preparing to teach history. Prerequisite, Ed. 104.

Objectives of history and civics in secondary school; selection of subject matter; parallel reading; State requirements and State courses of study; the development of civics from the community point of view; reference books, maps, charts and other auxiliary materials; the organization of materials; lesson plans; measuring results; observations; class teaching; critiques.

ED. 112. *Foreign Language in Secondary Schools*—The year. Six credits. Special methods and supervised teaching. Required of seniors preparing to teach foreign language. Prerequisite, Ed. 104.

Objectives of foreign language in secondary schools; selection of subject matter; State requirements and State courses of study; the organization of material for teaching; lesson plans; special devices and auxiliary materials; observation; class teaching; critiques.

ED. 113. *Mathematics in Secondary Schools*—The year. Six credits.

Special methods and supervised teaching. Required of seniors preparing to teach mathematics. Prerequisite, Ed. 104.

Objectives of mathematics in secondary schools; selection of subject matter; State requirements and State courses of study; proposed reorganizations; lesson plans; measuring results; observations; class teaching; critiques.

ED. 114. *Science in Secondary Schools*—The year. Six credits. Special methods and supervised teaching. Required of seniors preparing to teach science. Prerequisite, Ed. 104.

Objectives of science in secondary schools; selection of subject matter; State requirements and State courses of study; sources of materials; the organization of materials for instruction; methods of the class period; lesson plans; the preparation and organization of laboratory instruction; note books; observation; class teaching; critiques.

C. Agricultural Education and Rural Sociology

ED. 121. *Teaching Secondary Vocational Agriculture*—The year. Eight credits. Three lectures and one laboratory period the first semester. One seminar period and practicum work to be arranged the second semester. Practicum work may be arranged during the first semester. Prerequisite, Ed. 104.

Types of schools and classes; qualifications of teachers day class instruction—objectives, selection of projects, project instruction, selection of content for group instruction, methods of class period, evening class instruction, part time class instruction, equipment and other administrative problems; unit courses; special considerations.

For Advanced Undergraduates and Graduates

ED. 122. *Rural Sociology and Educational Leadership*—Second semester. Three credits. Three lectures.

The rural community—importance, nature, types, evolution; factors conditioning leadership in rural communities; special considerations. This course is designed especially for persons who expect to be called upon to assist in shaping educational and other community problems for rural people. (Cotterman.)

ED. 123. *Objectives and methods in Extension Education*—Second Semester. Three credits. Three lectures.

Given under the supervision of the Extension Service and designed to equip young men to enter the broad field of extension work. Methods of assembling and disseminating the agricultural information available for the practical farmer; administration, organization, supervision, and practical details connected with the work of a successful county agent, club worker, and extension specialist. Students will be required to gain experience under the guidance of men experienced in the respective fields. Traveling expenses for this course will be adjusted, according to circumstances, the ability of the man and the service rendered. (Cotterman.)

For Graduates

ED. 202. *Problems in Agricultural and Rural Education*—The year. Four to eight credits. Two lectures, conferences and field work.

Major problems of agricultural and rural education, particularly in the fields of vocational education, extension or adult education, and higher education. Essentially a field course. Special projects, assigned readings and reports. (Cotterman.)

ED. 203. *Practicum in Rural Sociology*—First or second semester. Three to five credits. Credits determined by the amount and character of work done. Prerequisite, Ed. 122.

Essentially a field course. Each student is required to make a social survey of some community and to submit a satisfactory report of the same. The work may be done during the summer in the community in which the student may be residing or if he be a teacher, it may be done during the winter in the community in which he may be teaching. Students electing this course must report for conferences both before the work is undertaken and during the time the work is in progress. At least one field conference must be arranged with the instructor. (Cotterman.)

D. Home Economics Education

ED. 130. *Education of Women*—First semester. Three credits. Three lectures. Open to juniors and seniors.

History of the family; its members and their relation to the home; change in women's position as affected by the progress of civilization; training for citizenship, professions and the home.

ED. 131. *Child Care and Welfare*—Second semester. Three credits. Open to juniors and seniors. Prerequisites for health teaching Foods 101 and Education 104.

Child psychology, child care and health teaching.

ED. 132-133. *Teaching Secondary Vocational Home Economics*—The year. Six credits. Methods and supervised teaching. Prerequisite, Ed. 104.

Aims and objectives in teaching secondary vocational home economics; making of a course of study and its adaptation to the needs of the girls and the homes of the community; methods of instruction; use of illustrative material; improvement of Home Economics library; selection of equipment; observation; outline units of instruction; lesson plans; class teaching, conference and critiques.

E. Industrial Education

ED. 140. *Industrial Education in Secondary Schools*—Either semester. Three credits. Two lectures and one laboratory period. Open to juniors and seniors. Required of seniors in Industrial Education. Prerequisite, Ed. 104.

Theory of vocational education; purposes of industrial education; types of industrial schools; vocational and trade analysis; place of auxiliary

knowledge; related trade courses; industrial school population; materials and equipment; relation of the industrial teacher of the school system; problems of the related trade teacher as they arise in connection with trade analysis; lesson planning; methods of the class period; discipline; organization and management; observation and critiques.

Ed. 141. *Teaching Industrial Subjects in Secondary Schools*—Either semester. Three to five credits determined by the amount and character of work done. Required of seniors in Industrial Education. Ed. 140 must be offered as a prerequisite to or as parallel with this course.

Observation; outlines; lesson plans; class teaching; conferences and critiques.

For Advanced Undergraduates and Graduates

Ed. 142. *History of Industrial Education*—Second semester. Two credits. Two lectures.

History of the origin and development of industrial education in the light of group needs; industrial education in the United States; development of schools; present problems in reorganization. (Profitt.)

ENGINEERING

Civil Engineering

C. E. 101. *Elements of Railroads*—First semester. Three credits. Two lectures and one laboratory period. Prerequisite, Surv. 102. Required of juniors in Civil Engineering.

The theory and practice of railroad surveys, alignment and earthwork. Preliminary steps toward complete plans for a short railroad.

C. E. 102. *Elements of Design of Steel Structures*—Second semester. Five credits. Four lectures and one laboratory period. Prerequisite, Mech. 101, 102. Required of juniors in Civil Engineering.

Design of steel beams and columns. Analysis of stresses in roof trusses, plate girders, bridge trusses and steel buildings. The preliminary steps toward complete design of these structures.

C. E. 103. *Highways*—The year. Eight credits. Three lectures and one laboratory period first semester. Two lectures and two laboratory periods second semester. Required of seniors in Civil Engineering.

Location, construction and maintenance of roads and pavements. Highway contracts and specifications, estimates and costs, highway work, highway legislation, highway economics and highway transportation.

The course will include, in addition to lecture and class room work, preparation of plans and specifications for special projects connected with highways.

C. E. 104. *Design of Masonry Structures*—The year. Eight credit hours. Three lectures and one laboratory period. Prerequisite, Mech. 101. Required of seniors in Civil Engineering.

The theory and practice of the design of structures of stone and of reinforced concrete; with applications to beams, slabs, columns, retaining

walls, dams, arches and bridges. The preparation of plans and bills of material.

C. E. 105. *Design of Steel Structures*—The year. Six credits. Two lectures and one laboratory period. Prerequisite, C. E. 102. Required of seniors in Civil Engineering.

The complete design and detailing of steel structures, a continuation of C. E. 102.

C. E. 106. *Sanitation*—The year. Six credits. Three lectures. Prerequisite, Mech. 101, 102. Required of seniors in Civil Engineering.

Methods of estimating consumption and designing water supply and sewerage systems.

C. E. 107. *Railroads*—The year. Two credits. One laboratory period. Prerequisite, C. E. 101. Alternative for seniors in Civil Engineering.

The theory and practice of railroad design, construction, maintenance and economics; a continuation of C. E. 101. Field and drafting room work consists of a reconnoissance and survey of a short railroad and preparation of the map, profiles and estimates.

C. E. 108. *Sanitary Science (Public Health)*—The year. Two credit hours. One laboratory period. To be taken co-ordinately with C. E. 106. Alternative for seniors in Civil Engineering.

State and municipal sanitary laws, organization, and functions of state and municipal health departments, public health surveys. Also in co-ordination with C. E. 106, complete plans are prepared for water supply and sewerage disposal systems for a given community.

C. E. 109. *Drainage and Irrigation*—The year. Two credit hours. One laboratory period. Prerequisite, Mech. 101, 102. Alternative for seniors in Civil Engineering.

The application of engineering principles to the design and construction of drainage and irrigation works. Field and drafting room work consists of surveying, designing and mapping of a proposed drainage project.

Electrical Engineering

E. E. 101. *Direct Currents*—The year. Ten credits. Three lectures and two laboratory periods. Prerequisite, Phys. 101, 102.

Principles of design, construction and operation of direct current generators and motors and direct current control apparatus. The construction, characteristics and operation of primary and secondary batteries and the auxiliary control equipment.

Experiments on the calibration of laboratory instruments, the manipulation of precision instruments, battery characteristics, and the operation and characteristics of direct current generators and motors.

E. E. 102. *Alternating Currents*—The year. Ten credits. Three lectures and two laboratory periods. Prerequisite, E. E. 101.

Analytical and graphical solution of problems on single phase and polyphase circuits; construction, characteristics and operation of all

types of alternating current generators and motors; switchboard appliances, the use of the oscillograph; alternating current power measurements.

E. E. 103. *Electric Machine Design*—The year. Three credits. One laboratory period first semester; two laboratory periods second semester. Prerequisite, E. E. 101, M. E. 101 and to take concurrently E. E. 102.

Materials of construction and design of the electric and magnetic circuits of direct current generators and motors, principles of design of the electric and magnetic circuits of alternating current generators, motors and transformers.

E. E. 104. *Electric Railways*—First semester. Two credits. Two lectures. Prerequisite, E. E. 101, and to take concurrently E. E. 102.

Traffic studies, train schedules, motor characteristics and the development of speed-distance and power-time curves, systems of control, motors and other railway equipment, electrification system for electric railways including generating apparatus, transmission lines, substations and distribution of electrical energy for car operation; electrification of steam roads and application of signal systems, problems in operation from the selection of proper car equipment to the substation apparatus.

E. E. 105. *Telephones and Telegraphs*—Second semester. Four credits. Three lectures and one laboratory period. Prerequisite, E. E. 101, and to take concurrently E. E. 102.

History and principles of magneto telephone and variable resistance transmitter, carbon transmitter, telephone receiver, induction coils and calling equipment. These components of the telephone then are studied as a complete unit in the local battery and common battery telephones. Magneto and common battery switchboards used in telephone exchanges, automatic telephones, and the operation of simple, duplex and quadruplex telegraphy.

In the laboratory the units are assembled and operated.

E. E. 106. *Radio Telegraphy and Telephony*—First semester. Four credits. Two lectures and two laboratory periods. Prerequisite, E. E. 101, and to take concurrently E. E. 102.

Principles of radio telegraphy and telephony, design, construction and operation of transmitting and receiving apparatus and special study of the use of the vacuum tube for short wave transmitting and receiving. Experiments include radio frequency measurements and the testing of various types of receiving circuits.

E. E. 107. *Illumination*—Second semester. Two credits. Two lectures. Prerequisite, E. E. 101, and to take concurrently E. E. 102.

Series systems of distribution, methods of street lighting, calculation of voltage drop, regulation, weights of wire and methods of feeding parallel systems, principles and units used in illumination problems, lamps and reflectors, candle power measurements of lamps, measurement of illumination intensities and calculations for illumination of laboratories and class rooms.

E. E. 108. *Electric Power Transmission*—Second semester. Two credits. Two lectures. Prerequisite, E. E. 103 and to take concurrently E. E. 102.

Survey of the electrical equipment required in central stations and substations, transmission of electrical power, practical problems illustrating the principles of installation and operation of power machinery.

Drafting

DR. 101. *Engineering Drafting*—The year. Two credits. One laboratory period. Required of all freshmen in Engineering.

Freehand Drawing—Lettering, exercises in sketching of technical illustrations and objects, proportion and comparative measurements.

Mechanical Drawing—Use of instruments, projections and working drawings, drawing to scale in pencil and in ink, topographic drawing, tracing and blue printing.

DR. 102. *Descriptive Geometry*—The year. Four credits. Two laboratory periods. Prerequisite, Dr. 101. Required of all sophomores in Engineering.

Orthographic projection as applied to the solution of problems relating to the point, line and plane, intersection of planes with solids and development. Generation of surfaces; planes, tangent and normal to surfaces; intersection and development of curved surfaces. Shades and shadows, perspective, map projection.

General Engineering

ENGR. 101. *Prime Movers*—The year. Four credits. Two lectures. Prerequisite, Math. 106. Required of all juniors in Engineering.

Salient features of the operation of steam, gas, hydraulic and electric prime movers and pumps. Comparison of types of each, methods of assembling or setting up in place for operation. Service tests.

ENGR. 102. *Engineering Geology*—The year. Two credits. One laboratory period. Lectures and field trips. Required of all juniors in Engineering.

Study of common rocks and minerals, geologic processes and conditions affecting problems of water supply, bridge, railroad and highway construction, dams and reservoirs, tunnels, canals, river and harbor improvements, irrigation works, and rock excavation.

ENGR. 103. *Engineering Jurisprudence*—First semester. One credit. Seminar course. Required of all seniors in Engineering.

A study of the fundamental principles of law relating to business and to engineering; including contracts, agency, sales, negotiable instruments, corporations and common carriers. These principles are then applied to the analysis of general and technical clauses in engineering contracts and specifications.

ENGR. 104. *Public Utilities*—Second semester. One credit. One lec-

ture. Prerequisite, Econ. 105. Required of all seniors in Engineering.

The development of public utilities, franchises, functions, methods of financing and control of public utilities. Service standards and their attainment in electric, gas, water, railway, and other utilities. The principles that have been adopted by the courts and public service commissions for the evaluation of public utilities for rate making and other purposes.

IND. CHEM. 104. *Engineering Chemistry*—The year. Two credits. One laboratory period second semester. Prerequisite, Math. 106. Required of all seniors in Engineering.

The value of fuels, coal, oils and gases, from their chemical analysis. The significance of flue gas analysis. Comparison of specifications, particularly chemical requirements, of various states, manufacturers and large corporations for fuels, lubricating oils and paints.

Mechanics.

MECH. 101. *Engineering Mechanics*—The year. Seven credits. Three lectures and one laboratory period first semester; two lectures and one laboratory period second semester. Prerequisite, Math. 106. Required of all juniors in Engineering.

Applied Mechanics—The analytical study of statics dealing with the composition and resolution of forces, moments and couples, machines and the laws of friction, dynamics, work, energy and the strength of materials.

Graphic Statics—The graphic solution of problems in mechanics, center of gravity, moments of inertia and determination of stresses in frame structures.

Elements of Hydraulics—Flow of water in pipes, through orifices and in open channels. Determination of the co-efficient of discharge, velocity and contraction in pipes and orifices.

MECH. 102. *Materials of Engineering*—Second semester. Two credits. Two laboratory periods. Prerequisite, to take concurrently Mech. 101. Required of all juniors in Engineering.

The composition, manufacture and properties of the principal materials used in engineering and of the conditions that influence their physical characteristics. The interpretation of specifications and of standard tests. Laboratory work in the testing of steel, wrought iron, timber, brick, cement and concrete.

MECH. 103. *Kinematics*—The year. Five credits. One lecture first semester; four lectures second semester. Prerequisite, Math. 106. Required of juniors in Mechanical Engineering.

The theory and practice of the kinematics of machinery, as applied to ropes, belts, chains, gears and gear teeth, wheels in trains, epicyclic trains, cams, linkwork, parallel motions. Miscellaneous mechanisms and aggregate combinations.

MECH. 104. *Thermodynamics*—First semester. Three credits. Three lectures. Prerequisites, Phys. 101 and 102, Eng. 101. Required of seniors in Mechanical and Electrical Engineering.

MECH. 105. *Thermodynamics*—Second semester. Three credits. Three lectures. Prerequisite, Mech. 104. Required of seniors in Mechanical Engineering.

Thermodynamics as applied to properties of gases, cycles of heat engines using gages. Properties of vapors. Entropy. The internal combustion engine. The steam turbine. Flow of fluids, and the application of thermodynamics to compressed air and refrigerating machinery.

Mechanical Engineering

M. E. 101. *Elements of Machine Design*—First semester. One credit. One laboratory period. Prerequisite, Math. 106. Required of juniors in Electrical Engineering.

Empirical design of machine parts.

M. E. 102. *Elements of Machine Design*—First semester. Five credits. Three lectures and two laboratory periods. Prerequisite, Math. 106. Required of juniors in Mechanical Engineering.

The application of the principles involved in determining the proportions and forms of machine parts. The design of bolts, screws, shafting and gears.

M. E. 103. *Design of Prime Movers*—The year. Six credits. One lecture and two laboratory periods first semester; two lectures and one laboratory period second semester. Prerequisite, M. E. 102. Required of seniors in Mechanical Engineering.

Analysis of the stresses in gas and steam engines. Proportioning the essential parts and estimating the cost of each. The steam boiler; its design and cost.

M. E. 104. *Design of Power Plants*—The year. Four credits. One lecture and one laboratory period. Prerequisites, Engr. 101, 102 and M. E. 102. Required of seniors in Mechanical Engineering.

The design of a complete power plant, including the layout of building and installation of equipment. The selection of types and capacities of the various units required.

M. E. 105. *Design of Pumping Machinery*—Second semester. Two credit hours. One lecture and one laboratory period. Prerequisite, M. E. 102 and Mech. 101, 102. Required of seniors in Mechanical Engineering.

Elementary design of double acting steam pumps and centrifugal pumps. The air lift and the hydraulic ram.

M. E. 106. *Operation and Production Costs*—Second semester. Two credits. Two lectures. Required of seniors in Mechanical Engineering.

Financial problems of the engineer. Cost segregation and cost analysis. Basis of price and rates. Fixed charges and operating costs. Replacement cost. Depreciation. Maintenance. Taxes and insurance. Unit cost determination. Determination of size of system for best financial efficiency.

M. E. 107. *Mechanical Laboratory*—The year. Two credits. One laboratory period. Prerequisites, Engr. 101, 102; Mech. 101, 102. Required of seniors in Mechanical Engineering.

Calibration of instruments, gauges, indicator springs, planimeters, steam, gas and water meters.

Indicated and brake horsepower of steam and internal combustion engines, setting of plain valves, corliss valves. Tests for economy and capacity of boilers, engines, turbines. Pumps and other prime movers. Feed water heaters, condensers; B. T. U. analysis of solid, gaseous and liquid fuels and other complete power plant tests.

M. E. 108. *Heating and Ventilation*—First semester. Two credits. Two lectures. Prerequisites, Engr. 101, 102 and Mech. 101, 102. Required of seniors in Mechanical Engineering.

The principles and methods of construction in use in various systems of heating and ventilating; the design, erection and operation of heating plants.

Shop

SHOP 101. *Shop and Forge Practice*—The year. Two credits. One laboratory period. Required of all freshmen in Engineering.

The use and care of wood working tools, exercise in sawing, planing, mortising, tenoning and laying out work from blueprints. Principles of pattern making with sufficient foundry practice to demonstrate the uses of pattern making. Forging of iron and steel, welding and making of steel tools.

SHOP 102. *Machine Shop Practice*—First semester. One credit. One laboratory period. Prerequisite, Shop 101. Required of all sophomores in Engineering.

SHOP 103. *Machine Shop Practice*—Second semester. Two credits. Two laboratory periods. Prerequisite, Shop 102. Required of sophomores in Mechanical and Electrical Engineering.

Study and practice with various machines used in machine shops, principles of turning, planing, drilling, screw cutting and filing.

SHOP 104. *Foundry Practice*—Second semester. One credit. One laboratory period. Prerequisite, Shop 103. Required of juniors in Mechanical Engineering.

Molding in brass and iron. Core making. The cupola and its managements. Lectures on selection of iron by fracture, fuels and the mixing and melting of metals.

Surveying

SURV. 101. *Plane Surveying*—First semester. One credit. Lecture and laboratory work. Prerequisite, Math. 101. Required of all sophomores in Engineering.

SURV. 102. *Plane Surveying*—Second semester. Two credits. Lecture and laboratory work. Prerequisite, Surv. 101. Required of sophomores in Civil Engineering.

The theory and practice of plane surveying; including the use and adjustment of the transit, level, plane table and minor surveying instru-

ments. Solution of practical problems in giving lines and grades for buildings, shafting and foundations, and in laying out curves. The computation of area and of earthwork, and the principles of plan and map making and map reading.

SURV. 103. *Advanced Surveying*—First semester. Three credits. One lecture and two laboratory periods. Prerequisite Surv. 101-102. Required of juniors in Civil Engineering.

Practical astronomy and geodetic surveying. The determination of latitude, longitude and azimuth by stellar and by solar observations. Base line measurement and precise triangulation. City surveying. Hydrographic surveying.

ENGLISH LANGUAGE AND LITERATURE

ENG. 101. *Composition and Rhetoric*—The year. Six credits. Three lectures. Freshman year. Prerequisite, three units of high school English. Required of all four-year students.

Parts, principles, and conventions of effective thought communication. Reading, study, and analysis of standard contemporary prose specimens. Original exercises and themes.

ENG. 102. *Elements of Literature*—The year. Six credits. Three lectures. Prerequisite, three units of high school English.

Lectures on the principles of literary form. Study and interpretation of selected English and American classics.

ENG. 103. *Advanced Composition and Rhetoric*—First semester. Two credits. Two lectures. Prerequisite, Eng. 101. Optional with Eng. 105-106 as a requirement for all students whose major is English.

Lectures on principles of composition. Study and analysis of the best scientific essays. Practice in expository writing.

ENG. 104. *Advanced Composition and Rhetoric*—Second semester. Two credits.

Continuation of Eng. 103. Prerequisite, Eng. 103.

ENG. 105. *Expository Writing*—First semester. Two credits. Two lectures. Prerequisite, Eng. 101. Optional with Eng. 103-104 as a requirement for all students whose major is English.

Lectures on the principles of expository writing. The main objective of the course is to direct the student's efforts in analysing, interpreting, and preparing material bearing upon scientific matter. Themes, papers, and reports.

ENG. 106. *Expository Writing*—Second semester. Two credits.

Continuation of Eng. 105. Prerequisite, Eng. 105.

ENG. 107. *History of English Literature*—First semester. Three credits. Three lectures. Prerequisite, Eng. 101. Required of all students whose major is English.

A general survey, with extensive reading and class papers.

ENG. 108. *History of English Literature*—Second semester. Three credits.

- Continuation of Eng. 107. Prerequisite Eng. 101.
- ENG. 109. *American Literature* (by types)—First semester. Three credits. Three lectures. Prerequisite, Junior standing. Lectures on the development of American literary types. Reports on assigned topics. Term themes. Special attention will be paid to the growth in America of lyric poetry, epic poetry, the drama, the ballad, the historical account, oration, biography, letters, essays, novel, and short story. (Omitted, 1924-1925.)
- ENG. 110. *American Literature*—Second semester. Three credits. Continuation of Eng. 109. Prerequisite, Junior standing.
- ENG. 111. *Modern Poets*—First semester. Three credits. Three lectures. Prerequisite, Eng. 101. English and American poets of the latter part of the Nineteenth and of the Twentieth Century. Intensive study of the shorter poems of Robert Browning.
- ENG. 112. *Modern Poets*—Second semester. Three credits. Continuation of Eng. 115. Prerequisite, Eng. 101.
- ENG. 113. *The Drama*—First semester. Three credits. Three lectures. Prerequisite, Junior standing. The work of the first semester will be devoted to a survey of the best and most successful plays in the history and development of the dramatic art in England and America. Lyly, Marlowe, Dekker, Heywood, Beaumont, Fletcher, Jonson, Webster, Middleton, Rowley, Dryden, Otway, Congreve, Addison, Steele, Fielding, Goldsmith, Sheridan, Shelly, Bulwer-Lytton, Godfrey, Tyler, Dunlop, Barker, Payne, Irving, Smith, Bird, Willis, Ritchie, Baker, Howe, Boucicault, Jefferson, Howard, Gillette, Belasco, Long, Sheldon, and Crothers. Lectures, Reports, and Term themes. Not given in 1924-1925.
- ENG. 114. *The Drama*—Second semester. Three credits. Continuation of Eng. 113. Prerequisite, Junior standing. The second semester will include the plays of modern dramatists: Wilde, Moody, Mackaye, Bennett, Shaw, Knoblock, Maugham, Drinkwater, Ervine, Dunsany, Walter, Peabody, Hazelton, Barrie, O'Brien, Tarkington, and Molnar. Not given in 1924-1925.
- ENG. 115. *Shakespeare*—First semester. Three credits. Three lectures. Prerequisite, Eng. 101. An intensive study of selected plays.
- ENG. 116. *Shakespeare*—Second semester. Three credits. Continuation of Eng. 115. Prerequisite, Eng. 101.
- ENG. 117. *Business English*—First semester. Two credits. Two lectures. Prerequisite, Eng. 101. This course develops the best methods of effective expression, both oral and written, used in business relations. The application of these methods includes correspondence, advertising, and salesmanship, and is based upon a psychological attitude toward the subject.
- ENG. 118. *Business English*—Second semester. Two credits. Continuation of Eng. 117. Prerequisites, Eng. 101 and 117.

For Advanced Undergraduates and Graduates

- ENG. 119. *Anglo-Saxon and Middle English*—The year. Six credits. Three lectures each semester. Prerequisite, some knowledge of Latin and German. Required of all students whose major is English.
- A study of Anglo-Saxon (Old English) grammar and literature. Lectures on the principles of comparative philology and phonetics. Beowulf through 1500 lines. The language and authorship of the Middle English period, ending with Chaucer. (House.)
- ENG. 120. *Aesthetics of Criticism*—First semester. Two credits. Two lectures. A philosophical approach to the criticism of literature, based upon Aristotle's Poetics and Longinus on the Sublime. The study of the basic structural principles of the various forms of literature will be supplemented by those principles governing all good art. (Johnson.)
- ENG. 121. *Aesthetics Criticism*—Second semester. Two credits. Continuation of Eng. 120. Prerequisite, Eng. 120.
- ENG. 122. *The Novel*—First semester. Two credits. Two lectures. Lectures on the principles of narrative structure and style. Class reviews of selected novels, chiefly from English and American sources.
- ENG. 123. *The Novel*—Second semester. Two credits. Continuation of Eng. 122. (House.)
- ENG. 124. *English and American Essays*—First semester. Two credits. Two lectures. A study of the philosophical and critical essays of England and America: Bacon, Lamb, Macaulay, Carlyle, Ruskin, Chesterton, Emerson. (House.)
- ENG. 125. *Authorship*—Second semester. Two credits. Two lectures. Admission to class on recommendation of instructor. Practice in the making of literature of various types; verse, essay, fiction, drama. (House.)
- ENG. 126. *Tennyson*—First semester. Two credits. Two lectures. Lectures on the art of poetry followed by a detailed reading of the Princess. Survey of other important poems of this author. (Omitted, 1924-1925.) (House.)
- ENG. 127. *Browning's Dramas*—Second semester. Two credits. Two lectures. Luria; Return of the Druses; Colombe's Birthday; Pippa Passes; A blot on the 'Scutcheon. (Omitted, 1924-1925.) (House.)
- ENG. 129. *Comparative Syntax*—Second semester. One credit. One lecture. Lectures on grammatical analysis supplemented by a comparison of modern English forms and idioms with those of other languages. (House.)
- ENG. 130. *Development of Fiction*—First semester. Two credits. Two lectures. From the origin of narration in English through Fanny Burney's Evelina and Cecilia; dealing by the way with some of the outstanding

continental fiction writers. Stress will be placed on the constantly changing form and appeal of fiction as represented by the principal writers. (Wheeler.)

ENG. 131. *Development of Fiction*—Second semester. Two credits. Two lectures.

From the beginning of The Romantic Movement through Stevenson. A few of the greatest German and French novelists will also be considered. The stress will be placed on the changing use of the novel and the short story forms to suit the purpose of the different writers and the schools of which they are members. American fiction will be touched on in its relation to other forms and to the general development of narrative art. (Wheeler.)

ENG. 132. *Versification*—First semester. One credit. Two lectures.

Admission to class on recommendation of instructor. Practice in the construction of the different poetical forms. (Wheeler.)

For Graduates

ENG. 201. *Seminar*—Credit proportioned to the amount of work and ends accomplished. (House.)

Original research and the preparation of dissertations looking toward advanced degrees.

ENG. 202. *Elizabethan Literature*—First semester. Three credits. Three lectures.

A study of Shakespeare and the chief Elizabethan dramatists, also a survey course of Milton's prose and poetry. (Lemon.)

ENG. 203. *Elizabethan Literature*—Second semester. Three credits. Continuation of Eng. 202. (Lemon.)

ENTOMOLOGY AND BEE CULTURE

ENT. 101. *General Entomology*—Second semester. Three credits. Two lectures and one laboratory.

General principles of structural and systematic entomology. The relation of insects to the past experience and the future activities of the student. Lectures, recitations, laboratory work and collection trips.

ENT. 102. *Advanced Entomology*—The year. Four credits. Two lectures and two laboratory periods. Prerequisite, Ent. 101.

Insect morphology and biology, with special relation to applied entomology. The theory and practice of insect control.

ENT. 104. *Systematic Entomology*—First semester. Two credits. Two laboratory periods. Prerequisite Ent. 101.

The student selects some group in which he is particularly interested and makes a detailed study of it. The course requires considerable field work and is supplemented by laboratory periods and frequent conferences.

ENT. 105. *Thesis*—The year. Four credits.

The intensive investigation of some zoological subject, the results of which are incorporated in a paper which is submitted as part of the requirement for graduation.

ENT. 106. *Insecticides and Their Application*—Second semester. Two credits. One lecture and one laboratory period.

The principles of insecticides, their chemistry, preparation and application; construction, care and use of spray and dusting machinery; fumigation, methods and apparatus in mechanical control.

ENT. 107. *Medical Entomology*—First semester. Two credits. Two lectures.

The relation of animals to disease, directly and as vectors of pathogenic organisms; the control of pests of man.

ENT. 108. *Scientific Delineation and Preparation*—The year. One credit. One laboratory period.

Photography, photomicrography, drawing freehand and with camera lucida, lantern-slide making, optical projection, preparation of exhibit and museum material, with especial reference to entomology.

ENT. 109. *Horticultural Entomology*—Second semester. Three credits. Two lectures and one laboratory period. Prerequisite Ent. 101.

Lectures, laboratory and field work on the morphology, biology and control of insect pests of horticultural crops.

For Advanced Undergraduates and Graduates

ENT. 103. *Economic Entomology*—The year. Five credits. Three lectures and two laboratory periods.

Problems in applied entomology, including life history studies, ecology and distribution, parasitism and control.

ENT. 110. *Seminar*—The year—One credit. Time to be arranged. Presentation of original work, book reviews and abstracts of the more important literature.

Graduate Students

ENT. 201. *Entomological Problems*—Two credits. Studies of minor problems in morphology, taxonomy and applied entomology, with particular reference to preparation for individual research. (Cory and Hamilton.)

ENT. 202. *Research in Entomology*—The year. Six to ten credits. Advanced students having sufficient preparation may, with the approval of the head of the department, undertake supervised research in morphology, taxonomy or biology and control of insects. Frequently, the student may be allowed to work on Station or State Horticultural Department projects. The student's work may form a part of the final report on the project and be published in bulletin form. A report, suitable for publication, must be submitted at the close of the studies and the time and place of its publication will be determined by the professor in charge of the work. (Cory.)

FARM FORESTRY

FOR. 101. *Farm Forestry*—Three credits. Two lectures and one laboratory period. Second semester. Senior year. Prerequisite, Bot. 101. A study of forest botany, wood management, measurements, fire pro-

tection, nursery practice, tree planting, valuation and utilization of forest crops. The work is conducted by means of lectures and field work.

FARM MANAGEMENT

F. M. 101. *Farm Accounting*—Second semester. Three credits. Two lectures and one laboratory period. Second semester open to juniors and seniors.

A concise practical course in the keeping of farm accounts and in determining the cost of farm production.

F. M. 102. *Farm Management*—First semester. Four credits. Four lectures.

The business of farming from the standpoint of the individual farmer. This course aims to connect the principles and practice which the student has acquired in the several technical courses and to apply them to the development of a successful farm business. Prerequisite, F. M. 101.

See also Agricultural Economics Page 141.

FRENCH

FREN. 101. *Elementary French*—The year. Eight credits. Four recitations each semester.

Drill upon pronunciation, elements of grammar; composition, conversation, easy translation. For beginners.

FREN. 102. *Second Year French*—The Year. Six credits. Three recitations each semester. Prerequisite, Fren. 101 or the equivalent.

Grammar continued; composition, conversation, translation, reproductions. Texts selected from modern prose. This course is for those who offer two units in French for entrance.

FREN. 103. *Development of the French Novel*—The year. Six credits. Three recitations each semester. Prerequisite, Fren. 102.

Detailed study of the history and growth of the novel in French literature; of the lives, works and influence of various novelists. Lectures, supplementary readings, reports.

GENETICS

(A description of courses in Genetics may be found under Agronomy and Animal Husbandry)

GEOLOGY

GEOL. 101. *Geology*—First semester. Three credits. Two lectures and one laboratory period.

A text-book, lecture and laboratory course, dealing with the principles of geology and their application to agriculture. While this course is designed primarily for agricultural students in preparation for technical courses, it may also be taken as part of a liberal education.

GERMAN

GERM. 101. *Elementary German*—The year. Eight credits. Four recitations.

The elements of German grammar; reading of easy prose; oral practice.

GERM. 102. *Second Year German*—The year. Six credits. Three recitations. Prerequisite, Germ. 101 or equivalent.

Reading of narrative and technical prose; grammar review; oral and written practice.

GERM. 103. *Advanced German*—The year. Six credits. Three recitations. Prerequisite, Germ. 102.

Rapid reading of modern dramas and novels by Hauptmann, Sudermann, Fulda, Frenssen, Ernst and others.

GREEK

GK. 101. *Elementary Greek*—The year. Eight credits. Four lectures or recitations each semester.

Drill and practice in the fundamentals of Greek grammar and the acquisition of a vocabulary.

GK. 102. *Greek Grammar, Composition and Translation of Selected Prose Works*—The year. Eight credits. Four lectures or recitations each semester. Prerequisite, Gk. 101 or two entrance units in Greek.

HISTORY

H. 101.-102. *Modern and Contemporary European History*—The year. Six credits. Three lectures and assignments each semester.

The object of the course is to acquaint students with the chief events in World History during the modern period. The lectures are arranged so as to present a comparative and contrastive view of the most important events during the period covered.

H. 103. *American History, 1492-1860*—First semester. Two credits. Two lectures and assignments. Open to sophomores or advanced under graduates.

A study of the political, economic and social development of the American people, from the discovery of America to the Civil War period.

H. 104. *American History, 1860-1920*—Second semester. Two credits. Two lectures and assignments.

A study of the Civil War and reconstruction periods and the period of national development from the close of the reconstruction period to the present time.

H. 105. *History of Maryland*—Second semester. Two credits. Two lectures or recitations.

A study of the Colony of Maryland and its development into statehood.

H. 110. *Ancient Civilization*—First semester. Three credits. Three lectures or recitations.

Treatment of ancient times including Geography, Mythology and Philosophy.

For additional courses in this field see courses listed under Political Science.

HOME ECONOMICS

H. E. 101. *Elementary Foods*—The year. Six credits. One lecture and two laboratory periods. Prerequisite, Inorganic Chemistry A. 101 or B. 101.

Principles and processes of Cookery. Production and composition of foods. Planning and serving of meals.

H. E. 102. *Nutrition*—First semester. Three credits. Three lectures. Required of all home economics students. Prerequisite, H. E. 101 and Organic Chemistry, 102.

Food requirements and metabolism. Diets for the normal person.

H. E. 103. *Nutrition*—Second semester. Three credits. One lecture and two laboratory periods. Prerequisite, H. E. 102.

Diets and metabolism of the abnormal person; invalid cookery; feeding of children.

H. E. 104. *Preservation and Demonstration of Foods*—First semester. Three credits. One lecture and two laboratory periods. Prerequisite, H. E. 101.

Canning and preserving; practice in giving public demonstrations.

H. E. 105. *Advanced Foods*—Second semester. Three credits. One lecture and two laboratory periods. Prerequisite, H. E. 101.

Experimental work in foods and cookery; fancy cookery; catering.

H. E. 106. *Marketing and Buying*—First semester. Three credits. Two lectures and one laboratory period.

Food budgets and household accounts. Selection, purchasing and care of foods for the family. Lectures will be given by specialists in the Department of Dairy Husbandry, Animal Husbandry and Horticulture, in the College of Agriculture, on the choice and care of dairy products, meats, vegetables and fruits.

H. E. 107. *Home Management and Mechanics of the Household*—First semester. Three credits. Three lecture periods.

The operation and maintenance of the household; its furnishings and equipment. Lectures on heating, lighting, plumbing, wood finishes and all mechanics of the household, as applied to average rural or city dwelling, will be given by the staff of the College of Engineering.

H. E. 108. *Practice House*—Second semester. Four credits. Six weeks experience in keeping house in a household of six students.

H. E. 109. *Home Nursing*—Second semester. Two credits.

Instruction in domestic emergencies and first aid, and in the simple procedure in the home care of the sick.

H. E. 110. *Institutional Management*—The year. Six credits. Three lectures each semester. Prerequisites, H. E. 101 and H. E. 107.

General Institutional organization including dining halls, dormitories and laundries.

H. E. 111. *Garment Construction*—Second semester. Two credits. Two laboratory periods. Prerequisite, H. E. 116.

Fundamental stitches; darning and patching; practice in hand and machine sewing; use of machine attachments; study of commercial patterns.

H. E. 112. *Drafting and Elementary Dress Design*—First semester. Three credits. One lecture and two laboratory periods. Prerequisite, H. E. 111 or equivalent.

Drafting, cutting, fitting and designing of patterns. Construction of woolen dress from pattern designed in class. Clothing Economics.

H. E. 113. *Dressmaking*—Second semester. Three credits. Three laboratory periods. Prerequisite, H. E. 112.

Construction of silk dress; made over dress; dinner or evening gown.

H. E. 114. *Advanced Clothing*—Second semester. Two credits. Two laboratory periods. Prerequisite, H. E. 113. Designing and dress construction continued.

H. E. 115. *Millinery*—Second semester. Three credits. Three laboratory periods. Prerequisite, H. E. 111.

Millinery stitches and simple trimmings; drafting of patterns for hats; making and covering of frames; making hats in velvet, silk, straw and transparent materials; renovation of materials.

H. E. 116. *Textiles*—First semester. Two credits. One lecture and laboratory period.

History of textile fibers, identification of textile materials; variation of weave in regard to beauty and strength; use and value of fibers for clothing and household furnishings.

H. E. 117. *Composition and Design*—First semester. Three credits. Three laboratory periods.

Space division and space relation; color schemes and exercises; original designs in which lines, values, and colors are put together to produce fine harmony; perspective principles.

H. E. 118. *Costume Design*—Second semester. Three credits. One lecture and two laboratory periods. Prerequisite, H. E. 117.

Appropriate dress; application of color, harmony and proportion of parts to costumes designed in ink and water color; history of costume.

H. E. 119. *Home Architecture and Interior Decoration*—First semester. Three credits. Two lectures and one laboratory period. Prerequisite H. E. 117.

Styles of architecture; application of colors in Home Decorations; furnishings from a sanitary, economical and artistic point of view.

H. E. 120. *Art and Handicraft*—Second semester. One credit. One laboratory period.

Applied design in embroidery, lace and stencils.

H. E. 121. *Basketry*—First semester. One credit. One laboratory period.

A study of the various weaves and their application in reed pieces; manipulation of materials in raffia work.

H. E. 122. *Art Shop Management*—The year. Six credits. Three laboratory periods. Prerequisite, H. E. 113 and H. E. 120.

Buying, making and selling of art materials; keeping accounts; principles of salesmanship.

H. E. 123. *Seminar—First semester*—Three credits. Three lecture periods.

This course consists of book reviews and abstracts from scientific papers and bulletins relating to Home Economics together with criticisms and discussion of the work presented.

HORTICULTURE

Pomology

HORT. 101. *Elementary Pomology*.—First semester. Three credits. Two lectures and one laboratory period.

A general course in pomology. The proper location and site for an orchard are discussed. Varieties, planting plans, inter-crops, spraying, cultural methods, fertilizing methods, thinning, picking, packing and marketing are also given consideration. The subjects are discussed for apples, peaches, pears, plums, cherries and quinces. The principles of plant propagation as applied to pomology are discussed.

HORT. 102. *Commercial Fruit Growing*—First semester. Three credits. Two lectures and one laboratory period. Prerequisite, Hort. 101.

The proper management of commercial orchards in Maryland. Advanced work is taken up on the subject of orchard culture, orchard fertilization, picking, packing, marketing and storing of fruits, orchard by-products, orchard heating and orchard economics. Designed for undergraduate or graduate students.

HORT. 103. *Systematic Pomology*—First semester. Three credits. Two lectures and one laboratory period. Prerequisite, Hort. 101.

The history, botany and classification of fruits and their adaptation to Maryland conditions. Exercises are given in describing and identifying the leading commercial varieties of fruits. Students are required to help set up the fruit show each year. Designed for undergraduate or graduate students.

HORT. 104. *Advanced Practical Pomology*—First semester. One credit. Senior year. Prerequisites, Hort. 102 and 103.

A trip occupying one week's time will be made through the principle fruit regions of eastern West Virginia, Maryland and Pennsylvania. A visit to the fruit markets of several large cities will be made. The cost of this trip should not exceed thirty dollars to each student. Each student will be required to hand in a detailed report covering the trip. The time for taking this trip will be arranged yearly with each class.

HORT. 105. *Small Fruit Culture*—Second semester. Two credits. One lecture and one laboratory period.

The care and management of small fruit plantations. Varieties and their adaptation to Maryland soils and climate, packing, marketing, and a study of the experimental plots and varieties on the Station grounds. The following fruits are discussed: the grape, strawberry, blackberry, blackcap raspberry, red raspberry, currant, gooseberry, dewberry and loganberry.

HORT. 106. *Economic Fruits of the World*—Second semester. Two credits. Two lectures. Prerequisites, Hort. 102 and 103.

A study is made of the botanical, ecological and physiological characteristics of all species of fruit-bearing plants of economic importance, such as the date, pineapple, fig, olive, banana, nut bearing trees, citrus fruits, newly introduced fruits and the like, with special reference to their cultural requirements in certain parts of the United States and the insular possessions. All fruits are discussed in this course which have not been discussed in a previous course.

HORT. 107. *Fruits and Vegetable Judging*—First semester. Two credits. Two laboratory periods. Prerequisites, Hort. 101 and 111.

A course designed to train men for fruit judging teams and practical judging. Students are required to know at least one hundred varieties of fruit, and are given practice in judging single plates, largest and best collections, boxes, barrels and commercial exhibits of fruits and vegetables. Students are required to help set up the college horticultural show each year.

HORT. 108. *Advanced Fruit Judging*—First semester. One credit. One laboratory period. Prerequisite, Hort. 107.

Vegetable Crops

HORT. 111. *Principles of Vegetable Culture*—Second semester. Three credits. Two lectures and one laboratory.

A study of fundamental principles underlying all garden practices. Each student is given a small garden to plan, plant, cultivate, spray, fertilize, harvest, etc.

HORT. 112. *Tuber and Root Crops*—First semester. Two credits. One lecture and one laboratory period. Prerequisite, Hort. 111. Open to seniors and graduates.

A study of white potatoes and sweet potatoes, considering seed varieties, propagation, soils, fertilizers, planting, cultivation, spraying, harvesting, storing and marketing.

HORT. 113. *Truck Crop Production*—Second semester. Three credits. Two lectures and one laboratory period. Prerequisite Hort. 111.

A study of methods used in commercial vegetable production. Each individual crop is discussed in detail. Trips are made to large commercial gardens, various markets and other places of interest.

HORT. 114. *Systematic Olericulture*—First semester. Given on odd years only. Three credits. Two lectures and one laboratory period. Prerequisite, Hort. 112 and 113.

A study of the classification and nomenclature of vegetables. De-

scription of varieties and adaptation of varieties to different environmental conditions.

HORT. 115. *Advanced Truck Crop Production*—Second semester. Two credits. Prerequisites, Hort. 112, 113, and 114.

A trip of one week is made to the commercial trucking sections of Maryland, Delaware, New Jersey and Pennsylvania. A study of the markets in several large cities is included in this trip. Students are required to hand in a detailed report of the trip. Such a trip should not exceed thirty dollars per student. The time will be arranged each year with each class.

HORT. 116. *Vegetable Forcing*—Second semester. Three credits. Two lectures and one laboratory period. Prerequisite, Hort. 111.

All vegetables used for forcing are considered. Laboratory work in sterilization and preparation of soils, cultivation, regulation of temperature and humidity, watering, training, pruning, pollination, harvesting, packing and marketing.

Floriculture

HORT. 121. *General Floriculture*—First semester. Two credits. One lecture and one laboratory period.

The management of greenhouse; the production and marketing of florists crops; retail methods; plants for house and garden.

HORT. 122. *Greenhouse Management*—The year. Six credits. Two lectures and one laboratory period.

A consideration of the methods employed in the management of greenhouses; including the operations of potting, watering, ventilating, fumigation and methods of propagation.

HORT. 123. *Floricultural Practice*—The year. Four credits. Two laboratory periods.

Practical experience in the various greenhouse operations of the fall, winter and spring seasons.

HORT. 124. *Greenhouse Construction*—Second semester. Two credits. One lecture and one laboratory period.

The various types of houses, their location, arrangement, construction, and cost; principles and methods of heating; preparation of plans and specifications for commercial and private ranges. This course is given every other year.

HORT. 125. *Commercial Floriculture*—The year. Six credits. Two lectures and one laboratory period. Prerequisite, Hort. 122.

Cultural methods of florists' bench crops and potted plants, the marketing of the cut flowers, the retail store, a study of floral decoration.

HORT. 126. *Garden Flowers*—First semester. Three credits. Two lectures and one laboratory period.

Plants for garden use; the various species of annuals, herbaceous perennials, bulbs, bedding plants and roses and their cultural requirements. This course is given every other year.

HORT. 127. *Floricultural Trip*—Second semester. One credit. Prerequisite, Hort. 122.

A trip occupying one week's time will be made through the principal floricultural sections including Philadelphia and New York, visiting greenhouse establishments, wholesale markets, retail stores, nurseries, etc. The cost of this trip should not exceed thirty dollars to each student. Each student will be required to hand in a detailed report covering the trip. The time for taking this trip will be arranged yearly with each class.

Landscape Gardening

HORT. 131. *General Landscape Gardening*—Second semester. Two credits. One lecture and one laboratory period.

The theory and general principles of landscape gardening and their application to private and public areas. Special consideration is given to the improvement and beautification of the home grounds, farmsteads and small suburban properties. Adapted to students not intending to specialize in landscape, but who wish some theoretical and practical knowledge of the subject. Given every other year.

HORT. 132. *Plant Materials*—The year. Four credits. One lecture and one laboratory period.

A field and laboratory study of trees, shrubs and vines used in ornamental planting.

HORT. 133. *Elements of Landscape Design*—First semester. Three credits. One lecture and two laboratory periods. Prerequisite, Hort. 127.

A consideration of the principles of landscape design; surveys, mapping and field work.

HORT. 134. *Landscape Design*—The year. Six credits. Three laboratory periods. Prerequisite, Hort. 129.

The design of private grounds, gardens and of architectural details used in landscape; planting plans; analytical study of plans of practicing landscape architects; field observation of landscape developments.

HORT. 135. *History of Landscape Gardening*—Second semester. One credit. One lecture or laboratory period. Prerequisite, Hort. 129.

Evolution and development of landscape gardening; the different styles and a particular consideration of Italian, English and American gardens. Given every other year.

HORT. 136. *Landscape Construction and Maintenance*—Second semester. One credit. One lecture or laboratory period.

Methods of construction and planting; estimating; park and estate maintenance. Given every other year.

HORT. 137. *Civic Art*—First semester. Two credits. One lecture and one laboratory period. Prerequisite, Hort. 129.

Principles of city planning and their application to village and rural improvement, including problems in design of civic center, parks, school grounds and other public and semi-public areas. Given every other year.

General Horticultural Courses

HORT. 141. *Horticultural Breeding Practices*—Second semester. One credit. One laboratory period. Senior year. Prerequisites, Genetics, Plant Phys. 101.

Practice in plant breeding, including pollination, hybridization, selection, note taking, and the general application of the theories of heredity and selection to practice are taken up in this course.

HORT. 142. *Horticultural Research and Thesis*—The year. Four to six credits.

Advanced students in any of the four divisions of horticulture may select some special problem for individual investigation. This may be either the summarizing of all the available knowledge on a particular problem or the investigation of some new problem. Where original investigation is carried on, students should in most cases start the work during the junior year. The results of the research work are to be presented in the form of a thesis and filed in the horticultural library.

HORT. 143. *Horticultural Seminar*—The year. Two credits.

In this course papers are read by members of the class upon subjects pertaining to their research or thesis work or upon special problems assigned them. Discussions of special topics are given from time to time by members of the departmental staff.

Courses Intended Primarily for Graduates

HORT. 201. *Experimental Pomology*—First semester. Three credits. Three lectures.

A systematic study of the sources of knowledge and opinion as to practices in pomology; methods and difficulties in experimental work in pomology and results of experiments that have been or are being conducted in all experiment stations in this and other countries. A limited number of seniors will be allowed to take this course, with the approval of the head of the department.

HORT. 202. *Experimental Olericulture*—Second semester. Two credits. Two lectures.

A systematic study of the sources of knowledge and opinion as to practices in vegetable growing; methods and difficulties in experimental work in vegetable production and results of experiments that have been, or are being conducted in all experiment stations in this and other countries. A limited number of seniors will be permitted to take this course with the approval of the head of the department.

HORT. 203. *Experimental Floriculture*—Second semester. Two credits. Two lectures.

A systematic study of the sources of knowledge and opinions as to practices in floriculture are discussed in this course. The results of all experimental work in floriculture which have been, or are being conducted, will be thoroughly discussed. A limited number of seniors will be permitted to take this course with the approval of the head of the department.

HORT. 204. *Methods of Research*—Second semester. Two credits. One lecture and one laboratory period.

For graduate students only. Special drill will be given in the making of briefs and outlines of research problems, in methods of procedure in conducting investigational work, and in the preparation of bulletins and reports. A study of the origin, development and growth of horticultural research is taken up. A study of the research problems being conducted by the Department of Horticulture will be made, and students will be required to take notes on some of the experimental work in the field and become familiar with the manner of filing and cataloging all experimental work.

HORT. 205. *Advanced Horticultural Research and Thesis*—The year. Four, six or eight credits.

Graduate students will be required to select problems for original research in either pomology, vegetable gardening, floriculture or landscape gardening. These problems will be continued until completed and final results are to be published in the form of a thesis.

HORT. 206. *Advanced Horticultural Seminar*—The year. Two credits.

This course will be required of all graduate students. Students will be required to give reports either on special topics assigned them, or on the progress of their work being done in courses. Members of the departmental staff will report special research work from time to time.

Requirements of Graduate Students in Horticulture

Pomology—Graduate students specializing in Pomology who are planning to take an advanced degree will be required to take or offer the equivalent of the following courses: Hort. 102, 103, 106, 201, 204, 205 and 206; Physiological Chemistry 101; Plant Bio-physics 201; Biochemistry 102; and Organic Chemistry ()

Olericulture—Graduate students specializing in vegetable gardening, who are planning to take an advanced degree, will be required either to take or offer the equivalent of the following courses: Hort. 113, 114, 202, 204, 205 and 206; physiological chemistry 101; plant bio-physics 201; bio-chemistry 102; and org. chem. 102.

Floriculture—Graduate students specializing in floriculture who are planning to take an advanced degree will be required either to take or offer the equivalent of the following courses: Hort. 122, 123, 124, 125, 126, 128, 129, 203, 204, 205 and 206; physiological chemistry 101; plant bio-physics 201; bio-chemistry 102; botany 103, and organic chemistry.

Landscape Gardening—Graduate students specializing in landscape gardening, who are planning to take an advanced degree, will be required either to take or offer the equivalent of the following courses: Hort. 128, 129, 130, 132, 204, 205 and 206; Bot. 103; Drawing 101-102; and Surveying 101 and 102.

Additional Requirements—In addition to the above required courses, all graduate students in horticulture are advised to take physical and colloidal chemistry.

Unless graduate students in horticulture have had some course work in entomology, plant pathology and genetics certain of these courses will be required.

LATIN

LAT. 101. *Elementary Latin*—The year. Eight credits. Four lectures or recitations each semester.

This course is offered to cover a substantial and accurate course in grammar and syntax with translation of simple prose.

LAT. 102. *Translation and Prose Composition*—The year. Eight credits. Four lectures or recitations each semester. Prerequisite, Lat. 101. or its equivalent.

Texts will be selected from the works of Caesar and Sallust.

LAT. 103. First Semester. Four credits. Four lectures or recitations. Prerequisite, Lat. 2, or two entrance units in Latin.

Texts will be selected from Virgil with drill on prosody.

LAT. 104. Second semester. Four credits. Four lectures or recitations. Prerequisite, Lat. 102 or three entrance units in Latin.

Selections from Cicero's orations with parallel reading of the world's masterpieces of oratory.

LAT. 105. First semester. Three credits. Three lectures or recitations. Prerequisites, Lat. 103 and 104.

Histories of Livy with parallel reading of Napoleon's campaign in Italy.

LAT. 106. Second semester. Three credits. Three lectures or recitations. Prerequisites, Lat. 103 and 104.

Odes and Epodes of Horace with appropriate study of prosody.

For Advanced Undergraduates and Graduates

LAT. 107. First semester. Three credits. Three lectures or recitations. Prerequisites, Lat. 103 and 104.

The writings of Tacitus. (Spence.)

LAT. 108. Second semester. Three credits. Three lectures or recitations. Prerequisites, Lat. 103 and 104.

Selected Plays of Terence and Plautus. (Spence.)

LAT. 109. First semester. Three credits. Three lectures or recitations. Prerequisites, Lat. 103 and 104.

Satires of Juvenal and Horace. (Spence.)

LAT. 111. *Classical Literature*—Second semester. Three credits. Three lectures or recitations. Knowledge of Greek or Latin desirable but not essential.

Study and criticism of translations of the classics, biographies of classic authors. (Spence.)

LIBRARY SCIENCE

L. S. 101. *Library Methods*—First semester. One credit. Freshman year. Required of all students registered in the College of Arts and Sciences. Elective for others.

This course is intended to help students use the library with greater facility. Instruction will be given by practical work with the various catalogs, indexes and reference books. This course considers the general classification of the library according to the Dewey system. Representative works of each division are studied in combination with the use of the library catalogue. Attention is given to periodical literature, particularly that indexed in the Reader's Guide and in the Agricultural Index; and to various much used reference books which the student will find helpful throughout his college course.

MATHEMATICS

MATH. 101. *Algebra*—First semester. Three credits. Three lectures or recitations. Alternative for students in the College of Arts and Sciences. Elective for other students.

This course includes the study of quadratics, simultaneous quadratic equations, graphs, progressions, elementary theory of equations, binomial theorem, permutations, combinations, etc. A similar course is given the Pre-medical and Pharmacy students in Baltimore.

MATH. 102. *Plane Trigonometry*—Second semester. Three credits. Three lectures or recitations. Alternative for students in the College of Arts and Sciences. Elective for other students. Prerequisite, Math. 101.

A study of the trigonometric functions and the deduction of formulas with their application to the solution of triangles and trigonometric equations. A similar course is given the Pre-medical and Pharmacy students in Baltimore.

MATH. 103. *Plane Trigonometry; Plane Analytic Geometry; Advanced Algebra*—The year. Ten credits. Five lectures or recitations. Required of Freshmen in the College of Engineering. Elective for other students.

Algebra and Plane Trigonometry are given during the first semester. Plane analytic geometry is studied during the second semester.

Advanced Algebra includes a review of algebra required for entrance, elementary theory of equations, binomial theorem, permutations, combinations and other selected topics.

Plane trigonometry includes trigonometric functions, the deduction of formulas and their application to the solution of triangles, trigonometric equations, etc.

Plane analytic geometry includes the curve and equation, the straight line, the conic sections and transcendental curves.

MATH. 104. *Plane Analytic Geometry*—First semester. Three credits. Three lectures or recitations. Required of students in chemistry. Elective for other students. Prerequisite, Math. 102.

Plane analytic geometry includes the study of the loci of equations in two variables, the straight line, conic sections, and transcendental curves; and the development of empirical equations from graphs.

MATH. 105. *Calculus*—Second semester. Three credits. Three lec-

tures or recitations. Required of students in Chemistry. Elective for other students. Prerequisite, Math. 104.

Calculus includes the study of the methods of differentiation and integration and the application of these methods in determining maxima and minima and areas, lengths of curves, etc. in the plane.

MATH. 106. *Calculus; Mathematics of Space; Special Topics*—The year. Ten credits. Five lectures or recitations each semester. Required of sophomores in the College of Engineering. Elective for other students. Prerequisites, Math. 104 and solid geometry.

Calculus is studied from the beginning of the year until April 1. The mathematics of space is studied during April and May. The last two weeks of the year are devoted to special topics.

Calculus includes a discussion of the methods of differentiation and integration and the application of these methods in determining maxima and minima areas, lengths of curves, etc., in the plane.

Mathematics of Space includes the solution of spherical triangles; the discussion of surfaces, curves and equations in three variables, the straight line, the plane and quadric surfaces; and the determination of areas, volume, etc. by the methods of the calculus.

Special Topics includes the determination of centers of gravity and moments of inertia; the development of empirical equations from graphs, etc.

For Advanced Undergraduates and Graduates

MATH. 107. *Differential Equations*—First semester. Two credits. Two lectures. Elective. Prerequisite, Math. 105 or Math. 106. The solution of the simpler differential equations is discussed.

MATH. 108. *Least Squares*—Second semester. Two credits. Two lectures. Elective. Prerequisite, Math. 105 or Math. 106. A short course in which stress is laid on the application to engineering, chemistry, etc.

MATH. 109. *Theory of Equations*—First semester. Two credits. Elective.

MATH. 110. *Elementary Theory of Functions of a Complex Variable*—Second semester. Two credits. Elective.

MILITARY DEPARTMENT

M. I. 101. *Basic R. O. T. C.*—The year. Four credits. Freshman year. The following subjects are covered:

First Semester:

Physical Training (Practical), Military Courtesy and Customs of the service (Theoretical and Practical), Infantry Drill, School of Soldier, Squad and Platoon (Theoretical and Practical), Scouting and Patrolling (Theoretical and Practical), Rifle Marksmanship, to include gallery practice and range practice (Theoretical and Practical), Personal Hygiene (Lectures).

Second Semester:

Physical Training (Practical), Infantry Drill, School of Platoon and Company (Theoretical and Practical), Scouting and Patrolling (Theoretical and Practical), Infantry Equipment (Practical).

M. I. 102. *Basic R. O. T. C.*—The year. Four credits. Sophomore year. The following subjects are covered:

First Semester:

Physical Training (Practical), Infantry Drill, School of the Soldier, Squad, Platoon and Company (Theoretical and Practical), Musketry (Theoretical and Practical), Military Map Reading and Sketching (Theoretical and Practical), Infantry Weapons, viz: Bayonet, Hand Grenades, Rifle Grenades, Automatic Rifles (Theoretical and Practical), Military Hygiene, Sanitation and First Aid (Theoretical and Practical).

Second Semester:

Military Map Reading and Sketching (Theoretical and Practical), Infantry Drill, School of Company (Practical), Physical Training (Practical).

M. I. 103. *Advanced R. O. T. C.*—The year. Six credits. Junior year. The following subjects are covered:

First Semester:

Physical Training (Practical), Infantry Drill, Duties of Instructors, Command and Leadership (Theoretical and Practical), Field Engineering (Theoretical and Practical), Military Law (Theoretical and Practical), Accompanying Weapons, viz: Machine Guns, 37 mm. Gun and Mortars (Theoretical and Practical).

Second Semester:

Physical Training (Practical), Infantry Drill, Duties of Instructors, Command and leadership (Theoretical and Practical), Field Engineering (Theoretical and Practical), Problems in Use of Accompanying Weapons.

M. I. 104. *Advanced R. O. T. C.*—The year. Six credits. Senior year. The following subjects are covered:

First Semester:

Physical Training (Practical), Infantry Drill, Duties of Instructors, Command and leadership (Theoretical and Practical), Minor Tactics (Theoretical and Practical), Administration, Army Paper Work (Theoretical and Practical), Military History and Policy of the United States (Theoretical).

Second Semester:

Minor Tactics (Theoretical and Practical), Physical Training (Practical), Infantry Drill, Duties of Instructors, Command and leadership (Theoretical and Practical), Pistol Marksmanship, to include Range Practice (Theoretical and Practical).

MUSIC

MUSIC 101. *History of Music*—The year. Two credits.

A comprehensive study of the development of music from the beginning to modern times. The early church influence. The ancient composers; those of the middle ages; and those of modern times.

MUSIC 102. *Music Appreciation*—The year. Two credits.

A study of all types of classical music with a view to developing the ability to listen and enjoy. Lecture recitals will be presented with the aid of performers and records. A study of the orchestra, the instruments that it employs. The development of the symphony and orchestra instruments for solo performance. The development of the opera and oratorio. Great singers of the past and present.

(For courses in Voice and Piano see under College of Arts and Sciences.)

PHILOSOPHY

For Advanced Undergraduates and Graduates

PHIL. 101. *Introduction to Philosophy*—First semester. Three credits. Lectures and assignments.

A study of the meaning and scope of philosophy: its relations to the arts, sciences and religion. To be followed by Phil. 102.

PHIL. 102. *Problems and Systems of Philosophy*—Second semester. Three credits. Three lectures and reports on the reading of representative works. Prerequisite, Phil. 101.

Study of the problems and systems of philosophy together with tendencies of present-day thought.

PHIL. 104. *History of Philosophy*—The year. Six credits. Three lectures each semester. Senior standing required.

A study of the development of philosophy from prehistoric times, through Greek philosophy, early Christian philosophy, mediaeval philosophy to modern philosophical thought. (Omitted, 1924-1925.)

PHYSICS

PHYSICS 101. *Arts Physics*—The year. Eight credits. Three lectures (or recitations) and one laboratory period each semester. Prerequisite, Math 101.

A discussion in the class room and application in the laboratory of the laws governing the physical phenomena in Mechanics, Heat, Sound, Magnetism, Electricity and Light. Required of students in the Pre-Medical curriculum. Elective for other students.

PHYSICS 102. *Engineering Physics*—The year. Ten credits. Four lectures (or recitations) and one laboratory period each semester. Prerequisite, Math. 104.

Laws and theories pertaining to Mechanics, Heat, Sound, Magnetism, Electricity, and Light, with special reference to the problems which are concerned with engineering, are discussed in the class room and applied

in the laboratory. Required of all students in engineering and chemistry. Elective for other students.

PHYSICS 103. *Special Applications of Physics*—Second semester. Four credits. Three lectures (or recitations) and one laboratory period.

This course consists of a discussion of the laws and theories of physics from the viewpoint of their practical applications. Especially for students in agriculture and home economics.

For Advanced Undergraduates and Graduates

PHYSICS 104. *Physical Measurements*—First semester. Two lectures (or recitations) and one laboratory period. Prerequisite, Physics 101 or 102.

This course is designed for the study of the theory of physical measurements and for familiarizing the student with the manipulation of the types of apparatus used in experimentation in physical problems. Elective.

PHYSICS 105. *Advanced Physics*—First semester. Three or four credits. Three lectures (or recitations) and one laboratory period. Prerequisite, Physics 101 or 102.

PHYSICS 106. *Advanced Physics*—Second semester. Three or four credits. Three lectures (or recitations) and one laboratory period. Prerequisite, Physics 101 or 102.

A discussion of the phenomena in Physical Optics, Spectroscopy, Conduction of Electricity through Gases, Radioactivity. Elective.

PHYSICS 107. *Graphic Physics*—The year. Two credits. One laboratory period each semester. Prerequisite, Physics 102.

A study of physical laws and formulae by means of scales, charts, and graphs. Elective.

PLANT PATHOLOGY

PLT. PATH. 101. *Diseases of Plants*—First semester. Three credits. Two lectures and one laboratory period. Prerequisite, gen. bot. 101.

An introductory study in the field, in the laboratory and in the literature, of symptoms, casual organisms and control measures of the diseases of economic crops.

PLT. PATH. 102. *Forest Pathology*—Second semester. One credit. One lecture and an occasional field trip or laboratory period.

The diseases of forest trees of economic importance. Intended especially for students in forestry.

For Advanced Undergraduates and Graduates

PLT. PATH. 103. *Methods and Problems in Plant Pathology*—The year. Credit to be arranged. Prerequisite, Plt. Path. 101.

Technique in plant disease investigations: A survey of the literature on the subject; practice in the use of pathological equipment and in the making of culture media, isolations and inoculations; preparation of a

manuscript for publication or for a thesis. Work in this course may be begun and it may be ended any time during the calendar year. Register only after consultation with the instructor in charge. (Temple.)

PLT. PATH. 104. *Advanced Plant Pathology*—The year. Six credits. Prerequisite, Plt. Path. 101.

An intensive study: First semester, diseases of fruits; second semester, diseases of garden and field crops. The full course is intended to give a rather thorough knowledge of the subject matter, such as is needed by those who expect to become advisers in crop-production as well as those who expect to become specialists in plant pathology. The project method of study is used; the student is assigned several subjects closely related to his major interest, he consults the original papers on each subject, organizes the information and presents it as a complete report before the class. (Temple.)

PLT. PATH. 105. *Seminar*—The year. Two credits.

Conferences and reports on plant pathological literature and on recent investigations. (Temple.)

PLT. PATH. 106. *Diseases of Ornamentals*—First semester. Two credits. One lecture and one laboratory period. Offered in 1924-1925 and then in alternate years.

A comprehensive study of the diseases of ornamental plants, including flowers, shrubs, and trees of greenhouse, garden and landscape.

For Graduates

PLT. PATH. 201. *Research*—Credit according to the work done. Original investigations of special problems. (Temple.)

PLANT PHYSIOLOGY AND BIOCHEMISTRY

Plant Physiology

PLT. PHY. 101. *Plant Physiology*—First semester. Four credits. Two lectures and two laboratory periods. Prerequisite Gen. Bot. 101.

Water requirements, principles of absorption, mineral nutrients, transpiration, synthesis of food, metabolism, growth and movements.

PLT. PHY. 102. *Plant Ecology*—Second semester. Three credits. One lecture and two laboratory periods. Prerequisite. Bot. 101.

The study of plants in relation to their environments. Plant formations and successions in various parts of the country are briefly treated. Much of the work, especially the practical, must be carried on in the field and for this purpose type regions adjacent to the University are selected.

For Advanced Undergraduates and Graduates

PLT. PHY. 103. *Advanced Plant Physiology*—The year. Four credits. Two lectures and two laboratory periods. Prerequisite, Plt. Phy. 101.

The laboratory work generally consists of special work on one or more problems that may continue through the year. Students who write theses

for their undergraduate degrees, may use data obtained from special problems assigned for laboratory work. (Zimmerman.)

Biochemistry

BIOCHEM. 101. *General Biochemistry*—First semester. Four credits. Two lectures and two laboratory periods. Prerequisites, Gen'l. Chem. 101, Analyt. Chem. 103 or their equivalents; also an elementary knowledge of organic chemistry.

A general course in chemical biology treated from the point of view of both animals and plants. The first half of the course is devoted to the chemistry of protoplasm and its products. The second half of the course deals with cell metabolism and embraces processes and problems of fundamental importance in both animal and plant life. (Appleman, Conrad.)

For Graduates

PLT. PHYS. 201. *Plant Biochemistry*—Second semester. Three credits. Two lectures and one laboratory period. Prerequisites, Bio-Chem. 101 and an elementary knowledge of plant physiology.

An advanced course on the chemistry of plant life. It follows Bio-Chem. 101 and deals with materials and processes characteristic of plant life. The relation of primary syntheses and transformations of materials in plants and plant organs to animal food is especially emphasized. (Appleman, Conrad.)

PLT. PHYS. 202. *Plant Biophysics*—Second semester. Three credits. Two lectures and one laboratory period. Prerequisites, one year's work in physics and an elementary knowledge of physical chemistry and plant physiology.

An advanced study of the operation of physical forces in plant physiological processes. The relation of climatic conditions to plant growth and practice in recording meteorological data constitute a part of the course. (Johnston.)

PLT. PHYS. 203. *Special Problems in Growth and Reproduction*—Second semester. One or two credits. (Appleman, Johnston.)

PLT. PHYS. 204. *Advanced Physiological Methods and Measurements*—First semester. Two credits. Not given every year. (Appleman, Johnston.)

PLT. PHYS. 205. *Seminar*—The year. Two credits.

The students are required to prepare reports of papers in the current literature. These are discussed in connection with the recent advances in the subject. (Appleman, Johnston.)

PLT. PHYS. 207. *Research*—The year. Credit hours according to work done.

Students must be specially qualified by previous work to pursue with profit the research to be undertaken. (Appleman, Johnston.)

POLITICAL SCIENCE

Soc. Sci. 101. *Elements of Social Science*—Second semester. Four credits. Four lectures and assignments.

For description of course see page 158 under Economics.

For Advanced Undergraduates and Graduates

POL. SCI. 102. *Government of the United States*—First semester. Three credits. Three lectures and recitations. Prerequisite, Soc. Sci. 101.

A study of the Government of the United States. Evolution of the federal constitution; function of the federal government.

POL. SCI. 103. *Governments of Europe*—Second semester. Three credits. Three lectures and recitations. Prerequisites, Soc. Sci. 101; Pol. Sci. 102.

A rapid survey and comparative study of the political organization of the principal states of Europe. Classification of forms, separation of powers. (Schulz.)

POL. SCI. 104. *American Municipal Government*—Second semester. Two credits. Two lectures and recitations. Prerequisites, Soc. Sci. 101; Pol. Sci. 102. (Omitted, 1924-1925.)

A study of American City Government: organization and administration; city manager and commission plans; initiative, referendum and recall. (Schulz.)

POL. SCI. 110. *Constitutional Law and History of the United States*. The year. Four credits. Two lectures and cases each semester. Prerequisites, Soc. Sci. 101; Pol. Sci. 102. Alternates with Pol. Sci. 111 and 112. Seniors and Graduate students. (Omitted 1924-1925.)

A study of the historical background of the Constitution and its interpretation. (Schulz.)

POL. SCI. 111. *International Law*—The year. Four credits. Two lectures, assigned reading and cases each semester. Prerequisites, Soc. Sci. 101; Pol. Sci. 102. Alternates with Pol. Sci. 110 and 112. Seniors and Graduate students.

A study of the sources, nature and sanction of international law, peace, war and neutrality. (Schulz.)

POL. SCI. 112. *American Diplomacy*—The year. Four credits. Two lectures and cases each semester. Prerequisites as Pol. Sci. 111. Alternates with Pol. Sci. 110 and 111. To be taken concurrently with Pol. Sci. 113. (Omitted, 1924-1925.)

A study of American foreign policy. (Schulz.)

POL. SCI. 113. *Diplomatic and Consular Procedure in Connection with American Interests Abroad*—The year. Two credits, one each semester. Prerequisites as for Pol. Sci. 112. To be taken concurrently with Pol. Sci. 112. (Omitted 1924-1925.)

The functions of Consular and Diplomatic Officers of the United

States in connection with our foreign relations, with particular emphasis on the economic investigational and trade promotion services of these officers; notarial and quasi-legal, public health and other routine consular functions. Comparisons made with consular and diplomatic practices of other countries. (Lee.)

POL. SCI. 116. *Political Parties in the United States*—First semester. Three credits. Two lectures and assigned readings. Prerequisites, Soc. Sci. 101; Pol. Sci. 102.

The development and growth of American Political Parties. Party organization and machinery. (Schulz.)

POL. SCI. 120. *Far Eastern History, Politics and Finance*—First semester. Two credits. Two lectures and assignments.

A study of the social and economic history of the principal countries of the Far East with special emphasis upon political and economic movements in China and Siberia. (Lee.)

POL. SCI. 121. *Far Eastern History, Politics and Finance*—Second semester. Two credits. Two lectures and assignments.

A continuation of Pol. Sci. 120, with particular study of the relations of the countries of the Far East with the United States and other Western Nations and policies of various governments toward countries of the Far East. (Lee.)

POULTRY HUSBANDRY

POULTRY 101. *Farm Poultry*—Second semester. Three credits. Two lectures and one laboratory period.

A general course in poultry raising including housing, feeding, incubation, brooding, breeds, breeding, selection of stock, culling, general management and marketing.

POULTRY 102. *Poultry Keeping*—First semester. Four credits. Two lectures and two laboratory periods. Prerequisite, Poultry 101.

A study of housing and yarding, practice in making poultry house plans, feeding, killing and dressing.

POULTRY 103. *Poultry Production*—Second semester. Four credits. Two lectures and two laboratory periods. Prerequisite, Poultry 101 and 102.

The theory and practice of incubation and brooding, both natural and artificial. Study of incubators and brooders, assembling, etc. Considerable stress will be placed on the proper growing of chicks into good laying pullets. General consideration of poultry disease. Caponizing.

POULTRY 104. *Poultry Breeds*—First semester. Four credits. Two lectures and two laboratory periods. Prerequisite, Poultry 101, 102 and 103.

A study of the breeds of poultry, the judging of poultry, fitting for exhibition and the methods of improvement by breeding.

POULTRY 105. *Poultry Management*—Second semester. Four credits.

Two lectures and two laboratory periods. Prerequisites, Poultry 101, 102, 103 and 104.

A general fitting together and assembling of knowledge gained in the previous courses. Culling, marketing, including both selling of poultry products and the buying of supplies, keeping poultry accounts, a study of poultry profits, how to start.

PSYCHOLOGY

PSYCH. 101. *Elements of Psychology*—The year. Four credits. Two lectures and recitations each semester.

The facts and uniformities of mind; types of behavior, conscious experience, sensation and image, perception, attention, memory, emotion, action and thoughts. Experimental methods and their results are illustrated in lectures.

For Advanced Undergraduates and Graduates

Soc. 110. *Social Psychology*—The year. Six credits. Three lectures and recitations each semester. Prerequisite, at least Soc. Sci. 101 and preferably Soc. 102-105. (Omitted. 1924-1925.)

This course deals with such psychological matters as underlie the work in the field of sociology and other social sciences. The fundamental instincts as dynamic forces in the individual and in society, their development, organization and control. Analysis of the value problem. (Thompson.)

ED. 103. *Educational Psychology*—First semester. Three credits. Open to juniors and seniors. Required of all juniors in Education.

General characteristics and use of original tendencies; principles of mental evolution and development; the laws and methods of learning; experiments in rate improvement; permanence and efficiency; causes and nature of individual differences; principles underlying mental tests; principles which should govern school practices.

ED. 108. *Advanced Educational Psychology*—Second semester. Three credits. Three lectures. Prerequisite, Ed. 103.

The problem of individual differences, causes and influences making for individual differences, such as sex, race, ancestry, maturity, and environment. Mentality and its development, variations in mentality, types of intellect and character, measurement of intelligence, intelligence tests, their uses and limitations.

PUBLIC SPEAKING

P. S. 101. *Reading and Speaking*—First semester. One credit. One lecture or recitation.

The principles and technique of oral expression; enunciation, emphasis, inflection, force, gesture and general delivery of short speeches. Impromptu speaking. Theory and practice of parliamentary procedure.

P. S. 102. *Reading and Speaking*—Second semester. One credit. One lecture or recitation.

Continuation of P. S. 101.

P. S. 103. *Advanced Public Speaking*—First semester. Two credits. Two lectures or recitations.

Advanced work on basis of P. S. 101-2 with special applications and adaptations. At each session of the class a special setting is given for the speeches—civil, social and political organizations, etc., and organizations in the field of the prospective vocation of the different students. When a student has finished this course he will have prepared and delivered one or more speeches which would be suitable and appropriate before any and all bodies that he would probably have occasion to address in after life.

P. S. 105. *Oral Technical English*—First semester. One credit. One lecture or recitation.

The preparation and delivery of speeches, reports, etc. on both technical and general subjects. Argumentation. This course is especially adapted to the needs of engineering students and is co-ordinated with the seminars of the College of Engineering.

P. S. 106. *Oral Technical English*—Second semester. One credit. One lecture or recitation.

Continuation of P. S. 105.

P. S. 107. *Oral Technical English*—First semester. One credit. One lecture or recitation.

The preparation and delivery of lectures, speeches, reports, etc., on both technical and general subjects. Argumentation. This course is especially adapted to the needs of students of chemistry. The head of the Department of Chemistry co-operates in the preparation of class programs. For sophomore chemistry students only.

P. S. 108. *Oral Technical English*—Second semester. One credit. One lecture or recitation.

Continuation of P. S. 107.

P. S. 109. *Advanced Oral Technical English*—First semester. Two credits. Two lectures or recitations.

This course is a continuation with advanced work of P. S. 105-106. Much attention is given to Parliamentary Procedure. Some of the class programs are prepared by the students and carried out under student supervision. For junior engineering students only.

P. S. 110. *Oral Technical English*—Second semester. Two credits. Two lectures or recitations.

Continuation of P. S. 109.

P. S. 111. *Advanced Oral Technical English*—First semester. One credit. One lecture or recitation.

Advanced work on the basis of P. S. 109-110. Work not confined to class room. Students are encouraged to deliver addresses before different

bodies in the University and elsewhere. For senior engineering students only.

P. S. 112. *Oral Technical English*—Second Semester. One credit. One lecture or recitation.

Continuation of P. S. 111.

P. S. 113. *Oratory*—First semester. One credit. One lecture or recitation. Prerequisite P. S. 101.

The rhetoric of oral discourse. The speech for the occasion. Study of masterpieces of oratory. Practice in the writing and delivery of orations.

P. S. 114. *Oratory*—Second semester. One credit. One lecture or recitation.

Continuation of P. S. 113.

P. S. 115. *Extempore Speaking*—First semester. One credit. One lecture or recitation.

Much emphasis on the selection and organization of material. Class exercises in speaking extemporaneously on assigned and selected subjects. Newspaper and magazine reading essential.

P. S. 116. *Extempore Speaking*—Second semester. One credit. One lecture or recitation.

Continuation of P. S. 115.

P. S. 117. *Debate*—First semester. Two credits. Two lectures or recitations.

A study of the principles of argumentation. A study of masterpieces in argumentative oratory. Class work in debating. It is advised that those who aspire to intercollegiate debating should take this course.

P. S. 118. *Argumentation*—Second semester. Two credits. Two lectures or recitations.

Theory and practice of argumentation and debate. Similar to course 118. This course is offered for the benefit of those who may find it impracticable to take this work in the second semester.

P. S. 119. *Oral Reading*—First semester. Two credits. Two lectures or recitations.

A study of the technique of vocal expression. The oral interpretation of literature. The practical training of students in the art of reading.

P. S. 120. *Oral Reading*—Second semester. Two credits. Two lectures or recitations.

Continuation of P. S. 119.

SOCIOLOGY

Soc. Sci. 101. *Elements of Social Science*—Second semester. Four credits. Four lectures and assignments.

For description of course see page 158 under Economics.

For Advanced Undergraduates and Graduates

Soc. 102. *Anthropology*—First semester. Three credits. Three lectures and assignments. Prerequisite, Soc. Sci. 101. (Omitted, 1924-1925.)

A study of prehistoric institutions; origins of capital, language, the family, state, religions and rights, with some reference to the natural history of man. (Lee.)

Soc. 103. *Ethnology*—Second semester. Three credits. Three lectures and assignments. Prerequisites, Soc. 101. (Omitted 1924-1925.)

A comparative study of races and racial differentiation; the dispersion of races over the earth. Wide reading in ethnography required. (Lee.)

Soc. 105. *General Sociology*—First semester. Four credits. Four lectures and assignments. Prerequisites, Soc. Sci. 101.

A study of the fundamental principles of the science of society; development of early industrial, religious, family, and regulative organizations, modes of social activity among savage, barbarous, and civilized peoples. (Lee.)

Soc. 106. *Applied Sociology*—Second semester. Three credits. Three lectures and assignments. Prerequisites, Soc. Sci. 101; Soc. 105. Seniors and graduates. (Omitted 1924-1925.)

A comparative study of modern social conditions dealing with a cross section of modern society; its economic organization, labor, housing and health conditions; pauperism, crime, and remedial and corrective agencies; social surveys in theory and practice. (Lee.)

Soc. 110. *Social Psychology*—The year. Six credits. Three lectures and recitations each semester. Prerequisite, at least Soc. Sci. 101 and preferably Soc. 102-105. (Omitted 1924-1925.)

This course deals with such psychological matters as underlie the work in the field of sociology and other social sciences. The fundamental instincts as dynamic forces in the individual and in society, their development, organization and control. Analysis of the value problem. (Thompson.)

Ed. 107. *Educational Sociology*—First or second semester. Three credits. Three lectures. Open to advanced undergraduates and graduates.

The sociological foundations of education; group needs; educational objectives; educational institutions; the program of studies; need for special organizations; possibilities of the special group leaders in adult education; educational programs. (Cotterman.)

Ed. 123. *Rural Sociology and Educational Leadership*—Second semester. Three credits. Three lectures. Open to advanced undergraduates and graduates.

The rural community—nature, history, structure, types; the community survey; present tendencies, needs, and problems of rural life; the villages and place in American social organization; special functions of the school and other institutions in relation to the needs of the rural

group. This course is designed especially for persons who expect to be called upon to assist in shaping educational and other community programs for rural people. (Cotterman.)

ED. 124. *Practicum Rural Sociology*—First or second semester. Three to five credits. Credit determined by the amount and character of work done. Open to graduate students only. Prerequisite, Ed. 123.

Essentially a field course in rural sociology. Students must make a social survey of a community and write a satisfactory report of the survey. (Cotterman.)

ED. 132. *Education of Women*—First semester. Three credits. Three lectures. Open to juniors and seniors.

History of the family; its members and their relation to the home; change in women's position as affected by the progress of civilization; training for citizenship, professions and the home. (McNaughton.)

For Graduates

Soc. 201. *Sociological Systems* (Seminar)—The year. Four credits. Two each semester. (May not be offered 1924-1925.)

A comparative study of the most important sociological literature. (Lee.)

Soc. 205. *Self-Maintenance of Society*—The year. Four credits. Two lectures. (May not be offered 1924-1925.)

Extensive study of the beginning of the industrial organization of society; division of labor; capital; war; classes, and social organization. (Lee.)

SOILS

SOILS 101. *Principles of Soil Management*—Second semester. Three credits. Two lectures, one quiz and one laboratory period. Prerequisite, Geol. 101.

A study of the physical, chemical and biological principles underlying the formation and management of soils. The relation of mechanical composition, classification, moisture, temperature, air, organic matter and tillage are considered. The use and value of commercial plant nutrients, green and stable manure and of lime are discussed.

SOILS 102. *Fertilizers and Manures*—First semester. Three credits. Two lectures and one laboratory period. Prerequisite, Soils 101.

This course includes a study of the nature, properties and use of fertilizers; the source and composition of fertilizer materials and the principles underlying the mixing of commercial plant-food. A study is made of the production, value and uses of animal and vegetable manures. The practical work includes special studies of the effect of fertilizers and manures on the crop-producing power of the various soil types.

SOILS 103. *Soil Fertility*—Second semester. Three credits. Two lectures and one laboratory period. Prerequisite, Soils 101 and 102.

A study of the soil fertility systems of the United States, with special emphasis on the inter-relation of total to available plant food, the

balance of nutrients in the soil with reference to various cropping systems and the economic and national aspect of permanent soil improvement. The practical work includes a resume of the important fertility studies and laboratory and greenhouse practice in soil improvement.

SOILS 105. *Soil Surveying and Classification*—First semester. Three credits. One lecture and two laboratory periods. Prerequisite, Soils 101.

A study of the principal soil regions, series and types of the United States, and especially of the soils of Maryland, as to formation, composition and value agriculturally. The practical work includes a field survey, identification of soil types and map making.

SOILS 107. *Soil Micro-Biology*—Second semester. Three credits. Two lectures and one laboratory period. Prerequisite, Bact. 101.

A study of the micro-organisms of the soil in relation to fertility. It includes the study of the bacteria of the soil concerned in the decomposition of organic matter, nitrogen fixation, nitrification, sulphofication and such injurious organisms as fungi, algae and protozoa.

SOILS 108. *Thesis*—The year. Four to eight credits. Some special problem is assigned to each student, who is expected to embody the results of the investigation in a thesis.

For Advanced Undergraduate and Graduate Students

SOILS 109. *Soil Technology*—The year. Six credits. One lecture and two laboratory periods. Prerequisites, Soils 100 and 101; Chemistry 101.

The technique of the field, laboratory and greenhouse manipulation as applied to the study of soil problems. (McCall, Smith.)

SOILS 110. *Methods of Soil Investigation*—Second semester. Two credits.

The course includes a critical study of the methods used by experiment stations in soil investigational work. (McCall.)

SOILS 111. *Seminar*—The year. Two credits.

The seminar periods are devoted largely to the discussion of the current bulletins and scientific papers on soil topics. (Staff.)

For Graduate Students

SOILS 201. *Special Problems and Research*—The year. Ten to twenty credits.

Original investigation of problems in soils and fertilizers. (McCall.)

SPANISH

SPAN. 101. *Elementary Spanish*—The year. Eight credits. Four recitations each semester.

Pronunciation, conversation, composition and the study of the elements of grammar. For beginners.

SPAN. 102. *Second Year Spanish*—The year. Eight credits. Four recitations each semester. Prerequisite, Span. 101 or the equivalent.

Conversation, study of grammatical forms and easy reading from selected texts.

SPAN. 103. *Advanced Spanish*—The year. Six credits. Three lectures or recitations each semester. Prerequisite, Span. 102.

Spanish grammar and the reading of texts relating to the habits, customs, etc. of the people of Spanish countries.

VETERINARY MEDICINE

For Students in Agriculture

V. M. 101. *Anatomy and Physiology*—Three credit hours; three lectures. First semester. Junior year.

Structure of the animal body; abnormal as contrasted with normal; the inter-relationship between the various organs and parts as to structure and function.

V. M. 102. *Animal Diseases*—Three credit hours; three lectures or demonstrations. Second semester. Senior year.

Diseases of domestic animals, infectious and non-infectious. Early recognition of disease; hygiene, sanitation, and prevention; first aid.

GRADUATE COURSE

V. M. 201-202. *Research*—Genital Diseases of Domestic Animals. Prerequisites; degree in veterinary Medicine, from an approved veterinary college. Laboratory and field work by assignment. (Reed.)

ZOOLOGY

ZOOL. 101. *General Zoology*—First or second semester. Four credits. Two lectures and two laboratory periods.

This course presents the fundamental principles of animal biology that constitute the foundation which is necessary for further study in any line of Zoology.

ZOOL. 102. *General Zoology for Pre-Medical Students*—First semester. Four credits. Two lectures and two laboratory periods.

ZOOL. 103. *General Zoology for Pre-Medical Students*—Second semester. Four credits. Two lectures and two laboratory periods.

ZOOL. 104. *Economic Zoology*—Second semester. One credit. One lecture. Prerequisite one course in Zoology or Botany 101.

The content of this course will center around the problems of preservation, conservation and development of the aquatic life of Maryland, including the blue crab and oyster. The lectures will be supplemented by assigned readings and reports.

ZOOL. 105. *The Invertebrates*—First semester. Three credits. One lecture and two laboratory periods. Prerequisite, Zool. 101.

This course consists in a study of the morphology and relationships of the principal invertebrate phyla.

ZOOL. 106. *Field Zoology*—Second semester. Three credits. One lecture and two laboratory periods.

This course consists in collecting and studying both land and aquatic forms of nearby woods, fields and streams with special emphasis placed upon insects, fishes, frogs, reptiles, birds and rodents, their breeding habits, environment and economic importance.

ZOOL. 108. *Comparative Vertebrate Morphology*—First semester. Three credits. One lecture and two laboratory periods. Prerequisite, Zool. 101, or Zool. 106.

ZOOL. 112. *Normal Animal Histology*—Second semester. Three credits. One lecture and two laboratory periods. Prerequisite, Zool. 101. Instruction in the simplest processes of technique will accompany the study of prepared material.

ZOOL. 116. *Advanced Comparative Vertebrate Morphology*—Second semester. Two credits. Schedule to be arranged. Prerequisite, Zool. 108 or its equivalent.

This is a continuation of Zool. 108, but will consist of laboratory work only.

For Advanced Undergraduates and Graduates

ZOOL. 120. *Embryology*—Second semester. Four credits. Two lectures and two laboratory periods. Prerequisites, two semesters of biology, one of which should be Zool. 101 or 102.

This course covers the development of the chick to the end of the fourth day. (Pierson, Anderson.)

ZOOL. 125. *Aquiculture*—Credit hours, lectures and laboratory to be arranged. Prerequisites, Zool. 101 and Bot. 101.

Plankton studies and the determination of other aquatic life of nearby streams and ponds. Morphology and ecology of representative commercial and game fishes in Maryland, the Chesapeake blue crab and the oyster. (Truitt.) (Not offered in 1924-1925.)

ZOOL. 130. *Organic Evolution*—First semester. Two credits. Two lectures. Prerequisites, two semesters of biological science, one of which must be either Zool. 101 or Zool. 106.

The object of this course is to present the biological data on which the theories of evolution rest. The lectures will be supplemented by discussion, reports and collateral reading. Enrollment limited to fifteen. (Pierson.)

ZOOL. 135. *Vertebrate Zoology*—The year. Credit hours and schedule to be arranged to suit the individual members of the class.

Each student may choose within certain limits, a problem in Taxonomy, Morphology or Embryology. (Pierson.)

Zool 136 -

DEGREES CONFERRED 1923

HONORARY DEGREES

ALEXANDER ARMSTRONG, Doctor of Laws
 JOHN JACOB CORNWELL, Doctor of Laws
 SAMUEL TAYLOR DARLING, Doctor of Science
 THOMAS FELL, Doctor of Letters
 BEVERLY THOMAS GALLOWAY, Doctor of Agriculture
 ROBERT MOSS, Doctor of Laws
 JOHN BITTING SMITH NORTON, Doctor of Science
 LORE ALFORD ROGERS, Doctor of Science

HONORARY TESTIMONIALS OF MERIT IN AGRICULTURE

ISAAC WALLACE HEAPS	Pylesville, Maryland
SAMUEL L. BYRN	Cambridge, Maryland
JOHN SNOWDEN	Laurel, Maryland
WILLIAM HENRY SCHROM	Berwyn, Maryland

THE GRADUATE SCHOOL

Master of Arts

B. ANDREW MATZEN	Berwyn, Maryland
ALMA HENRIETTA PREINKERT	Washington, D. C.

Master of Science

VICTOR R. BOSWELL	Columbia, Missouri
EDWARD LELAND BROWNE, JR.	Chevy Chase, Maryland
FRANCIS DESALES CANTER	Aquasco, Maryland
CARL M. CONRAD	Burlington, Kansas
FREDERICK RANDOLPH DARKIS	Frederick, Maryland
ORSON NORTHROP EATON	Beltsville, Maryland
CHARLES HAROLD HOWE	Chapman, Kansas
HARVEY FOSS JENKINS	Concord, New Hampshire
DANIEL C. LICHTENWALNER	Riverdale, Maryland
MARCUS ARTHUR MCCARRON	Worcester, Massachusetts
JOHN AUSTIN MORAN	Frederick, Maryland
JOHN DORSEY SCHEUCH	Washington, D. C.
GEORGE NELSON SCHRAMM	Cumberland, Maryland
BEN C. SHER	St. Joseph, Missouri
JACOB EDWARD SHILLINGER	Washington, D. C.
ALBERT FRANK VIERHELLER	Parkersburg, West Virginia

COLLEGE OF AGRICULTURE

Bachelor of Science

ROBERT CARLTON BURDETTE	Gaithersburg, Maryland
ERNEST COOK DUNNING	Govans, Maryland
CHARLES WALTER ENGLAND	Rising Sun, Maryland
RUTH FUHRMAN	Washington, D. C.
MORRIS JACOB GUREVICH	Beltsville, Maryland
CLAYTON PRICE HARLEY	College Park, Maryland
NOAH BRACKENDELL HAWTHORNE	Washington, D. C.
CHARLES LOUIS HUFFARD	Wytheville, Virginia
JOHN MOTTER LESCURE	Harrisburg, Pennsylvania
MALCOLM BARTLER MELROY	Washington, N. J.
THOMAS KENNETH MILLER	Havre de Grace, Maryland
JOHN WESLEY MUMFORD, JR.	Newark, Maryland
GEORGE FINDLAY POLLOCK	Boys, Maryland
HARRY HARRISON SHAFFER	Berwyn, Maryland
FRANCIS CURIE SKILLING	Baltimore, Maryland
GEORGE FRANCIS SMITH	Big Spring, Maryland
VASO TRIVANOVITCH	Zagreb, Jugoslavia
VIRGIL S. TROY	Centreville, Maryland

VETERANS' BUREAU CERTIFICATE

KENNETH ALLEN	Brandywine, Maryland
JOSEPH CUMMINGS CHERRY	Berwyn, Maryland
HARVEY CLINTON GRAVES	Berwyn, Maryland
JOHN THOMAS HOTTEL	Bealton, Virginia
HARRY BASIL PERSINGER	Berwyn, Maryland
JOHN ROBERT PIERCE	Washington, D. C.
ALVIN WILLIAM POPPEN	Toluca, Virginia
FELIX WILLIAM RICHARDS	Washington, D. C.
IRA MARVIN SIMPICH	Landover, Maryland
BENJAMIN HARRISON WILEY	Bittinger, Maryland

COLLEGE OF ARTS AND SCIENCES

Bachelor of Arts

ELIZABETH GREVILLE ADY	Sharon, Maryland
BENJAMIN LANKFORD BARNES	Princess Anne, Maryland
MILDRED CECELIA BLANDFORD	College Park, Maryland
ALBERT BLOCK	Laurel, Maryland
J. EDWARD BURROUGHS, JR.	La Plata, Maryland
JOHN FRANCIS CLAGETT	Upper Marlboro, Maryland
ZITA THERESSA ENSOR	Sparks, Maryland
GEORGE EDMUND GIFFORD	Rising Sun, Maryland
ISADOR GORDON	Riverdale, Maryland
WILLIAM JOSEPH LESCURE, JR.	Harrisburg, Pennsylvania
MARION WINFIELD POSEY	La Plata, Maryland

RUTH ISABELLE REPERT
 CHARLOTTE CALVERT SPENCE
 WILLIAM CLIFFORD STURGIS
 RUTH AGNES THOMPSON
 ROBERT MALCOLM WATKINS

Washington, D. C.
 College Park, Maryland
 Snow Hill, Maryland
 Washington, D. C.
 Mt. Airy, Maryland

Bachelor of Science

ARTHUR KIRKLAND BESLEY
 LESTER WILLARD BOSLEY
 CHARLES MACFARLANE BREWER
 KENNETH BALDWIN CHAPPELL
 MORRIS H. DASKAIS
 LAURAN PRESTON DOWNIN
 THOMAS HENRY FITZGERALD
 ERNEST ALEXANDER GRAVES
 HOWARD VICTOR KEEN
 ALLEN DUVAL KEMP
 RUSSELL EARL MARKER
 LEONARD G. MATHIAS
 RUTH ELIZABETH MAYERS
 JOHN FREDERICK MOORE
 ANDREW NELSON NISBET
 GORDON SEXTON PATTON
 ROBERT GILLIAM PORTER
 GERALD GROSH REMSBERG
 RAYMOND LESTER RISSLER
 HUGHES ADAMS SHANK
 MATSON WAYNE SHEPHERD
 LAURENCE D. SIMMONS
 A. ALLEN SUSSMAN
 CHARLES EDWARD WHITE

Baltimore, Maryland
 Washington, D. C.
 College Park, Maryland
 Kensington, Maryland
 Baltimore, Maryland
 Hagerstown, Maryland
 Princess Anne, Maryland
 Washington, D. C.
 Snow Hill, Maryland
 Frederick, Maryland
 Hagerstown, Maryland
 Hagerstown, Maryland
 Washington, D. C.
 Washington, D. C.
 Baltimore, Maryland
 Jackson, Mississippi
 Hyattsville, Maryland
 Braddock Heights, Maryland
 Washington, D. C.
 College Park, Maryland
 Berwyn, Maryland
 Washington, D. C.
 Baltimore, Maryland
 College Park, Maryland

Bachelor of Commercial Science

JACOB B. FAGAN
 J. HARRY GARMER
 HOWARD E. JACKSON
 GEORGE E. JOHNSON
 FRANK R. KELLER
 LLOYD C. KNABE
 CATHARINE M. KOCH
 HERBERT COLLINS METCALFE
 ELIZABETH MILLER
 JOSEPH F. WORLEY

Baltimore, Maryland
 Baltimore, Maryland
 Baltimore, Maryland
 Washington, D. C.
 Washington, D. C.
 Baltimore, Maryland
 Baltimore, Maryland
 Baltimore, Maryland
 Baltimore, Maryland
 Baltimore, Maryland
 Washington, D. C.

Certificate of Proficiency

ALCIDE J. BODIN
 EUGENE BOLSTLER

CLARENCE E. DAVIS
 WILLIAM T. EDMEADES, JR.
 JOSEPH EUCHTMAN
 HYMAN NEEDALMAN
 H. A. SCHWARZ
 CHARLES B. SYDOW

Washington, D. C.
 Baltimore, Maryland
 Baltimore, Maryland
 Baltimore, Maryland
 Baltimore, Maryland
 Washington, D. C.

DEGREES CONFERRED IN SEPTEMBER, 1923

Bachelor of Commercial Science

EARL PHILIP DARSCH
 ARTHUR W. GRAY
 PORTER T. WHITE

Baltimore, Maryland
 Baltimore, Maryland
 Westernport, Maryland

Certificate of Proficiency

WYLIE KELLEY BELL
 LEON F. GOODWIN
 HOWELL ATWATER KING
 ROBERT S. LILES
 BENJAMIN H. SCHOOLER
 ROBERT E. LEE STUNTZ
 JOSEPH LEE SULLIVAN

Baltimore, Maryland
 Waterville, Maine
 Baltimore, Maryland
 Wendell, North Carolina
 Catonsville, Maryland
 Lansdowne, Maryland
 Baltimore, Maryland

SCHOOL OF DENTISTRY

Doctor of Dental Surgery

WILLIAM VIRGIL ADAIR
 LAWRENCE J. AMENTA
 JOHN L. ASHBY
 ALLAN RODNEY BETTS
 CHARLOTTE B. BRICKNER
 LOUIS LOMBARD BROWN
 ELLSWORTH WORTHINGTON CHILDERS
 JAMES RUSSELL COOK
 CHARLES CLIFTON COWARD
 WILLIAM HENRY CROWLEY
 EDWIN SAMUEL CUMMINGS
 JOSEPH MILLER DAVENPORT
 LEWIS CHAUNCEY DAVIDSON
 EDWARD BOLTON GIBBINS
 ROBERT ISAIAH GIVENS
 JOSEPH GOLDSTEIN
 LEON H. GOOMRIGIAN
 JOSEPH HAYWARD HOFF
 JESSE DAVIS HOGAN
 JAMES ALBERT JONES
 GEORGE CONRAD KARN
 LOUIS ELI KAYNE
 WILLIAM R. KISER

Grafton, West Virginia
 North East, Pennsylvania
 Mt. Airy, North Carolina
 Morris Plains, New Jersey
 Bronx, New York
 Ellicott City, Maryland
 Salem, West Virginia
 Frostburg, Maryland
 Cheraw, South Carolina
 Troy, New York
 Newark, New Jersey
 Thomas, West Virginia
 Lewisburg, West Virginia
 Newark, New Jersey
 Sinking Creek, Virginia
 Washington, D. C.
 Summit, New Jersey
 Wellsville, Pennsylvania
 Mt. Airy, North Carolina
 Altoona, Pennsylvania
 Jefferson, Maryland
 Baltimore, Maryland
 Keyser, West Virginia

HENRI G. LANDRY	Baltimore, Maryland
HARRY B. MCCARTHY	Swanton, Vermont
WILLIAM F. MEDEARIS	Winston-Salem, North Carolina
PETER MARIUS MORTENSON	Perth Amboy, New Jersey
HARRY ROY NESBITT	Baltimore Maryland
HENRY SELBY NIMOCKS	Fayetteville, North Carolina
ELMER ARTHUR PERRY	Warwick, New York
ERNEST EDWARD PRATHER	Burnt House, West Virginia
WILLIAM ADAMS PRESSLY, JR.	Rock Hill, South Carolina
VERNON WILLIAM RICHARDS	Wardtown, Virginia
S. LEROY RICHMOND	Hinton, West Virginia
CHARLES A. RIDER	Benwood, West Virginia
HERBERT M. SCHMALENBACH	Baltimore, Maryland
MAX MORTON SCHWARTZ	Jersey City, New Jersey
WALTER DODD SHAAK	Kearny, New Jersey
ALFRED HOUSTON SHEPPE	Frenchton, West Virginia
HARRY A. SILBERMAN	Washington, D. C.
WALTER T. WALSH	Moriah Center, New York
IRVING WASSERBERG	New York City
ALVIN P. WHITEHEAD	Morehead City, North Carolina
FRANK FORD YATES	Grafton, West Virginia
GEORGE W. YOUNG	Rutherford Heights, Pennsylvania

COLLEGE OF EDUCATION

Bachelor of Arts

MARY PRINCESS ANDERSON	Washington, D. C.
ELSIE MAY SOPER	Beltsville, Maryland

Bachelor of Science

LONDON CRAWFORD BURNS	Burnsville, Virginia
PAUL CALVERT CISSEL	Highland, Maryland
ELIZABETH GLADYS CROWTHER	Sparks, Maryland
PAUL SARDO FRANK	College Park, Maryland
JAMES FRANKLIN GRAHAM	Barclay, Maryland
MIRIAM ELIZABETH JONES	Chestertown, Maryland
RICHARD CARLTON LIGHTER	Middletown, Maryland
AUSTIN ALBERT MCBRIDE	Middletown, Maryland
JESSE POWERS PULLEN	Martinsville, Virginia
NELLIE OLIVE SMITH	Washington, D. C.
VICTORIA VAIDEN	Baltimore, Maryland
DONALD ELLSWORTH WATKINS	Mt. Airy, Maryland

Special Teachers' Diploma

MARY PRINCESS ANDERSON	Washington, D. C.
LONDON CRAWFORD BURNS	Burnsville, Virginia
PAUL CALVERT CISSEL	Highland, Maryland
ELIZABETH GLADYS CROWTHER	Sparks, Maryland

PAUL SARDO FRANK
 JAMES FRANKLIN GRAHAM
 MIRIAM ELIZABETH JONES
 RICHARD CARLTON LIGHTER
 AUSTIN ALBERT MCBRIDE
 JESSE POWERS PULLEN
 NELLIE OLIVE SMITH
 ELSIE MAY SOPER
 VICTORIA VAIDEN
 DONALD ELLSWORTH WATKINS

College Park, Maryland
 Barclay, Maryland
 Chestertown, Maryland
 Middletown, Maryland
 Middletown, Maryland
 Martinsville, Virginia
 Washington, D. C.
 Beltsville, Maryland
 Baltimore, Maryland
 Mt. Airy, Maryland

COLLEGE OF ENGINEERING

Bachelor of Science

MASON CARPENTER ALBRITAIN	La Plata, Maryland
CALEB THAYER BAILEY	Bladensburg, Maryland
MORRIS JUDSON BALDWIN	Woodridge, D. C.
WILLIAM BOWEN BELT	Hyattsville, Maryland
FRANK AMOS BENNETT	Hagerstown, Maryland
HOWARD MARION BOTELER	Laurel, Maryland
CHARLES SMALLWOOD COOK	Frederick, Maryland
JAMES HAYWARD HARLOW	Havre de Grace, Maryland
JOSEPH BERNARD HIMMELHEBER	Baltimore, Maryland
PETER THEODORE KNAPP	Overlea, Maryland
WILLIS GEORGE MELVIN	Havre de Grace, Maryland
WILBUR BURSON MONTGOMERY	Washington, D. C.
ELLIOTT PRICE OWINGS	North Beach, Maryland
JOHN PHILLIP SCHAEFER	Riverdale, Maryland
LANSING GROW SIMMONS	Washington, D. C.
FREDERICK PARKER WALDEN	Raspeburg, Maryland
ALBERT GRAFTON WALLIS	Frederick, Maryland
GEORGE ALLEN WICK	Washington, D. C.
J. WARD WISNER, JR.	Baltimore, Maryland

COLLEGE OF HOME ECONOMICS

Bachelor of Science

AUDREY KILLIAM	Delmar, Maryland
ELIZABETH LOUISE MCCALL	College Park, Maryland

SCHOOL OF LAW

Bachelor of Laws

MILTON ANDREW ALBERT	Baltimore, Maryland
HOWELL W. ALLEN, JR.	Baltimore, Maryland
ROBERT BARRON	Baltimore, Maryland
FRANKLIN PHILLIPS BARRETT	Baltimore, Maryland
DONALD P. BELLOWES	Glyndon, Maryland
FRANKLIN MURRAY BENSON	Baltimore, Maryland

SOLOMON CHARLES BERENHOLTZ	Baltimore, Maryland
BENJAMIN LOUIS BERMAN	Baltimore, Maryland
EARLE WILSON BLACKBURN	Baltimore, Maryland
J. SELMAN BLAUSTEIN	Baltimore, Maryland
ALBERT HERBERT BLUM	Baltimore, Maryland
JOSEPH T. BOWLING	Baltimore, Maryland
WALTER R. CAPLES	Baltimore, Maryland
HERMAN COHEN	Baltimore, Maryland
JACOB COHEN	Baltimore, Maryland
B. OLIVE COLE	Baltimore, Maryland
MYRON S. COTTON	Baltimore, Maryland
JAMES PIPER COVER	Easton, Maryland
GEORGE RODNEY CROWTHER, JR.	Smithsburg, Maryland
LESTER H. CROWTHER	Baltimore, Maryland
JOHN WILMERTON DARLEY	Baltimore, Maryland
PAUL FROMM DUE	Baltimore, Maryland
JOHN CORRY FELL	Annapolis, Maryland
FRANCIS MILLARD FOARD	Baltimore, Maryland
ROBERT FRANCE	Baltimore, Maryland
OTTO R. FREED	Baltimore, Maryland
WILLIAM ELIJAH FREENY	Salisbury, Maryland
DAMON SALLADA GASKINS	Baltimore, Maryland
HENRY GLICK	Baltimore, Maryland
WALTER CARLTON GROSUCH	Oxford, Maryland
MORDECAI D. GREENBERG	Baltimore, Maryland
JOSEPH BENEDICT GRIESACKER	Baltimore, Maryland
THEODORE JOHN HAHN	Mt. Washington, Maryland
ISRAEL HARRY HAMMERMAN	Baltimore, Maryland
THOMAS MATTHEW HARRINGTON	Baltimore, Maryland
GEORGE HOFFERBERT	Baltimore, Maryland
JOSHUA RONALD HORSEY	Baltimore, Maryland
WILLIAM RAYMOND HORNEY	Centreville, Maryland
JULIUS ISAACSON	Baltimore, Maryland
LOUIS H. JAEGER	Whipple Barracks, Arizona
ROBERT SAMUEL JETT	Baltimore, Maryland
CLAY JEWELL	Baltimore, Maryland
HARRY KAIRYS	Baltimore, Maryland
STANLEY KELLEY	Eldridge, Alabama
MORRIS EUGENE KERPELMAN	Baltimore, Maryland
JAMES KAILER KIDD	Baltimore, Maryland
FANNIE KURLAND	Baltimore, Maryland
HENRY LAZARUS	Baltimore, Maryland
MAURICE M. LEAVITT	Baltimore, Maryland
OLIVER WILBERT LITTLETON	Baltimore, Maryland
JEROME ALOYSIUS LOUGHRAN	Ellicott City, Maryland
IDA CLAIRE LUTZKY	Baltimore, Maryland

JAMES ALLEN McALLISTER	Cambridge, Maryland
ELMER B. McCAHAN, JR.	Baltimore, Maryland
EUGENE McINNIS	Baltimore, Maryland
PAUL E. MARSH	Baltimore, Maryland
JULIUS GEORGE MAURER	Relay, Maryland
MEYER MAZOR	Baltimore, Maryland
WILLIAM LEE MERRIKEN	Baltimore, Maryland
JOHN HENRY MINDER	Baltimore, Maryland
W. G. READ MULLAN	Baltimore, Maryland
SIDNEY NEEDLE	Baltimore, Maryland
JOHN MARSHALL NEEL	Baltimore, Maryland
PALMER RICE NICKERSON	Baltimore, Maryland
MITCHELL PALEES	Baltimore, Maryland
SEYMOUR PHILLIPS	Baltimore, Maryland
LEON H. A. PERSON	Baltimore, Maryland
WILLIAM EDGAR PORTER	Baltimore, Maryland
MAURICE JULIUS PRESSMAN	Baltimore, Maryland
MARIE WHITE PRESSTMAN	Baltimore, Maryland
WALTER JOHN PUGH	Baltimore, Maryland
HERMAN PUMPIAN	Baltimore, Maryland
GOLDSBOROUGH G. ROSSITER	Baltimore, Maryland
PETER C. SALERNO	Bristol, Conn.
FREDERICK SCHARF	Baltimore, Maryland
SIMON SCHONFIELD	Baltimore, Maryland
HELEN I. SHERRY	Baltimore, Maryland
WALTER EDWARD SINN	Frederick, Maryland
WILLIAM HOWSER SKINNER	Baltimore, Maryland
MILTON RICHARDSON SMITH	Glen Arm, Maryland
MAX SOKOL	Baltimore, Maryland
ALEX WORTHINGTON SPEDDEN, JR.	Baltimore, Maryland
CHARLES F. STEIN, JR.	Baltimore, Maryland
RAYMOND FREDERICK STRAUSS	Baltimore, Maryland
NELSON HOWARD STRITEHOFF, JR.	Baltimore, Maryland
CHARLES A. TRAGESER	Baltimore, Maryland
VAUGHAN RUE TRUITT	Baltimore, Maryland
UTHMAN WALKER	Baltimore, Maryland
BEN WEINTRAUB	Baltimore, Maryland
FRANCIS ANTON WEISKITTEL	Baltimore, Maryland
BENJAMIN ZIMMERMAN	Baltimore, Maryland

SCHOOL OF MEDICINE

Doctor of Medicine

NATHANIEL MONROE BECK	Baltimore, Maryland
JACOB BELENKY	Brooklyn, New York
THADDEUS RAY BOWERS, JR.	Littleton, North Carolina
FREDERICK BOND DART	Niantic, Connecticut

JOSEPH DESANE
 JOHN MILTON EDMONDS
 DEWEY LYNWOOD FLESHMAN
 THEODORE C. GIFFIN
 BEN GOLDBERG
 ABRAHAM S. GORDON
 JOSEPH MATTHEW GUTOWSKI
 DOUGLASS ARNO HADDOCK
 PAUL HAGERMAN
 J. ELMER HARF
 PHILIP HIRSCH
 JOHN T. T. HUNDLEY, JR.
 WILLIAM BRYCE HUNT
 WILLIAM CARL JENNETTE
 MARION YATES KEITH
 GEORGE ADAM KNIPP
 ARTHUR MILTON KRAUT
 FREDERICK T. KYPER
 LEO ALOYSIUS LALLY
 IRA CLINTON LONG
 WILLIAM SAMUEL LOVE, JR.
 CARLTON S. L. McCULLOUGH
 HERBERT E. McLEAN
 RALEIGH MILLER MOLER
 ROBERT L. MURRAY
 KARL JOHNSON MYERS
 DAVID R. NEWCOMER
 ALEXANDER WILLIAM POVALSKI
 FONZO GOFF PRATHER
 PAUL ARNDT ROTHFUSS
 HARRY CHARLES RUCHE
 RICHARD SCHORR
 WALTER HAL SHEALY
 LOUIS SHERMAN
 CHARLES FRANKLIN SMITH
 THERESA ORA SNAITH
 ROY GERODD SOWERS
 PETER JOSEPH STEINCROHN
 ABRAM ALLEN SUSSMAN
 T. JOSEPH TOUHEY
 WALLACE WILLIAM WALKER
 SIDNEY WASSERSTROM
 HENRY V. WEINERT
 WILLIAM ARCHIBALD WELTON
 WALTER IGNATIUS WERNER
 JAMES FRANKLIN WHITE

Long Island City, New York
 Horton, Michigan
 Pence Springs, West Virginia
 Rowlesburg, West Virginia
 Spring Valley, New York
 Brooklyn, New York
 Perth Amboy, New Jersey
 Calais, Maine
 Cameron, West Virginia
 Hagerstown, Maryland
 New York City
 Lynchburg, Virginia
 Lexington, North Carolina
 Fremont, North Carolina
 Currie, North Carolina
 Baltimore, Maryland
 Jersey City, New Jersey
 Clearfield, Pennsylvania
 Scranton, Pennsylvania
 Morehead City, North Carolina
 Baltimore, Maryland
 Pittsburgh, Pennsylvania
 Jersey City, New Jersey
 Morgantown, West Virginia
 St. Pauls, North Carolina
 Philippi, West Virginia
 Hagerstown, Maryland
 Jersey City, New Jersey
 Burnt House, West Virginia
 Montoursville, Pennsylvania
 Philadelphia, Pennsylvania
 New York City
 Leesville, South Carolina
 Brooklyn, New York
 Uniontown, Pennsylvania
 Weston, West Virginia
 Linwood, North Carolina
 Hartford, Connecticut
 Baltimore, Maryland
 Wilmington, Delaware
 Winona, West Virginia
 Brooklyn, New York
 Jersey City, New Jersey
 Petersburg, West Virginia
 Cleveland, Ohio
 Morgantown, West Virginia

SCHOOL FOR NURSES

Graduate Nurse

RUTH WINIFRED BOYD
 HELEN LOUISE DUNN
 EVELYN PEARL GRAHAM
 DOROTHY LUCILLE HAZEN
 HULDA FAMOUS HARKINS
 MARY MARGARET HERRINGTON
 MARTHA MARIE HOFFMAN
 LILLIE RUTH HOKE
 KATHRYN ELIZABETH HORST
 VILMA CATHERINE KISH
 WILHELMINA NEVILLE McCANN
 IRENE AGNES MAXWELL
 IDA MARIE NAGEL
 ANNA ELIZABETH PRATT
 KATHRYN AMES READE
 MARIE E. CHALMERS SCHROEDER
 MARGARET MAY STAILEY
 HELEN STEDMAN TEEPLE
 KITTIE ROWLAND TOMS
 REGINA MEDORA WEST
 RUTH ANNA WHITE

Street, Maryland
 Baltimore, Maryland
 Huntingdon, Pennsylvania
 Union City, Pennsylvania
 Street, Maryland
 Meadeville, Pennsylvania
 Smithsburg, Maryland
 Emmitsburg, Maryland
 Hagerstown, Maryland
 Trenton, New Jersey
 Street, Maryland
 Owings Mills, Maryland
 Federalsburg, Maryland
 Baltimore, Maryland
 Painter, Virginia
 East New Market, Maryland
 Liverpool, Pennsylvania
 Baltimore, Maryland
 Funkstown, Maryland
 Martinsburg, West Virginia
 Federalsburg, Maryland

SCHOOL OF PHARMACY

Graduate in Pharmacy

WALTER EDWARD ALBRECHT
 ISRAEL BAKER
 WILLIAM LOUIS BARALL
 GEORGE C. BASIL, JR.
 SOLOMON GEORGE BLOCK
 LOUIS A. CARLINER
 FRIEDA CHERTKOF
 BERNARD JULIUS COHEN
 LOUIS ISAAC COPLIN
 JOHN DONNETT
 ARTHUR CLEMENT ELDRIDGE
 LORRAINE D. FIELDS
 MORRIS LOUIS FINKELSTEIN
 CHARLES FLOM
 HARRY H. FREIMAN
 LOUIS JOSEPH GLASS
 NATHANIEL HECKER
 MURRAY SHERMAN HINTON
 BENJAMIN R. KATZ

Baltimore, Maryland
 Baltimore, Maryland
 Baltimore, Maryland
 Annapolis, Maryland
 Phoebus, Virginia
 Baltimore, Maryland
 Mt. Washington, Maryland
 Baltimore, Maryland
 Baltimore, Maryland
 Baltimore, Maryland
 Myersville, Maryland
 Pikesville, Maryland
 Baltimore, Maryland
 Baltimore, Maryland
 Baltimore, Maryland
 Baltimore, Maryland
 Baltimore, Maryland
 Baltimore, Maryland
 Baltimore, Maryland
 Baltimore, Maryland

GUY CHARLTON KELLEY
 ROBERT A. KIRSON
 MORRIS KRAMER
 LOUIS LEBOWITZ
 HARRY LEVIN
 LEON MARMOR
 WILLIAM HENRY MATTOX
 JOHN E. MORAN
 WALTER G. MUSGROVE
 ANNA COVER NORTON
 MORRIS ROCKMAN
 EMANUEL ROSENTHAL
 LOUIS ROSENTHAL
 THEODORE E. STACY, JR.
 OWEN RUDISILL STAGMER
 AMOS ROOT VANSLYKE
 HERMAN ALBERT VOIGT
 RAPHAEL HYMAN WAGNER
 SOL BARTH WEINBERG
 LAWRENCE MALCOLM WRIGHT

Salisbury, Maryland
 Baltimore, Maryland
 Baltimore, Maryland
 Laurel, Delaware
 Baltimore, Maryland
 Baltimore, Maryland
 Elberton, Georgia
 Manchester, New Hampshire
 Baltimore, Maryland
 Laurel, Maryland
 Baltimore, Maryland
 Baltimore, Maryland
 Baltimore, Maryland
 Baltimore, Maryland
 Baltimore, Maryland
 Overlea, Maryland
 Baltimore, Maryland
 Baltimore, Maryland
 Staunton, Virginia
 Baltimore, Maryland

Pharmaceutical Chemist

MARVIN JACKSON ANDREWS
 Bristol, Tennessee

Bachelor of Pharmacy

JOHN CHRISTIAN KRANTZ, JR.
 Baltimore, Maryland

MEDALS, PRIZES AND HONORS, 1923

Elected Members of the Phi Kappa Phi, the Honorary Fraternity

MORRIS JUDSON BALDWIN	RUSSELL EARL MARKER
WILLIAM BOWEN BELT	RUTH ELIZABETH MAYERS
MILDRED CECILIA BLANDFORD	RUTH ISABELLE REPERT
PAUL CALVERT CISSEL	JOHN PHILIP SCHAEFER
JOHN FRANCIS CLAGETT	HARRY HARRISON SHAFFER
ZITA THERESSA ENSOR	LANSING GROW SIMMONS
GEORGE EDMUND GIFFORD	ELSIE MAY SOPER
MORRIS JACOB GUREVICH	VICTORIA VAIDEN
JAMES HAYWARD HARLOW	ROBERT MALCOLM WATKINS
CHARLES EDWARD WHITE	

Citizenship Medal offered by Mr. H. C. Byrd, Class of 1908
 ROBERT MALCOLM WATKINS

Citizenship Prize offered by Mrs. Albert F. Woods
 ELIZABETH LOUISE MCCALL

Athletic Medal offered by the Class of 1908
 GEORGE FINDLAY POLLOCK

Goddard Medal offered by Mrs. Annie K. Goddard James
 OSWALD HERMAN GREAGER

Alumni Association Debate Medal
 ROBERT MALCOLM WATKINS

Sigma Phi Sigma Freshman Medal
 SAMUEL LEBOWITZ

Alpha Zeta Agricultural Freshman Medal
 THOMAS CHADWICK KELLEY

"President's Cup" for Excellence in Debate, offered by Dr. H. J. Patterson
 THE POE LITERARY SOCIETY

"Governor's Drill Cup" offered by His Excellency, Honorable Albert C. Ritchie, Governor of Maryland
 COMPANY A

President's Military Prize, offered by Dr. Albert F. Woods
 CADET MAJOR GEORGE FINDLAY POLLOCK

Military Medal offered by the Class of 1899
 CADET SERGEANT DOUGLAS DAVIS BURNSIDE

Company Sword offered by the Class of 1897
 CADET CAPTAIN JACKSON WARD WISNER, JR.

Inspection Day Cup, offered by Saks & Company
 COMPANY A

Washington Chapter Alumni Military Cup
 SECOND PLATOON, COMPANY A—COMMANDED BY LOUIS FRANCIS MELCHOIR

Rifle Cup, offered by Graduates of the Advanced R. O. T. C. Course
 SOPHOMORE CLASS

Military Department Prize
 WALTER HEMPSTONE YOUNG

Individual Class Military Prizes offered by Regular Army Officers on duty at the University

JOHN PHILIP SCHAEFER, Senior Class
 LOUIS FRANCIS MELCHOIR, Junior Class
 DOUGLAS DAVIS BURNSIDE, Sophomore Class
 ERIC CARL METZEROTH, Freshman Class

**WAR DEPARTMENT AWARDS OF COMMISSIONS AS SECOND
LIEUTENANTS IN THE INFANTRY RESERVE CORPS**

KENNETH BALDWIN CHAPPELL	GEORGE FINDLAY POLLOCK
JOHN FRANCIS CLAGETT	RAYMOND LESTER RISSLER
CHARLES SMALLWOOD COOK	JOHN PHILIP SCHAEFER
EVERETT CLAYTON EMBREY	LOREN FLETCHER SCHOTT
PAUL SARDO FRANK	ALBERT GRAFTON WALLIS
ERNEST ALEXANDER GRAVES	CHARLES EDWARD WHITE
WILLIAM MILBURNE JONES	GEORGE ALLEN WICK
JOHN WESLEY MUMFORD, JR.	JACKSON WARD WISNER
WALTER HEMPSTONE YOUNG	

AWARDS OF MILITARY COMMISSIONS

PAUL SARDO FRANK	Lieutenant Colonel
GEORGE FINDLAY POLLOCK	Major
JOHN PHILIP SCHAEFER	Captain
JACKSON WARD WISNER	Captain
EVERETT CLAYTON EMBREY	Captain
WILLIAM MILBURNE JONES	Captain
RAYMOND LESTER RISSLER	First Lieutenant
JOHN FRANCIS CLAGETT	First Lieutenant
ALBERT GRAFTON WALLIS	First Lieutenant
WALTER HEMPSTONE YOUNG	First Lieutenant
GEORGE ALLEN WICK	First Lieutenant
CHARLES EDWARD WHITE	First Lieutenant
KENNETH BALDWIN CHAPPELL	First Lieutenant
JOHN WESLEY MUMFORD	Second Lieutenant
CHARLES SMALLWOOD COOK	Second Lieutenant
LOREN FLETCHER SCHOTT	Second Lieutenant
ERNEST ALEXANDER GRAVES	Second Lieutenant
EDWARD MARSHALL RICHARDSON	Second Lieutenant

HONORABLE MENTION

College of Agriculture

First Honors—HARRY HARRISON SHAFFER
Second Honors—MORRIS JACOB GUREVICH, VASO TRIVANOVITCH

College of Arts and Sciences

First Honors—CHARLES EDWARD WHITE, RUTH ELIZABETH MAYERS,
GEORGE EDMUND GIFFORD, RUSSELL EARL MARKER
Second Honors—JOHN FRANCIS CLAGETT, ROBERT MALCOLM WATKINS,
RUTH ISABELLE REPERT, MILDRED CECILIA BLANDFORD

College of Education

First Honors—VICTORIA VAIDEN
Second Honors—PAUL CALVERT CISSEL

College of Engineering

First Honors—JAMES HAYWARD HARLOW, MORRIS JUDSON BALDWIN
Second Honors—JOHN PHILIP SCHAEFER

School for Nurses

University of Maryland Nurses' Alumnae Association Scholarship to
Columbia University
HELEN STEDMAN TEEPLE
University of Maryland Nurses' Alumnae Association Pin and Member-
ship in the Association
HELEN LOUISE DUNN

School of Medicine

University Prize, Gold Medal—HENRY VINCENT WEINERT

CERTIFICATE OF HONOR

JOSEPH M. GUTOWSKI	DAVID R. NEWCOMER
GEORGE ADAM KNIPP	ALEXANDER WILLIAM POVALSKI
FREDERICK BOND DART	WILLIAM S. LOVE, JR.

The Dr. Jose L. Hirsch Memorial Prize of \$50.00 for Excellence in
Pathology during the second and third years
HENRY VINCENT WEINERT

School of Law

Prize of \$100 for the highest average grade for the entire course
FRANCIS MILLARD FOARD
Prize of \$100 for the most meritorious thesis
J. RONALD HORSEY

School of Dentistry

University Gold Medal for Scholarship—ELMER ARTHUR PERRY
First Honorable Mention—WALTER RAYMOND KISER

School of Pharmacy

Gold Medal for General Excellence—MRS. ANNA COVER NORTON
Simon Prize for Practical Chemistry—MRS. ANNA COVER NORTON
Senior Class, Honorable Mention—HARRY H. FREIMAN and HARRY LEVIN
Junior Class, Honorable Mention—HARRY ALVAN JONES,
HARRY H. HANTMAN and CHARLES BLECHMAN

College of Commerce and Business Administration

Phi Delta Gamma Sorority Gold Key for Scholarship—
CATHARINE M. KOCH
Delta Sigma Pi Fraternity Gold Key to Male Students for Highest
Scholarship—J. HARRY GARMER

**BATTALION ORGANIZATION R. O. T. C. UNIT
UNIVERSITY OF MARYLAND**

THOMAS J. McQUADE, Major, Unit Commander
THOMAS J. HOLMES, Captain-Adjutant

COMPANY A

B. HAMILTON ROCHE
WARRINGTON R. SANDERS
STANLEY C. ORR
M. HAMILTON HOWARD
J. MARVEL SENEY
JOSEPH C. BURGER
J. LEROY DOUGALL
JOHN H. BAKER
WILBUR PEARCE
BARNWELL R. KING
SELWYN L. POWERS
W. EMORY DAUGHERTY
GEORGE E. BOUIS
J. WELLS JONES
E. P. COBLENTZ
J. E. REVELLE
G. M. MCCAULEY
E. F. DEATLEY
E. B. LONGYEAR
J. D. BRYAN
L. P. WINNEMORE
S. LEBOWITZ
A. E. BONNET
W. F. KELLERMAN
E. C. METZEROTH
E. M. BARRON
E. R. ALLEN
C. W. BUTLER

COMPANY B

Captains
LOUIS F. MELCHIOR
First Lieutenant, Second in Command
MAURICE F. BROTHERS
First Lieutenants
HENRY M. WALTER
Second Lieutenants
NELSON T. MEEDS
GEORGE J. LUCKEY
First Sergeants
DOUGLAS D. BURNSIDE
Platoon Sergeants
DANIEL R. STALEY
MERLE L. BOWSER
Sergeants
WILLIAM H. MERRILL, JR.
JAMES H. HUBBARD
HOUGHTON C. CLAPP
EMANUEL F. ZALESAK
ARTHUR G. PRANGLEY, JR.
FRED H. ROGERS
Corporals
W. F. BOHANNAN
W. H. WHITEFORD
G. C. BOWEN
L. CLYMER
P. E. HUFFINGTON
A. SPINNEY
W. C. SUPPLEE
W. D. MANKIN
S. WHALEY
E. M. LOHSE
W. G. DENT
J. C. LANG
K. F. MATTHEWS
P. C. BAUER

COMPANY C

RITCHIE P. TAYLOR
J. LUPTON MECARTNEY
RALPH M. GRAHAM
HOUSDEN L. MARSHALL
EUGENE R. STEELE
JOHN F. SULLIVAN
JOHN F. HOUGH
J. FRENCH SKIRVEN
GEORGE P. GARDNER
GEORGE R. HEINE
PAUL B. HARLAN
CHARLES C. CASTELLA
PAUL MORRIS
EDWIN L. FORD
H. C. CLARK
D. E. CORKRAN
L. P. DITMAN
C. T. BARBER
H. L. SCHAEFER
J. E. ENNIS
A. E. CHRISTMAS
F. C. HERZOG
K. G. STONER
J. E. RICE
G. H. FETTUS
W. I. GREEN

CADET BAND

Drum Major—CADET SERGEANT DOUGLASS D. BURNSIDE
Band under direction of Warrant Officer James Simmons, Army Music School,
Washington Barracks, Washington, D. C.

Register of Students, 1923-1924

COLLEGE OF AGRICULTURE

SENIOR CLASS

Bacon, Samuel R., Glencoe	Miller, Robert H., Spencerville
*Church, Carey F., College Park	Nichols, Norris N., Delmar
Clarke, Glen M., Clarksville	Nichols, Robert S., Delmar
Duvall, William M., Baltimore	Penn, William B., Clinton
Embrey, Everett C., Washington, D. C.	Powell, William D., Woodsboro
Endslow, David K., Mt. Joy, Pa.	Prince, Charles E., Baltimore
Geist, Charles H., Upperco	Remsberg, Harold A., Middletown
Hale, Roger F., Towson	Roche, Benjamin H., Baltimore
*Hancock, Hugh, Berwyn	Rosenberg, Charles, Riverdale
*Harper, Floyd H., College Park	Rothgeb, Edwin E., Washington, D. C.
*Holland, Arthur H., Cartersville, Va.	Sleasman, Arthur R., Smithsburg
*Ludlum, Samuel L., Chevy Chase	Walrath, Edgar K., Annapolis
McQuade, Thomas J., Washington, D. C.	Weber, Wilhelm H., Oakland
Mccartney, John L., Vaucluse, Va.	Yates, Harry O., Abington, Pa.

JUNIOR CLASS

Aldrich, Willard W., Port Deposit	Hough, John F., Mt. Rainier
Anderson, Wilton A., College Park	*Lincoln, Leonard B., Takoma Park
Baker, John H., Winchester, Va.	*Lowman, Clarence A., Funkstown
*Banfield, Frank W., Riverdale	McKeever, William G., Kensington
Barton, J. Frank, Centreville	Myers, Victor, Washington, D. C.
*Bonnet, Harold M., East St. Johnsbury, Vermont	Nielson, Knute W., Washington, D. C.
Bouis, George E., Mt. Washington	Pearce, Wilbur, Sparks
Bromley, Walter D., Pocomoke City	Price, M. Myron, Queenstown
Buckman, Horace D., Accotink, Va.	Pugh, Edward L., Jr., North Chevy Chase
Bull, Fred L., Pocomoke City	*Shoemaker, Charles, Bethesda
Cluff, Francis P., Pocomoke	Staebner, Alfred P., Glyndon
Dawson, Walker M., Silver Spring	Stuart, Leander S., Pepperell, Mass.
Dietz, George J., Baltimore	Sullivan, John F., Washington, D. C.
England, Howard A., Rising Sun	Summerill, Richard L., Penn's Grove, New Jersey
Faber, John E., Washington, D. C.	*Trower, Hugh C., Norfolk, Va.
Harlan, Paul B., Churchville	Vivanco, Carlos D., Washington, D. C.
Heine, George R., Washington, D. C.	Walker, Dwight T., Mt. Airy
*Hevessy, Michael, Gloucester Point, Va.	Williams, Richard E., Riverside, Conn.
*Hohman, Charles W., Berwyn	*Worthington, Leland G., Berwyn
	Zalesak, Emanuel F., Washington, D. C.

SOPHOMORE CLASS

Ady, Albert A., Sharon	Dorsett, Telfair B., Washington, D. C.
Anderson, James H., Washington, D. C.	Endslow, Joseph S., Mt. Joy, Pa.
Bauer, Paul E., Washington, D. C.	Ensor, Leoinel K., Sparks
Bennett, Leslie C., Upper Marlboro	Evans, William H., Pocomoke City
Brinsfield, Carrol S., Cordova	Ganoza, Luis, Triyillo, Peru, S. A.
Bryan, John D., Baltimore	Hoopes, Joseph D., Bel Air
Butts, Herbert R., Maryland	Hubbard, Harry S., Cordova
*Campbell, Thomas A., Hyattsville	Kelley, Thomas C., Washington, D. C.
*Carter, John H., Washington, D. C.	King, Eugene W., Branchville
Conklin, Charles W., Smithfield, Va.	Mankin, W. Douglas, Washington, D. C.
*Crotty, Leo A., Utica, N. Y.	*McGlone, Joseph, Baltimore
Danner, Edward G., Unionville	Mills, James E., Randall Cliff Beach
Ditman, Lewis, Westminster	*Moffitt, William J., Beltsville

*Denotes students detailed to the University by the Veteran's Bureau.

Morsell, John B., Bowen's
Newcomer, Lionel E., Harper's Ferry,
W. Va.
*Parlett, William A., College Park
Price, Kent S., Centreville
*Reed, Emmons H., Denton
Remsberg, Charles H., Middletown
Rice, Warren W., Sylmar
*Richardson, Harry F., Berwyn
*Ritter, Floyd, Middletown, Va.
Ronsaville, Edwin W., Kensington
Shipley, Ernest H., Frederick

Skirven, James F., Chestertown
Smith, Paul W., Washington, D. C.
*Stanley, Edward A., Bluefield, W. Va.
Stokes, George C. A., Cockeysville
Supplee, William C., Washington, D. C.
*Taylor, Letha E., Mt. Rainier
*Vigus, Edwin E., Deposit, N. Y.
Walker, Earnest A., Mt. Airy
Whaley, M. Stewart, Washington, D. C.
Wilson, J. Kenneth, Pylesville
Worriolow, George M., North East

FRESHMAN CLASS

Abrams, George J., Washington, D. C.
Bishoff, George E., Oakland
Bowyer, Thomas S., Towson
Bye, John M., Denton
Clymer, Lee, Rawlings
Cockerill, Frank O., Washington, D. C.
Coffman, Richard E., Hagerstown
Coghill, Kenchin W., Brooklyn, N. Y.
Cole, Cecil F., Jr., Fulton
Conner, M. Helen, Washington, D. C.
Cottman, Harry T., Pocomoke
Crosthwait, Samuel L., Hyattsville
Dallas, David, Salisbury
Dodge, Frederick N., Washington, D. C.
Downey, Mylo S., Williamsport
Eaton, Norwood A., Washington, D. C.
Embrey, Howard O., Washington, D. C.
England, G. William, Rising Sun
Gasch, William F., Hyattsville
Gerken, Hubert J., Riverdale

Gunby, Paul B., Marion
Hess, Lawrence H., Elm Grove, W. Va.
Kemp, Stoll D., Frederick
Krein, John G., Baltimore
Lazo, Rene G., Havana, Cuba
*McCabe, Henry L., Washington, D. C.
Montgomery, Donald B., Chevy Chase
Moore, William H., Boyds
Nock, Alton E., Stockton
Randolph, Winslow H., Jr., Seminary
Hill, Va.
*Romjue, Andrew G., Washington, D. C.
Schmidt, Engelbert H., Washington, D. C.
Schrider, Peter P., Takoma Park, D. C.
Shear, G. Myron, Rosslyn, Va.
Stockslager, Herman L., Smithsburg
Thornton, Norwood C., Elkton
Twilley, Howard J., Hurlock
Yost, Henry E., Grantsville

TWO-YEAR AGRICULTURE CLASS

*Allen, Kenneth, Brandywine
Bailey, Roy L., Mardela
*Barber, Charles, Elkridge
Barrick, LeRoy C., Woodsboro
*Beall, Morris, Brandywine
*Berry, Peter G., Thoroughfare, Va.
*Best, R. C., Washington, D. C.
*Boender, John A., Laurel
*Bollinger, Peary R., Reisterstown
*Bray, Walter C., Emporia, Va.
*Brown, Brunswick L., Washington, D. C.
Brown, Eugene F., Queen Anne
*Busch, Rudolph, Shelltown
*Callis, Cecil R., Washington, D. C.
*Chassagne, Leo J., Raspburg
*Cherry, Joseph C., Berwyn
*Cogswell, Fred, Ilchester
*Collins, George T., Ballston, Va.
*Crozier, Henry T., Ballston, Va.
*Dawson, James H., Ballston, Va.
*Dennis, G. E. H., College Park
*DeWitt, Ellis F., East Falls Church, Va.
*Dobbins, William E., Laurel

*Duke, John Benson
*Ferguson, Walter M., Berwyn
*Fiorini, Michael, College Park
*Fisher, Charles E., Herndon, Va.
*Fitzwater, Oscar F., Moorefield, W. Va.
*Fletcher, John C., Bluemont, Va.
*Fletcher, Raymond M., La Plata
*Forsythe, Lewis V., Berwyn
*Foster, Paul P., Berwyn
*Garrett, William N., Ballston, Va.
*Graves, Harvey C., Berwyn
*Greifzu, John, Baltimore
*Grosskurth, William F., Bethesda
*Grove, Claude M., Kernstown, Va.
*Guilday, Michael, Baltimore
*Hall, Harry, Purcellville, Va.
*Hamlin, Harry, Newark, N. J.
*Harnsbarger, John H., Warrenton, Va.
*Hearold, John W., Miskinom, Va.
*Heath, Frank M., Silver Springs
*Hedberg, Edwin L., Beltsville
*Hicks, Harry W., Stephens City, Va.
*Hiser, Bernard, Washington, D. C.

*Horak, Anton, Colesville
*Hottel, John T., Bealton, Va.
*Iseminger, Lester D., Smithsburg
*Jackson, Harry, Childs Station
*Jeffries, Mark P., Brandywine
*Johnson, Leo C., East Falls Church, Va.
*Jones, John S., Pocomoke
*Jones, Paxton C., College Park
Joyce, Fletcher, Millersville
*Kearns, Michael J., Culpeper, Va.
Learned, Frank C., Washington, D. C.
*Llewellyn, Carrington P., Dunn-Loring,
Va.
*Long, Ludwell S., Washington, D. C.
*Lynn, Charles S., Hyattsville
*Martin, Virgil E., Atlanta, Ga.
*McAndrews, Joseph B., Hyattsville
*McCarthy, Harry L., Brookville
*McCarty, Patrick M., Sykesville
*McGarvey, John, Baltimore
*Mess, George B., Laurel
*Moore, Peter L., Brandywine
*Mortimer, Walter M., Neavitt
*Myers, John A., Tom's Brook, Va.
*Newberry, James R., Macon, Ga.
*Norris, Elmer A., College Park
*Ollerenshaw, James J., Washington, D. C.
*O'Rourke, James H., Pohick Church, Va.
*Osborne, Herman B., Baltimore
*Oswald, Louis H., Ballston, Va.
Parran, Archibald D., Coster
*Persinger, Harry B., Berwyn
Pettit, Carlton Z., Washington, D. C.
*Pierce, John R., Congress Heights, D. C.

Polyette, John N., Westover
*Poole, Harry C., Laurel
*Poppen, Alvin W., Toluca, Va.
*Potter, Albert R., Windy Hill
*Price, Jacob J., Easton
*Rayle, Edward C., Washington, D. C.
*Richards, Felix W., Accotink, Va.
*Richards, Philip W., White Plains, Va.
*Ross, Charles E., Oriole
*Ross, Charles F., Hampstead
*Rowe, George, Brentwood
*Ryan, Matthew G., Loveville, Va.
*Schedmegaard, George W., Laurel
Schuyler, Van Rensselaer, Easton
Seabold, Charles W., Baltimore
*Senne, Henry L., Accotink, Va.
*Simpich, Ira M., Landover
*Sprinkle, Paul C., Washington, D. C.
*Strathman, George F., Berwyn
*Tait, George F., Fairfax, Va.
*Thompson, Franklin H., Patapsco Station
Timmons, Charles L., Snow Hill
*Toxey, John N., Jr., Elizabeth City, N. C.
*Van Horn, George L., Silver Springs
*Walker, Francis M., Washington, D. C.
*Wardles, William I., Anacostia, D. C.
*Webb, Dorsey L., Parksley, Va.
*West, John R., Washington, D. C.
*White, George A., Berwyn
*Wiley, Benjamin H., Reisterstown
*Wilson, Aseal S., Baldwin
Wilson, Laurence, Hillsboro
*Woodward, Amos R., Woodbine
*Yewell, Henry, Jr., Glenburnie

UNCLASSIFIED

Aston, Arthur C., Gambrills
Beall, Clarkson J., College Park
*Johnston, C. Aloysius, Philadelphia, Pa.
Marty, Ivan M., Baltimore
Quaintance, Howard W., College Park
Richardson, Edward M., Washington,
D. C.

Ross, Marion A., Princess Anne
Rowe, Taylor P., Baltimore
Smith, Edward J., Riverdale
Stewart, Harry A., Rustburg, Va.
Wootten, John F., Berwyn

WINTER SHORT COURSE IN DAIRYING

Bushey, James L., Woodbine
Calahan, C. L., Elkton
Cole, Stanley M., Fulton
Crocker, Howard E. M., Chevy Chase
Dudrow, Walter, Walkersville
Handley, William J., Cambridge
Hyland, James, Fiskdale, Mass.

Keatts, Rossie C., Mt. Rainier
Magness, H. Smith, Bel Air
Matthews, E. Thomas, Jr., Sparks
Miller, Paul C., Westminster
Null, Hubert J., Taneytown
Thorington, Charles N., Pocomoke City
Warrenfeltz, J. Hugh, Smithsburg

COLLEGE OF ARTS AND SCIENCES

SENIOR CLASS

Beers, Wilson C., Waterbury, Conn.
Besley, Florence E., Baltimore
Brewer, Virginia W., College Park
Chase, Ralph H., Washington, D. C.

Clay, Catherine L., College Park
Darcy, George D., College Park
Gambrill, Charles M., Baltimore
Gemmell, William, Baltimore

Harman, Clara L., College Park
 Harned, Frank M., Merchantville, N. J.
 Hedgcock, Leland M., Takoma Park
 Heidelbach, Ralph H., Catonsville
 Hitchcock, Albert E., Washington, D. C.
 Holmes, Thomas J., Takoma Park
 Knotts, James T., Jr., Sudlersville
 Lininger, Harry C., Westernport
 Newland, Paul F., Bristol, Tenn.
 Porter, Vivien W., Washington, D. C.

Spence, Virginia I., College Park
 Steele, Eugene R., Hagerstown
 Straka, Robert P., Homestead, Pa.
 Sullivan, Emile A., Baltimore
 Terwilliger, William G., Highland, N. Y.
 Walter, Henry M., Washington, D. C.
 Wardwell, Aubrey St. C., Washington,
 D. C.
 Warrenfeltz, Mary Salomé, Emmitsburg
 White, John I., Washington, D. C.

JUNIOR CLASS

Bowen, G. Carville, Hyattsville
 *Bragg, John H., Washington, D. C.
 Burger, Joseph C., Washington, D. C.
 Cairns, Robert S., Washington, D. C.
 Cannon, James H., Hyattsville
 Clapp, Houghton G., Mt. Rainier
 Dorsey, Anna H. E., Ellicott City
 Dougall, J. L., Garrett Park
 Duke, Henry E., Durham, N. C.
 Flenner, Elizabeth M., Glen Mills, Pa.
 Ford, Edwin L., Washington, D. C.
 Froehlich, Wilfred E., Crisfield
 Graham, Ralph M., Washington, D. C.
 Greagor, Oswald H., Baltimore
 Hardtner, Ernestine J., Baltimore
 Hill, Minnie M., Washington, D. C.
 Horn, Millard J., Washington, D. C.
 House, Kingsley A., College Park
 Jones, Joseph W., Washington, D. C.
 Juska, Edward F., Elberon, N. J.
 Keane, John P., College Park
 Kwik, Pock Heng, Djocdjakarta, Java
 Lankford, Johsua M., Pocomoke City
 Luckey, George J., Frederick
 Mace, John, Jr., Cambridge

Macko, Joseph A., Homestead, Pa.
 Marden, Tilghman B., Jr., Baltimore
 Marshall, Housden L., Washington, D. C.
 Massicot, Marie M., Columbus, Ga.
 McClung, Marvin R., Morrisville
 Merrill, William H., Pocomoke
 Nash, Mabel M., Mt. Rainier
 Newman, Saul C., Hartford, Conn.
 Parks, Leston C., Bristol, Tenn.
 Peebles, Irvin, Lonaconing
 Phillips, Gareld E., Hagerstown
 Powers, Selwyn L., Hyattsville
 Rivkin, Joseph L., Hartford, Conn.
 Ryon, Allison F., Waldorf
 Scott, Edward A., Bristol, Tenn.
 Scott, William M., Princess Anne
 Shank, James O. C., Smithsburg
 Stambaugh, Bruce T., Woodsboro
 Tan, Felix H., Baltimore
 Tan, Joseph H., Fukien, China
 Taylor, Ritchie P., Washington, D. C.
 Wheaton, I. Evan., Greenwich, N. J.
 White, Russell B., Kittanning, Pa.
 Wilson, John N., Frederick
 Zelwis, Minerva, Pittsburgh, Pa.

SOPHOMORE CLASS

Barber, Charles T., Hagerstown
 *Bauer, Joseph, College Park
 Berger, William A., Bloomfield, N. J.
 Bohannan, William T., Baltimore
 *Bonnett, Harold A., Washington, D. C.
 Bounds, James A., Sharptown
 Bounds, James H., Salisbury
 Browne, Tom A., Chevy Chase
 Chappius, Maurice K., Washington, D. C.
 Christmas, Edward A., Upper Marlboro
 Clark, Alfred H., Washington, D. C.
 Clement, Eugenia W., Washington, D. C.
 Comer, Walter R., Frederick
 Crowther, Aloha H., Laurel
 Daugherty, J. Claude, Washington, D. C.
 Daugherty, Walter E., Washington, D. C.
 Deibert, Elmore R., Havre de Grace
 Dement, Paul E., Jr., Branchville
 Dent, Theo. Hatch, Oakley
 Dent, Wade Gilbert, Jr., Clinton

Ennis, John E., Pocomoke
 Evans, Edward T., Cumberland
 Fleming, Christian M., Baltimore
 Fogg, George W., Bangor, Maine
 Gary, Edward T., Washington, D. C.
 Green, Harry J., Baltimore
 Green, Winship I., Kensington
 Greenfield, Charles M., Takoma Park
 Hall, Irving, Chevy Chase
 Heber, Carl H., Cumberland
 Holmes, George K., Washington, D. C.
 Hopwood, Mason H., Washington, D. C.
 Hubbard, James H., Cordova
 Huffington, Paul E., Eden
 Kaufman, Max, Brooklyn, N. Y.
 Kay, George F., Elk Mills
 Lanigan, John Ralph, Washington, D. C.
 Leithiser, Eldon F., Havre de Grace

Lipman, Leonard H., New Brunswick,
 N. J.
 Lohse, Edward M., Washington, D. C.
 Longridge, Joseph C., Barton
 Longyear, Edward B., Poplar Hill
 Lupton, Helen A., Washington, D. C.
 Matsumura, Junichi, Wailuku, Maui, Ha-
 waii
 Meloy, William C., Washington, D. C.
 Merrick, Charles H. R., Barclay
 Mitchell, John H., LaPlata
 Moretti, John J., Newark, N. J.
 Osborn, A. Downey, Point Pleasant, N. J.
 Parsons, Arthur C., Ormsby, Pa.
 Pearce, Clyde A., Point Pleasant, N. J.
 Pfeiffer, Karl G., Washington, D. C.
 Porton, Harry P., Washington, D. C.
 Ray, John J., Waterbury, Conn.
 Reading, Hugh D., Washington, D. C.
 Rice, John E., Frederick
 Ryon, William A., Washington, D. C.

Schaefer, Herbert S., Riverdale
 Silver, Abraham A., New Haven, Conn.
 Somerville, Duncan S., Cumberland
 Spence, Mary, College Park
 Spinney, Archie, Baltimore
 Staley, Ira M., Knoxville
 Stoner, Kenneth G., Hagerstown
 Strite, John H., Clearspring
 Sumner, Howard C., Washington, D. C.
 Taylor, Thelma I., Washington, D. C.
 Tingley, Egbert F., Hyattsville
 Troxell, Walter H., Northampton, Pa.
 Truesdell, Phillip B., Chevy Chase
 Waters, Douglas G., Germantown
 Whaley, Mildred C., Washington, D. C.
 Whelpley, Louisa R., Riverdale
 Whiteford, Wm. Hamilton, Baltimore
 Winkjer, Thelma W., Washington, D. C.
 Wishnefsky, Jacob, Paterson, N. J.
 Wolf, Patricia, New York City, N. Y.
 Wright, Nadia V., Washington, D. C.

FRESHMAN CLASS

Abrecht, George F., Frederick
 Achstetter, Joseph C., Washington, D. C.
 Atkinson, Rachel B., Washington, D. C.
 Baber, Richard H., Riverdale
 Baldwin, Kenneth M., New Haven, Conn.
 Baumgartner, Eugene I., Oakland
 Beach, Charles C., Washington, D. C.
 Beachley, Amos B., Middletown
 Behring, Julia L., Washington, D. C.
 Blackstone, Robert D., Jr., River Springs
 Bloom, Martha L., Ellicott City
 Bochau, Carl T., Baltimore
 Bottum, Merritt H., Ridgewood, N. J.
 Bowman, Craig, Rockville
 Brightman, C. Gordon, Jr., Baltimore
 Brill, Isadore, Washington, D. C.
 Bromley, Luther F., Stockton
 Bucciarelli, John A., New Canaan, Conn.
 Burgee, Miel D., Monrovia
 Burns, John H., Sparrows Point
 Cardwell, John L., Washington, D. C.
 Charshree, William R., Havre de Grace
 Cheek, Leland H., Washington, D. C.
 Clagett, Helen B., Hyattsville
 Collins, Martha C., Bishopville
 Compton, John H., Princeton, N. J.
 Dargue, Charles C., Kittanning, Pa.
 Day, William H., West Haven, Conn.
 Deener, William E., Brunswick
 Delgado, Arthur L., New Haven, Conn.
 DeMaria, Dom James, New Kensington,
 Pa.
 DePalma, Anthony F., Orange, N. J.
 Dupuis, J. James, New Richmond, Wis.
 Ely, Selden M., Jr., Washington, D. C.

Fisher, William A., Washington, D. C.
 Frazier, Karl B., Hurlock
 Frisby, Paul E., Washington, D. C.
 Futterer, Charles, Hagerstown
 Galligan, Joseph D., Washington, D. C.
 Gary, Edwin B., Takoma Park
 Geiger, Clarence E., Washington, D. C.
 Glenum, Harry, Bradley Beach, N. J.
 Graham, William C., North East
 Granger, Albert F., Kattskill Bay, N. Y.
 Gray, James G., Jr., Riverdale
 Grimmel, Huntley C., Washington, D. C.
 Gundry, Jesse K. H., Catonsville
 Haeseker, Margaret E., Baltimore
 Harp, Charles W., Hagerstown
 Harper, Douglas B., Royal Oak
 Harry, Laurence W., Washington, D. C.
 Harvey, Jane V., Mt. Lake Park
 Hawkshaw, John W., Hyattsville
 Heiss, Maxine, Washington, D. C.
 Herzog, Fred C., Washington, D. C.
 Hill, Robert W., Baltimore
 Hill, William S., Upper Marlboro
 Hornbaker, John H., Cumberland
 Howard, William L., Federalsburg
 Hungerford, Vincent B., Marshall Hall
 Hyde, Edward D., Baltimore
 Jones, Lewellyn, Granville, N. Y.
 Katchmar, A. William, Ansonia, Conn.
 Katzin, Eugene M., Newark, N. J.
 Kelchner, Harry J., Palmerton, Pa.
 Kidd, Paul W., Rising Sun
 King, Russell M., Washington, D. C.
 Lakin, John R., Cumberland
 Leaf, Wibur M., Washington, D. C.

Lipkin, Benjamin A., Paterson, N. J.
 Lowry, Thomas S., New York, N. Y.
 Markwood, Emmett H., E. Cleveland, Ohio
 Marrone, Anthony, Frederick
 Martz, John W., Frederick
 Mason, J. E., Newark
 May, Alfred A., Washington, D. C.
 McCabe, Joe I., Baltimore
 McClay, Harold R., Hyattsville
 McGreevy, Joan F., Washington, D. C.
 McMinimy, Winifred M., Mt. Rainier
 Mead, Irene C., College Park
 Mills, James B., Delmar
 Mills, William D., Salisbury
 Missonellie, William, Hawthorne, N. J.
 Moler, Bernice V., Hyattsville
 Morris, Robert E. L., Hyattsville
 Muzzy, Alexander A., Homestead, Pa.
 O'Donnell, Roger, Jr., Washington, D. C.
 Paganelli, Americus J., New York, N. Y.
 Paganelli, Hugo R., New York, N. Y.
 Petrie, Kenneth, Winchester, Va.
 Petruska, Albert J., New Brunswick, N. J.
 Powell, Luther E., Woodsboro
 Price, William A., Sparks
 Propst, Cecil F., Laurel
 Quesada, Elwood R., Washington, D. C.
 Quillen, Ansley J., Ocean City
 Ratner, Harry E., New Haven, Conn.
 Reed, Harold B., Turtle Creek, Pa.
 Ripa, Samuel J., Essex, N. J.
 Rothgeb, Russell G., Washington, D. C.
 Sasscer, Buchanan B., Upper Marlboro
 Savage, Mary E., Rockville

Schindler, Julius E., Hagerstown
 Schoolfield, S. James, Jr., Pocomoke City
 Seal, Eleanor C., Takoma Park, D. C.
 Seltzer, Olive M., Washington, D. C.
 Sheinfeld, Nathan, New Haven, Conn.
 Sheriff, Leroy W., Landover
 Shipley, Linwood P., Hyattsville
 Shubert, Edward, Erie, Pa.
 Sims, Martha T., Washington, D. C.
 Smith, Clater W., Baltimore
 Snouffer, Edward N., Jr., Buckeystown
 Spencer, Ernest, Bel Alton
 Sprecher, Milford H., Sharpsburg
 Stephenson, Frank R., Baltimore
 Stevens, Myron B., Chevy Chase
 Stevenson, Kathryn C., Mt. Lake Park
 Sullo, Robert A., New Haven, Conn.
 Summers, Patrick L., Cumberland
 Taylor, Elizabeth J., Washington, D. C.
 Taylor, Garland Ray, Salisbury
 Taylor, Lylburn L., Salisbury
 Tenney, Edw. M., Jr., Hagerstown
 Terhune, Frank H., Ridgewood, N. J.
 Tippet, Howard G., Cheltenham
 Van Sickler, Carr T., Washington, D. C.
 Walker, Charles L., Washington, D. C.
 Wellens, Edna M., Washington, D. C.
 Wentzel, Alton A., Carlisle, Pa.
 Whiteford, Roger S., Baltimore
 Whitmire, Boyce A., Hendersonville, N. C.
 Wright, Philip A., Williamsburg
 Yeager, George H., Cumberland
 Zobrist, John C., Jr., Baltimore

UNCLASSIFIED

Blanton, Thomas J., Elkton
 Clay, Lucy E. (Mrs.), College Park
 Crisp, Edwin S., Washington, D. C.
 Goodyear, Amy C., (Mrs.), Riverdale
 House, Hugh O., College Park

John, (Mrs.) W., College Park
 Kemp, Leonard, Relay
 MacDougall, Alan F., Merchantville, N. J.
 Schott, Loren F., Washington, D. C.
 Wheeler, Janice P. M., Englewood, N. J.

COLLEGE OF COMMERCE AND BUSINESS ADMINISTRATION

SENIOR CLASS

Baxley, Charles Herbert, Baltimore
 Bolstler, Eugene, Baltimore
 Canton, William L., Montclair, N. J.
 Chen, Thung Tang, Tsungming Kiangsu,
 China
 Clemens, Maynard A., Baltimore
 Darsch, Earl Philip, Baltimore
 DiPaula, Joseph S., Baltimore
 Zang, Dalin R., Kiang Ying, China
 Gould, Helen, Baltimore
 Gray, Arthur William, Baltimore

Hendrix, Ernest Carlton, White Hall
 Jackson, Howard E., Baltimore
 Levinson, William George, Baltimore
 Lindsay, G. E., Baltimore
 McCahan, Robert S., Linthicum Heights
 McClyment, Herber, Carmichael
 Sullivan, Dennis B., Manchester, N. H.
 Tharle, H. D., Baltimore
 Thomas, Lawrence G., Cameron, W. Va.
 Wannan, Carl Lee, Baltimore

JUNIOR CLASS

Andrew, Charles Owen, Aberdeen
 Armstrong, J. E., Baltimore
 Buckey, Charles Gordon, Baltimore
 Chayt, Leon, Baltimore
 Darsch, Granville M., Baltimore
 Dauer, William Frank, Baltimore
 Dawson, C. E., Pikesville
 Donaway, Harry Stewart, Baltimore
 Jones, Norman Michael, Harrisburg, Pa.
 Kramer, Louis Benjamin, Baltimore
 Lappe, Cornelius A., Baltimore
 Levitt, Maurice M., Baltimore
 Lewis, Herman M., Baltimore
 McKewen, John L., Baltimore
 Mallett, Victor J., Baltimore

Milener, Eugene Darden, Baltimore
 Miller, Harry, Baltimore
 Nemphos, T. C., Baltimore
 Rapperport, Albert A., Baltimore
 Robinson, Moody A., Toddville
 Rowles, L. B., Baltimore
 Schmidt, Oswald, Baltimore
 Schotta, Victor Thomas, Oella
 Smith, Nathan, Baltimore
 Smith, Walter K., Baltimore
 Stange, Arbutus M., Baltimore
 Strause, Howard S., Baltimore
 Strutman, William, Baltimore
 Vaeth, James E., Baltimore
 vonBriesen, Roy, Baltimore

SOPHOMORE CLASS

Beyer, Herbert G., Baltimore
 Busch, Alfred David, Baltimore
 Chu, Pung Y., Nanchang, China
 Clemens, Theodore Requa, Baltimore
 Cohen, Samuel J., Baltimore
 Eichert, Bruno John, Baltimore
 Fairal, John Tyler, Baltimore
 Feldman, Max, Baltimore
 Goldberg, Norman, Washington, D. C.
 Greager, Oswald Augustus, Baltimore
 Gutberlet, Irvin W., Baltimore
 Guildler, John M., Baltimore
 Hart, Kirke M., Baltimore
 Hlavin, J. A., Baltimore
 Hobson, William C., Baltimore
 Holmslykke, Christian, Baltimore
 Layman, Homer Crawford, Tamaroa, Ill.

Lesnar, Maurice, Baltimore
 McDonald, Thomas F., Baltimore
 Manfuso, John G., Baltimore
 Masters, Julian J., Lewisburg, W. Va.
 Moshkevich, Leon I., Baltimore
 Naegele, Joseph Anthony, Raspeburg
 Prodoehl, Emile H., Baltimore
 Pullen, Frank H., Baltimore
 Robinson, Russell C., Toddville
 Rubensteni/Sidney S., Baltimore
 Schuppner, William George, Baltimore
 Segall, Helen, Baltimore
 Seim, William, Baltimore
 Smith, Albert Emmanuel, Baltimore
 Snyder, Benjamin, Baltimore
 Walton, William R., Baltimore

FRESHMAN CLASS

Anderson, John Meredith, White Hall
 Barbon, William L., Princess Anne
 Barrett, Daniel Gilbert, Baltimore
 Bates, John Whitney, Baltimore
 Beeler, Robert V., Washburn, Tenn.
 Bellus, Milton Raymond, Baltimore
 Berger, Roland H., Baltimore
 Berger, Samuel, Sparrows Point
 Blum, Irving deB., Arlington
 Boehm, Willard Thompson, Baltimore
 Bussarde, George W., Baltimore
 Cannon, Harold A., Crapo
 Chandler, Lovelyn W., Baltimore
 Compher, Walter Randolph, Doubs
 Coney, Edgar Heath, Baltimore
 Corkran, Orville W., Rhodesdale
 Corrigan, James Henry, Glyndon
 Craig, Harold E., Baltimore
 Dent, Richard D., Oakley
 Ditch, John S., Baltimore
 Donnelly, John Herbert, Baltimore

Dressler, Lawrence P., Catonsville
 Dufty, Lewis Edward, Frostburg
 Dunlap, Paul M., Delta, Pa.
 Eckhardt, Frederick S., Glyndon
 Feldman, Carl, Baltimore
 Feldman, Harry, Baltimore
 Feltham, John Henry, Baltimore
 Frame, Saul Hirsh, Baltimore
 Friedman, Nathan, Baltimore
 Geraghty, James Joseph, Baltimore
 Gerbig, Harry, Baltimore
 Goncharsky, Isidore H., Baltimore
 Gorfine, Harry Benjamin, Baltimore
 Griffith, Romulus Riggs, Baltimore
 Groscup, Hamilton, Baltimore
 Guthrie, Edward S., Baltimore
 Gwynne, William R., Baltimore
 Gyr, Marie Emma, Baltimore
 Harrington, John Harper, Easton
 Harrison, C. O., Baltimore
 Hearn, Robert LeBar, Baltimore

Heinmiller, Paul, Baltimore
 Hoffmann, Henry Charles, Baltimore
 Horn, June Elva, Glenarm
 Jones, Curtis Leland, Delta, Pa.
 Kelly, Thomas Melvin, Relay
 Kirstein, Herbert, Baltimore
 Kunkel, Frank William
 Larson, Theodore O., Ocean City
 Lavy, Abe, Baltimore
 Lowrie, Archie, New Haven, Conn.
 Levi, Maurice, Baltimore
 Long, Elsa R., Baltimore
 Magee, James Joseph, Baltimore
 Maynes, Charles Buckley, Baltimore
 Medford, James R., Hurlock
 Mendoza, Louis E., Oriente, Cuba
 Miller, Joseph F., Jr., Baltimore
 Milligan, Ralph Clayton, Hurlock
 Mittler, Genevieve O., Baltimore
 Moore, Basil E., Baltimore
 Moore, Genevieve O., Baltimore
 Nee, Dermot Anthony, Washington, D. C.
 Neumann, John Henry, Catonsville
 Parks, Lawrence E., Baltimore
 Penn, Joseph, Baltimore
 Phelps, Clara Virginia, Ellicott City

Phelps, Preston E., Ellicott City
 Riggins, Leslie E., Baltimore
 Robinson, Reginald E., Toddville
 Ross, Lorman F., Baltimore
 Rowe, Henry, Baltimore
 Russell, Stuart B., Reisterstown
 Sachs, Raymond, Baltimore
 Sadler, Mollie G., Baltimore
 Sandler, Hymen, Baltimore
 Sapp, Edward Arthur, Baltimore
 Schwartzman, David J., Baltimore
 Siet, Joseph, Trenton, N. J.
 Small, Helen Doris, Baltimore
 Smith, Arthur, Baltimore
 Snyder, John A., New Oxford, Pa.
 Sokolsky, J., Baltimore
 Spamer, Henry E., Baltimore
 Styrlander, Erik G., Baltimore
 Tongue, Alexander H., Solomon's
 Turow, Herman, Baltimore
 Upman, Walter, Baltimore
 Wallach, George Rittenhouse, St. Michaels
 Warton, George B., Griggsville, Ill.
 Wase, Louis, Baltimore
 Waters, David, Washington, D. C.

UNCLASSIFIED

Abramson, Hyman V., Baltimore
 Apitz, Johannah K., Baltimore
 Ash, George R., Elkton
 Ashman, Samuel L., Catonsville
 Ayres, Marion Watson, Baltimore
 Bailey, Clarence Mark, Baltimore
 Baklor, Jay Leon, Baltimore
 Bartels, William, Baltimore
 Bartle, Paul Ambrose, Waynesboro, Pa.
 Baylon, John Francis, Baltimore
 Baker, Charles Lewis, Baltimore
 Baker, Leslie W., Baltimore
 Beall, J. Alonzo, Baltimore
 Becker, John P., Baltimore
 Benseler, Edith A., Baltimore
 Benson, Ida Belle, Upperco
 Belt, Margaret, Baltimore
 Bernstein, Robert, Baltimore
 Bertier, William T., Baltimore
 Bertsch, George Tracy, Baltimore
 Biggs, Charles E., Baltimore
 Biemiller, Lawrence E., Baltimore
 Blumenthal, Herman, Baltimore
 Bond, William Grason, Cockeysville
 Boone, Evelyn L., Baltimore
 Bortner, Chauncey E., Baltimore
 Boylan, Edward M., Baltimore
 Boyle, Marie, Baltimore
 Bradfield, Norris, Baltimore
 Brown, William H., Baltimore
 Breunning, Catherine A., Baltimore

Bull, Winfield P., Baltimore
 Burkins, Clyde H., Baltimore
 Burt, Henry Patterson, Catonsville
 Bugg, Ray St., Baltimore
 Burch, C. F., Baltimore
 Burke, Eva M., Baltimore
 Bushey, Roy Coghlan, Baltimore
 Butler, Elizabeth M., Baltimore
 Cabells, Ralph, Baltimore
 Cane, Amy H., Baltimore
 Callum, Ruston D., Baltimore
 Carr, Howard, Baltimore
 Carr, Rowland, Baltimore
 Cary, Maud B., Baltimore
 Chance, Grover C., Gambrills
 Charlton, James D., Baltimore
 Christ, Frank P., Hughesville
 Codd, Joseph A., Baltimore
 Cohen, Anna, Baltimore
 Cohen, Maurice, Baltimore
 Cohen, Max, Baltimore
 Cole, Francis G., Baltimore
 Cole, Bessie Olive, Baltimore
 Collifouer, William, Baltimore
 Collins, Margaret Aloysia, Baltimore
 Colvin, Abram, Baltimore
 Conlon, Katharine, Baltimore
 Connolly, William B., Baltimore
 Cooley, William Belcher, Baltimore
 Costello, Catharine A., Baltimore
 Crosby, W. C., Baltimore

Curran, John Joseph, Baltimore
 Cushner, Rose, Baltimore
 Dagold, George, Baltimore
 Danker, Morris, Baltimore
 Davidov, Nathan J., (M. D.), Baltimore
 Davey, Mary E., Baltimore
 Davis, Alfred C., Baltimore
 Davis, Carroll F., Catonsville
 Denmead, James H., Baltimore
 Derwart, August, Jr., Baltimore
 Dirzuweit, Arthur C., Baltimore
 Diorio, Roche, Baltimore
 Driver, Louis J., Baltimore
 Dryden, Helen, Baltimore
 Drydin, Sherman, Crisfield
 Duggan, Margaret N., Baltimore
 Duitscher, Hanna, Baltimore
 Dunigan, Robert R., Baltimore
 Dunn, Jerome, Baltimore
 Dunning, Beverly W., Baltimore
 Eckenrode, Genevieve B., Baltimore
 Efron, Max, Baltimore
 Ehlen, William, Baltimore
 Eierman, Charles W., Baltimore
 Elfont, Marian, Baltimore
 Elton, Hazel A., Baltimore
 Elton, George Raymond, Baltimore
 Emge, Albert George, Baltimore
 Farrell, Elizabeth G., Govans
 Feldmann, Joseph G., Baltimore
 Fell, J. Harry, Baltimore
 Filbert, Edwin B., Baltimore
 Finifter, Joseph, Baltimore
 Fleck, Mrs. H. K., Baltimore
 Faraone, Christo, Baltimore
 Fletcher, Ralph K., Baltimore
 Floss, Elsie M., Baltimore
 Freehof, Fanny E., Baltimore
 Freeman, Mary G., Baltimore
 Fried, Samuel, Baltimore
 Friers, Ernest August, Baltimore
 Foard, J. Standley, Baltimore
 Friedenwald, Julius, Baltimore
 Frisch, Florence E., Baltimore
 Gable, Clara Louise, Baltimore
 Gately, Michael, Baltimore
 Geiger, Albert George, Baltimore
 Gemmill, W. Hamilton, Baltimore
 Giese, Helene Louise, Baltimore
 Gissel, William A., Baltimore
 Glacken, Raymond M., Baltimore
 Gantz, Irving P., Baltimore
 Gold, Justinus, Baltimore
 Goldsberg, Mary B., Baltimore
 Goldstone, Herbert N., Baltimore
 Gontrum, Charles H., Baltimore
 Goodman, Morris M., Baltimore
 Graefe, Sophie A., Baltimore
 Graf, Grover F., Baltimore

Graves, John Frederick, Baltimore
 Greenberg, David H., Baltimore
 Greene, Elsa Estelle, Baltimore
 Greif, Mrs. Leonard L., Pikesville
 Grill, Edith, Baltimore
 Gross, George, Baltimore
 Gundry, Richard, Baltimore
 Gyr, Tabitha W., Overlea
 Hahn, Irvin H., Reisterstown
 Hall, Julia C., Baltimore
 Hankin, Anne, Baltimore
 Hankin, David, Baltimore
 Harlan, James C., Baltimore
 Harrison, Mildred Elizabeth, Philadelphia, Pa.
 Hartz, Roger L. B., Baltimore
 Hawkins, Thomas M., Baltimore
 Hawthorne, Thomas J., New Haven, Conn.
 Hearn, Bernard C., Baltimore
 Heimert, Albert E., Baltimore
 Hoffmann, Frederica, Baltimore
 Hogan, Loretta A., Baltimore
 Hogue, Ernest Floyd, New Brighton, Pa.
 Hooks, Hilary G., Baltimore
 Hopkins, Ruth G., Baltimore
 Humburg, Alfred S., Baltimore
 Hutchins, Edward H., Norfolk, Va.
 Hutchinson, George R., Harborton, Va.
 Israelson, Hyman, Baltimore
 Jackson, Dorothy E., Baltimore
 Jacobs, Raymond L., Baltimore
 Johnson, Anna R., Baltimore
 Johnson, Mable Watts, Edgewood Arsenal
 Jones, Harold C., Hamilton
 Jones, Katharine R., Baltimore
 Jubb, Margaret H., Baltimore
 Kahl, Carolyn, Baltimore
 Kallinsky, Sigmund R., Baltimore
 Kaplan, Samuel, Baltimore
 Kavanagh, William M., Baltimore
 Kearney, James, Baltimore
 Kearney, Joseph Thomas, Baltimore
 Keating, Sadie W., Baltimore
 Keefer, Edgar, Baltimore
 Keefer, Lester, Baltimore
 Keil, John M., Baltimore
 Keller, Viola M., Baltimore
 Kelley, Audrey, Baltimore
 Kellogg, Dwight E., Lansdowne
 Kelly, Albert William, Baltimore
 Kelly, Sara Margaret, Baltimore
 Kennedy, John, Baltimore
 Kennedy, William Bennett, Baltimore
 Kerr, Lula O., Baltimore
 King, Alice A., Baltimore
 King, Howell A., Baltimore
 King, Paul W., Baltimore
 Klein, Carl Edmund, Ruxton
 Klein, William F., Pikesville

Knell, Joseph Aloysius, Baltimore
 Knighton, Harrison H., Baltimore
 Koch, Catherine M., Baltimore
 Kohn, Mrs. Walter W., Arlington
 Krieger, Kathryn, Baltimore
 Lacey, J. Glenn, Baltimore
 Landrus, Frederick Carl, Elmira, N. Y.
 Lang, Frank W., Baltimore
 Lange, M. Magdalene, Baltimore
 Laubheimer, Anna, Baltimore
 Laur, Frank Joseph, Baltimore
 Laynor, Florence M., Halethorpe
 League, Norma E., Baltimore
 Lang, Harris T., Baltimore
 Leary, Lois Margaret, Baltimore
 Lebour, William J., Highlandtown
 Lees, Hoyle L., Baltimore
 LeSage, John A., Baltimore
 Leuschner, Henry, Baltimore
 Lewis, Harold A., Baltimore
 Levy, Gertrude, Baltimore
 Leyden, Nellie, Baltimore
 Lightner, James P., Baltimore
 Linck, Helen, Baltimore
 Lockard, Ralph L., Patapsco
 Long, William H., Baltimore
 Lotterer, Victor G., Baltimore
 Louis, Carlton J., Baltimore
 Lynch, Joseph F., Baltimore
 McBride, Charles L., Frederick
 McCarthy, Harry B., Swanton, Vt.
 McClintock, Cora A., Baltimore
 McCusker, Carrie W., Baltimore
 MacEachern, John T., Baltimore
 McGeiger, John, Brooklyn Park
 Maconachy, E. Marion, Irvington
 MacPherson, Helen, Baltimore
 Mahon, Ellis J., Pikesville
 Meade, Arthur, Baltimore
 Mermelstein, Samuel, Baltimore
 Merriam, Russell W., Baltimore
 Meyer, Ehlandt A., Baltimore
 Miller, Bessie M., Baltimore
 Miller, Edna D., Lansdowne
 Miller, William K., Baltimore
 Millison, Harry, Baltimore
 Morris, Katherine F., Baltimore
 Morris, Ernest F., Baltimore
 Morrison, Theodore H., Baltimore
 Moss, Nannie C., Baltimore
 Muehlhouse, William, Baltimore
 Mussochio, Vincent, Baltimore
 Myers, David, Baltimore
 Nagel, Harry E., Baltimore
 Needalman, Hyman, Baltimore
 Nelson, George Bernard, Baltimore
 Nollenberger, Otto F., Baltimore
 O'Meara, James Edward, Glyndon
 Owen, Earl F., York, Pa.

Parker, Edward Samuel, Baltimore
 Phillips, Carolyn E., Baltimore
 Phillips, Harry C., Baltimore
 Pitcher, Nathan P., Baltimore
 Pohlman, Adelaide L., Randallstown
 Porter, Sydney W., Perryman
 Presstman, Marie W., Baltimore
 Pritchard, William D., Jr., Baltimore
 Ramsburg, Marion E., Baltimore
 Read, Emma Leigh S., Baltimore
 Redman, Charles H., Baltimore
 Redpath, Jack A., Ottawa Ont., Can.
 Reed, Dorsey M., Baltimore
 Remley, E. A., Baltimore
 Requardt, Mrs. Gustav., Baltimore
 Richins, Watson, Baltimore
 Riley, Mary V., Baltimore
 Robinson, Anne B., Baltimore
 Rodbell, Isidore, Baltimore
 Rodgers, Samuel P., Baltimore
 Rogers, George E., Baltimore
 Rollins, Stephen R., Baltimore
 Rosch, Emilie, Baltimore
 Roschen, Louise A., Reisterstown
 Rosenbloom, Henry H., Baltimore
 Rosenbloom, Isador F., Baltimore
 Ross, Thomas S., Baltimore
 Rosseter, Helen J., Baltimore
 Rothenberg, Louis, Baltimore
 Rouchard, Anna M., Baltimore
 Russell, Nina M., Baltimore
 Sachs, Blanche, Baltimore
 Sacks, Henrietta, Baltimore
 Sanford, Vernon E., Baltimore
 Savage, Albert, Baltimore
 Scannell, Nannie Lucey, Catonsville
 Schaale, Helen Marie, Baltimore
 Schaefer, H. R., Baltimore
 Schindler, Nathan, Baltimore
 Shivoder, Charles A., Fullerton
 Schlicker, John Nicholas, Baltimore
 Schloss, Julius E., Jr., Baltimore
 Schmidt, Henry, Raspeburg
 Schofer, George M., Baltimore
 Schooler, Benjamin H., Catonsville
 Schotta, Lester W., Oella
 Schroder, Ferdinand C., Baltimore
 Schulz, George W., Baltimore
 Seidel, Bertha, Baltimore
 Shaffrey, Frank J., Baltimore
 Shank, Marie F., Baltimore
 Shapo, Sadie I., Baltimore
 Sharp, Emma O., Baltimore
 Sheedy, Joseph E., Baltimore
 Shunk, Laura Virginia, Baltimore
 Siegel, Israel, Baltimore
 Siehler, Adele, Catonsville
 Silberman, David, Baltimore
 Silver, Harry, Baltimore

Silverman, Harry, Baltimore
 Singer, S. Edgar, Baltimore
 Smith, James R., Baltimore
 Smith, Virginia, Glyndon
 Smoak, Newton P., Jr., Bamberg, S. C.
 Snyder, Mattie, Baltimore
 Spicknall, Thomas F., Baltimore
 Stein, Jacob, Baltimore
 Stein, Mrs. Julian S., Baltimore
 Stepanek, Rose, Baltimore
 Stine, Isaac F., Winchester, Va.
 Strobel Peyton B., Baltimore
 Svec, Lucy, Baltimore
 Sweeney, Madeline, Baltimore
 Sweeten, Mrs. Alma, Baltimore
 Tatum, Charles H., Baltimore
 Taylor, Louis T., Baltimore
 Theil, Elizabeth V., Baltimore
 Thomas, Joseph H., Baltimore
 Thomas, John W., Baltimore
 Thomas, Joseph H., Baltimore
 Thomsen, Rosgel C., Baltimore
 Trageser, C. A., Baltimore
 Tucker, Brison C., Baltimore
 Tuttle, Leslie M., Baltimore
 Utz, Harry E., Hampstead
 Underwood, Edna M., Parkton
 Vance, Edwin S., Baltimore
 Voloshen, Lee R., Baltimore
 Wade, Myrtle L., Baltimore
 Wanner, Marie Elizabeth, Baltimore
 Williams, Ralph L., Baltimore
 Weinstein, Henry A., Baltimore
 Weisblatt, Rose, Baltimore
 Weinkam, Adelaide, Baltimore
 Weber, Gerald M., Baltimore
 Weisman, Benjamin, Baltimore
 Weitzman, Theodore, Baltimore

Wellener, Helen E., Baltimore
 Weller, John, Baltimore
 Wells, Mary E., Baltimore
 Wheatley, Morris E., Baltimore
 Wheeler, Pearl Edna, Baltimore
 Whettle, Eugene J., Catonsville
 Whitaker, Lawrence, Baltimore
 White, Irving C., Baltimore
 White, Porter Thurman, Baltimore
 Whitehurst, Francis DePaul, Norfolk, Va.
 Whitmore, Bernard L., Curtis Bay
 Wicks, John N., Baltimore
 Wickens, Margaret E., Baltimore
 Wieland, Edward T., Baltimore
 Wich, Carlton E., Baltimore
 Williams, Nat., Baltimore
 Wilner, Maurice Aaron, Baltimore
 Wilson, Mary A., Baltimore
 Wilson, Robert William, Balboa, Canal
 Zone
 Winand, William Thomas, Baltimore
 Wittstadt, Andrew John, Baltimore
 Wolf, Charles R., Baltimore
 Wolf, Henrietta C., Baltimore
 Wright, Millard F., Baltimore
 Wright, Edwin Q., Baltimore
 Wunderlich, Joseph R., Baltimore
 Wyatt, Arthur R., Baltimore
 Yaffe, Samuel H., Baltimore
 Yankellow, Harry, Baltimore
 Yates, Lucy Alice, Ellicott City
 Yates, James R., Ellicott City
 Yates, Nimrod H., Ellicott City
 Yerman, Max, Baltimore
 Zenitz, Nelson, Baltimore
 Zepp, Newell Bradley, Clarksville
 Zieve, Lewis Samuel, Baltimore
 Zimmerman, Robert Murbach, Baltimore

SCHOOL OF DENTISTRY

SENIOR CLASS

Adams, Everett LaCroix, Meriden, Conn.
 Adkins, Lester Olas, Parsonsburg
 Alford, William Clarence, Dublin, Va.
 Bauder, John Frank, Newark, N. J.
 Bazinet, Wilfred Pierre, Webster, Mass.
 Begg, John Francis, Waterbury, Conn.
 Bissett, George W., Hundred, W. Va.
 Boatman, Willis William, Orting, Wash.
 Bradley, James Bassett, Washington, D. C.
 Bradshaw, John Pilcher, Burkeville, Va.
 Brandow, George Rexford, Carbondale, Pa.
 Brenner, Morris, Pittsburgh, Pa.
 Bump, Floyd Marcy, Cabin Creek, W. Va.
 Burley, Ova Milton, Davis, W. Va.
 Campbell, Ralph Dempster, Taunton, Mass.
 Casey, John Andrew, Wilmington, Del.
 Chimaroff, Nathan Theodore, Newark, N.J.

Christian, William Phillip, Rerdell, Fla.
 Clark, Robert Russell, Weldon, N. C.
 Connell, Earl W., Mt. Holly, N. C.
 Corcoran, Donald Michael, New London,
 Conn.
 Davila, Ezequiel, Cayey, Porto Rico
 Deichmann, George Lipps, Baltimore
 DeVita, Anthony Leon, Newark, N. J.
 Dumont, Harold Chas. Breton, Skowhegan,
 Maine
 Fernandez, Julio Martin, Aguadilla, Porto
 Rico
 Finkleberg, Joseph L., Philadelphia, Pa.
 Finkleberg, Samuel Morris, Philadelphia,
 Pa.
 Fitzgerald, George Eugene, Chembusco,
 N. Y.

Foley, Patrick Joseph, So. Boston, Mass.
 Gaston, Howard L., Buchannon, W. Va.
 Gibbins, Clifford Henry, Newark, N. J.
 Ginnavan, William J., Jr., Montgomery, Ala.
 Goble, Russell Conwell, Paterson, N. J.
 Goggin, John Thomas, Stamford, Conn.
 Gorman, James Raymond, Fall River, Mass.
 Grempler, Karl Frederick, Baltimore
 Hall, David Nevius, Somerville, N. J.
 Ham, Edgar, Harrisburg, Pa.
 Harris, Millard William, Elkins, W. Va.
 Hayes, Francis Irving, Waterbury, Conn.
 Higginbotham, Joseph Harry, Fairmont, W. Va.
 Hogle, Winfield Mason, Glens Falls, N. Y.
 Holmes, Cecil Stanley, Harrisburg, Pa.
 Hurst, Orville Clayton, Wilsonburg, W. Va.
 Janes, Albert Rice, Monongah, W. Va.
 Jerdon, Edward John, North Adams, Mass.
 Jones, Herbert Mason, Baltimore
 Karayan, Charles, New Haven, Conn.
 Kearfott, Joseph G., Jr., Shipman, Va.
 Kelley Harry Howard, Plattsburg, N. Y.
 Langan, Harold Patrick, Olyphant, Pa.
 Lawles, James Patrick, Jessup, Pa.
 Leary, William Arthur, Fall River, Mass.
 Leighty, Orland Freed, Connellsville, Pa.
 McCarl, James Walter, Mapleton, Pa.
 McCutcheon, Robert B., Newark, N. J.
 McGovern, William Joseph, Providence, R. I.
 McGrath, Joseph Michael, Waterbury, Conn.
 Meyer, Benjamin S., Newark, N. J.
 Miller, Wilson Lake, Cape May, N. J.
 Moore, Edgar B., Globe, N. C.
 Moore, Richard Owen, Scotland Neck, N. C.
 Moran, Michael Edward, Baltimore
 Munoz, Cristino, Guana Diaz, Porto Rico
 Neimeth, Nathan, Queens, N. Y.
 Nesbit, William Dempster, Jr., New Haven, Conn.
 Nigaglioni, Julio, Yauco, Porto Rico

Ouellette, Walter Joseph, St. Agatha, Me.
 Pargman, William H., Paterson, N. J.
 Pengel, William Henry, Matawan, N. J.
 Plesko, John Edward, Scranton, Pa.
 Pollack, Samuel Louis, Dayton, Ohio.
 Puckett, Philip Hamrick, Newark, Ohio.
 Racicot, George J., Webster, Mass.
 Rice, Ray E., Codorus, Pa.
 Rosenberg, Jacob, Dorchester, Mass.
 Rowe, James Earle, Island Falls, Maine
 Ruiz, Carlos, Guatemala City, C. A.
 Rutrough, Bruce Woody, Roanoke, Va.
 Scherr, Henry Yingling, Baltimore
 Schonholtz, Lewis Rixey, Philadelphia, Pa.
 Sherrard, Vernon Frederick, Canon City, Colo.
 Short, Joseph Richard, Lex, W. Va.
 Shugrue, Frank Jeremiah, New London, Conn.
 Sickles, William VanRensselaer, Troy, N. Y.
 Simons, Blair Elwood, Moorefield, W. Va.
 Slifkin, William, Bloomfield, N. J.
 Smith, Max, 225 S. Caroline St. Balto.
 Sorokin, Louis A., Philadelphia, Pa.
 Styers, Edward James, Baltimore
 Swearingen, Frank Vandevort, Fairmont, W. Va.
 Swing, James Patterson, Jr., Ridgely
 Thacker, Paul Shackelford, Franklin, W. Va.
 Thaman, William C., Baltimore
 Thomas, Carl Livingston, Danville, Va.
 Toothman, Clay Bostwick, Farmington, W. Va.
 Tressler, Roland A., Baltimore
 Trettin, Clarence, Baltimore
 Vazquez, Jorge A., Ponce, Porto Rico
 Waring, Harold Glenn, Barton
 Weisberger, Joseph Harold, Poughkeepsie, N. Y.
 Whitehead, John Wesley, Bachelor, N. C.
 Wilson, H. Davis, Baltimore
 Wolfe, David, Chicago, Ill.
 Wong Fo Sue, Fred H. Joseph, Trinidad, B. W. I.

JUNIOR CLASS

Abramson, Leonard, Bayonne, N. J.
 Alpert, Julius Leo, Burlington, Vt.
 Andre, Carl P., Fairmont, W. Va.
 Aston, Edward Ernest, Wilkes-Barre, Pa.
 Barth, Sol, New York, N. Y.
 Basehoar, Clyde Evans, Littlestown, Pa.
 Baum, Theodore A., Baltimore
 Beard, John Herbert, York, Pa.
 Benazzi, Bomeda B., Danville, Va.

Benedict, Water Sherman, Bridgeport, Conn.
 Benson, Covert Orville, Cameron, W. Va.
 Birney, William Joseph, Torrington, Conn.
 Bishop, Blaine Charles, Waynesboro, Pa.
 Blaisdell, Virgil Clay, Sullivan, Me.
 Blanchard, Norman Kelley, Portland, Me.
 Brigadier, Leonard Richard, Bayonne, N. J.

Bridger, Roy H., Dunn, N. C.
 Brightfield, Lloyd O., Baltimore
 Browning, Batthis Allen, Baltimore
 Bruce, Charles H., Jr., Matawan, N. J.
 Budz, Francis J., Clifton, N. J.
 Burt, Joseph Freeman, Williamstown, W. Va.
 Butkiewicz, Edward W., Nanticoke, Pa.
 Cahill, T. J., Smithton, W. Va.
 Campbell, Samuel Lewis, Charleston, W. Va.
 Capo, Enrique, Ponce, Porto Rico
 Chase, Herman, Newark, N. J.
 Cheewing, Carroll Wills, Orange, Va.
 Coberly, Bernie O., Junior, W. Va.
 Cohen, Meyer Harold, Carbondale, Pa.
 Colvin, Ernest Milburn, Jr., Wash. D. C.
 Cosmi, Euripides E., San Juan, Porto Rico
 Crespo, Demetrio, Cato Rojo, Porto Rico
 Cronauer, Frank Anthony, Wilkes-Barre, Pa.
 Delaney, Rodolphe Wilfred, Magdalen Islands, Can.
 Dickson, Bryan Aycock, Silas Creek, N. C.
 Dixon, Charles Merle, Jr., Frederick
 Doble, Howard Ronella, Presque Isle, Me.
 Dolan, Joseph Kyle, Pawtucket, R. I.
 Dudasik, Nicholas, Clifton, N. J.
 Fisher, Jacob David, Hampton, Va.
 Foley, John Joseph, Grafton, W. Va.
 Fortney, Milford Daniel, Kingwood, W. Va.
 Garrett, Charles Richard, Waynesboro, Pa.
 Goldstein, Harry, Baltimore
 Gonzalez, Pedro J., Porto Rico
 Greenwald, Louis E., Passaic, N. J.
 Guilfoyle, Francis Xavier, Bayonne, N. J.
 Hagerty, Richard Andrew, Farmington, W. Va.
 Hall, Howard Victor, Fanwood, N. J.
 Hanan, James Joseph, Holyoke, Mass.
 Harper, Edward Franklin, Newport News, Va.
 Hart, William I., Jr., Johnson City, Tenn.
 Higby, Clifford Carlton, Clermont, Fla.
 Hinricks, Ernest Henry, Baltimore
 Hitchcock, Lewin Nelson, Taneytown
 Hakemian, Charles H., Providence, R. I.
 Hinebaugh, Daniel Stuart, Thomas, W. Va.
 Hogan, John Howard, Waterbury, Conn.
 Hoover, Samuel Henry, Sparrows Point
 Ingram, William A., Cheraw, S. C.
 Jaffe, Abraham Myer, New Britain, Conn.
 Keister, W. L., Upper Tract, W. Va.
 Kerlejza, George J., New Britain, Conn.
 Kilcoyne, John Edward, Clinton, Mass.
 LaRoe, John Edward, Somerville, N. J.
 LaVallee, Alexander Joseph, Burlington, Vt.

Lautenberger, Henry Lewis, Baltimore
 Lawlor, Joseph John, Shenandoah, Pa.
 Lazarus, Jacob, Belington, W. Va.
 LeFevre, Edward Warren, Newport News, Va.
 Levine, Milton, Bayonne, N. J.
 Lewis, Frank Lucas, Baltimore
 Loehwing, George Henry, Paterson, N. J.
 Lopatin, Samuel, New Haven, Conn.
 Lussardi, John, Rockaway, N. J.
 Lynch, Daniel Francis, Waterbury, Conn.
 Matney, W. Glenn, Grundy, Va.
 McCormick, Richard Edward, Springfield, Mass.
 McCrohan, Joseph Augustine, New Bedford, Mass.
 McCrystle, Frank Christian, Minersville, Pa.
 McEvoy, George Fenton, Waterbury, Conn.
 McNeely, Jacob Owen, Fairmont, W. Va.
 McQuaid, Michael Ernest, Baltimore
 Mercader, Miguel Angel, Mayaguez, Porto Rico
 Merriam, Kenmore Elijah, Baltimore
 Meyer, Oscar William, East Rutherford, N. J.
 Minahan, Michael Joseph, Clearfield, Pa.
 Mugman, William M., Asbury Park, N. J.
 Munera, Narciso, Ponce, Porto Rico
 Newell, John Davidson, Wilmington, Del.
 Nielcarek, Leopold, Chester, Pa.
 Novak, Frank J., Baltimore
 Nuger, Nathan, Baltimore
 O'Leary, Paul Garrett, Elmira, N. Y.
 Oletsky, Barney Elwood, Trenton, N. J.
 Ortel, Linwood, Baltimore
 Padolf, Ephraim Lee, Erie, Pa.
 Pearman, Harvey Raine, Summerfield, N. C.
 Pelusco, Charles Michael, Hoboken, N. J.
 Pfohl, Arthur C., Jersey City, N. J.
 Phelps, Frederick William, Fairfield, Conn.
 Phillips, George J., Monk, Va.
 Polk, Charles James, Hartford, Conn.
 Powell, Albert Charles, Adamston, W. Va.
 Resh, George Daniel, Hampstead
 Richardson, James B., Leaksville, N. C.
 Rieman, Barney, Bayonne, N. J.
 Romino, Leonard A., Fairmont, W. Va.
 Schaff, Fred Lemeul, Greencastle, Pa.
 Scholtex, Charles Philip, Minersville, Pa.
 Shea, Edward Walter, Holyoke, Mass.
 Shinn, Francois Boggess, Belington, W. Va.
 Siegel, Arthur, Huntington, N. Y.
 Siwa, Roman C. A., Mt. Carmel, Pa.
 Smith, Henry Harold, Adamston, W. Va.
 Sousa, Charles Theophile, Fall River, Mass.

Stewart, William, Jr., Wilmington, Del.
 Stone, Edward Daniel, Baltimore
 Teague, Henry Nelson, Martinsville, Va.
 Thomas, C. A., Newport News, Va.
 Torrill, R. B., Wake, Virginia.
 Ulanet, Louis, Newark, N. J.
 Van Auken, Ross Depew, New Brunswick,
 N. J.
 Van Lenten, Peter, Clifton, N. J.
 Viera, Providencia, Rio Pedras, Porto Rico

Wallace, Herschel Everett, New Concord,
 Ohio
 Webb, Charles, Bowling Green, Va.
 Weisengreen, Herman Henry, New York
 Wierciak, Paul Aloysius, Ludlow, Mass.
 Wildemann, Elmer M., Keyser, W. Va.
 Wilhelm, Paul, Whiteford
 Williams, Robert Edgar, Jr., Inez, N. C.
 Willis, George A., Belair
 Wood, Howard, Beaty, W. Va.

SOPHOMORE CLASS

Akers, James Lee, Baltimore
 Anderson, Milton Frederick, Baltimore
 Andre, Homer Constant, Fairmont, W. Va.
 Badger, Walter Lanneau, Baltimore
 Badowicz, Boleslaus Stanislaus, Water-
 vliet, N. Y.
 Barrette, Roland Alcide, Fall River, Mass.
 Bates, John Ormond, New York, N. Y.
 Benick, Carroll, Richard, Baltimore
 Bigin, Arthur Adeland, Waterville, Me.
 Binns, Edwin Virgil, Baltimore
 Biosca, Henry, Camaguey, Cuba
 Blair, Murray R., North Devon, N. B.,
 Can.
 Blair, Robert Edward, Morgantown, W.
 Va.
 Bouchard, Maxim., Fort Kent, Maine.
 Bourgeois, Ernest Marcellin, Moncton, N.
 B., Can.
 Brown, Charles Shugart, Lick Creek, W.
 Va.
 Brown, William DuBois, Barnegat, N. J.
 Bumgarner, Albert Sheridan, Baltimore
 Byron, Wesley Cole, Baltimore
 Caine, Louis Philip, Newark, N. J.
 Carroll, Vincent Allyn, Corning, N. Y.
 Catusus, Emilio, Santiago de Cuba
 Cavallaro, Augustine Louis, New Haven,
 Conn.
 Cheong, Matthew Adolphus Chue, Trini-
 dad, B. W. I.
 Costello, Charles C., Providence, R. I.
 Crickenberger, White Sulphur Spgs., W.
 Va.
 Davis, William Rogers, East Orange, N. J.
 Degling, Harry H., East Orange, N. J.
 Deslandes, Leo Emile, Providence, R. I.
 Doherty, Frank Joseph, Worcester, Mass.
 Dorsey, Caleb, Jr., Baltimore
 Dunphy, Albert Francis, Providence, R. I.
 Driscoll, Joseph William, Ansonia, Conn.
 Elliot, Walter H. T., So. Orange, N. J.
 Ellor, Arthur B., Bloomsfield, N. J.
 Feiss, Paul Lewis, New Martinsville, W.
 Va.
 Font, Juan, Santurce, Porto Rico

Fusco, Joseph Delbert, New Haven, Conn.
 Gannon, Edward Patrick, Clinton, Mass.
 Gregory, Archie William, Webster Spgs.,
 W. Va.
 Hagerthy, Cornelius Carlisle, Sedgwick,
 Maine
 Hardy, George Edward, Jr., Baltimore
 Hern, Laurence H., Portland, Me.
 Hernandez, Manati, Porto Rico
 Holliday, Robert Henry, Clinton, N. C.
 Huminski, Chester Joseph, Union City,
 Conn.
 Jameson, Austenus Hughesville
 Jacobs, Benjamin Joseph, Elizabeth, N. J.
 Joule, James, Arlington, N. J.
 Kaplon, Morton, Summit, N. J.
 Kelly, Charles A., Craddockville, Va.
 King, Joseph D., Worcester, Mass.
 Klock, James Harold, Orlando, Fla.
 Kozubski, Michael, Baltimore
 Lazzell, Charles Barron, Baltimore
 Leger, Edmond Joseph, Bathrust, N. B.,
 Can.
 Levenson, Leon H., Holyoke, Mass.
 Levin, Harry Herbert, Baltimore
 Lipman, Samuel, Bayonne, N. J.
 Little, Main Eugene, Darlington
 Loar, Elijah E., Eckhart Mines
 Lonergan, Robert C., New London, Conn.
 Marx, Joseph, Passaic, N. J.
 McAlexander, Archie, Orange Va.
 McGann, James Francis, Providence, R. I.
 McGonigle, William I. L., Newark, N. J.
 McGrath, Vincent P., New Haven, Conn.
 McGrail, Frank R., New Haven, Conn.
 McMullen, Charles A., Steubenville, O.
 Mackwiz, Raymond G., Baltimore
 Magee, Kenneth A., Nutley, N. J.
 Mehring, Wilbur Basehoar, Taneytown
 Miller, Carey O., Newcastle Bridge, N. B.,
 Can.
 Minkin, Hyman, Washington, D. C.
 Mockridge, Arthur R., Dover, N. J.
 Monk, David, Potchefstroom, South Africa
 Morris, Thomas E., Hasbrouck Heights,
 N. J.

Morrison, William H., Burlington, Vt.
 Myrowitz, Bernhard C., New York, N. Y.
 Nealon, John P., Scranton, Pa.
 Nelson, Joseph Thomas, Baltimore
 Newell, Ward M., Stephens City, Va.
 Oggesen, Walter L., New Haven, Conn.
 Plaster, Hubert S., Winston-Salem, N. C.
 Phreaner, Richard M., Greencastle, Pa.
 Pinsky, Benjamin, Baltimore
 Powell, William Herbert, Elkins, W. Va.
 Pressman, Sam, Woonsocket, R. I.
 Pyott, James E., Hartford, Conn.
 Quillen, Joseph E., Rehoboth, Del.
 Raciborski, Anthony J., Indian Orchard,
 Mass.
 Rausch, Albin W., Newark, N. J.
 Reynolds, Leo, North Attleboro, Mass.
 Reynolds, Robert Hugh, New Haven, Conn.
 Rice, Robert Thereon, Cameron, N. C.
 Richmond, Clarence Wright, Coatesville,
 Pa.
 Rohrbaugh, Walter E., Richwood, W. Va.
 Ruane, William Aloysius, Scranton, Pa.
 Ryan, James E., New Bedford, Mass.
 St. Marie, Gerald Elphege, Holyoke, Mass.
 Sandy, Benjamin P., Baltimore
 Schwartz, Abie, Westwood, N. J.
 Sciarietta, William, Providence, R. I.
 Seery, Paul R., Wilmington, Del.
 Shapiro, Louis, Brooklyn, N. Y.
 Sharpe, Nicholas, New Haven, Conn.
 Shoof, Richard R., Lexington, N. C.

Shutter, Abram A., Timberville, Va.
 Spellman, James P., Scranton, Pa.
 Springer, Charles B., Frederickton, N. B.,
 Can.
 Smith, Wallace P., Cambridge
 Stratton, Warren W., Hartland, Conn.
 Tidgewell, Frederick Hubbard, New Haven,
 Conn.
 Toulouse, Fred E., Waterville, Me.
 Towers, John Milton, Essex, N. J.
 Townes, George E., Martinsville, Va.
 Trail, William E., Pipestem, W. Va.
 Trent, Ralph W., Leaksville, N. C.
 Trinkle, George H., Shenandoah, Pa.
 Trone, James LeRoy, Carlisle, Pa.
 Tuttle, Samuel, Revere, Mass.
 Veasey, Eugene Elderdice, Pocomoke
 Walker, Robert, Harrisburg, Pa.
 Walsh, William P., Wilmington, Del.
 Walter, Henry Maynard, Baltimore
 Ward, James F., Mt. Airy, N. C.
 Warshawsky, Samuel Harris, Asbury Park
 N. J.
 Watson, Hugh Alfred, Lenoir, N. C.
 Watts, Allan L., Carlisle, Pa.
 Webb, Elmore Miller, Baltimore
 Weeks William Pierce, Charlotte, N. C.
 Whitcomb, Robert W., New London, Conn.
 Winchester, Phil. Whitfield, Summerfield
 N. C.
 Zelinski, Edward W., Baltimore
 Zwick, Andrew, Naugatuck, Conn.

FRESHMAN CLASS

Abrams, Samuel, Jersey City, N. J.
 Alvarez, Rafael Rodriguez, Habana, Cuba.
 Asirian, John, Waterbury, Conn.
 Baish, Eugene L., Baltimore
 Bernfield, Fred M., New Haven, Conn.
 Blessing, Gerald F., Waynesboro, Pa.
 Bock, Carl Frederick, Baltimore
 Boggs, Richard Hopkins, Franklin, W. Va.
 Boggs, Robert A., Jr., Marietta, Ohio
 Burns, Howard R., Bergenfield, N. J.
 Bush, Harry L., Park Ridge, N. J.
 Byer, Samuel Harold, Trenton, N. J.
 Byerly, George LaMotte, Glyndon
 Casciano, Dominick N., Jersey City, N. J.
 Coberth, Morris E., Baltimore
 Condry, James A., Clarksburg, W. Va.
 Dailey, William P., Steelton, Pa.
 Demarest, John Huson, Verona, N. J.
 Donatelli, Francis P., Roseto, Pa.
 Dorsey, Brice M., Baltimore
 Douglas, William W., Bayonne, N. J.
 Doty, Almon Peter, Plainfield, N. J.
 Duryea, Walter Egbert, Hawthorne, N. J.

Eagle, James Webster, Keyser, W. Va.
 Elliott, Milton Edwine, Bristol Vt.
 Epstein, Raymond, Newark, N. J.
 Erwin, Dick H., Charlotte, N. C.
 Fenn, George Nelson, Waterbury, Conn.
 Fernandez, Marcolina, San Juan, P. R.
 Fitch, Avery Williams, Noank, Conn.
 Fitzgerald, John Percy, Alexandria, Va.
 Fox, Lewis, Norwich, Conn.
 Frank, Samuel M., New Haven, Conn.
 Gabriel, Germain, West Haven, Conn.
 Gale, Ralph Cookman, New Freedom, Pa.
 Garverich, Charles A., Harrisburg, Pa.
 Gould, Charles K., Spartanburg, S. C.
 Graffam, Sidney Roy, Unity, Maine
 Griffin, Harry Anthony, Susquehanna, Pa.
 Grotsky, Theodore, Baltimore
 Hankin, Samuel Jacob, Baltimore
 Hanna, Robert C., Bethel, Conn.
 Haynes, Ellery Cleary, Middlebury, Vt.
 Herring, Lonnie O., Clinton, N. C.
 Hess, Frederick Joseph, Washington, D. C.
 Hoffman, William Paul, Hagerstown

Holdstock, James Jr., Troy, N. Y.
 Hundley, Alwyn, Jr., Baltimore
 Hurst, Frank, Winona, W. Va.
 Hurst, Kenneth E., Wilsonburg, W. Va.
 Huth, Ralph, L., Follansbee, W. Va.
 Hyson, John Miller, Hampstead
 Jennette, Alexander T., Washington, N. C.
 Karas, Henry John, Chicopee, Mass.
 Keefe, James Andrew, Bridgeport, Conn.
 Kinch, Frederick Joseph, Rumford, Me.
 King, Robert J., Williamsport, Pa.
 Kirk, Walter W., Darlington
 Kohler, Ferdinand C., Carlstadt, N. J.
 Koppel, Isaac H., Baltimore
 Kramer, Abraham, Elizabeth, N. J.
 Lammers, Walter John, Baltimore
 Lauer, Louis, Newark, N. J.
 Lichtenstein, Arthur, Baltimore
 Marrone, Jack, Frederick
 Mathieson, Robert M., Allegheny, Pa.
 McAnally, Charles Bearegod, Madison, N. C.
 McClain, Preston L., Philadelphia, Pa.
 McCluer, William Alexander, Fairfield, Va.
 McDonnell, Harold Aloysius, West Englewood, N. J.
 McKay, Allen Pierce, Baltimore
 McFay, Frank Paul, North Andover, Mass.
 Mielcarek, Leon Michaels, Chester, Pa.
 Miller, Alexander, Norfolk, Va.
 Moore, Oliver S., Globe, N. C.
 Myers, John Leo, Washington, D. C.
 Neel, Jerrold Wilbur, Jr., Baltimore
 Newberg, Conrad William, New Haven, Conn.
 O'Boyle, John Michael, Scranton, Pa.

Oneacre, Claret A., New Martinsville, W. Va.
 Orrison, Richard C., Lovettsville, Va.
 Paszek, Stephen Andrew, Newark, N. J.
 Pharr, Joe, Charlotte, N. C.
 Pomroy, Granville, Presque Isle, Me.
 Piescher, Adolph Rexroth, Plantsville, Conn.
 Prouty, Earle Tudhope, Swanton, Vt.
 Quirk, Pierce A., Jersey City, N. J.
 Rider, Elwood Birdsall, Monroe, N. Y.
 Rohrbaugh, John P., Camden, W. Va.
 Rose, Jacob N., Philadelphia, Pa.
 Ruderman, Charles, Newark, N. J.
 Russell, Carl P., Eastport
 Schilling, Louis R., Carlstadt, N. J.
 Schusterson, Edward H., New York, N. Y.
 Schwartz, Jacob, Newark, N. J.
 Shanklin, Burke J., Union, W. Va.
 Siwa, Walter F., Mt. Carmel, Pa.
 Stewart, William Archibald, Bayonne, N. J.
 Taylor, Charles E., Verona, N. J.
 Webb, William Camper, Bowling Green, Va.
 Weber, Ernest John, Clifton, N. J.
 White, Ross Bond, Jefferson, Ohio
 Whitman, Clifford LeRoys, Lyndhurst, N. J.
 Wierman, John A., Dillsburg, Pa.
 Wilde, Samuel Henry, Jr., East Orange, N. J.
 Woolfson, Albert, Baltimore
 Yolken, Henry David, Baltimore
 Yuckman, Benjamin Paul, Carteret, N. J.
 Zacks, Aaron Melville, Norfolk, Va.
 Zenovitz, Lewis Herbert, Norfolk, Va.

COLLEGE OF EDUCATION

SENIOR CLASS

Castella, Olive W., Riverdale
 Dorsey, Ethel A., Beltsville
 Earnest, Lillian O., Mt. Rainier
 Engle, Ruth B., Frostburg
 Foster, James J., Parkton
 Getty, Angela D., Grantsville
 Glenn, Wilbur J., Smithsburg
 Groves, John, Washington, D. C.
 Hipple, Benton G., College Park
 Knox, Lucy, College Park

JUNIOR CLASS

Bowers, Walter L., Hagerstown
 Buckey, Nellie S., Mt. Rainier
 Coblenz, Roscoe Z., Middletown
 Cushman, Alice W., Takoma Park
 Dolly, Virgil O., Flintstone
 Duvall, Elizabeth S., Washington, D. C.

Magruder, John W., Gaithersburg
 Nicol, Victorine G., Washington, D. C.
 Orme, Elsie L., Barnesville
 Rigdon, Wilson O., Cardiff
 Staley, Daniel R., Knoxville

Swenk, Elizabeth R., Washington, D. C.
 *Whiteford, Michael W., Whiteford
 Willis, Rebecca C., Hyattsville
 Willis, Theodora, Hyattsville
 Wolfe, Mary F., Forest Glen

SOPHOMORE CLASS

Amos, Laura I., Forest-Hill
 Anderson, Dorothy B., Washington, D. C.
 Baker, Katherine L., Edgemont
 Barron, Edward M., Hyattsville
 Beatty, William P., Long Branch, N. J.
 *Bennett, Benjamin H., Kenilworth, D. C.
 Corkran, Daniel E., Rhodesdale
 Dorsey, Elise, Ellicott City
 Grosdidier, Grace H., Riverdale
 Kessler, Mary A., Hyattsville

Morgan, Phyllis, Lonaconing
 Murray, Dorothy, Clinton
 Pancoast, Priscilla B., Mt. Rainier
 Pyles, Joseph T., Frederick
 Richardson, Louise, Washington, D. C.
 Seibert, John C., Clearspring
 Smith, Rose M., Washington, D. C.
 Wallace, Sarah O., Landover
 Wolfe, Margaret B., Forest Glen
 Young, Dorothy O., Washington, D. C.

FRESHMAN CLASS

Browne, Mary M., Chestertown
 Custer, Helen, Friendsville
 Ervin, Martha L., Hyattsville
 Harbaugh, Louise, Brookland, D. C.
 Harp, Carroll E., Union Bridge
 Kraft, Mary L., Ellicott City
 Long, Marvin C., Williamsport

Miller, Gladys M., Westernport
 Morris, Ralph E., Birmingham, Ala.
 Ryon, Helen G., Waldorf
 Ryon, Naomi C., Waldorf
 Shank, Elizabeth R., Smithsburg
 Ward, William L., Baltimore
 Woodward, Alberta A., Brookland, D. C.

UNCLASSIFIED

Branner, Cecil G., Hyattsville

Raedy, Michael L., Washington, D. C.
 Riley, Mary E., Catonsville

EXTENSION COURSE (Baltimore)

Askew, H. D., Baltimore
 Baker, Charles L., Baltimore
 Ballentine, Linscott, Norfolk, Va.
 Bartle, Paul A., Baltimore
 Beall, Alonzo, Baltimore
 Bennett, Alton M., Baltimore
 Bertier, W. F., Baltimore
 Blackwell, J. D., Baltimore
 Boylan, E. M., Baltimore
 Brown, W. H., Baltimore
 Bull, W. P., Baltimore
 Calliflour, William, Baltimore
 Carmichael, G. W., Dundalk
 Carr, Howard A., Baltimore
 Catello, Ralph, Baltimore
 Cesky, Frank A., Towson
 Cesky, J. W., Baltimore
 Charles, Webster, Curtis Bay
 Charlton, J. D., Baltimore
 Cohen, E. Calvin, Baltimore
 Coleman, H. W., Baltimore
 Cromack, J. T., Baltimore
 Danker, M., Baltimore
 Davis, A. E., Baltimore
 Deussen, Henry, Baltimore
 Diorio, Roche, Baltimore
 Dirzeit, A. C., Baltimore

Donelson, R. N., Baltimore
 Douglas, Hazen, Baltimore
 Driver, Louis J., Baltimore
 Edwards P. G., Baltimore
 Edwards, T. S., Baltimore
 Elgert, J. E., Baltimore
 Emge, Albert G., Baltimore
 Feinberg, Bernard, Baltimore
 Filbert, Elwood N., Baltimore
 Freese, C. T., Baltimore
 Freeze, Frank L., Baltimore
 Friers, Ernest A., Baltimore
 Gillen, Paul B., Baltimore
 Glock, H. Henry, Baltimore
 Graf, Grover F., Baltimore
 Green, P. W., Rossville
 Haefner, W. F., Baltimore
 Hall, R. Milton, Dundalk
 Healey, W. G., Baltimore
 Heathcote, L. W., Baltimore
 Henry, A. R., Annapolis
 Herbst, Louis W., Baltimore
 Homberg, E. F., Baltimore
 Humburg, A. S., Baltimore
 Kaplan, Samuel, Baltimore
 Kane, T. J., Baltimore
 Katz, Samuel S., Baltimore

Keil, J. M., Baltimore
 Kellog, D. E. Lansdowne
 Kelly, Albert W., Baltimore
 Kennedy, W. B., Baltimore
 Kiefer, Lester, Baltimore
 Klepper, Charles E., Baltimore
 Knell, Joseph A., Baltimore
 Krauss, H. W., Baltimore
 Krotee, Samuel L., Baltimore
 La Sage, J. A., Baltimore
 Latterer, V. G., Baltimore
 Lease, H. G., Baltimore
 Lee, Allan, Baltimore
 Liebman, C. B., Baltimore
 Letzer, J. H., Baltimore
 Long, W. H., Baltimore
 Mahon, Ellis J., Pikesville
 McGregor, John, Brooklyn Park
 McPherson, Eva, Baltimore
 Medinger, G. E., Baltimore
 Mele, Hugo, Baltimore
 Mermelstein, S., Baltimore
 Meyers, G. A., Baltimore
 Moritz, M. L., Baltimore
 Neibuhr, Henry, Baltimore
 Oheim, Henry, Jr., Baltimore
 O'Keefe, Violet E., Baltimore
 Oliver, Marion, Baltimore
 O'Meara, J. E., Glyndon
 Packard, A. G., Baltimore
 Parker, E. S., Baltimore
 Peterson, H. D., Baltimore
 Phillips, J. L., Baltimore
 Phillips, K. L. Leroy, Baltimore

Raabe, H. L., Dundalk
 Raabe, N. C., Baltimore
 Ramsburg, M. E., Baltimore
 Rodbell, Isidore, Baltimore
 Roesler, E. F., Baltimore
 Ross, Thomas, Baltimore
 Sanders, G. S., Baltimore
 Savage, Albert, Baltimore
 Schneider, K. A., Baltimore
 Schroeder, F. C., Baltimore
 Search, M. Louise, Baltimore
 Sebour, W. J., Baltimore
 Shaffrey, F. J., Baltimore
 Shivoder, M., Baltimore
 Sheridan, Sarah E., Baltimore
 Smith, James, Baltimore
 Spawn, N. Norman, Halethorpe
 Spicknall, T. F., Baltimore
 Strauss, G. L., Baltimore
 Sullens, R. R., Baltimore
 Thompson, Emma, Baltimore
 Tilgman, R. C., Dundalk
 Utz, H. E., Baltimore
 Vance, Edwin S., Baltimore
 Walbert, N. J., Curtis Bay
 Williams, Elizabeth, Baltimore
 Williams, R. L., Baltimore
 Wilson, Hugh, Woodlawn
 Wischer, John G., Fairfield
 Wittstadt, Andrew, Baltimore
 Wolf, C. R., Baltimore
 Wood, W. C., Baltimore
 Yarmack, Morris, Baltimore
 Zimmerman, R. L., Baltimore

EXTENSION COURSE (College Park)

Bowling, Marybeth, Marlboro
 Brackin, Dwight, Washington, D. C.
 Buck, Lura, Landover
 Clayton, Louella, Mt. Rainier
 Forshee, Edith, Washington, D. C.
 Lanham, Mary, Seat Pleasant
 Lovell, Mary H., Mt. Rainier
 McCoy, Maud, Beltsville

Ogle, Evelyn, Croom
 Penman, Christene, Mt. Rainier
 Ratcliffe, Gladys, Oxon Hill
 Ream, Vera, Washington, D. C.
 Sears, Gustavus, Anacostia, D. C.
 Stringer, Alice M., Upper Marlboro
 Thompson, Bertina, Riverdale
 West, Margaret S., Anacostia, D. C.
 Wyvill, Ruth, Marlboro

COLLEGE OF ENGINEERING

SENIOR CLASS

Brothers, Maurice F., Washington, D. C.
 Chesnut, Frank T., Hyattsville
 Donaldson, DeWitt C., Laurel
 Fitzgerald, Gilbert B., Princess Anne
 Foard, James H., Aberdeen
 Glass, Gerald L., Hyattsville
 Hill, William B., Hyattsville
 *Hoppe, John H., Baltimore

Howard, Marshall Hamilton, Brookeville
 Latham, Ector B., Washington, D. C.
 Miller, Harold, Frederick
 Neumann, Alan B., Silver Spring
 Orr, Stanley C., Hyattsville
 *Patton, Gordon S., Jackson, Miss.
 Reed, Raymond B., College Park
 Richard, William J., Goldsboro

Santos, Bernardino, Rio Piedras, P. R.
 Schumann, Andrew E., Princess Anne
 Seney, J. Marvel, Chestertown
 Shofnos, William, Washington, D. C.

JUNIOR CLASS

Aldridge, David D., Frederick
 Aldridge, Howard R., Mount Savage
 Bartlett, Wirt D., Centerville
 Baum, Edwin C., Washington, D. C.
 Bowie, John, Jr., Annapolis Junction
 Bowser, Merle L., Kittanning, Pa.
 Burnside, Douglas D., Washington, D. C.
 Castella, Charles C., Riverdale
 Collins, Stanton J., Sparrows Point
 Compher, Carlton M., Doubs
 Coronel, Ulpiano, New York City, N. Y.
 Fisk, Willis H., Kensington
 Ford, Watson I., Baltimore
 Glover, Charles P., Mt. Airy
 Hook, Addison E., Baltimore
 King, Barnwell Rhett, Branchville
 Knox, Howard L., College Park
 Knox, Lloyd T., Jr., College Park
 Lewis, Gomer, Washington, D. C.
 Lewis, William H., Elkton
 Lillie, Francis T., Takoma Park

SOPHOMORE CLASS

Allen, Edw. Russell, Towson
 Atkinson, Walter S., Pocomoke
 Bishop, William E., Washington, D. C.
 Blades, Samuel L., Sudlersville
 Bonnet, Arthur E., Washington, D. C.
 Brayton, Jean H., Washington, D. C.
 Caruthers, Robert S., Riverdale
 Coakley, Forrest, Havre de Grace
 Coblenz, Edw. P., Catonsville
 Cooling, William C., Chesapeake City
 Crawford, Thomas B., Havre de Grace
 Davis, Douglas M., Hyattsville
 DeAtley, Ellsworth F., Washington, D. C.
 Dent, George H., Anne Arundel
 Fisher, Albert B., Point of Rocks
 *Gannon, Clarence B., Baltimore
 Huyett, Earl D., Hagerstown
 Johnson, Theodore W., Washington, D. C.
 Kellermann, William F., Washington
 D. C.
 Kline, William M., Washington, D. C.
 Lang, John C., Pocomoke
 Lebowitz, Samuel, Mt. Rainier
 Lehman, Laurence L., Rockville
 Leilich, Robert K., Baltimore
 Lyons, Thomas H., Clinton

FRESHMAN CLASS

Beavens, Elmer A., Washington, D. C.
 Berry, Joseph G., Vienna, Va.
 Bewley, William G., Berwyn

Stranahan, Robert J., Union City, Pa.
 Wenger, Charles W., Washington, D. C.
 Young, Walter H., Washington, D. C.

Litchfield, Chas. W., Washington, D. C.
 Magalis, Benjamin W., Brunswick
 Matthews, Kenneth F., Washington, D. C.
 McCune, Wm. T., Elkton
 Meeds, Nelson T., Silver Spring
 Melchior, Louis F., Washington, D. C.
 Melton, Edw. Roane, Jr., Washington,
 D. C.
 Mills, J. E. Wayne, Washington Grove
 Morris, Paul, St. Michaels
 *Noe, Ira J., Washington, D. C.
 Orr, Robert G., Lonaconing
 Prangley, Arthur G., Washington, D. C.
 Rogers, Fred. H., Washington, D. C.
 Sanders, Warrington R., Washington,
 D. C.
 Troxell, William F., Gaithersburg
 Vandegrift, Edgar D., College Park
 *Vandoren, Theodore J., Hyattsville
 Warren, John S., Pomonkey
 Watkins, Benjamin, 3rd, Davidsonville

Bowie, Andrew K., Riverdale
 Boyd, Arthur C., Washington, D. C.
 Butler, Charles W., Washington, D. C.
 Campbell, Neil P., Washington, D. C.
 Clayton, Thompson B., Chevy Chase
 Coblentz, Oscar B., Jr., Catonsville
 Davis, Porter L., Cecilton
 Dick, James McFadden, Salisbury
 Elgin, Wade H., Washington, D. C.
 Fettus, George H., Jr., Folcroft, Pa.
 Finch, Harold W., Washington, D. C.
 Fitzgerald, Edward P., Princess Anne
 Fox, Henry C., Baltimore
 Frey, Russel M., Harrisburg, Pa.
 Funk, Creston E., Hagerstown
 Garber, Harry F., Washington, D. C.
 Glover, Nathan D., Mt. Airy
 Hager, Henry G., Jr., Chesapeake City
 Halley, Edward B., Washington, D. C.
 Hamilton, Frank A., Hagerstown
 Harris, Walter R., Owings Mills
 Hassler, Howard E., Washington, D. C.
 Hickox, Malcolm, Washington, D. C.
 Hough, George W., Washington, D. C.
 Hurley, George F., Suffolk, Va.
 Iglehart, William H., Washington, D. C.
 Jacob, Harvey A., Washington, D. C.
 Jenkins, Stanleigh E., College Park
 Jones, Joseph L., Sparrows Point
 Kaiser, John F., Washington, D. C.
 Knotts, Joseph B., Dundalk
 Lanier, Eldred S., Washington, D. C.
 LeSueur, Benjamin W., Baltimore
 Lichtenberg, William R., Wash., D. C.
 Linville, Charles S., Baltimore
 Luckey, Robert B., Hyattsville
 Lynn, Roland A., Hagerstown

Marks, Edward B., Washington, D. C.
 Marseglia, M., Washington, D. C.
 Marshall, William R., Washington, D. C.
 McLeish, David, Mt. Rainier
 Morrison, George W., Port Deposit
 Mumford, Charles O., Ocean City
 Murray, Herbert S., Washington, D. C.
 Ninas, George A., Gaithersburg
 Noll, Adam M., Ellicott City
 O'Dell, Arthur E., Randallstown
 Oldenburg, Lester W., Hyattsville
 Peverill, William L., Washington, D. C.
 Poole, John E., Dickerson
 Powell, Russel T., Sparrows Point
 Rhodes, Robert E., Washington, D. C.
 Richards, William K., Pikesville
 Rod, Isadore, Washington, D. C.
 Rohrbaugh, Robert M., Mt. Rainier
 Ryan, Martin A., Kensington
 Schreiner, Louis R., Chevy Chase
 Shinn, Edmund H., Long
 Smither, Herbert A., Cumberland
 Snyder, Wilbur N., Randallstown
 Spence, Kenneth F., Hancock
 Stevens, Raymond L., Hyattsville
 Test, Eugene W., Randallstown
 Till, Randolph W., New Brunswick, N. J.
 Tonkin, John, College Park
 Triplett, Paul W., Cumberland
 Trotter, James E., Washington, D. C.
 Van Wagner, Kingsley, Washington, D. C.
 Weber, Charles S., Oakland
 Weber, Philip W., Havre de Grace
 Wenner, Edward M., Point of Rocks
 Werle, Francis B., Washington, D. C.
 White, Wilbur M., Princess Anne
 Wooster, Mallery O., Berwyn

UNCLASSIFIED

Chandler, Malcolm W., Silver Spring
 DeCaindry, William A., Baltimore
 Powell, Robert W., College Park

Stoll, Charles C., Baltimore
 *Vittum, Charles C., Laconia, N. H.

VOCATIONAL CLASSES IN MINING

BARTON CLASS

William C. Abbott
 St. Cloud Ambroses
 Robert Andrews
 Herman B. Arnold
 Randolph M. Ashby
 W. S. Barnard
 Ellsworth Boal
 John Bradley
 Edward R. Bremen
 Lloyd Brooks
 James P. Brown
 Clifton Clark

Joseph T. Conroy
 Harry Cook
 George Crowe
 John Cuthbertson
 Joseph Davis
 Robert Durham
 Luther Evans
 Sheridan Evans
 John Fahrety
 A. B. Foley
 John R. Foote
 Felix Foote, Jr.

Thomas J. Footen
 Albert L. Frenzel
 John D. Frenzel
 Elias Frye
 Curtis Griffith
 Henry A. Guy
 J. P. Guy
 C. Frederick Guy
 John F. Guy
 T. A. Harris
 Robert S. Harvey, Sr.

George Heffner
 L. M. Hellyer
 Carson F. Hyde
 Chester A. Hyde
 Dubois Jones
 Irvin Kallmyer
 Walter L. Kallmyer
 John M. Kight
 L. R. Kight
 John Kirk
 Herbert Langham
 Charles Layman
 Robert Longbridge
 Julius Martin

John Amtower
 Olin Amtower
 J. O. Bartlett
 F. E. Brode
 Edward L. Brown
 Leo Corrick
 W. H. Cutchall
 Louis Despo
 W. S. Fortney
 John Grega

Alvin Albright
 George B. Albright
 William T. Allen, Jr.
 William T. Allen, Sr.
 G. M. Anthony
 John Bahen
 John P. Barry
 Maurice Bean
 Benjamin Bradley
 Jenkins Bradley
 Charles P. Bruner
 Peter Bush
 Bernard D. Byrnes
 Lawrence Byrnes
 Richard Callin
 Frank W. Carter
 Leo J. Carter
 Robert L. Carter
 Thomas P. Carter
 Mike Caruso
 John L. Casey
 James H. Close
 John Condry
 John Connor
 Robert E. Connor
 James Conway
 John Davies
 Archie Davis
 Allan Dennison

Allan McDonald
 J. J. McDonald, Jr.
 Thomas H. McIntyre
 V. L. Mullan
 Hugh O'Rourke
 Martin T. O'Rourke
 Harry Pence
 Andrew Penman
 John Rankin
 William Rankin
 Edward Robertson
 John S. Robertson
 Joseph H. Robertson
 Daniel J. Schramm

DODSON CLASS

J. B. James
 C. H. Jones
 William F. Jones
 W. I. Kinkead
 William Lemon
 Joseph Markley
 H. A. Marshall
 Walter McCloud
 Claud McIntyre
 W. H. Miller

FROSTBURG CLASS

William C. Dod
 William J. Donahue
 John J. Doram
 William Dugan
 R. L. Edwards
 Joseph Elrick
 Robert D. Ewing
 John Fatkin
 Albert Filsinger
 George Filsinger
 Herman Felsinger
 Thomas W. Gracie
 William F. Guymn
 John Hartig
 Philip Hartig, Jr.
 William E. Hartman
 Richard Hawkins
 John R. Hendly
 Raymond Henry
 Harry C. Hitchins
 Henry Holtschneider
 Joe Hoyer
 Peter Hoyer
 Oscar Huber
 James Jenkins
 William Jenkins
 James L. Jones
 John Johns
 Edward Joyce

Carl W. Shaffer
 Edward W. Shaw
 Joseph Shuhart
 T. R. Smith
 Howard Southerland
 Charles E. Symons
 John Tibbett
 Robert K. Todd
 John D. Wallace
 Charles E. Warnick
 Simeon Whiteman
 E. J. White
 Edward Winkler

C. N. Morgan

John Oberly
 George Parrish
 J. W. Rowan
 Albert W. Smith
 D. E. Sowers
 Clarence Stanley
 Oscar Stanley
 Tromas Swansbora
 Ralph J. Williams

William Joyce
 William A. Kear
 Patrick Kenney
 John H. Kidwell
 Elmer Kight
 Howard Kinny
 John W. Kreitzburg
 John W. Kroll
 James R. Laber
 Wilfred Lancaster
 Chas. E. Lewis
 Lewis Lewis
 Thomas F. Lewis
 Carl Long
 H. E. Long
 John MacFarlane
 John Marshall
 Joseph G. Martin
 A. Roy Martin
 Michael R. McCeady
 Bernard McGowan
 Victor Meager
 Thomas F. Mickernan
 Edward Miller
 Edward Monahan
 Edward Muir
 Alex Neal
 Charles Odgers
 Patrick O'Halloran

William R. Pape
 William T. Pape
 Adam Patterson
 Bruce Phillips
 Pinto
 Clarence Porter
 Thomas B. Powell
 Clarence Powers
 David Pugh
 Hugo Rempel
 William H. Rephorn
 George M. Richardson
 Anthony Ritchie
 Ben Ritchie
 James Ritchie
 John W. Ritchie

Albert Sandvik
 Bernard Seib
 John Seib
 Jacob Seibert
 E. D. Shannon
 Douglas P. Shaw
 Robert T. Shaw
 Clarence Shea
 Charles J. Shields
 Albert Simpson
 William H. Simpson
 Ralph Skelly
 William Sleeman
 Jesse C. Snyder
 Charles Stark
 Eugene Stevens

George Tennant
 William H. R. Thomas
 Walter Tippen
 George P. Tipping
 John Tipping
 James R. Varney
 Clarence S. Wade
 Samuel T. Walker
 Roy Warn
 Henry E. Weisenburn
 James Weston
 Charles Williams
 Frank J. Williams
 Frank R. Williams
 R. H. Williams
 Charles P. Wolfe

KITZMILLER CLASS

Earnest Abernethy
 George Bell
 Fitzhugh Burrell
 William Burrell
 H. W. Chadderton
 A. J. Chisholm
 Harry F. Decker
 Hugo DeVall
 R. E. Dively
 Lee Ellifritz
 Fred Flanagan
 C. Ray Gough

Charles Hart
 Alex Harvey
 Frank Heck
 Paul Junkins
 Derfey Knotts
 L. E. Knox
 Alex McDonald
 Davis M. McKinley
 Charles Paugh
 W. C. Paugh
 George L. Pritts
 George W. Pritts

Stewart Reynolds
 Thomas Rosser
 John Schilling
 L. B. Sharpess
 John A. Shore
 J. A. Smith
 Roy Sowers
 C. E. Spence
 Thomas Strachn
 J. J. Walker,
 W. D. Walker, Jr.
 W. D. Walker, Sr.
 R. H. Yokum

MT. SAVAGE CLASS

Robert Andrews
 Harold Avery
 Lawrence Barth
 Roy S. Barth
 Edgar Bridges
 Angus Brown
 Joseph Carter
 Kenneth Chappell
 E. M. Conaway
 Albert Deffinbaugh
 John F. Diehl
 Vernon Diehl
 Gilbert C. Emrick

William Faraday
 Christopher Festerman
 Joseph Finzel
 Roy Folk
 Charles Frankenberg
 James Frankenberg
 Milner Frankenberg
 John J. Henaghan
 Joseph Jenkins
 William Keegan
 Albert Machin
 Gilbert Machin

Thomas Machin
 Jesse Merrill
 M. D. Morgan
 Joseph Nolan
 Harry Retzer
 James Ringler
 John Simpson
 Edward Stowell
 Patrick Sullivan
 Victor Trimble
 William F. Twigg
 William Winnerberner

GRADUATE SCHOOL

Anderson, Otto W., Timmons ville, S. C.
 Anderson, Pearl, Amherst, N. H.
 Besley, Arthur K., Baltimore
 Boswell, Victor R., Columbia, Missouri
 Brewer, Charles MacFarlane, College Park
 Brunstetter, Byron C., Harrisburg, Pa.
 Burdette, Robert C., Washington, D. C.
 Burrens, R. L., E. Stroudsburg, Pa.
 Clare, Irwin C., Jamaica Plain, Mass.

Conrad, Carl M., Burlington, Kansas
 Darkis, Frederick R., Frederick
 Daskais, Morris H., Baltimore
 Dean, Horace S., E. Liverpool, Ohio
 Diehl, Helmut C., Washington, D. C.
 Elder, James W., Cumberland
 Eppley, Geary, College Park
 Ericson, Eston E., College Park
 Ezekiel, Walter N., Berwyn

Fields, John N., Lamar, S. C.
 Flanagan, Sherman E., Walkersville
 Flenner, Albert L., Hyattsville
 Flynn, John E., Friendsville, Pa.
 Graffin, Mildred W., Baltimore
 Haines, G., Hyattsville
 *Hancock, Hugh, Berwyn
 Harley, Clayton P., Royersford, Pa.
 Holmes, Myron G., Northwood, N. H.
 Kimbrough, W. Duke, Summerdale, Ala.
 Knode, John S., Baltimore
 Krantz, John C., Baltimore
 Lagasse, Felix S., Lochmere, N. H.
 Langford, George S., Blythewood, S. C.
 Lichtenwalner, Daniel C., Riverdale
 Lindquist, Harry G., Holden, Mass.
 Liu, Ho, China
 Mackert, Charles L., College Park
 Malcolm, W. G., Mt. Airy
 Marker, Russell E., Hagerstown
 McFarland, Frieda, (Mrs.), Hyattsville
 McKibbin, Reginald R., Hyattsville
 McMaster, Marcus A., Rochester, N. Y.
 Melroy, Malcolm, Washington, N. J.
 Moore, Harry H., Washington, D. C.
 Moskey, Henry E., Washington, D. C.
 Mumford, John W., Jr., Newark
 O'Donnell, Frank G., Reading, Pa.
 *Patton, Gordon S., Jackson, Miss.
 Pollock, George F., Boyds

Popenoe, Charles H., Silver Spring
 Potts, Samuel F., Crawford, Miss.
 Preinkert, Margaret M., Wash., D. C.
 Raedy, Michael L., Washington, D. C.
 Sanders, Paul D., West, Miss.
 Scheuch, John D., North Beach
 Schopmeyer, C. H., Washington, D. C.
 Schrader, Albert Lee, So. KauKauna, Wis.
 Shaffer, Harry H., Berwyn
 Shepherd, Matson Wayne, Berwyn
 Shillinger, J. E., Easton
 Siegler, Edward H., Takoma Park
 Skilling, Francis C., Baltimore
 Smith, Arthur M., College Park
 Snyder, Joseph M., Riverdale
 Stamp, Adele H., College Park
 Stevens, Edwin H., LaPlata
 Stinson, Harry W., Hyattsville
 Troy, Virgil S., College Park
 VandenBosche, E. Gaston, Pittsburgh, Pa.
 Walker, Wm. Paul, Mt. Airy
 Watkins, Donald E., Mt. Airy
 Watkins, Robert M., Mt. Airy
 Welsh, Claribel P. (Mrs.) College Park
 Wheeler, Paul M., Englewood, N. J.
 White, Charles E., College Park
 Whitehouse, William E., Hyattsville
 Wiley, R. C., College Park
 Winant, H. B., Brentwood

COLLEGE OF HOME ECONOMICS

SENIOR CLASS

Alderman, F. Ruth, Washington, D. C.
 *DeVol, Helen M., Crawfordsville, Ind.
 Morris, Sarah E., Hyattsville

Murphy, Anna M., Staunton, Va.
 *Stewart, Anne Stone, Rustburg, Va.
 Williams, Esther L., Lanham

SOPHOMORE CLASS

Dent, Alice L., Townshend

Ferrell, Marion F., College Park
 *Langenfeldt, Marie E., Hyattsville

FRESHMAN CLASS

Beyerle, Helen G., Baltimore
 Blandford, Josephine M., College Park
 Calbreath, Ellen F., Washington, D. C.
 Cannon, Aline E., Hagerstown
 Chesnut, Gertrude, Hyattsville
 Davis, Dorothy V., Ridgely
 Jacobs, Irene E., Washington, D. C.
 Keiser, Ellen J., Washington, D. C.

Lathrop, Golda H., Riverdale
 Mankin, Jane L., Washington, D. C.
 McRae, Ruth H., Riverdale
 Muncaster, Jessie F., Rockville
 Orton, H. Alberta, Takoma Park
 Poole, Minnie L., White Hall
 Prentiss, Jean E., Washington, D. C.
 Ripple, Grace A., Cheltenham
 Russell, T. Frances, Washington, D. C.

UNCLASSIFIED

Kharasch, Ethel M., (Mrs.) Riverdale

Wood, Lilian, (Mrs.), Riverdale

SCHOOL OF LAW

SENIOR CLASS

Ades, Bernard, Baltimore
 Adler, Irwin H., Baltimore
 Alexander, John Davis, Baltimore
 Alaxander, John Gunnels, Atlanta, Ga.
 Barnett, Ralph Oliver, Sykesville
 Bartholomay, William Peter, Jr., Balto.
 Bearman, Sidney, Baltimore
 Berlin, Herman, Baltimore
 Biggs, Ruhard Douglas, Baltimore
 Biser, Leon Windsor, Ijamsville
 Blickenstoft, Lloyd Snavely, Boonsboro
 Borden, Aaron, Baltimore
 Bramble, Forrest Fulton, Baltimore
 Brenner, David Mitchell, Baltimore
 Brown, Howard, Baltimore
 Browne, Alfred James, New York, N. Y.
 Caplan, Frank Louis, Baltimore
 Carney, Robert Emmett, Hamilton
 Carroll, Paul Edgar, Baltimore
 Clayton, John Morgan, Cambridge
 Codd, William A., Baltimore
 Cohen, Leon, Baltimore
 Coleburn, George Revell, Accomac, Va.
 Coughlan, Robert E., Jr., Baltimore
 Connor, I. Campbell, Baltimore
 Daisey, Carey James, Chincoteague, Va.
 Dankmeyer, Theodore Rognald, Baltimore
 Darrough, William, Baltimore
 Deady, Frank Hale, Baltimore
 Debel, Niels H., Baltimore
 DeLashmutt, Emilie Frances, Baltimore
 Dellone, Katherine R., Baltimore
 Dorsey, Philip Henry, Annapolis
 Doyle, James Joseph, Hamilton
 Edelson, Milton Benjamin, Baltimore
 Epstein, Samuel Carroll, Baltimore
 Famous, Franklin Eli, Street
 Farber, George, Baltimore
 Fenwick, James Stewart, Baltimore
 Feinberg, Isidore Bernard, Baltimore
 Feldman, Isadore E., Baltimore
 Figinski, Marion A., Baltimore
 Fine, Melvin L., Baltimore
 Fine, Phylburt E., Baltimore
 Fitzpatrick, John Joseph, Baltimore
 Frankel, Albert Harry, Baltimore
 Forrest, Otto Norman, Baltimore
 Foster, Reuben, Baltimore
 Glick, Maurice, Baltimore
 Greenberg, Alexander M., Baltimore
 Greene, Melvin, Joseph, Baltimore
 Griffin, Felix Aloysius, Baltimore
 Goldberg, Charles Franklin, Baltimore
 Goldbloom, Milton S., Baltimore
 Gutberlet, Joseph Charles, Baltimore

Hammerman, Herman, Baltimore
 Harrington, T. Barton, Baltimore
 Hoffman, George Laughlin, Baltimore
 Honeywell, James Owens, Baltimore
 Hopkins, Hastings Brown, Baltimore
 Hopkins, Ira C., Halls
 Hudson, Howard E., Gumboro, Del.
 Huss, Albert Bernard, Baltimore
 Isaacson, Simon Louis, Baltimore
 Jarboe, John Melvin, Pearson
 Kalb, Edgar Seymour, Baltimore
 Kelley, Estel C., Westernport
 Kenly, Lacy Ruse, Baltimore
 Lamberd, Luther Sentman, Baltimore
 Lee, James Julian, Baltimore
 Levitas, Benjamin I., Baltimore
 Lohmuller, George Bernard, Baltimore
 Macht, Louis Ephrain, Baltimore
 Masson, Stevenson, Baltimore
 Mechanic, William George, Baltimore
 Meid, Albert, Jr., Baltimore
 Meiser, Fred William, Baltimore
 Mercer, Beverly Howard, Baltimore
 Merrill, Irving Woodbury, Baltimore
 Meyerhoff, Louis, Baltimore
 Mihm, William Albert, Mt. Washington
 McKenney, Henry Hanson, Baltimore
 Moss, Gersh Isaac, Baltimore
 Moylan, Charles Ellsworth, Ijamsville
 Newell, Beach, Baltimore
 Norten, George Thomas, Baltimore
 Novak, Charles J., Hamilton
 Oxley, John Edgar, Poolesville
 Parr, Frank Timothy, Baltimore
 Penrod, Charles Edward, Baltimore
 Peregoff, Louis, Baltimore
 Perlman, Arthur, Baltimore
 Poole, John Henry, New Market
 Post, Philip Tillinghast, Baltimore
 Proper, Jerome, Baltimore
 Rhyhart, William Wallace, Baltimore
 Robinson, Morton Matthew, Baltimore
 Roesch, Emil Anthony, Baltimore
 Rosner, Jeanette, Pikesville
 Rowe, Roscoe Conkling, Annapolis
 Rubenstein, Abraham J., Baltimore
 Samuelson, Herman, Baltimore
 Sar, Samuel A., New York, N. Y.
 Saiontz, Carl Benjamin, Baltimore
 Scaggs, Howard I., Baltimore
 Schapiro, Ruth, Baltimore
 Schlegal, Edwin M., Baltimore
 Schlossberg, Abe, Baltimore
 Schulbe, George P., Jr., Catonsville
 Seliterman, Ben B., Baltimore

Semans, William R., Baltimore
 Seymour, Charles Clarence, Cumberland
 Shea, Jeremiah D., Colchester, Conn.
 Schockett, Harry Maurice, Baltimore
 Siegmund, Carl, Baltimore
 Silverman, Samuel L., Baltimore
 Simpson, Albert Louis, Portsmouth, Va.
 Smith, Albert V. D., Baltimore
 Smith, Edward M., Baltimore
 Smith, Michael P., Baltimore
 Stevens, Edward W., Sudlersville
 Stocksdale, Howard B., Baltimore
 Swartz, Jerome, Baltimore

Tarshish, Allan, Baltimore
 Tippet, William Thomas, Jr., Baltimore
 Tome, Richard E., Baltimore
 Truitt, Hughey B., Girdletree
 Vanger, Henry R., Baltimore
 Webster, Edwin H., Bel Air
 Wellmore, Grace Lucretia, Baltimore
 Wellner, Gabriel D., Baltimore
 Williams, Matilda D., Baltimore
 Woelfel, George B., Annapolis
 Yaffee, Harry, Baltimore
 Zetzer, Rose Sylvan, Baltimore

INTERMEDIATE CLASS

Aaron, Howard L., Baltimore
 Abramowitz, Max, Baltimore
 Abramson, Oscar, Baltimore
 Adkins, John Edward, Salisbury
 Aiken, Gerald Randolph, Catonsville
 Arnold, Charles G., Brunswick
 Baer, Eli, Baltimore
 Baker, Orison W., Baltimore
 Barron, Sylvan, Baltimore
 Bartholow, Joseph Carroll, Baltimore
 Baumann, John, Baltimore
 Bennett, Aubrey Kenneth, Federalsburg
 Bennett, John Crogan, Baltimore
 Benson, James L., Baltimore
 Bounds, Carroll E., Allen
 Bounds, Wade G., Allen
 Bowen, John Bird, Baltimore
 Brennan, Peter John, Baltimore
 Bressler, Ida, Baltimore
 Bronner, Charles Joseph, Detroit, Mich.
 Brown, Forrest Nicholas, Frederick
 Brownstein, William N., Baltimore
 Buchoff, Joseph O., Baltimore
 Budnitz, Emil A., Baltimore
 Burch, James C., Baltimore
 Cairns, Huntington, Baltimore
 Calloway, N. M., Sharptown
 Carter, Joseph L., Eckhart Mines
 Chambers, Benjamin, Baltimore
 Cohen, Ellis, Baltimore
 Cohen, Samuel, Baltimore
 Collins, Stephen R., Chestertown
 Coyle, Wilbur F., Jr., Baltimore
 Culotta, Joseph John, Baltimore
 Diehm, Victor Christian, Sparrows Point
 Disney, Kenith D., Baltimore
 Edelman, Jacob J., Baltimore
 Faithful, B. Leon, Baltimore
 Fedder, Morris, Baltimore
 Feldman, Nathan, Baltimore
 Feldstein, Samuel Henry, Baltimore
 Fink, Herbert, Baltimore
 Freehof, Louis J., Baltimore

Fried, Louis C., Baltimore
 Gaugh, Ralph A., Lewistown
 Gerber, Herman J., Baltimore
 Getz, Meyer Henry, Bel Air
 Goodman, Max, Baltimore
 Greenstein, Edward, Baltimore
 Grillo, Vincent Richard, Philadelphia, Pa.
 Hamm, William J., Baltimore
 Hammond, Francis H., Baltimore
 Harris, Alexander C., Baltimore
 Harris, Gertrude, Baltimore
 Helfrich, George E., Baltimore
 Herman, Harry Samuel, Baltimore
 Hetzer, Samuel R., Baltimore
 Hill, Stirling S., Baltimore
 Hillman, Sidney, Baltimore
 Hoff, Charles Worthington, Baltimore
 Horine, Dawson, Myersville
 Humphreys, Harry N., Baltimore
 Jacobs, Benedict Weiner, Baltimore
 Jacobs, Sidney Melbourne, Baltimore
 Kallinsky, Sigmund R., Baltimore
 Kaufmann, Norman, Baltimore
 Keating, Thomas James, Jr., Centreville
 King, Daniel Denoon, Baltimore
 Knight, Edwin J., Baltimore
 Kramer, Herman Walter, Baltimore
 Kramer, John, Baltimore
 Kriegel, Leo, Baltimore
 Krieger, Abraham, Baltimore
 Kratz, John E., Baltimore
 Lambert, Milton Franklin, Baltimore
 Levin, Isidore E., Baltimore
 Levy, Julius E., Baltimore
 Levy, Herman Frank, Baltimore
 LeViness, Charles T., Jr., Baltimore
 Lober, Albert Franklin, Baltimore
 Lloyd, William T., Baltimore
 Mallek, Emil T., Baltimore
 Marbury, Charles C., Upper Marlboro
 Mazor, Alfred, Baltimore
 McAllister, Lloyd G., Vienna
 McKeldin, Theodore Roosevelt, Baltimore

Miller, Goldie R., Baltimore
 Miller, Harry M., Baltimore
 Maher, Edward A., Baltimore
 Mulford, Harry Seeley, Baltimore
 Mullikin, Oliver S., Easton
 Moshkevich, Max, Baltimore
 Myers, Willis Adelbert, Baltimore
 Obrecht, Charles Frederick, Baltimore
 Parlett, Edward L., Baltimore
 Parsons, Paul Shumway, Baltimore
 Peregoff, Ellis, Baltimore
 Perel, Samuel, Baltimore
 Perry, Merrill Graydon, Greensboro
 Pittman, Martin L., Brooklyn
 Pritchett, Wilbye J., Jr., Bishop's Head
 Proser, Bernard U., Baltimore
 Putzel, Edward Lewis, Baltimore
 Race, Allan Mayor, Baltimore
 Reed, Robert, Baltimore
 Rhudin, Marcy M., Baltimore
 Richardson, Standley L., Baltimore
 Rose, Douglas Hall, Baltimore
 Rosenstock, Benjamin B., Frederick
 Rothel, Adelbert L., Baltimore
 Sandrock, Julius Frederick, Baltimore

Schmidt, George John, Baltimore
 Shefferman, Julius, Baltimore
 Silver, Morris Lemberg, Baltimore
 Silverman, Benjamin H., Baltimore
 Sinnott, Katherine A., Baltimore
 Smith, Edward A., Baltimore
 Smith, Nicholas McCubbin, Baltimore
 Sowers, William R., Annapolis
 Spector, Joseph William, Baltimore
 Stonestreet, Henrietta Dunlap, Baltimore
 Stulman, Oscar, Baltimore
 Sultan, W. Edward, Baltimore
 Sybert, Cornelius Ferdinand, Elkridge
 Sykes, Alfred J., Baltimore
 Taylor, Wilson Everett, Baltimore
 Thompson, Richard H., Baltimore
 Tongue, T. Magruder, Solomon's
 Townsend, M. D., Reisterstown
 Vorsteg, Ethel R., Baltimore
 Wase, Joseph, Baltimore
 Watkins, Robert Dorsey, Baltimore
 Weil, Isador, Baltimore
 Williams, Donald C., Mt. Washington
 Wolfe, Philip, Baltimore
 Wrightson, William D. G., Baltimore

JUNIOR CLASS

Adams, Charles William, Sykesville
 Adams, Gunther, Baltimore
 Adelberg, Harry, Baltimore
 Armstrong, Herbert Eustace, Baltimore
 Ash, George Reynolds, Elkton
 Ashman, Joseph, Baltimore
 Baker, Morris A., Baltimore
 Barrett, Lester Louis, Lansdowne
 Baur, Gerard, Baltimore
 Beacham, Robert J., Jr., Baltimore
 Becker, Joseph William, Baltimore
 Beigel, Philip, Baltimore
 Black, Roy E., Baltimore
 Blaustein, Bernard N., Baltimore
 Bornstein, Morris, Baltimore
 Bostetter, Martin V., Hagerstown
 Brown, Helen E., Baltimore
 Burns, John Francis, Baltimore
 Butler, John Marshall, Baltimore
 Colwell, Walter Scott, Baltimore
 Campbell, Kenneth H., Baltimore
 Caplan, Jerome H., Baltimore
 Carliner, Samuel, Baltimore
 Carney, Eugene D., Westernport
 Carozza, Frank L., Catonsville
 Cavis, Joseph Augustine, Baltimore
 Coady, Charles Pearce, Baltimore
 Cockrill, James Mitchell, Little Rock, Ark.
 Cohen, Calvin E., Baltimore
 Cohen, John H., Baltimore
 Cohen, Paul Morton, Baltimore

Cohen, Raymond, Baltimore
 Cohen, Sidney, Baltimore
 Colvin, Joseph, Baltimore
 Connors, Thomas Joseph, Pittsfield, Mass.
 Cooper, Hart, Baltimore
 Cooper, Margaret Baldner, Baltimore
 Creager, Job Mann, Hancock
 Daily, Frank John, Baltimore
 Day, James Nelson, Rocks
 Day, Stewart O., Rocks
 deLauder, Thomas A., Baltimore
 Delea, Michael F., Baltimore
 Di Cenzo, George G., New Haven, Conn.
 DiDomenico, Anthony F., Baltimore
 Dillon, John J., Baltimore
 Ditto, John Henry, Baltimore
 Doroba, Mitchell J., Baltimore
 Doub, George Cochran, Cumberland
 Dunn, Melville H., Ashland, Va.
 Eder, Joseph R., Baltimore
 Eisenberg, Samuel Solomon, Baltimore
 Engler, Donald Herbert, Baltimore
 Eppley, Donald, Johnstown, Pa.
 Epstein, Max, Baltimore
 Evans, Harvey L., Lexington, N. C.
 Every, Frank William, Baltimore
 Farbman, David J., Baltimore
 Fenneman, Lawrence B., Baltimore
 Fink, William, Baltimore
 Fisher, Irwin H., Baltimore
 Fitzsimmons, Carroll F., Baltimore

Flacomio, Joseph Vincent, Baltimore
 Fleckenstein, Laurence L., Easton
 Fogle, John Robertson, Baltimore
 Fox, Paul, Baltimore
 Freed, Alexander, Baltimore
 Freeze, Frank Leo, Jr., Baltimore
 Fribush, Abe, Baltimore
 Friedenber, Aaron, Baltimore
 Galvin, John Patrick, Jr., Baltimore
 Gilbert, Rodman Irving, Baltimore
 Goldsborough, LeRoy F., Ruxton
 Goldman, Sydney Bert, Baltimore
 Goldsmith, Howard F., Baltimore
 Golomb, Philip N., Baltimore
 Gomborov, Samuel Hertz, Baltimore
 Greenfeld, William, Baltimore
 Hallam, Joseph H., Baltimore
 Hamburger, Nathan, Baltimore
 Hancofsky, Michael, Baltimore
 Harmatz, Leonard, Baltimore
 Harrison, Erman, Baltimore
 Harwood, James Kemp, Catonsville
 Hecht, Lawrence W., Havre de Grace
 Hedrick, Orian, Baltimore
 Helfgott, Isidor, Baltimore
 Hendelberg, Philip, Baltimore
 Hipsley, Stanley P., Baltimore
 Hoffa, James Melvin, Lonaconing
 Holmes, Arthur Charles, Baltimore
 Hood, John Wilson, Baltimore
 Hudgins, Leslie G., Gwynn, Va.
 Huey, Edward Greene, Ruxton
 Iverson, George Dudley, Jr., Baltimore
 Iverson, George Dudley, 4th, Baltimore
 Iverson, William P., Baltimore
 Jaminski, C. Sigmund, Baltimore
 Jenkins, Morton Earle, Brooklyn
 Joblin, Israel Milton, Baltimore
 Johns, Thomas Morris, Baltimore
 Jones, Edward C., Baltimore
 Kajetan, Witold Grzelecki, Baltimore
 Kappelman, Leon Irving, Baltimore
 Kaufman, Ora Viola, Relay
 Kelsey, Julius J., Reading, Pa.
 Kelso, Charles Alexander, Jr., Baltimore
 Klein, Irvin, Baltimore
 Kirkpatrick, Andrew Maxwell, Baltimore
 Kirwan, Jesse Dallas, Baltimore
 Klitzner, Frank, Baltimore
 Kloze, Ida Iris, Baltimore
 Knabe, Lloyd Condon, Baltimore
 Krantz, Maximilian W., Baltimore
 Kurland, Edwin L., Baltimore
 Lankford, Benjamin G., Baltimore
 Laukaitis, John Joseph, Lansdowne
 Lederman, Edward, Baltimore
 Leven, Milton, Baltimore
 Levene, August, Baltimore

Levey, Harry I., Baltimore
 LeViness, Charles T., Baltimore
 Leydon, Thomas W., Pikesville
 Lipman, Samuel George, Baltimore
 Lott, Harry K., Baltimore
 Lowe, Allan Bennett, Baltimore
 Luke, Richard T., Charlestown, W. Va.
 Malan, Albert, Baltimore
 Marshall, William Harvey, Baltimore
 Masson, Charles Augustus, Baltimore
 McMahon, Daniel Alan, Baltimore
 Mathias, Leonard G., Hagerstown
 Mendels, Joel, Baltimore
 Metcalfe, Herbert Collins, Baltimore
 Meyers, David Paul, Baltimore
 Machaelson, Oscar Phillip, Baltimore
 Middleton, Samuel Atherton, Centreville
 Mihm, Leslie Ellsworth, Baltimore
 Miller, Luther Bonnet, Baltimore
 Mindel, Hyman, Baltimore
 Mish, Joseph Dubbs, Hagerstown
 Moore, John Jacob, Eckhart
 Moore, John Peter, Woodbrook
 Mount, Charles Owens, Baltimore
 Myerberg, David, Baltimore
 Myers, Israel, Baltimore
 Myers, Jack Bricker, Arnold Station
 Nathanson, Melvin, Baltimore
 Novey, Julius, Baltimore
 Nuttle, Everett, Federalsburg
 O'Brien, William V., Baltimore
 O'Dell, Edward C., Baltimore
 Pairo, Preston, Allen, Baltimore
 Patterson, Lyman, Baltimore
 Patz, Nathan, Newport News, Va.
 Pear, Solomon, Baltimore
 Pekar, Rufus Joseph, Baltimore
 Perry, Thornton T., Charlestown, W. Va.
 Pfaffenbach, George A., Havre de Grace
 Powell, Bernard R., Jr., Franklin City, Va.
 Poindexter, Samuel Ferdinand, Jr., Lynch-
 burg, Va.
 Purnell, William Childs, Riverview
 Ranft, Joseph L., Jr., Baltimore
 Respass, Homer M., Baltimore
 Rice, Thomas Warren, Baltimore
 Riesberg, Frank, Baltimore
 Rifman, Abraham, Baltimore
 Roeder, George Holzshu, Baltimore
 Rollins, Clarence L., Baltimore
 Rostovsky, Abraham, Baltimore
 Rubenstein, Arthur C., Baltimore
 Rubin, Irwin, Baltimore
 Sachs, Abraham, Baltimore
 Saffell, William Headington, Reisterstown
 Sager, Harry Herman, Front Royal, Va.
 Sahn, Louis A., Baltimore
 Sandler, Abram Meyer, Baltimore

Sapperstein, Rose, Baltimore
 Savage, Bernard M., Baltimore
 Schiffer, Rosa, Baltimore
 Schilpp, Carroll B., Baltimore
 Schindler, Joseph William, Hamilton
 Schmidt, Edward Holloway, Baltimore
 Schmidt, Robert Austin, Baltimore
 Scholtz, Erwin V., Baltimore
 Schultz, Kendall H., Baltimore
 Schulze, Paul K., Baltimore
 Selenkow, Annette, Baltimore
 Shrade, John M., Sergeant, Pa.
 Shafer, Lester Thomas D., Linthicum Heights
 Sherr, Meyer M., Baltimore
 Shochet, Jacob Elijah, Baltimore
 Silberstein, Baltimore
 Silver, Barnett L., Baltimore
 Simpson, David V., Baltimore
 Site, Myer, Baltimore
 Smalkin, Samuel, Baltimore
 Smith, Arthur H., Baltimore
 Smith, Clater W., Wilmington, N. C.
 Smith, Joseph Martin, Glyndon
 Stewart, Rae W., Baltimore
 Stine, Isaac Frederick, Winchester, Va.
 Stockbridge, Sylvester L., Baltimore
 Stulman, Jerome, Baltimore

Sweetman, Charles K., Baltimore
 Talkin, Milton H., Baltimore
 Taylor, Levin P., Quantico
 Thomas, Constantine G., Baltimore
 Topping, Daniel Dewey, Pantego, N. C.
 Trieschman, Albert Ewell, Randallstown
 Tull, James Leroy, Annapolis
 Tull, Samuel Webster, Baltimore
 Ulman, Paul Alvin, Baltimore
 Usilton, David Richard, Baltimore
 Vickers, Powell, Baltimore
 Vidal, David, Porto Rico
 Waller, Max Joseph, Baltimore
 Walbeck, James M., Forest Hill
 Walner, Louis, Baltimore
 Watson, Kenneth Clayton, Catonsville
 Ways, Charles Max, Baltimore
 Wegner, Roland M., Baltimore
 Weil, John deFord, Baltimore
 Weinstein, Jos., Baltimore
 Welsh, Charles Patrick, Cumberland
 Wilkerson, George Earl, Baltimore
 Williams, John D., Baltimore
 Williams, Max, Baltimore
 Winter, Irvin D., Baltimore
 Wolfel, William E., Catonsville
 Zenitz, Nelson, Baltimore
 Zetzer, Samuel, Baltimore

IRREGULAR STUDENTS

Bell, Vernal W., Baltimore
 Benson, Carville D., Jr., Halethorpe
 Berman, S. Frances, Baltimore
 Bollinger, James William
 Bousman, Floyd W., Baltimore
 Caplan, David H., Baltimore
 Caplan, Meyer, Baltimore
 Christensen, Edward B., Baltimore
 Day, Carl L., Baltimore
 Deen, Albert L., Preston
 DeKowzan, Paul A., Baltimore
 Dimarco, Anna E., Baltimore
 Druery, Oliver K., Baltimore
 Feldman, Sydney, Baltimore
 Fine, Harry H., Baltimore
 Gay, James E., Greensboro, N. C.
 Goertz, Harry E., Baltimore
 Golden, Solomon Isaac, Atlanta, Ga.
 Goldstein, Milton E., Baltimore
 Goldstein, Raphael S., Baltimore
 Gould, Theodore, Baltimore
 Hagner, Thomas J., Baltimore
 Hampson, George Mobra, Baltimore
 Hall, Reginald I., Baltimore
 Harman, Stanley K., Baltimore
 Hartz, Roger S. B., Baltimore
 Hoff, Albert Julius, Baltimore

Johnson, Russell Hughes, Baltimore
 Kernan, Anthony Eugene, Baltimore
 Lebowitz, Harry, Brooklyn
 Lesinsky, Samuel, Baltimore
 Levinson, Saul R., Baltimore
 Lynch, Charles A., Raspeburg
 Madenlberg, Abraham, Baltimore
 Massey, William Franklin, Sudlersville
 McGolerick, Wilbur F., Weverton
 Mooney, Lawrence R., Baltimore
 Mullikin, James Clayland, Easton
 Newman, Irving, Baltimore
 Pausch, George, Baltimore
 Rabuck, LeRoy T., Coraopolis, Pa.
 Rome, Hyman P., Baltimore
 Scaggs, George W., Baltimore
 Schad, John H., Baltimore
 Sear, Abram, Hampton, Va.
 Siegrist, Louis, Jr., Baltimore
 Siems, V. Bernard, Baltimore
 Siff, H. Edwin, Baltimore
 Truitt, Jeremiah F., Salisbury
 Weiner, Paul Norman, Baltimore
 Williams, Charles C., Baltimore
 Whiteley, George Calvin, Centreville
 Wilson, Frankie D., (Mrs.), Linthicum Heights

SCHOOL OF MEDICINE

SENIOR CLASS

Anderson, Albert Louis, Annapolis
 Anderson, Richard Speight, Whitaker, N. C.
 Antonius, Nicholas Anthony, Orange, N. J.
 Aycock, Thomas B., Pikesville, N. C.
 Barnes, D. Keith, Kaysville, Utah
 Beerman, Herman Marlin, Johnstown, Pa.
 Bell, Roy Austin, Shepherdstown, W. Va.
 Berkson, Morris Irwin, Pittsburgh, Pa.
 Best, D. Edward, Warsaw, N. C.
 Byer, Margaret Virginia, Punxsutawney, Pa.
 Boyd, Kenneth Bray, Baltimore
 Clamson, Thomas Alfred, Jr., Salt Lake City, Utah
 Daughtridge, Arthur Lee, Rocky Mount, N. C.
 Davenport, Carlton A., Mackeys, N. C.
 Dean, Hugh Elmer, Salt Lake City, Utah
 Edelman, Edward Isidor, Woodhaven, L. I., N. Y.
 Fields, Daniel A., Laurinberg, N. C.
 Finegold, Abraham, Carnegie, Pa.
 Fisher, Harry Richard, New York, N. Y.
 Flax, Ira Isador, Newark, N. J.
 Frehling, Joseph Morris, Louisville, Ky.
 Friedman, Irving, Newark, N. J.
 Goff, John Trevy, Burnt House, Va.
 Golembe, Julius, New York City, N. Y.
 Granoff, Jerry F., Brooklyn, N. Y.
 Greifinger, Marcus H., Newark, N. J.
 Grose, Robert Glenn, Harmony, N. C.
 Grossblatt, Philip, Newark, N. J.
 Howell, Clewell, Vineland, N. C.
 Jacobson, Philip, Baltimore
 Kafka, Maximilian M., Brooklyn, N. Y.
 Knox, Joseph Clyde, Leland, N. C.
 Koons, Earle M., Taneytown
 Kratz, Fred William, Baltimore
 Marsh, James T., Baltimore
 Marton, Samuel, New York City
 Maseritz, Isador, Baltimore
 Maurillo, Dominick F., Brooklyn, N. Y.

McConnell, Harvey R., Chester, S. C.
 McLane, William Oliver, Jr., Frostburg
 Megahan, Burke, Williamsport, Pa.
 Messinger, Benjamin, New York, N. Y.
 Miller, Benjamin, Baltimore
 Miller, Jacob, Baltimore
 Miller, Joseph G., Baltimore
 Monroe, Clement Rosenberg, West End, N. C.
 Moriarity, Louis, Manchester, Conn.
 Morris, Philip, Brooklyn, N. Y.
 Morrison, William Henry, Jr., Phila., Pa.
 Motta, Peter G., Carnegie, Pa.
 Neustaedter, Theodore, New York, N. Y.
 Nocera, Domingo, Mayaguez, Porto Rico
 Norment, John Edwin, Baltimore
 Owen, Thelma Viola, Baltimore
 Pachtman, Isadore, Braddock, Pa.
 Parks, Walter B., Huntersville, N. C.
 Perry, Arch T., Louisville, N. C.
 Peterman, James Elmer, Baltimore
 Roberts, Bennett Watson, Gatesville, N. C.
 Robertson, Edwin Mason, Woodsdale, N. C.
 Salvati, Leo Harry, Monongoh, W. Va.
 Saurborne, Sylvia Barnes, Bridgeport, W. Va.
 Scagnetti, Albert, Congers, N. Y.
 Scheindlinger, Morris I., Baltimore
 Schlenger, Leo B., Paterson, N. J.
 Schultz, Louis Ariel, New York, N. Y.
 Schwab, Joseph Henry, Woodhaven, N. Y.
 Scimeca, Antonio Adolfo, New York, N. Y.
 Seliger, Robert V., New York City
 Shapiro, Ralph N., Newark, N. J.
 Siegel, Samuel, Cleveland, Ohio
 Tabershaw, Arnold Leon, Brooklyn, N. Y.
 Talbott, Richard Bosworth, Elkins, W. Va.
 Theuerkauf, Frank Joseph, Erie, Pa.
 Warren, Bryan Pope, Blounts Creek, N. C.
 Weinstock, Alexander A., New York, N. Y.
 Whaley, Thomas B., Berlin
 Zaslow, John, Woodridge, N. Y.

JUNIOR CLASS

Balcerzak, Stanley Paul, Wabash, Pa.
 Briglia, Nicholas N., Philadelphia, Pa.
 Brown, Leo T., Washington, D. C.
 Byerly, Marshall Paul, Lexington, N. C.
 Cadle, William R., Frederick Junction
 Cardinale, Pasquale F., Newark, N. J.
 Caso, Jose, Santurce, Porto Rico
 Clahr, Abraham Albert, New York, N. Y.
 Coe, John Marburg, Brandywine
 Coonan, Thomas Joseph, Westminster

Cope, Arthur Alexander, Baltimore
 Dodd, Benjamin Roscoe, Wake Forest, N.C.
 Dodge, Eva Francette, Baltimore
 Draper, Leonidas McFerrin, Warrenton, N. C.
 Dreakin, Jacob Louis, E. Orange, N. J.
 Eastland, John Sheldon, Baltimore
 Elgin, Lee William, Baltimore
 Ellis, Francis A., Baltimore
 Epstein, Harry Herman, Brooklyn, N. Y.

Everett, Franklin R., Millington
 Fancher, Henry Wilson, Jr., Winsted,
 Conn.
 Farber, Raphael, Wellsboro, Pa.
 Fields, Abijah Clements, Ensley, Ala.
 Fischman, Harold H., Newark, N. J.
 Friedman, Bernard, New York, N. Y.
 Fuchs, Abner M., New York, N. Y.
 Gale, Louis H., Erie, Pa.
 Gaston, William Bryan, Clarksburg, W.
 Va.
 Gattens, Wilbur E., Cumberland
 Glick, Samuel, Baltimore
 Gurley, Hubert Taylor, High Point, N. C.
 Hall, Cecil Maurice, Hinton, W. Va.
 Hammond, Kent Cato, West Union, W. Va.
 Herbert, Alpha Nathan, Oakhurst, N. J.
 Hertz, Ben, New York, N. Y.
 Hofer, Ralph Hayes, Gatesville, N. C.
 Howell, James Gerald, Altoona, Pa.
 Hulla, Jaroslav, Baltimore
 Jacobs, Morris Albert, Baltimore
 Keating, John Patrick, Sandy Hook, Conn.
 Kimbrough, Joseph William, Jr., Raleigh,
 N. C.
 Knotts, William K., Sudlersville
 Laus, Edward Raymond, Elizabeth, N. J.
 Leibensperger, George Franklin, Kutztown,
 Pa.
 Lennon, William Earle, Manteo, N. C.
 Linde, Arthur S., Baltimore
 London, Daniel, Brooklyn, N. Y.
 Lowe, Claude Milton, Fawn Grove, Pa.
 McAnally, Alfred L., Madison, N. C.
 Miller, Edgar Raymond, Stewartstown,
 Pa.
 Minnefor, Charles A., Newark, N. J.
 Montani, Anthony Carmen, Youngstown,
 Ohio

SOPHOMORE CLASS

Alperin, Benjamin, Brooklyn, N. Y.
 Anker, Harry, Cleveland, Ohio
 Askin, Aaron John, Baltimore
 Ballard, Maggie Byrnside, Greenville,
 W. Va.
 Beachley, Jack Hensen, Hagerstown
 Beamon, Horace Vernon, Savage, N. C.
 Bloch, Adolph, Passaic, N. J.
 Blough, Homer Chester, Hollsopple, Pa.
 Bronstein, Irving, Brooklyn, N. Y.
 Calvin, Warren Ellwood, Hagerstown
 Cohen, Morris, Baltimore
 Coniff, Arthur Adams, Baltimore
 D'Angelo, Antonio F., Providence, R. I.
 DeVincentis, Henry, Orange, N. J.
 Diamond, H. Elias, New York, N. Y.
 DiPaula, Frank Rosario, Baltimore

Nataro, Joseph, Newark, N. J.
 Navarro, Vincente A., Cadiz, Porto Rico
 Nelson, James Wharton, Baltimore
 Nock, Randolph M., Stockton
 Oshrin, Henry, Jersey City, N. J.
 Pinsky, Myer Mordecai, Camden, N. J.
 Plassnig, Edwin, Baltimore
 Polzzotti, Joseph Louis, Paterson, N. J.
 Pulaski, Leo Edward, Shenandoah, Pa.
 Rathsprecher, Isadore, Newark, N. J.
 Reynolds, Knight, Keyser, W. Va.
 Richmond, Lewis C., Jr., Inez, Ky.
 Roberts, Bryan N., Hillsboro, N. C.
 Sarnoff, Jack, New York, N. Y.
 Silverstein, Jacob M., Millburn, N. J.
 Simon, Joseph Ralph, East Pittsburgh,
 Pa.
 Simpson, Henry Hardy, Altamahaw, N. C.
 Sinton, William Allen, Newport News, Va.
 Spelsberg, Walter William, Clarksburg,
 W. Va.
 Staeck, Felix Cecil, McMechen, W. Va.
 Sulman, William Richard, Reading, Pa.
 Tomainoli, Michael Francis, Hoboken, N. J.
 Turner, Thomas B., Frederick
 Vila-Morales, Jaime, Rio Piedras, Porto
 Rico
 Visconti, Joseph Albert, Hoboken, N. J.
 Ward, William Titus, Ryland, N. C.
 Wassersweig, Martin Max, Reading, Pa.
 Widmeyer, Robert Samuel, Martinsburg,
 W. Va.
 Wiener, Joseph, Raspeburg
 Wilson, Paul Russell, Wilson, W. Va.
 Winstead, John Lindsay, Elm City, N. C.
 Zimmermann, Charles Conrad, Cumber-
 land, Md.

Jolson, Meyer Stanley, Baltimore
 Knapp, Alphonse J., Baltimore
 Kralikauckas, Joseph, Newark, N. J.
 Lavy, Louis Theodore, Baltimore
 Levin, H. Edmund, Baltimore
 Levin, Joseph, Newark, N. J.
 Lumpkin, Lloyd Uber, Baltimore
 Lusby, Frank Farrier, Baltimore
 Manginelli, Emanuel, New York, N. Y.
 Martino, George Caprio, Newark, N. J.
 Mattikow, Bernard, Brooklyn, N. Y.
 Merkel, Walter Clarence, Hamburg, Pa.
 Miller, Harry G., New York, N. Y.
 Misenheimer, Ed Alexander, Concord,
 N. C.
 Moriconi, Albert F., Trenton, N. J.
 Naylor, Singleton Townshend, Oakland
 Norment, Clinton C., Baltimore
 O'Boyle, Thomas J., Scranton, Pa.
 Polsue, William Clewell, Charleston,
 W. Va.
 Rattenni, Arthur, Providence, R. I.
 Reifschneider, Herbert Eilert, Baltimore
 Rex, E. Galen, Reinersville, Ohio
 Rocco, Frank, Newark, N. J.
 Roseman, Ned, New York City

FRESHMAN CLASS

Adzima, Joseph Matthew, Bridgeport,
 Conn.
 Aptaker, Albert Jack, Brooklyn, N. Y.
 Armacost, Joshua Harper, Owings Mills
 Bankhead, John Marion, Lowrys, S. C.
 Basil, George Chester, Jr., Annapolis
 Belsky, Hyman, New York City, N. Y.
 Benesunes, Joseph George, Baltimore
 Bialostosky, Julius, Brooklyn, N. Y.
 Birnbaum, Joseph Osias, New York, N. Y.
 Gadden, John Francis, Jr., Keyser, W. Va.
 Carey, Thomas Nelson, Baltimore
 Castronovo, Joseph, Providence, Rhode
 Island
 Chase, William Wiley, Emmitsburg
 Christian, William, Nanticoke, Pa.
 Clemson, Earle Princeton, Baltimore
 Cohen, Bernard J., Baltimore
 Cohen, Morris Daniel, New Rochelle, N. Y.
 Custy, Edward Guilbert, Baltimore
 Davis, Henry Vincent, Berlin
 Derwin, James Francis, Waterbury, Conn.
 Donchi, Sol Marvin, Newark, N. J.
 Eliason, Howard William, Rowlesburg,
 W. Va.
 Feldman, Jacob, Bronx, N. Y.
 Foster, William Abram, Mapleton, Pa.
 Friedman, Meyer Henry, Trenton, N. J.
 Gamble, Francis Joseph, Waterbury, Conn.
 Gellar, Abraham, Brooklyn, N. Y.

Rosenberg, Albert Abraham, Wilkensburg,
 Pa.
 Rosenfeld, Max Harry, Baltimore
 Rosenstein, Jack, New York, N. Y.
 Rothberg, Abraham S., New York, N. Y.
 Sashin, David, New York City
 Sax, Benjamin J., Brooklyn, N. Y.
 Scheuker, Paul, Baltimore
 Schmukler, Jacob, Newark, N. J.
 Schneider, David, Baltimore
 Schuman, William, Baltimore
 Schwartz, Ralph Alfred, Newark, N. J.
 Shanklin, William Mathias, Fork
 Sherman, Elizabeth Bowman, Front Royal,
 Va.
 Spano, Frank, West New York, N. J.
 Taub, Samuel, New York, N. Y.
 Tayntor, Lewis Olds, Erie, Pa.
 Teitelbaum, Maurice L., Brooklyn, N. Y.
 Thompson, Thomas Payne, Forest Hill
 Tobias, Herbert Ramsay, Hancock
 Totterdale, William Grainger, Baltimore
 Trubek, Max, Carlstadt, N. J.
 Weinstein, Samuel, Freehold, N. J.
 Weiss, Louis Leo, New York, N. Y.
 Weseley, Louis J., Brooklyn, N. Y.
 Wolfe, Samuel B., Baltimore

Moran, John Edward, Manchester, N. H.
 Morris, Francis Kailer, Baltimore
 †Newman, Richard, Smithsburg
 Nussbaum, Samuel, Pine Hill, N. Y.
 Peake, Clarence William, Afex, Ky.
 Peltenkian, Panos S., Baltimore
 Phillips, John Roberts, Quantico
 Repasky, John, Byesville, Ohio
 Rich, Benjamin Sunderland, Catonsville
 Roetling, Carl Paul, Baltimore
 Ruiz, Emilio M., Arecibo, Porto Rico
 Rutter, Joseph Howard, Baltimore
 Saffell, James Glen, Reisterstown
 Schenker, Benjamin Nathan, Jersey City, N. J.
 Schmidt, George Henri, Baltimore
 Schnierer, Samuel Benjamin, Waterbury, Conn.
 Schwedel, John Bernard, Baltimore
 Singer, Jack Jerome, Baltimore
 Smith, Paul, Altoona, Pa.
 Sobkov, Samuel, Baltimore
 Sparta, Tony, Easton, Pa.
 Stacy, Theodore Edwin, Jr., Baltimore

Stonesifer, Charles Hiram, Westminster
 Susser, Max, Bayonne, N. J.
 Swank, James Levy, Elk Lick, Pa.
 Swartzwelder, Wallace Ray, Mercersburg, Pa.
 Teague, Francis Bailey, Martinsville, Va.
 Tenaglia, Eutimio Domenico, Providence, R. I.
 Tollin, Louis, Newark, N. J.
 Tumminello, Salvatore Anthony, Baltimore
 Upton, Hiram Eugene, Burlington, Vt.
 Voigt, Herman Albert, Baltimore
 Von Schulz, Augustine Paul, Baltimore
 Wack, Frederic Van D., Point Pleasant, N. J.
 Waesche, Frederick S., Sykesville
 Werner, Sidney Edwin, Baltimore
 White, Beulah May, Baltimore
 Whittington, Claude Thomas, Greensboro, N. C.
 Wilner, Joseph Walter, New York City, N. Y.
 Wohlreich, Joseph Jacob, Newark, N. J.
 Wollak, Theodore, Baltimore

SCHOOL FOR NURSES

SENIOR CLASS

Ruth Boyd, Street
 Helen Louise Dunn, Baltimore
 Dorothy Lucille Hazen, Union City, Pa.
 Hulda Famous Harkins, Street
 Lillie Ruth Hoke, Emmitsburg
 Mary Margaret Herrington, Meadeville, Pa.
 Kathryn Elizabeth Horst, Hagerstown
 Martha Marie Hoffman, Smithsburg
 Vilma Catherine Kish, Trenton, N. J.

Wilhelmina Neville McCann, Street
 Irene Agnes Maxwell, Owings Mills
 Ida Marie Nagel, Federalsburg
 Anna Elizabeth Pratt, Baltimore
 Marie E. Chalmers Schroeder, East New Market
 Margaret May Stailey, Liverpool, Pa.
 Helen Stedman Teeple, Baltimore
 Regina Medora West, Martinsburg, W. Va.
 Ruth Anna White, Federalsburg, Md.

The above students received their diplomas at the June commencement. They were obliged to return to the hospital, however, to finish some practical work.

SENIOR CLASS

Alexander, Edith L., Matthews, N. C.
 Appleton, Pauline V., Punxsutawney, Pa.
 Barnes, Miriam U., Nashville, N. C.
 Bell, Janet M., Waterbury, Conn.
 Bennett, Bertha P., Sharptown
 Bennett, Alice M., Baltimore
 Brude, Lucy A., Baltimore
 Callaway, Esther A., Bridgeville, Del.
 Compton, Pinkie Lee, Roncerverte, W. Va.
 Copenhagen, Elizabeth E., Bel Air

Davis, Marie M., Frostburg
 Davis, Ruth E., Federalsburg
 Fisher, Mary E., Cumberland
 Forrest, Lola R., Keymar
 Griffith, Myrtle, Princeton, Ind.
 Headley, Sarah P., Village, Va.
 Hoopes, Madeline, Baltimore
 Hughes, Claire, Baltimore
 Kraft, Dorothy C., Ellicott City
 McCormack, Margaret J., North Adams, Mass.

† Deceased.

Moore, Rachel, Cambridge
 Morgart, J. Helen, Rainsburg, Pa.
 Pope, Jane, Fayetteville, N. C.
 Putt, Bernice G., Saxton, Pa.
 Schaale, Bernice D., Baltimore
 Scott, Jane, Eckhart
 Shaffer, Mary C., Westminster
 Slez, Irene M., Millington

INTERMEDIATE CLASS

Barr, Alberta, Port Deposit
 Barnsley, Martha, Olney
 Cannon, Elizabeth, Seaford, Del.
 Coulter, Zelda, Newton, N. C.
 Croll, Mildred M., Federalsburg
 Fletcher, Grace, Winston-Salem, N. C.
 Frick, Esther E., Waynesboro, Pa.
 Forrest, A. Louise, Gettysburg, Pa.
 Garman, Helen M., Waynesboro, Pa.
 Hathcock, Mary A., Norwood, N. C.
 Haugh, Hazel C., Waynesboro, Pa.
 Kirtner, Mattie, Radford, Va.

JUNIOR CLASS

Allen, Naomi, Seaford, Del.
 Bond, Mildred A., Ashton
 Bouis, Dorothy M., Baltimore
 Caples, Virginia E., Baltimore
 Coates, Marian J., Elkridge
 Colbourne, Lillian E., East New Market
 Cunningham, Elizabeth E., Cambridge
 Eller, Maybelle R., Baltimore
 Fink, Margaret V., Berwyn
 Glover, Dorothy R., Hurlock
 Haughay, Jessie M., Street
 Hershey, Esther E., Gap, Pa.
 Hurlock, Edna M., Eastport
 Koogle, Imogean, Hagerstown
 Kotteck, Rose, Brooklyn, N. Y.

Spencer, Lenora F., Westminster
 Sponsler, Mary, Petersburg, Pa.
 Thomas, Kathryn A., East Mauch Chunk, Pa.
 Thompson, Icelene, Street
 Tillinghast, Robine H., Fayetteville, N. C.
 Wertz, Gladys A., Batesburg, S. C.
 Whitworth, Esther W., Elkton

Mitchell, Gladys, Gaithersburg
 Moore, Kate, Claxton, Ga.
 Nock, Myrtle, Pocomoke
 Rankin, Margaret, Norfolk, Va.
 Scarborough, Annie L., Delta, Pa.
 Scott, Mary, Baltimore
 Shatzer, Myrtle, Cumberland
 Shoemaker, Charlotte, Huntingdon, Pa.
 Stafford, Alyce, Connellsville, Pa.
 Wall, Laura, Nashville, N. C.
 Walter, Charlotte, Westminster
 Whitley, Estelle, Albemarle, N. C.

Mundy, Fannie M., Abbeville, S. C.
 Parks, Colgate C., Cockeysville
 Perkinson, Sadye H., Wise, N. C.
 Powell, Ethel S., Baltimore
 Powell, Marian E., Baltimore
 Sampson, Nettie, Pembroke, N. C.
 Scott, Elizabeth, Eckhart
 Shoemaker, Frances, Taneytown
 Sperber, Elsie V. M., Baltimore
 Sperber, Theodore H., Baltimore
 Shinn, Mille A., Long
 Shultz, Carol C., Anderson, Ind.
 Wetzell, Mary, Hanover, Pa.
 Wier, Mildred E., Cambridge
 Wright, Mary, Bridgeville, Del.

SCHOOL OF PHARMACY

THIRD-YEAR CLASS

Kelley, Guy Charlton, Salisbury
 Rockman, Morris, Baltimore

SECOND-YEAR CLASS

Archer, Theodore, White Hall
 Bettigole, Philip, Baltimore
 Bindok, Edward Joseph, Baltimore
 Blechman, Charles, Baltimore
 Block, Frank, Baltimore
 Calmen, Elmon Herman, Baltimore
 Carey, Alford Robus, Towson
 Cohn, Nathan, Baltimore
 Corrado, Ernest Michael, Atlantic City, N. J.
 Cowan, William C., Randallstown
 Davidov, Louis, Baltimore
 Fedder, Eli, Baltimore
 Finkelstein, David, Baltimore
 Fisher, Edward Hamilton, Catonsville
 Fisher, Michael Augustine, Swissvale, Pa.
 Gaver, Paul Glenn, Myersville
 Gerber, Minnie, Hagerstown
 Goldberg, Victor, Baltimore
 Goodman, Jerome Edward, Baltimore
 Greenberg, Harry, Baltimore
 Hantman, Harry H., Baltimore
 Hayes, William Bradford, Baltimore
 Henderson, Upshur Kerr, Bridgetown, Va.
 Higger, Samuel, Baltimore

Hirschowitz, Reuben J., Baltimore
 Hopkins, Josephine Edna, Brooklyn
 Jones, H. Alvan, Baltimore
 Kern, Joseph, Baltimore
 King, Melvin LeRoy, Westminster
 Kirson, Abraham, Baltimore
 Kolman, Minnie Frieda, Baltimore
 Kronthal, Jacob L., Baltimore
 Levin, Abraham, Baltimore
 Levin, Bernard, Baltimore
 Levin, Morton, Baltimore
 Little, Luther Emmanuel, Darlington
 McCormick, Arthur Felix, Chatsaugay,
 N. Y.
 McKay, William Kenney, Luray, Va.
 Marciniak, Edward Stanley, Perth Am-
 boy, N. J.
 Matthews, Vincent William, Baltimore
 Mears, Chase Kellam, Baltimore
 Mears, L. Kerns, Salisbury
 Meikle, John Donald, Baltimore
 Pelaez, Bringas Jose Manuel, Santiago de
 Cuba
 Parsons, Herman D., Ocean City
 Paulson, Aaron Ariel, Baltimore
 Pass, Victor Earl, Baltimore
 Pfeifer, Charles Edward, Baltimore
 Poltilove, George J., Baltimore
 Raap, Irvin Leonard, Baltimore

FIRST-YEAR CLASS

Alessi, Silvio Amadeo, Baltimore
 Anderson, Walter Anders, Baltimore
 Austraw, Henry Harrison, Dundalk
 Bare, Ray Spahr, New Cumberland
 Bassin, Harry Albert, Baltimore
 Batie, Albert Lester, Cumberland
 Beck, Jesse Philip, Smithsburg
 Bergner, Samuel William, Baltimore
 Binkley, Leavitt Hildebrand, Hagerstown
 Bongiorno, Henry, Passaic, N. J.
 Brager, Simon, Baltimore
 Budacz, Peter Thomas, Baltimore
 Cahn, Albert Myer, Baltimore
 Caplan, Howard Hyman, Baltimore
 Catlett, Ollie Edwin, Cumberland
 Caudy, Newton Brooks, Weston, W. Va.
 Cohen, Abraham Nathan, Baltimore
 Cooper, Nathan Norman, Baltimore
 Cwalina, Benjamin C., Baltimore
 David, Alphonse, Baltimore
 Davidson, Meyer, Baltimore
 Drukman, Herman Bernard, Baltimore
 Edelson, Aaron, Baltimore
 Fisher, Jr., Delphia Franklin, Baltimore
 Fivel, Harry, Norfolk, Va.
 Freed, Israel, Baltimore
 Friedman, Nathan Joseph, Baltimore
 Galbreath, C. Irwin, Baltimore

Reamer, Israel Thomas, Baltimore
 Robinson, Robert, Baltimore
 Rodman, Morris, Baltimore
 Rubin, Mortimer Meyer, Baltimore
 Rubinstein, Hyman Solomon, Baltimore
 Samuelson, Oscar, Baltimore
 Sanner, Richard Thomas, Westernport
 Scher, Michael, Ellicott City
 Schmidt, Charles John, Baltimore
 Schmidt, George Matthew, Baltimore
 Schoenfeld, Benjamin, Baltimore
 Schuster, John N., Raspeburg
 Shapiro, Henry, Baltimore
 Slama, Frank James, Baltimore
 Solomon, Simon Samuel, Baltimore
 Sothoron, Lewis Johnson, Jr., Catonsville
 Staley, Clifton Beall, Fallston
 Strawn, James Sanson, Connellsville
 Sussman, Hyman Jacob, Woodbine, N. J.
 Swiskowski, Frank Leonard, Baltimore
 Tenner, David, Baltimore
 Vidal, Manuel Jesus, Santiago de Cuba
 Voshell, Harvey Walls, Centreville
 Warfield, Harry Nelson, Baltimore
 Warrenfeltz, J. Frederick F., Funkstown
 Weiner, Sol, Baltimore
 Wilkerson, Albert Russell, Baltimore
 Wright, Edna Kirk, Baltimore

Gaspar, Alfredo Parra, Cuba
 Goldman, Abram, Baltimore
 Goran, Isadore, Baltimore
 Gordon, Solomon, Baltimore
 Greenberg, Abram Morton, Baltimore
 Harryman, Chauncey Brooks, Baltimore
 Hecker, David, Baltimore
 Hershner, John Franklin, Baltimore
 Horine, Randolph A., Westminster
 Householder, Edgar I., Martinsburg, W.
 Va.
 Jeppi, Samuel Patrick, Baltimore
 Kaminska, Janina Josephine, Baltimore
 Kasten, Karl Henry, Baltimore
 Katz, Herbert Alfred, Baltimore
 Kelly, Thomas James, Trenton, N. J.
 Kermisch, Albert, Baltimore
 Klein, Solomon Joseph, Baltimore
 Kling, Herman, Baltimore
 Kramer, Samuel Edward, Baltimore
 Kraus, Louis Henry, Baltimore
 Kroopnick, Godfrey David, Reisterstown
 Laroe, Frances, Somerville, N. J.
 Leonard, Helen Arville, Binghamton,
 N. Y.
 Levi, Ernest, Baltimore
 Levinson, Henry, Baltimore
 Levy, Edward Samuel, Baltimore

Levy, Morris Zachray, Baltimore
 Lipsky, Irvin, Baltimore
 Liker, George Peabody, Leonardtown
 McCall, George Benjamin, Baltimore
 McComas, James Ross, Baltimore
 Martz, Ernest William, Herndon, Va.
 Mercer, Victor Grove, Frederick
 Meyers, Louis Lear, Baltimore
 Neumann, Joseph James, Overlea
 Noveck, Nathan, Baltimore
 Palmer, Mathias, Baltimore
 Parker, Allan I., Frostburg
 Pickett, Benjamin F. P., Baltimore
 Pomeroy, Robert Edward, Weston, W. Va.
 Price, Carroll Franklin, Glen Rock, Pa.
 Raichlen, Samuel Isreal, Baltimore
 Ralston, Minter Bailey, Weston, W. Va.
 Rawe, Charles Edward, New Martinsville,
 W. Va.
 Richards, William Kantner, Pikesville
 Salfner, John Roscoe, Baltimore
 Sappe, Milton John, Woodlawn
 Savage, Robert, Baltimore

SPECIAL STUDENTS

Caldwell, Gerald Ellison, Baltimore
 Coblentz, Horace Winifield, Washington,
 D. C.
 Coblentz, Loyd Phillip, Washington, D. C.

Schmitz, Henry Dorsey, Annapolis
 Schnabel, William Thomas, Baltimore
 Schochet, Paul, Port Deposit
 Serpick, Jacob, Baltimore
 Serra, Lawrence Mario, Baltimore
 Shapiro, Max, Baltimore
 Shulman, Emanuel Veritus, Baltimore
 Smith, Bernard Thomas, Frederick
 Smith, Francis E., Clarksburg, W. Va.
 Smith, Rudolph M. J., Annapolis
 Smulovitz, Isidore, Baltimore
 Smulson, Milton Maurice, Hagerstown
 Snyder, Nathan, Baltimore
 Snyder, Paul J., Boonsboro
 Storch, Arthur, Baltimore
 Stewart, Edward Gilbert, Harbeson, Del
 Taylor, Thomas Leroy, Baltimore
 Topchik, Irving, Passaic, N. J.
 Tutz, Hammond M., Northfork, W. Va.
 Vogel, George William, Baltimore
 Waterman, Richard Henry, Baltimore
 Webster, Samuel Earl, Cambridge
 Wickham, John James, Baltimore

THE SUMMER SCHOOL—1923

Abbott, Lilia C., Lonaconing
 Adams, Lida C., Trappe
 Adkins, Chas. S., Newark
 Albrittain, Mary, La Plata
 Alderman, F. Ruth, Washington, D. C.
 Aldridge, W. D. K., Centreville
 *Allen, Kenneth, Brandywine
 Andrews, Virginia L., Cumberland
 Ashton, Mary M., Clarksburg
 Atalla, Georges G., Cairo, Egypt
 Atwater, Mary J., Front Royal, Va.
 Baden, Annie M. H., Townshend
 Baden, Edna L., Baden
 Baden, Elizabeth L., Baden
 Baker, Alma G., Hillsboro
 Baker, Elesta, Frostburg
 *Banfield, Frank W., Takoma Park, D. C.
 Bannatym, Katharine, Eckhart
 Barnes, Gertrude M., New Market
 Barnhill, Theresa M., Cumberland
 Barnsley, Effie G., Rockville
 Barrager, Evelyn M., Oldtown
 Bartlett, Edith V., Cumberland
 Bartlett, Reta V., Cumberland
 Baxter, Naomi B., Chestertown
 Beall, Clarkson J., College Park
 Beall, Susie C., Beltsville

Beauchamp, John H., Pocomoke City
 Beaumont, Dorothy, Ridgely
 *Bennett, Benjamin H., Falls Church, Va.
 *Berry, Peter G., Thoroughfare, Va.
 Beyer, Elsie, Baltimore
 Biddinger, Virginia L., New Midway
 Black, Margaret H., Cecilton
 Bland, Harriet W., Sparks
 Blank, Clara C., Eckhart Mines
 Bloom, Louise M., Ellicott City
 *Boender, John A., Laurel
 *Bollinger, Peary R., Reisterstown
 Bolton, Alice, White Plains
 Boone, Lydia I., Mt. Airy
 Booth, Rebecca A., Washington, D. C.
 Bostwick, Mary C., Abell
 Bowen, Cora R., Chevy Chase
 Bowie, Jane R., Washington, D. C.
 Boyle, Elizabeth G., Baltimore
 Bradley, Harriet, Frostburg
 *Bragg, John H., Riverdale
 Brain, Earl F., Midlothian
 Brakeall, Janet E., Hancock
 Branner, Ruth, Centreville
 Branson, J. M., Mt. Rainier
 Bray, Nona D., Hyattsville
 Bready, Arthur C., Rockville

Breakall, Mary E., Hancock
 Brewer, Virginia W., College Park
 Brightman, Carl G., Baltimore
 Briscoe, Mary H., Cordova
 Bromley, Walter D., Pocomoke
 *Brown, B. L., Washington, D. C.
 Brown, Miriam, Centreville
 Bruehl, John T., Centreville
 Brust, Huldah, Frederick
 Burke, Mabel C., Cumberland
 Burkholder, Mary R., Westminster
 Caldwell, John H., St. Michaels
 *Callis, Cecil R., Washington, D. C.
 Caltrider, Samuel P., Westminster
 Canter, Grace M., Hughesville
 Carpenter, Zeldia N., Indian Head
 *Carter, John H., Washington, D. C.
 Chambers, Angela W., Lusby
 Chandler, Miriam T., Nanjemoy
 *Chassagne, Leo J., Raspeburg
 *Cherry, Joseph C., Berwyn
 Chiswell, Eloise, Dickerson
 *Church, Carey F., St. Johns Park, Fla.
 Clarke, Glen M., Clarksville
 Clapper, Naomi I., Keedysville
 Coe, Grace, Berlin
 *Collins, George T., Rosslyn, Va.
 Collins, Lurah D., Berlin
 Condiff, Margaret M., Solomons
 Connick, Edna M., Baden
 Connor, Bertha E., Cumberland
 Cook, Elizabeth M., Frostburg
 Cooksey, Madoline V., La Plata
 Coombs, Rose M., Drayden
 Copeland, Phyllis P., Cumberland
 Copenhauer, Myrtle V., Bel Air
 Corby, Bertha M., Williamsport
 Cottrill, Frances M., Williamsport
 Crew, Mrs. Achsah V., Kennedyville
 Crew, Edith H., Worton
 Cross, Janie A., Westwood
 Crossan, Florence G., Washington
 Crothers, John L., North East
 *Crotty, Leo A., Utica, N. Y.
 *Crozier, Henry T., Ballston, Va.
 Davis, Frank R., Darlington
 Davis, Hazel K., Cumberland
 Davis, Maybelle C., Pocomoke
 *Dawson, James H., Ballston, Va.
 Day, Elizabeth, Rocks
 Day, Frank, Hyattsville
 *Dennis, Gen. E. G., College Park
 Dent, Frances Joseph, Oakley
 Detwiler, Mary L., Ridgely
 *DeVol, Helen M., Washington, D. C.
 *DeWitt, Ellis F., College Park
 Dickey, Mrs. Gladys S., Port Tobacco
 Dixon, Mary A., Laurel Grove

*Dobbins, Wm. E., Laurel
 Dorsey, Anna H. E., Ellicott City
 Dorsey, Ethel A., Beltsville
 Dryden, Emily K., Snow Hill
 Dryden, George E., Snow Hill
 Dudrow, Helen, Walkersville
 *Duke, John W., Benson
 Dunham, Harman W., Woodlawn
 Earnest, Lillian O., Mt. Rainier
 Edelen, Gladys M., Bryantown
 Edmonstone, Margaret O., Laurel
 Edwards, Harriet K., Washington, D. C.
 Elder, James W., Cumberland
 Eutsler, Kerner W., Pocomoke City
 Everline, Pearl, Corringanville
 Fatkin, William G., Luke
 *Ferguson, Walter M., Berwyn
 Ferrell, Marion F., College Park
 *Fiorini, Michael, Ironsides
 *Fisher, Charles E., Blacksburg, Va.
 Fisher, Elizabeth N., Greenock
 Fisher, John W., Cumberland
 Flanagan, Sherman E., Walkersville
 Flanagan, Virginia M., McKeesport, Pa.
 *Fletcher, John C., Bluemont, Va.
 *Fletcher, Raymond M., La Plata
 Ford, Blanche C., Elkton
 *Foster, Paul P., Berwyn
 France, Mazie A., Hagerstown
 Frank, Paul S., College Park
 Frere, Frances M., Tompkinsville
 Gaither, Marguerite E., Union Bridge
 Gallahan, Jessie M., Brandywine
 *Garrett, Wm. N., Ballston, Va.
 Gartrell, Virginia, Brookeville
 Garver, Kathryn M., Hagerstown
 Getty, Angela D., Grantsville
 Gibson, Robert L., Washington, D. C.
 Giffen, Sallie L., Cumberland
 Gingell, Helen V., Beltsville
 Goldsmith, Caroline O., Waldorf
 Grabenstein, Mary E., Cumberland
 *Graham, George, College Park
 *Graves, Harvey C., Berwyn
 Gray, Effie J., Riverside
 Gray, Sadie L., Riverside
 Green, Mary E., Boyds
 Green, Marion K., Frederick
 Greenwell, James C., Leonardtown
 *Greifzu, John, Baltimore
 Griffith, Della M., Hurlock
 Griffith, Mary I., Forestville
 Grimes, Maye E., Woodbine
 *Grosskurth, Wm. F., Washington, D. C.
 *Grove, Claude M., Kernstown, Va.
 Groves, John, College Park
 *Guilday, Michael, Baltimore
 Guyther, Claudia V., Valley Lee

*Hancock, Hugh, Huddleston, Va.
 Hanna (Miss) Wm. D., Westernport
 Hardy, Catherine I., Branchville
 Harlan, Paul B., Churchville
 *Harnsberger, John H., Warrenton, Va.
 *Harper, Floyd H., College Park
 Harris, S. Fenton, Frederick
 Harrison, Dora, Charlotte Hall
 Harron, Nannie L., Odenton
 Hauver, William E., Myersville
 Havener, Katharine E., Hyattsville
 Hayden, Beatrice, Pope's Creek
 *Hearold, John W., Miskimon, Va.
 *Heath, Frank M., Silver Springs
 Henckel, Martha R., Frostburg
 Hendley, Elizabeth, Frostburg
 *Hevessy, Michael, Gloucester Point, Va.
 *Hicks, Harry W., Kernstown, Va.
 Higgins, Temperance, Gambrills
 Hildebrand, Maud E., Hagerstown
 Hill, Elsie M., Cumberland
 Hipple, Benton G., Marietta, Pa.
 *Hiser, Bernard T., Washington, D. C.
 Hitzelberger, Theresa L., Libertytown
 *Hohman, Charles W., West, W. Va.
 Holsinger, Lillian L., Mt. Savage
 *Horak, Anton, Silver Springs
 Horine, Alvey, Myersville
 *Hottel, John T., Bealeton, Va.
 Howard, Donnell J., Brookeville
 Howland, Lionel B., Upper Marlboro
 Hughes, (Mrs.) Helen C., Benedict
 Hummer, Ivy R., Walkersville
 Hunt, Viola M., Lonaconing
 James, Jennie P., Mt. Rainier
 Jamison, Louise E., Cumberland
 *Jeffries, Mark P., Brandywine
 Jewell, Edgar G., Poolesville
 *Johnson, Leo C., East Falls Church, Va.
 Jones, Courtney B., Boyds
 Jones, Ethel C., Snow Hill.
 Jones, (Mrs.) Isabel B., Brinklow
 Jones, Leon H., Church Creek
 Jones, Mary C., Church Creek
 *Jones, Paxton C., Shepherdstown, W. Va.
 Jones, Virginia A., Brunswick
 Jones, William M., Chestertown
 Kaylor, Margaret, Sharpsburg
 Kefauver, J. Orville, Mt. Savage
 Kefauver, (Mrs.) Mary I., Mt. Savage
 Keister, Monroe F., Midlothian
 Kelly, Grace (Mrs.) Biltmore, N. C.
 Kelly, Lulu R., Hobbs
 Kennedy, John F., Frostburg
 Kershaw, Mary B., Washington, D. C.
 Kimberlin (Mrs.) Nette, Glenwood
 Klein, Ethel L., LeGore
 Knox, Lucy, College Park

Krabill, Verlin C., Burkettsville
 Kupjian, Gabriel, Brooklyn, N. Y.
 Kupjian, Haig, Takoma Park
 Kupjian (Mrs.) Haig, Takoma Park
 Kwick, Pock Heng, College Park
 *Langenfeldt, Marie, Hyattsville
 Langham, Mary E., Seat Pleasant
 Larmore, Lloyd L., Hurlock
 Layman, Rhudove M., Thurmont
 Leaman, Katheryn, Washington, D. C.
 Leatherman, Charles L., Smithsburg
 Leatherman, Marshall H., Myersville
 Lescure, John M., Harrisburg, Pa.
 Leshar, Dean S., Williamsport
 Lewis, Ada, Cumberland
 Lewis, Cestelle M., Glenndale
 Lightburn, Catherine H., Hyattsville
 *Lincoln, Leonard B., Takoma Park
 *Llewellyn, Carrington P., Dunn-Loring, Va.
 Long, Lillian H., Cumberland
 *Long, Ludwell S., Washington, D. C.
 Lovell, Mary H., Mt. Rainier
 *Lowman, Clarence A., Funkstown
 *Ludlum, Samuel L., Chevy Chase
 Mann, Marie L., Baltimore
 Manning, Maud, Accokeek
 Manning, Roger I., Accokeek
 Marker, Russell E., Hagerstown
 Marshall, Edna M., Easton
 Massenburg, James S., Louisburg, N. C.
 Massicot, Marie M., Columbus, Ga.
 Matthews, Joseph P., Washington, D. C.
 Mattingly, Anna E., Leonardtown
 Matzen, Antoinette S., Berwyn
 Mayers, John J., Havre de Grace
 Mayhew, Ruth M., Upper Marlboro
 McBride, Henry E., Brunswick
 McBride, Mabel E., Brunswick
 *McCarthy, Harry L., Brookville
 McCoy, Maud V., Beltsville
 *McGarvey, John, Baltimore
 McGeady, Loretto, Cumberland
 McGinn, Agnes M., Lonaconing
 McGregor, Ellen E., Upper Marlboro
 *McLain, Charles L., Accotink, Va.
 McLuckie, Dora B., Barton
 Melvin, Mildred C., Kennedyville
 *Mess, George B., Laurel
 Messick, Linda J., Allen
 Michael, Madge, Washington, D. C.
 Miller, Effie M., Beltsville
 Miller, Ruth, Parkton
 *Mitchell, William E., Washington, D. C.
 *Moffitt, William J., Beltsville
 Molesworth, Mary T., Ijamsville
 Moore, Addie M., Annacostia, D. C.
 Morningstar, Mary A., Gaithersburg

Morris, Frances B., Chestertown
 Morris, K. James, Hyattsville
 Morris, Violet E., Centreville
 *Mortimer, Walter S., Neavitt
 Morton, McKinley C., Clearspring
 Mudd, Lucile A., Waldorf
 Mullen, Beulah O., Washington, D. C.
 Neild, Hester A., Taylor's Island
 Newcomer, Alice R., Hagerstown
 Nicol, Victorine G., Manassas, Va.
 Noble, Ruth P., Denton
 *Norris, Elmer A., College Park
 O'Donnell, Mary W., Mountain Lake
 Park
 Ogle, Evelyn, Croome
 Ohler, Mary R., Taneytown
 Oldenburg, Lester W., Hyattsville
 *Ollerenshaw, James J., Washington, D. C.
 *O'Rourke, James H., Lorton, Va.
 *Oswald, Louis H., Ballston, Va.
 Owens, Lenora, Greenock
 Palmer, Mary S., Myersville
 Parks, John, Frostburg
 *Parlett, William A., College Park
 Parran, Elizabeth, St. Leonard
 Parrott, Blanche, South River
 Partlow, Frances W., Easton
 Pearce, Elisabeth A., National
 Perdue, Dorothy, Salisbury
 *Persinger, Harry B., Berwyn
 Peters, Edna I., Westernport
 Phelps, Sara L., Solley
 *Pierce, John R., Congress Heights, D. C.
 *Poole, Harry C., Laurel
 *Poppen, Alvin W., Toluca, Va.
 *Porter, Ward W., Clifton, Va.
 *Potter, Albert R., Windy Hill
 *Pullen, Jesse P., Saluda, Va.
 Purnell, Nannie, Berlin, Md.
 Ranck, Devona G., Cumberland
 *Rayle, Edward C., Washington, D. C.
 Readmond, Mary W., Hollywood
 *Reed, Emmons H., Denton
 Rees, Priscilla, Forest Hill
 Reeves, Gertrude V., Hagerstown
 Reynolds, Louise C., Powhatan, Va.
 Rice, Alice W., Hyattsville
 Rice, Mary A., Germantown
 *Richards, Felix W., Accotink, Va.
 *Richards, Philip W., White Plains
 Rieck, Elsa L., Preston
 Riley, Mary E., Catonsville
 Rison, Grace, Rison
 Rison, Jessie F., Rison
 *Ritter, Floyd, Middletown, Va.
 Roberts, Leota H., Frederick
 Rogers, Annabell, Hyattsville
 Rymer, Agnes W., Hyattsville
 Sasser, Nell B., Croome Station

Schlaer, Regina M., Bowie
 *Schmedegaard, George F., Laurel
 Schutt, Cecil A., Takoma Park
 Schwartz, Edna F., Baltimore
 Schwien, Erna A., Townshend
 Scott, Dolores, Eckhart Mines
 Sears, Gustavus W., Clinton
 *Senne, Henry L., Accotink, Va.
 Shanholtz, Mary Sue, Glen Echo
 Shenk, B. Myrtle, Delta, Pa.
 Shenk, Pearl E., Delta, Pa.
 *Shoemaker, Charles, Bethesda
 Shoemaker, Henry R., Middletown
 Shockley, Wm. Jennings, Pittsville
 Short, Mildred B., Washington, D. C.
 Simons, Katherine M., Frostburg
 *Simpich, Ira M., Landover
 Sites, George A., Clear Spring
 Skelley, Mary F., Oldtown
 Skidmore, Sara E., Frostburg
 Sleasman, Arthur R., Smithsburg
 Smith, Alberta, Easton
 Smith, Elsie M., Myersville
 Smith, Grace S., Mt. Rainier
 Smith, Kathleen M., Cambridge
 Smith, Mame, Ridgely
 Smith, Nellie V., Flintstone
 Somers, Milton M., Crisfield
 Soper, Elsie M., Beltsville
 Sparks, Bertie M., Henderson
 *Sprinkle, Paul C., Washington, D. C.
 Spurrier, Catharine G., Brookeville
 *Stanley, Edward A., College Park
 Stansbury, Mary H., Hampstead
 Stanton, Ellen G., Oakland
 Stapleton, Margaret M., Cumberland
 Starkey, Edgar B., College Park
 Stell, Eleanor L., Hagerstown
 Stein, Joseph M., Camden, N. J.
 Stevenson, Edith L., Pocomoke City
 *Stewart, Anne S., Rustburg, Va.
 Stewart, Dorothy F., Berwyn
 Stewart, Harry A., Rustburg, Va.
 Stone, Helen N., Billingsley
 Stone, Michael S., Port Tobacco
 Stout, Robert W., Poolesville
 *Strathman, George F., Berwyn
 Strong, Talmage A. R., Chestertown
 Stull, Robert B., Frederick
 Sturgis, Hontas M., Hyattsville
 Swank, James L., Elk Lick, Pa.
 Swenk, Elizabeth R., Washington, D. C.
 *Tait, George S., Fairfax, Va.
 Tan, Felix H., College Park
 Tan, Joseph H., Fukian, China
 *Tarbell, William E., Berwyn
 *Taylor, Letha E., Wilmington, N. C.
 Tayman, Myrtle M., Brandywine
 Temple, Martha G., Riverdale

Tenney, Edward M., Hagerstown
 Thomas, (Mrs.) Effie B., Frostburg
 Thomas, Margaret, Barton
 Thompson, Bertina, Riverdale
 *Thompson, Franklin H., Patapsco Station
 Thompson, Kathryn L., Brownsville
 Thompson, Ruth A., Washington, D. C.
 Tongue, S. J. Coster
 *Trower, Hugh C., Washington, D. C.
 Twigg, Margaret M., Oldtown
 Underwood, Ann, Washington, D. C.
 Vansant, Susan A., Massey
 Vivanco, Carlos D., Washington, D. C.
 Wackerman, Rebecca V., Washington,
 D. C.
 *Walker, Francis M., Washington, D. C.
 Ward, Hugh W., Owings
 *Wardles, Wm. I., Washington, D. C.
 Warren, Minnie, Snow Hill
 Watkins, Francis W., Silver Spring
 Watson, Catherine, Chestertown
 Watson, Sara O., Chestertown
 Welch, Mary M., Ridge
 Wheatley, Vivian, Rhodesdale
 White, Arthur P., Pittsville
 White, Beulah I., Lonaconing

White, Charles E., College Park
 *White, George A., Berwyn
 White, Marie E., Cumberland
 *Whiteford, Michael W., Whiteford
 Wick, George A., Washington, D. C.
 Wickard, Harold C., Cumberland
 Wiley, Benjamin H., Reisterstown
 Wilhelm, Charles P., Baltimore
 Wilkins, Jessie E., Rock Hall
 Williams, Archibelle (Mrs.) Gaithersburg
 Williams, Estelle Davis, Frostburg
 Williams, Gladys V., Poolesville
 Willis, Benjamin C., Easton
 *Wilson, Aseal S., Baldwin
 Wilson, Ida B., Pocomoke
 Winkjer, Thelma H., Washington, D. C.
 Wise, Gertrude M., Hollywood
 Wolfe, Elmer A., Union Bridge
 *Woodward, Amos R., Woodbine
 *Worthington, Leland G., Hagerstown
 Yates, Susie R., Compton
 Young, Sallie P., Frederick
 Zeller (Mrs.) Grace A., Riverdale
 Zepp, Gladys S., Taneytown
 Zepp, Vesta E., Taneytown

COLLEGE OF COMMERCE AND BUSINESS ADMINISTRATION

REGULAR STUDENTS

Wylie K. Bell, Baltimore
 Earl Philip Darsch, Baltimore
 Leon F. Goodwin, Waterville, Maine
 Arthur W. Gray, Baltimore
 Oswald A. Greager, Baltimore
 William Reese Gwynne, Baltimore
 Christian Holmslykke, Baltimore
 Howall Atwater King, Baltimore
 Homer C. Layman, Baltimore
 Robert S. Liles, Wendell, N. C.

Herbert McClyment, Baltimore
 M. A. Robinson, Baltimore
 Russell C. Robinson, Baltimore
 Benjamin H. Schooler, Catonsville
 Arthur Smith, Baltimore
 Robert E. Lee Stunz, Lansdowne
 Joseph L. Sullivan, Baltimore
 L. G. Thomas, Baltimore
 Porter T. White, Westernport
 Francis DePaul Whitehurst, Baltimore

UNCLASSIFIED STUDENTS

C. Owen Andrew, Baltimore
 Henry Jewell Bready, Baltimore
 John G. Callan, Baltimore
 John E. Carroll, Baltimore
 Mary C. Casey, Baltimore
 Vernon J. Congleton, Baltimore
 W. Hamilton Gemmill, Baltimore
 Herman J. Gerber, Baltimore
 Raymond M. Glacken, Baltimore
 Jefferson C. Grinnalds, Baltimore
 Gertrude Harris, Baltimore
 Lloyd C. Knabe, Baltimore
 Leo Kriegel, Baltimore

David Kuperman, Baltimore
 Anna R. Laubheimer, Baltimore
 Ernest F. Morris, Baltimore
 Francis P. O'Brien, Baltimore
 T. Stephen Oursler, Baltimore
 Marie W. Presstman, Baltimore
 Wilbur J. Preston, Baltimore
 Charles H. Redman, Baltimore
 Mrs. Emma O. Sharp, Baltimore
 Jerry L. Smith, Baltimore
 David H. Tieman, Baltimore
 L. C. White, Baltimore
 Cornelia Zies, Baltimore

SUMMARY OF STUDENT ENROLLMENT AS OF MARCH 1, 1924

College of Agriculture.....	291
College of Arts and Sciences.....	301
College of Commerce and Business Administration.....	547
School of Dentistry.....	486
College of Education.....	287
College of Engineering.....	198
Graduate School.....	77
College of Home Economics.....	28
School of Law.....	552
School of Medicine.....	340
School for Nurses.....	117
School of Pharmacy.....	188
Summer School, 1923.....	452
<hr/>	
Total	3864
Duplications	135
<hr/>	
Net Total	3729

GENERAL INDEX

Administration, 10, 33, 42
building, 24
committees, 9
council, 10
officers of, 11
Administrative officers, 11.
procedure, 45
Admission, 36
certificate, by, 37
elective subjects, 37
examination, by, 38
to advanced standing, 40
transfer, by, 39
units, number required, 37
Advanced bacteriology, 147
Agents, county, 18, 19
Agricultural building, 23
chemistry, 74, 152
county agents, 18, 19
economics, 57, 141, 142
education, 51, 164, 165
engineering, 50, 142, 143
experiment station, 35, 36, 48
experiment station staff, 16, 17
eastern branch, 36
extension, 34
extension staff, 17, 18
Agriculture, College of, 47, 140
and home economics, 34
Agronomy, 50, 143
Algebra, advanced, 105
Alpha Zeta, 31
Alumni association, 30
Analytical chemistry, 149
Animal husbandry, 51, 144, 145, 146
Aquiculture, zoology and, 204, 205
Arts and Sciences, College of, 65, 140, 141
Astronomy, 146
Athletics, 29
Bacteriology, 52, 146, 147
Bee culture, entomology and, 55, 176
Biochemistry, 195
Board of Regents, 9
Botany, 147, 148
Buildings, 25, 26, 27
Calendar, University, 5, 6, 7, 8
Calvert Hall, 25
Certificates, two-year, 41
Chemical Building, 25
society, 30
Chemistry, department of, 70, ff
Chorus, 78
Civil Engineering, 103, 166, 167
Clubs, 30, 31, 32
College of Agriculture, 47
department of, 47
general curriculum for, 49
College of Arts and Sciences, 65, 140, 141
College of Education, 90, 141
agricultural, 94, 164, 165
arts and science, 93, 163, 164
history and principles of, 161
home economics, 95, 165
industrial, 96, 165, 166
summer school, 34, 138, 139
teachers' special diplomas, 90
College of Engineering, 98, 141
curricula, 102 ff
College of Home Economics, 111, ff. 141
Commerce and Business Administration,
81
Committees, 9
Comparative Literature, 155
Council of Administration, 10
County demonstration agents, 18
Courses of Instruction, 140, 141
Clubs, 30
Dairy husbandry, 53, 156, 157, 158
Debating and oratory, 29
Degrees, 40
Dentistry, School of, 86
Department of Military Science and Tactics,
125, 190
of physical education, 137
Diamondback, 32
Dining Hall, 27
Diplomas, 40
Doctor of Philosophy, 109
Domestic science, 111
Dormitories, new, 23
Drafting, 169
Dramatic Club, 30
Eastern Branch, 36
Economics, 158
agricultural, 57, 141, 142
club, 31
Education, College of, 90, ff. 141
Electrical engineering, 104, 167, 168

Engineering, College of, 98, 141
 building, 25
 Civil, 103, 166, 167
 degrees, 99
 drafting, 169
 general, 169
 mechanical, 105, 171, 172
 mechanics, 170, 171
 shop, 172
 Society, 32
 surveying, 172
 English, 173 ff
 Entomology, 55, 176
 Examination, 45
 Expenses, fees and, 41, 42, 43
 Baltimore schools, 44
 special, 42
 Experiment Station, Agricultural, 26, 34,
 35, 36
 Extension Service, 34
 and research, 34
 staff, 17, 18
 Faculty, 12, 13, 14, 15, 16
 committees, 20
 Farm forestry, 56, 177
 Farm Management, 57, 178
 Fees and expenses, 41
 Fellowships, 28, 49
 Floriculture, 61, 184
 Foods and nutrition, 111, 180
 Forestry, 56, 177
 Fraternities and sororities, 30
 French, 178
 General agriculture, curriculum for, 59
 General chemistry, 148
 General engineering, 169
 General horticultural courses, 186
 General information, 21
 Genetics, 178
 Geology, 178
 German, 179
 Gerneaux Hall, 27
 Glee club, 78
 Grading system, 45
 Graduate School, The, 106
 council, 11
 fees, 42
 Grange, Student, 31
 Graduation and degrees, 40
 Greek, 179
 High school scholarships, 28
 History, 179, 180
 Home Economics, College of, 111, 141, 180
 Home and Institutional Management, 181
 education, 165
 Honor and awards, 28
 Honor system, 46

Horticultural building, 26
 Horticulture, 59, 182, ff
 Hospital, Baltimore, 25
 College Park, 26
 Income, 36
 Industrial Chemistry, 73, 152 ff.
 education, 165
 scholarships, 28, 29
 Infirmary, 26
 Instruction, officers of, 12, 13, 14, 15, 16
 Kappa Alpha, 30
 Keystone club, 32
 Landscape gardening, 185
 Languages and literature, 173 ff.
 Late registration fee, 42
 Latin, 188
 Law, School of, 116
 Le Cercle Francais, 32
 Library, 27
 science, 79, 188, 189
 Literature, English language and, 173 ff.
 Literary societies, 30
 Location of the University, 23
 Master of Arts, 108
 of Science, 109
 Mathematics, 189
 Mechanical Engineering, 171, 172
 Mechanics, 170, 171
 Medals and prizes, 28, 29
 Medicine, School of, 119
 Methods in Arts and Science subjects, 163
 Military Science and physical education, 79
 Military science and tactics, department of,
 125, 190, 191
 band, 78
 medal, 29
 Morrill Hall, 25
 Music, 77, 192
 New Mercer Literary Society, 30
 Nursing, School of, 128
 Nu Sigma Omicron, 30
 Officers, administrative, 11
 of instruction, 12, 13, 14, 15, 16
 Olericulture, 60
 Oratory, 26
 Organic chemistry, 150
 Organization, University, 30, 31, 32
 Pharmacy, School of, 133
 Phi Kappa Phi, 31
 Philosophy, 192
 Phi Mu, 32
 Physical education and recreation depart-
 ment of, 137
 Physical examination, 45
 training, 45
 Physiology, 198
 Physics, 192

Piano, 79
 Plant physiology, 194
 Political Science, 196
 Pomology, 60, 182
 Poultry building, 26
 husbandry, 62, 63, 197, 198
 Practice House, 27
 Pre-medical course two-years, curriculum,
 74, 75
 Prize, citizenship, 29
 Public speaking, 198
 Refunds, 43
 Register of students, 206
 Registration, date of, 45
 penalty for late, 45
 Research, extension and, 34
 Reserve Officers' Training Corps, 125
 Rifle Club, 32
 Rossbourg Club, 32
 Sanitary engineering, hydraulic and, 98
 Scholarship and self-aid, 28
 industrial, 28
 School of Dentistry, 86
 School of Law, 116
 School of Medicine, 119
 School of Nursing, 128
 School of Pharmacy, 133
 Self-aid, scholarships, and, 28
 Short course in agriculture, 64
 Sigma Nu, 30
 Sigma Phi Sigma, 30
 Societies, 200
 Sociology, 200
 Soils, 63, 202, 203
 Sororities, 30
 Spanish, 203
 Staff, Experiment Station, 16, 17
 Extension Service, 17, 18
 Station, Agricultural Experiment, 35, 48
 Student assembly, 30, 46
 Grange, 31
 organizations and activities, 30, 31, 32
 publications, 32
 Summer camps, 126
 Summer school, 34, 138, 139
 Surveying, 172
 Terra Mariae, 32
 Textiles and Clothing, 182
 Tractors and automobiles, 142
 Trigonometry, 189
 Tuition, 41
 Unclassified students, 40
 Uniforms, 126
 University council, 10
 Vegetable crops, 183
 Veterinary medicine, 64, 204
 Voice, 78
 Withdrawals, 43
 Water supply, 27
 Women's home economics practice house, 27
 Zoology, 204.

PRESS OF
KOHN & POLLOCK, INC.
BALTIMORE

PRESS OF
KOHN & POLLOCK, INC
BALTIMORE

**Any further information desired concerning the University
of Maryland will be furnished upon application to DR.
ALBERT F. WOODS, President, College Park, Md.**

