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MARYLAND
PUBLICATION

Volume 8

March 5, 1956

Number 25

The

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**SUMMER
SESSION
1956**

UNIVERSITY OF MARYLAND,
COLLEGE PARK, MARYLAND



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IMPORTANT

THE PROVISIONS of this publication are not to be regarded as an irrevocable contract between the student and the University of Maryland. The University reserves the right to change any provision or requirement at any time within the student's term of residence. The University further reserves the right at any time, to ask a student to withdraw when it considers such action to be in the best interests of the University.

GENERAL INFORMATION

For information in reference to the University grounds, buildings, equipment, library facilities, requirements in American Civilization, definition of resident and non-resident, regulation of studies, degrees and certificates, transcripts of records, student health and welfare, living arrangements in the dormitories, off-campus housing, meals, University Counseling Service, scholarships and student aid, athletics and recreation, student government, honors and awards, religious denominational clubs, fraternities, societies and special clubs, the University band, student publications, University Post Office and Supply Store, write to the Director of Publications for the General Information issue of the Catalog.

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Volume 8

March 5, 1956

Number 25

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BOARD OF REGENTS

AND

MARYLAND STATE BOARD OF AGRICULTURE

	<i>Term Expires</i>
WILLIAM P. COLE, JR., Chairman, 100 West University Parkway, Baltimore...	1958
MRS. JOHN L. WHITEHURST, Vice-Chairman, 4101 Greenway, Baltimore.....	1956
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EDWARD F. HOLTER, Middletown	1959
ENOS S. STOCKBRIDGE, 10 Light Street, Baltimore.....	1960
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C. EWING TUTTLE, 1114 St. Paul Street, Baltimore.....	1962
THOMAS B. SYMONS, 7410 Columbia Avenue, College Park.....	1963

Members of the Board are appointed by the Governor of the State for terms of nine years each, beginning the first Monday in June.

The President of the University of Maryland is, by law, Executive Officer of the Board.

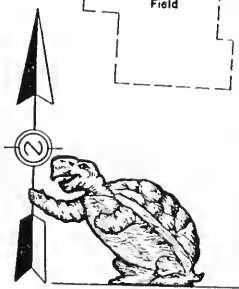
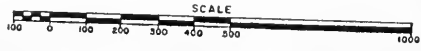
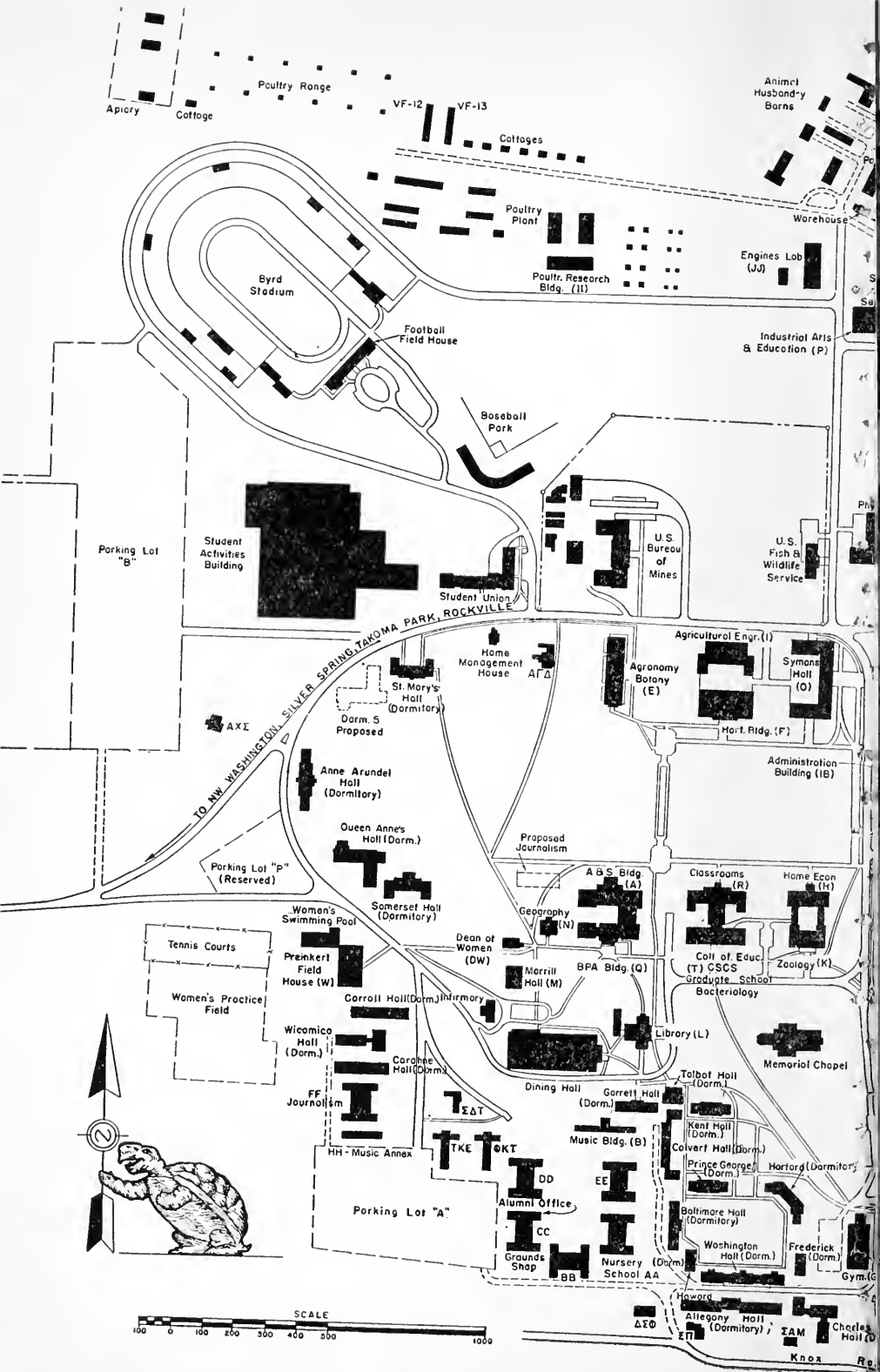
The State law provides that the Board of Regents of the University of Maryland shall constitute the Maryland State Board of Agriculture.

A regular meeting of the Board is held the last Friday in each month, **except** during the months of July and August.

OFFICERS OF THE ADMINISTRATION

- WILSON H. ELKINS, President, University of Maryland.
B.A., University of Texas, 1932; M.A., 1932; B.Litt., Oxford University, 1936
D.Phil., 1936.
- ALVIN O. KUHN, Assistant to the President of the University.
B.S., University of Maryland, 1938; M.S., 1939; Ph.D., 1948.
- HARRY C. BYRD, President Emeritus, University of Maryland.
B.S., University of Maryland, 1908; LL.D., Washington College, 1936; LL.D.,
Dickinson College, 1938; D.Sc., Western Maryland College, 1938.
- HAROLD F. COTTERMAN, Dean of the Faculty of the University.
B.S., Ohio State University, 1916; M.A., Columbia University, 1917; Ph.D.,
American University, 1930.
- RONALD BAMFORD, Dean of the Graduate School.
B.S., University of Connecticut, 1924; M.S., University of Vermont, 1926;
Ph.D., Columbia University, 1931.
- GORDON M. CAIRNS, Dean of Agriculture.
B.S., Cornell University, 1936; M.S., 1938; Ph.D., 1940.
- PAUL E. NYSTROM, Director, Agricultural Extension Service.
B.S., University of California, 1928; M.S., University of Maryland, 1931;
M.P.A., Harvard University, 1948; D.P.A., 1951.
- IRVIN C. HAUT, Director, Agricultural Experiment Station and Head, Department
of Horticulture.
B.S., University of Idaho, 1928; M.S., State College of Washington, 1930.
Ph.D., University of Maryland, 1933.
- LEON P. SMITH, Dean of the College of Arts and Sciences.
B.A., Emory University, 1919; M.A., University of Chicago, 1928; Ph.D.,
1930; Diplome de l'Institut de Touraine, 1932.
- J. FREEMAN PYLE, Dean of the College of Business and Public Administration.
Ph.B., University of Chicago, 1917; M.A., 1918; Ph.D., 1925.
- MYRON S. AISENBERG, Dean of the School of Dentistry.
D.D.S., University of Maryland, 1922.
- VERNON E. ANDERSON, Dean of the College of Education.
B.S., University of Minnesota, 1930; M.A., 1936; Ph.D., University of Colorado,
1942.
- S. SIDNEY STEINBERG, Dean of the College of Engineering.
B.E., Cooper Union School of Engineering, 1910; C.E., 1913; Registered
Professional Engineer.
- WILBERT J. HUFF, Director, Engineering Experiment Station and Chairman of the
Division of Physical Sciences.
B.A., Ohio Northern University, 1911; B.A., Yale College, 1914; Ph.D., Yale
University, 1917; D.Sc. (hon.), Ohio Northern University, 1927.
- M. MARIE MOUNT, Dean of the College of Home Economics.
B.A., University of Indiana, 1916; M.A., Columbia Teachers College, 1924.
- ROGER HOWELL, Dean of the School of Law.
B.A., Johns Hopkins University, 1914; Ph.D., 1917; LL.B., University of
Maryland, 1917.
- WILLIAM S. STONE, Dean of the School of Medicine and Director of Medical Edu-
cation and Research.
B.S., University of Idaho, 1924; M.S., 1925; M.D., University of Louisville
1929; Ph.D., (hon.), University of Louisville, 1946.
- FLORENCE M. GIFE, Dean of the School of Nursing.
B.S., Catholic University of America, 1937; M.S., University of Pennsylvania
1940; Ed.D., University of Maryland, 1952.
- CLIFFORD G. BLITCH, Director of the University Hospital.
M.D., Vanderbilt University Medical School, 1928.
- JOSEPH R. AMBROSE, Dean of the College of Military Science.
B.A., University of Denver, 1948; Colonel, U.S. Air Force.
- NOEL E. FOSS, Dean of the School of Pharmacy.
Ph.C., South Dakota State College, 1929; B.S., 1929; M.S., University of
Maryland, 1932; Ph.D., 1933.

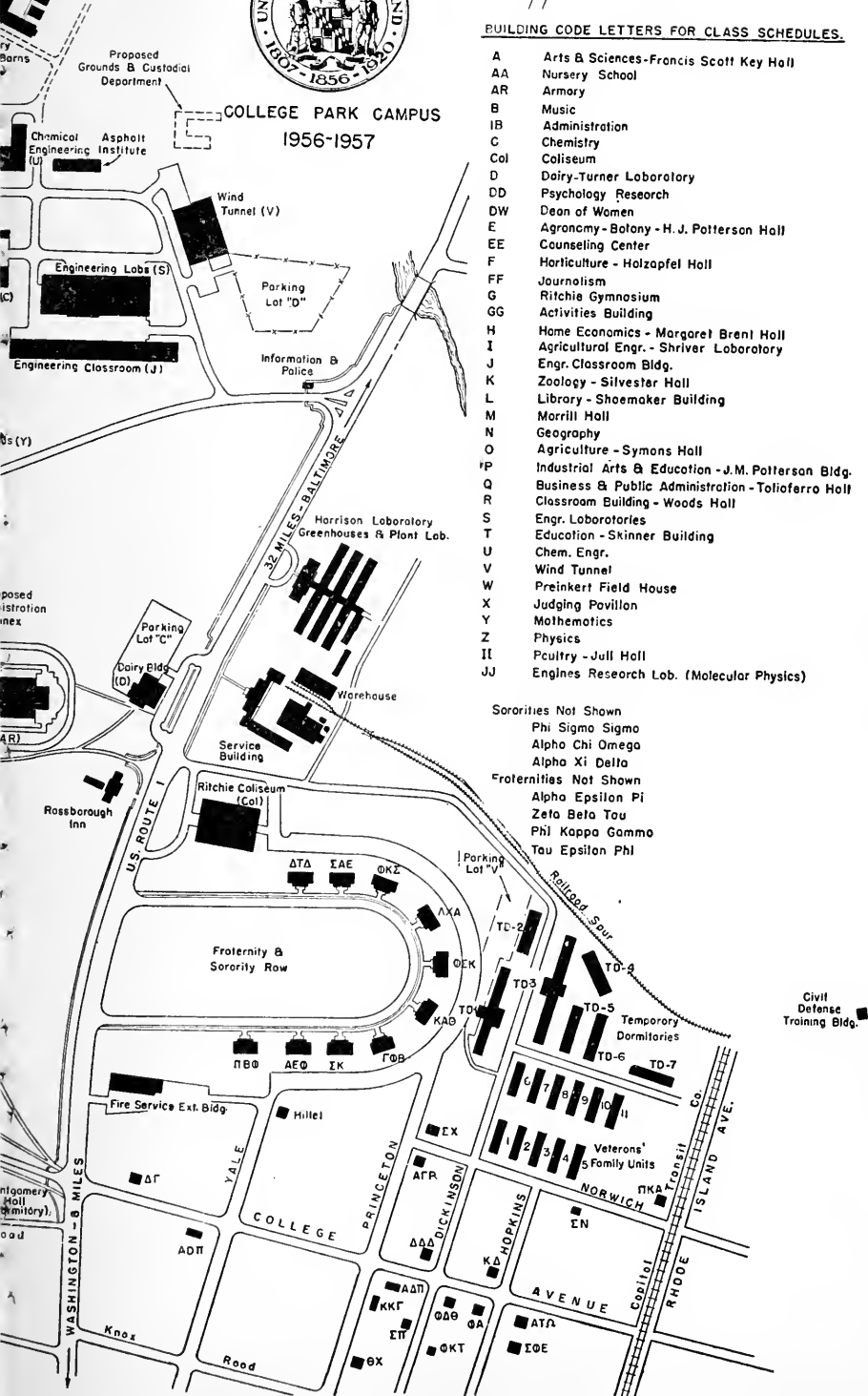
- LESTER M. FRALEY, Dean of the College of Physical Education, Recreation, and Health.
B.A., Randolph Macon College, 1928; M.A., 1937; Ph.D., Peabody College, 1939.
- RAY W. EHRENSBERGER, Dean of the College of Special and Continuation Studies.
B.A., Wabash College, 1929; M.A., Butler University, 1930; Ph.D., Syracuse University, 1937.
- CHARLES E. WHITE, Chairman of the Lower Division.
B.S., University of Maryland, 1923; M.S., 1924; Ph.D., 1926.
- JOHN E. FABER, JR., Chairman of the Division of Biological Sciences.
B.S., University of Maryland, 1926; M.S., 1927; Ph.D., 1937.
- ADOLF E. ZUCKER, Chairman of the Division of Humanities.
B.A., University of Illinois, 1912; M.A., 1913; Ph.D., University of Pennsylvania, 1917.
- HAROLD C. HOFFSOMMER, Chairman of the Division of Social Sciences.
B.S., Northwestern University, 1921; M.A., 1923; Ph.D., Cornell University, 1929.
- GEARY F. EP:LEY, Director of Student Welfare and Dean of Men.
B.S., Maryland State College, 1920; M.S., University of Maryland, 1926.
- ADELE H. STAMP, Dean of Women.
B.A., Tulane University, 1921; M.A., University of Maryland, 1924.
- EDGAR F. LONG, Dean of Students.
B.A., Blue Ridge College, 1911; M.A., University of Kansas, 1914; Ph.D., Johns Hopkins University, 1932.
- G. WATSON ALGIRE, Director of Admissions and Registrations.
B.A., University of Maryland, 1930; M.S., 1931.
- NORMA J. AZLEIN, Associate Registrar.
B.A., University of Chicago, 1940.
- DOROTHY L. POWELL, Associate Director of Admissions.
B.A., University of Maryland, 1943.
- DAVID L. BRIGHAM, Alumni Secretary.
B.A., University of Maryland, 1938.
- WILLIAM W. COBEY, Director of Athletics.
A.B., University of Maryland, 1930.
- GEORGE O. WEBER, Director and Supervising Engineer, Department of Physical Plant.
B.S., University of Maryland, 1932.
- GEORGE W. MORRISON, Associate Director and Supervising Engineer Physical Plant. (Baltimore).
B.S., University of Maryland, 1927; E.E., 1931.
- CHARLES L. BENTON, Director of Finance and Business.
B.A., University of Maryland, 1938; M.S., 1940; C.P.A., 1940.
- C. WILBUR CISSEL, Comptroller.
B.A., University of Maryland, 1932; M.A., 1934; C.P.A., 1939.
- HOWARD ROVELSTAD, Director of Libraries.
B.A., University of Illinois, 1936; M.A., 1937; B.S.L.S., Columbia University, 1949.
- GEORGE W. FOGG, Director of Personnel.
B.A., University of Maryland, 1926; M.A., 1928.
- GEORGE W. WARREN, Director of Procurement.
B.A., Duke University, 1942.
- HARVEY L. MILLER, Director of Publications and Publicity.
Colonel, U.S. Marine Corps. Retired.
- HARRY A. BISHOP, Director of the Student Health Service.
M.D., University of Maryland, 1912.
- JOHN P. O'REAGAN, Commandant of Cadets, Air Force R.O.T.C.
B.S., Georgetown University, 1959.



UNIVERSITY OF MARYLAND



COLLEGE PARK CAMPUS
1956-1957



BUILDING CODE LETTERS FOR CLASS SCHEDULES.

- A Arts & Sciences-Francis Scott Key Hall
- AA Nursery School
- AR Armory
- B Music
- IB Administration
- C Chemistry
- Col Coliseum
- D Dairy-Turner Laboratory
- DD Psychology Research
- DW Dean of Women
- E Agronomy - Botany - H. J. Potterson Hall
- EE Counseling Center
- F Horticulture - Holzapel Hall
- FF Journalism
- G Ritchie Gymnasium
- GG Activities Building
- H Home Economics - Margaret Brent Hall
- I Agricultural Engr. - Shriver Laboratory
- J Engr. Classroom Bldg.
- K Zoology - Silvester Hall
- L Library - Shoemaker Building
- M Morrill Hall
- N Geography
- O Agriculture - Symons Hall
- IP Industrial Arts & Education - J.M. Potterson Bldg.
- Q Business & Public Administration - Tolioferro Hall
- R Classroom Building - Woods Hall
- S Engr. Laboratories
- T Education - Skinner Building
- U Chem. Engr.
- V Wind Tunnel
- W Preinkert Field House
- X Judging Pavilion
- Y Mathematics
- Z Physics
- II Pcultry - Jull Hall
- JJ Engines Research Lab. (Molecular Physics)

Sororities Not Shown

- Phi Sigma Sigma
- Alpha Chi Omega
- Alpha Xi Delta

Froternities Not Shown

- Alpha Epsilon Pi
- Zeta Beta Tau
- Phi Kappa Gamma
- Tau Epsilon Phi

Civil Defense Training Bldg.

1956-57 CALENDAR

First Semester

1956

September 18-21
September 24
November 21
November 26
December 19

Tuesday-Friday
Monday
Wednesday after last class
Monday, 8 A. M.
Wednesday after last class

Registration, first semester
Instruction begins
Thanksgiving recess begins
Thanksgiving recess ends
Christmas recess begins

1957

January 2
January 20
January 21
January 22
January 23-30

Wednesday, 8 A. M.
Sunday
Monday
Tuesday
Wednesday-Wednesday, inc.

Christmas recess ends
Charter Day
Inauguration Day, holiday
Pre-Examination Study Day
First Semester examinations

Second Semester

February 5-8
February 11
February 22
March 25
April 18
April 23
May 16
May 29
May 30
May 31-June 7
June 2
June 8

Tuesday-Friday
Monday
Friday
Monday
Thursday after last class
Tuesday, 8 A. M.
Thursday
Wednesday
Thursday
Friday-Friday, inc.
Sunday
Saturday

Registration, second semester
Instruction begins
Washington's birthday, holiday
Maryland Day
Easter recess begins
Easter recess ends
Military Day
Pre-Examination Study Day
Memorial Day, holiday
Second Semester examinations
Baccalaureate exercises
Commencement exercises

Summer Session, 1957

June 24
June 25
August 2

Monday
Tuesday
Friday

Registration, summer session
Summer Session begins
Summer Session ends

Short Courses

June 17-22
August 5-10
September 8-6

Monday-Saturday
Monday-Saturday
Tuesday-Friday

Rural Women's Short Course
4-H Club Week
Firemen's Short Course

1956	1957	1957	1958	1958
<p>JULY</p> <p>S M T W T F S</p> <p>1 2 3 4 5 6 7</p> <p>8 9 10 11 12 13 14</p> <p>15 16 17 18 19 20 21</p> <p>22 23 24 25 26 27 28</p> <p>29 30 31</p>	<p>JANUARY</p> <p>S M T W T F S</p> <p>1 2 3 4 5</p> <p>6 7 8 9 10 11 12</p> <p>13 14 15 16 17 18 19</p> <p>20 21 22 23 24 25 26</p> <p>27 28 29 30 31</p>	<p>JULY</p> <p>S M T W T F S</p> <p>1 2 3 4 5 6</p> <p>7 8 9 10 11 12 13</p> <p>14 15 16 17 18 19 20</p> <p>21 22 23 24 25 26 27</p> <p>28 29 30 31</p>	<p>JANUARY</p> <p>S M T W T F S</p> <p>1 2 3 4</p> <p>5 6 7 8 9 10 11</p> <p>12 13 14 15 16 17 18</p> <p>19 20 21 22 23 24 25</p> <p>26 27 28 29 30 31</p>	<p>JULY</p> <p>S M T W T F S</p> <p>1 2 3 4 5</p> <p>6 7 8 9 10 11 12</p> <p>13 14 15 16 17 18 19</p> <p>20 21 22 23 24 25 26</p> <p>27 28 29 30 31</p>
<p>AUGUST</p> <p>S M T W T F S</p> <p>1 2 3 4</p> <p>5 6 7 8 9 10 11</p> <p>12 13 14 15 16 17 18</p> <p>19 20 21 22 23 24 25</p> <p>26 27 28 29 30 31</p>	<p>FEBRUARY</p> <p>S M T W T F S</p> <p>1 2</p> <p>3 4 5 6 7 8 9</p> <p>10 11 12 13 14 15 16</p> <p>17 18 19 20 21 22 23</p> <p>24 25 26 27 28</p>	<p>AUGUST</p> <p>S M T W T F S</p> <p>1 2 3</p> <p>4 5 6 7 8 9 10</p> <p>11 12 13 14 15 16 17</p> <p>18 19 20 21 22 23 24</p> <p>25 26 27 28 29 30 31</p>	<p>FEBRUARY</p> <p>S M T W T F S</p> <p>1</p> <p>2 3 4 5 6 7 8</p> <p>9 10 11 12 13 14 15</p> <p>16 17 18 19 20 21 22</p> <p>23 24 25 26 27 28</p>	<p>AUGUST</p> <p>S M T W T F S</p> <p>1 2</p> <p>3 4 5 6 7 8 9</p> <p>10 11 12 13 14 15 16</p> <p>17 18 19 20 21 22 23</p> <p>24 25 26 27 28 29 30</p>
<p>SEPTEMBER</p> <p>S M T W T F S</p> <p>1</p> <p>2 3 4 5 6 7 8</p> <p>9 10 11 12 13 14 15</p> <p>16 17 18 19 20 21 22</p> <p>23 24 25 26 27 28 29</p> <p>30</p>	<p>MARCH</p> <p>S M T W T F S</p> <p>1 2</p> <p>3 4 5 6 7 8 9</p> <p>10 11 12 13 14 15 16</p> <p>17 18 19 20 21 22 23</p> <p>24 25 26 27 28 29 30</p> <p>31</p>	<p>SEPTEMBER</p> <p>S M T W T F S</p> <p>1 2 3 4 5 6 7</p> <p>8 9 10 11 12 13 14</p> <p>15 16 17 18 19 20 21</p> <p>22 23 24 25 26 27 28</p> <p>29 30</p>	<p>MARCH</p> <p>S M T W T F S</p> <p>1</p> <p>2 3 4 5 6 7 8</p> <p>9 10 11 12 13 14 15</p> <p>16 17 18 19 20 21 22</p> <p>23 24 25 26 27 28 29</p> <p>30 31</p>	<p>SEPTEMBER</p> <p>S M T W T F S</p> <p>1 2 3 4 5</p> <p>6 7 8 9 10 11 12 13</p> <p>14 15 16 17 18 19 20</p> <p>21 22 23 24 25 26 27</p> <p>28 29 30</p>
<p>OCTOBER</p> <p>S M T W T F S</p> <p>1 2 3 4 5 6</p> <p>7 8 9 10 11 12 13</p> <p>14 15 16 17 18 19 20</p> <p>21 22 23 24 25 26 27</p> <p>28 29 30 31</p>	<p>APRIL</p> <p>S M T W T F S</p> <p>1 2 3 4 5 6</p> <p>7 8 9 10 11 12 13</p> <p>14 15 16 17 18 19 20</p> <p>21 22 23 24 25 26 27</p> <p>28 29 30</p>	<p>OCTOBER</p> <p>S M T W T F S</p> <p>1 2 3 4 5</p> <p>6 7 8 9 10 11 12</p> <p>13 14 15 16 17 18 19</p> <p>20 21 22 23 24 25 26</p> <p>27 28 29 30 31</p>	<p>APRIL</p> <p>S M T W T F S</p> <p>1 2 3 4 5</p> <p>6 7 8 9 10 11 12</p> <p>13 14 15 16 17 18 19</p> <p>20 21 22 23 24 25 26</p> <p>27 28 29 30</p>	<p>OCTOBER</p> <p>S M T W T F S</p> <p>1 2 3 4 5</p> <p>6 7 8 9 10 11 12</p> <p>13 14 15 16 17 18 19</p> <p>20 21 22 23 24 25 26</p> <p>27 28 29 30 31</p>
<p>NOVEMBER</p> <p>S M T W T F S</p> <p>1 2 3</p> <p>4 5 6 7 8 9 10</p> <p>11 12 13 14 15 16 17</p> <p>18 19 20 21 22 23 24</p> <p>25 26 27 28 29 30</p>	<p>MAY</p> <p>S M T W T F S</p> <p>1 2 3 4</p> <p>5 6 7 8 9 10 11</p> <p>12 13 14 15 16 17 18</p> <p>19 20 21 22 23 24 25</p> <p>26 27 28 29 30 31</p>	<p>NOVEMBER</p> <p>S M T W T F S</p> <p>1 2</p> <p>3 4 5 6 7 8 9</p> <p>10 11 12 13 14 15 16</p> <p>17 18 19 20 21 22 23</p> <p>24 25 26 27 28 29 30</p>	<p>MAY</p> <p>S M T W T F S</p> <p>1 2 3</p> <p>4 5 6 7 8 9 10</p> <p>11 12 13 14 15 16 17</p> <p>18 19 20 21 22 23 24</p> <p>25 26 27 28 29 30 31</p>	<p>NOVEMBER</p> <p>S M T W T F S</p> <p>1 2 3 4 5 6 7 8</p> <p>9 10 11 12 13 14 15</p> <p>16 17 18 19 20 21 22</p> <p>23 24 25 26 27 28 29</p> <p>30</p>
<p>DECEMBER</p> <p>S M T W T F S</p> <p>1</p> <p>2 3 4 5 6 7 8</p> <p>9 10 11 12 13 14 15</p> <p>16 17 18 19 20 21 22</p> <p>23 24 25 26 27 28 29</p> <p>30 31</p>	<p>JUNE</p> <p>S M T W T F S</p> <p>1</p> <p>2 3 4 5 6 7 8</p> <p>9 10 11 12 13 14 15</p> <p>16 17 18 19 20 21 22</p> <p>23 24 25 26 27 28 29</p> <p>30</p>	<p>DECEMBER</p> <p>S M T W T F S</p> <p>1 2 3 4 5 6 7</p> <p>8 9 10 11 12 13 14</p> <p>15 16 17 18 19 20 21</p> <p>22 23 24 25 26 27 28</p> <p>29 30 31</p>	<p>JUNE</p> <p>S M T W T F S</p> <p>1 2 3 4 5 6 7</p> <p>8 9 10 11 12 13 14</p> <p>15 16 17 18 19 20 21</p> <p>22 23 24 25 26 27 28</p> <p>29 30</p>	<p>DECEMBER</p> <p>S M T W T F S</p> <p>1 2 3 4 5 6</p> <p>7 8 9 10 11 12 13</p> <p>14 15 16 17 18 19 20</p> <p>21 22 23 24 25 26 27</p> <p>28 29 30 31</p>

SUMMER SESSION, 1956

JUNE 25—AUGUST 3

Vernon E. Anderson, Ph.D., Director

ARTHUR M. AHALT, Professor and Head, Department of Agricultural Education.
B.S., University of Maryland, 1931; M.S., Pennsylvania State College, 1937.

ALBERT LEE ALFORD, Instructor in Government and Politics.
B.A., University of Akron, 1948; M.A., 1951; Ph.D., Princeton University, 1953.

FRANK G. ANDERSON, Assistant Professor of Sociology.
B.A., Cornell University, 1941; Ph.D., University of New Mexico, 1951.

JAMES L. ANDERSON, Research Associate in Physics.
B.S., 1946; M.S., 1949, University of Chicago; Ph.D., Syracuse University, 1952.

PHILIP E. ARSENAULT, Instructor of Foreign Languages.
E.A., Clark University, 1935; M.A., Princeton University, 1950.

JOHN P. AUGELLI, Associate Professor of Geography.
B.A., Clark University, 1934; M.A., 1948; Ph.D., Harvard University, 1951.

WILLIAM T. AVERY, Professor and Head, Department of Classical Languages and Literatures.
B.A., 1934; M.A., 1935; Ph.D., 1937, Western Reserve University.

EDWARD W. BAKER, Lecturer in Zoology.
B.S., 1936; Ph.D., 1938, University of California.

JACK C. BARNES, Instructor of English.
B.A., 1939; M.A., 1947, Duke University; Ph.D., University of Maryland, 1954.

WHITNEY K. BATES, Instructor of History.
B.A., University of Washington, 1941; M.A., 1948; Ph.D., 1951, University of Wisconsin.

RICHARD H. BAUER, Associate Professor of History.
B.A., 1924; M.A., 1928; Ph.D., 1935, University of Chicago.

EARL S. BEARD, Instructor of History.
B.A., Baylor University, 1948; M.A., 1950; Ph.D., 1953, State University of Iowa.

GLENN H. BECK, Professor and Head of Dairy.
B.S., University of Idaho, 1936; M.S., Kansas State College, 1938; Ph.D., Cornell University, 1950.

SARAH A. BEMIS, Director of Physical Education, Mary Institute, Missouri. Visiting Lecturer in Physical Education and Director of Summer School Recreation.
B.S., Boston University, 1945; M.A., New York University, 1951.

GLENN O. BLOUGH, Associate Professor of Education.
B.A., 1929; M.A., 1932, University of Michigan; LL.D., Central Michigan College of Education, 1950.

CARL BODE, Professor of English.
Ph.B., University of Chicago, 1933; M.A., 1938; Ph.D., 1941, Northwestern University.

- O. R. BONTRAGER, Professor of Education, California State Teachers College, Pennsylvania. Visiting Lecturer in Education.
B.A., 1927; M.A., 1930; Ph.D., 1933, State University of Iowa.
- EMMA M. BOWMAN, Supervisor of Elementary Education, Prince George's County, Maryland. Visiting Lecturer in Education.
B.S., 1941; M.Ed., 1951, University of Maryland.
- RICHARD M. BRANDT, Assistant Professor of Education, Institute for Child Study. B.M.E., University of Virginia, 1943; M.A., University of Michigan, 1949; Ed.D., University of Maryland, 1954.
- HENRY BRECHBILL, Professor of Education and Assistant Dean.
B.A., Blue Ridge College, 1911; M.A., University of Pittsburgh, 1917; Ph.D., George Washington University, 1933.
- MARIE D. BRYAN, Associate Professor of Education.
B.A., Goucher College, 1923; M.A., University of Maryland, 1945.
- GLEN D. BROWN, Professor of Industrial Education.
B.A., Indiana State Teachers College, 1916; M.A., Indiana University, 1931.
- JOSHUA R. C. BROWN, Assistant Professor of Zoology.
B.A., 1948; M.A., 1949; Ph.D., 1953, Duke University.
- LESLIE R. BUNDGAARD, Instructor in Government and Politics.
B.S., 1948; M.S., 1949, University of Wisconsin; Ph.D., Georgetown University, 1954.
- ALOIS J. BURDA, JR., Junior Instructor in Mathematics.
B.S., U. S. Naval Academy, 1940.
- SUMNER O. BURHOE, Professor of Zoology.
B.S., University of Massachusetts, 1925; M.S., Kansas State College, 1926; Ph.D., Harvard University, 1937.
- RICHARD H. BYRNE, Associate Professor of Education.
B.A., Franklin and Marshall College, 1938; M.A., 1947; Ed.D., 1952, Columbia University.
- CHARLES E. CALHOUN, Professor of Finance.
A.B., 1925; M.B.A., 1930, University of Washington.
- JOSEPH H. CAMIN, Lecturer in Zoology.
B.S., 1946; M.S., 1947; Ph.D., 1949, Ohio State University.
- MARJORIE H. CAMPBELL, Teacher, Washington, D. C., Public Schools. Visiting Lecturer in Education.
B.S., 1938; M.A., 1940, University of Maryland.
- JOHN F. CARRUTHERS, Assistant Professor of Chemistry.
- VERNE E. CHATELAIN, Professor of History.
A.B., Nebraska State Teachers College, 1917; M.A., University of Chicago, 1925; Ph.D., University of Minnesota, 1943.
- DWANE R. COLLINS, Coordinator of Pupil Personnel, Snyder Public Schools, Texas. Visiting Lecturer in Education.
B.A., Iowa State Teachers College, 1931; M.S., Iowa State College (Ames), 1938; Ed.D., Teachers College, Columbia University, 1943.
- GERALD F. COMBS, Professor of Poultry Husbandry.
B.S., University of Illinois, 1940; Ph.D., Cornell University, 1948.
- FRANKLIN D. COOLEY, Associate Professor of English.
B.A., The Johns Hopkins University, 1927; M.A., University of Maryland, 1933; Ph.D., The Johns Hopkins University, 1940.

- ELLEN CORREL, Instructor of Mathematics.
B.S., Douglas College (Rutgers University), 1951; M.S., Purdue University, 1953.
- ERNEST N. CORY, State Entomologist, Head of Department of Entomology.
B.S., 1909; M.S., 1913, Maryland Agricultural College; Ph.D., American University, 1926.
- CARROLL E. COX, Professor of Botany.
A.B., University of Delaware, 1938; M.S., Virginia Polytechnic Institute, 1940; Ph.D., University of Maryland, 1943.
- DOROTHY D. CRAVEN, Instructor of Speech and Dramatic Arts.
B.S., (Education) Southeast Missouri State Teachers College, 1945; M.A., University of Iowa, 1948.
- FRANK H. CRONIN, Associate Professor of Physical Education, Head Golf Coach.
B.S., University of Maryland, 1946.
- JANE H. CROW, Assistant Professor of Home and Institution Management.
B.S., Salem College, 1937; M.S., University of Maryland, 1938.
- MADLINE E. DALTON, Supervisor, Classes for Children with Retarded Mental Development, New York City. Visiting Lecturer in Education.
B.A., 1935; M.A., 1942, Hunter College.
- MARIE DENECKE, Instructor in Education.
B.A., Columbia University, 1938; M.A., University of Maryland, 1942.
- ROBERT L. DEZAFRA, Graduate Assistant in Physics.
B.A., Princeton University, 1954.
- ROBERT G. DIXON, JR., Associate Professor of Government and Politics.
A.B., 1943; Ph.D., 1947, Syracuse University.
- CAROLYN C. DUNLAP, Director of Practice, State Teachers College, Salisbury, Maryland. Visiting Lecturer in Education.
A.B., Western Maryland College, 1939; M.A., 1950; Ed.D., 1954, University of Maryland.
- THOMAS H. DYER, Junior Instructor in Mathematics.
B.S., U. S. Naval Academy, 1924.
- CHARLES B. EDELSON, Instructor of Accounting.
B.B.A., University of New Mexico, 1949; M.B.A., Indiana University, 1950; C.P.A., University of Maryland, 1952.
- GERTRUDE EHRLICH, Instructor in Mathematics.
B.S., Georgia State College for Women, 1943; M.A., University of North Carolina, 1945; Ph.D., University of Tennessee, 1953.
- JOHN E. FABER, JR., Professor and Head, Department of Bacteriology.
B.S., 1926; M.S., 1927; Ph.D., 1937, University of Maryland.
- BHASKAR S. FADNIS, Instructor in Mathematics.
B.S., 1944; M.S., 1948, College of Science, Nagpur, India.
- ROBERT G. FISK, Associate Professor of Education, Chico State College, California. Visiting Lecturer in Education.
B.S., 1941; M.Ph., 1946, University of Wisconsin; Ed.D., Teachers College, Columbia University, 1953.
- LUCIUS GARVIN, Professor of Philosophy.
A.B., 1928; A.M., 1929; Ph.D., 1933, Brown University.
- HUGH G. GAUCH, Professor of Botany.
B.S., Miami University, 1935; M.S., Kansas State College, 1937; Ph.D., University of Chicago, 1939.

DWIGHT L. GENTRY, Associate Professor of Marketing.

A.B., Elon College, 1941; M.B.A., Northwestern University, 1947; Ph.D., University of Illinois, 1952.

WILLIAM GEORGIADIS, Senior Department Chairman, Whittier High School, Whittier, California. Visiting Lecturer in Education, Institute for Child Study.

B.A., Upland College, 1946; M.A., Claremont Graduate School, 1949.

GUY W. GIENGER, Associate Professor of Agricultural Engineering.

B.S., 1933; M.S., 1936, University of Maryland.

RICHARD A. GOOD, Associate Professor of Mathematics.

A.B., Ashland College, 1939; M.A., 1940; Ph.D., 1945, University of Wisconsin.

IRA J. GORDON, Associate Professor of Education, Institute for Child Study.

B.B.A., City College of New York, 1943; M.A., 1947; Ed.D., 1950, Columbia University.

WILLIAM H. GRAVELY, JR., Assistant Professor of English.

B.A., College of William and Mary, 1925; M.A., 1934; Ph.D., 1953, University of Virginia.

HENRY W. GRAYSON, Associate Professor of Economics.

B.A., University of Saskatchewan, 1937; M.A., 1947; Ph.D., 1950, University of Toronto.

WILLARD W. GREEN, Professor of Animal Husbandry.

B.S., 1933; M.S., 1934; Ph.D., 1939, University of Minnesota.

DONALD GREENSPAN, Instructor in Mathematics.

B.S., New York University Teachers College, 1948; M.S., University of Wisconsin, 1949.

ROSE MARIE GRENTZER, Professor of Music.

B.A., (Music and Music Education), 1936; M.A., (Music Education), Carnegie Institute of Technology, 1939.

SIDNEY GROLLMAN, Assistant Professor of Zoology.

B.S., 1947; M.S., 1949; Ph.D., 1952, University of Maryland.

ALLAN G. GRUCHY, Professor of Economics.

B.A., University of British Columbia, 1926; M.A., McGill University, 1928; Ph.D., University of Virginia, 1931.

DICK W. HALL, Professor of Mathematics.

B.S., 1934; M.S., 1935; Ph.D., 1938, University of Virginia.

DANIEL HAMBERG, Assistant Professor of Economics.

B.S., 1945; M.A., 1947; Ph.D., 1952, University of Pennsylvania.

LUDWIG HAMMERSCHLAG, Assistant Professor of Foreign Languages.

Ph.D., University of Freiburg, 1925.

LEWIS E. HARRIS, Executive Secretary, Ohio School Boards Association. Visiting Lecturer in Education.

B.S., 1928; M.A., 1947, University of Minnesota; Ed.D., New York University, 1952.

HORACE V. HARRISON, Assistant Professor of Government and Politics.

B.A., Trinity University, 1932; M.A., 1941; Ph.D., University of Texas, 1951.

GUY B. HATHORN, Instructor in Government and Politics.

B.A., 1940; M.A., 1942, University of Mississippi; Ph.D., Duke University, 1950.

ELLIS HAWORTH, Professor of Chemistry and Chairman, Division of Science, District of Columbia Teachers College. Visiting Lecturer in Education.

B.A., 1922; M.A., 1927, George Washington University; Ph.D., The Johns Hopkins University, 1928.

- HUBERT P. HENDERSON, Assistant Professor of Music.
A.B., 1941; M.A., 1950, University of North Carolina.
- RICHARD HENDRICKS, Assistant Professor of Speech and Dramatic Arts.
B.A., Franklin College, 1937; M.A., Ohio State University, 1939.
- CHARLES M. HERZFELD, Physicist, U. S. Naval Research Laboratory, Washington, D.C. Visiting Lecturer in Physics.
B.Ch.E., Catholic University, 1945; Ph.D., University of Chicago, 1951.
- J. ROSS HEVERLY, Operations Research Office, Johns Hopkins University, Chevy Chase, Maryland. Visiting Lecturer in Physics.
B.S., 1935; M.S., 1938; Ph.D., 1948, Pennsylvania State University.
- ROBERT K. HIRZEL, Instructor of Sociology.
B.A., 1946; M.A., 1950, Pennsylvania State University; Ph.D., Louisiana State University, 1954.
- FRANK M. HOADLEY, Instructor of English.
B.A., 1950; M.A., 1951, George Peabody College for Teachers; Ph.D., University of Oklahoma, 1955.
- H. PALMER HOPKINS, Assistant Professor of Agricultural Education.
B.S., Oklahoma A. & M. College, 1936; M.Ed., University of Maryland, 1948.
- R. LEE HORNBAKE, Professor and Head, Industrial Education.
B.S., State Teachers College, California, Pennsylvania, 1934; M.A., 1936; Ph.D., 1942, Ohio State University.
- KENNETH O. HOVET, Professor of Education.
B.A., St. Olaf College, 1926; Ph.D., University of Minnesota, 1950.
- HAI-TSIN HSU, Instructor of Mathematics.
B.E., National Technical College, 1937; M.A., National Chekiang University, 1945; Ph.D., Yale University, 1955.
- JAMES H. HUMPHREY, Associate Professor of Physical Education and Health.
A.B., Denison University, 1933; M.A., Western Reserve University, 1946; Ed.D., Boston University, 1951.
- STANLEY B. JACKSON, Professor and Head of Mathematics.
B.A., Bates College, 1933; M.A., 1934; Ph.D., 1937, Harvard University.
- RICHARD H. JAQUITH, Assistant Professor of Chemistry.
B.S., 1940; M.S., 1942, University of Massachusetts; Ph.D., Michigan State University, 1955.
- WARREN R. JOHNSON, Professor of Physical Education and Health.
B.A., 1942; M.A., 1947, University of Denver; Ed.D., Boston University, 1950.
- J. CHARLES JONES, Assistant Professor of Education, Bucknell University, Lewisburg, Pennsylvania. Visiting Lecturer in Education, Institute for Child Study.
B.A., Bucknell University, 1942; M.S., 1950; Ph.D., 1953, Cornell University.
- H. BRYCE JORDAN, Assistant Professor of Music.
B.Mus., 1948; M.Mus., 1949, University of Texas.
- MARY A. KEMBLE, Instructor of Music.
B.S., Pennsylvania State Teachers College, 1930; B.S. in Ed., 1936; M.S. in Mus. Ed., 1940, University of Pennsylvania.
- CHARLES F. KRAMER, Associate Professor of Foreign Languages.
Ph.B., 1911; M.A., 1912, Dickinson College.
- ROBERT W. KRAUSS, Assistant Professor of Botany.
A.B., Oberlin College, 1947; M.S., University of Hawaii, 1949; Ph.D., University of Maryland, 1951.

- AARON D. KRUMBEIN, Assistant Professor of Physics.
A.B., Brooklyn College, 1941; Ph.D., New York University, 1951.
- JOHN J. KURTZ, Professor of Education, Institute for Child Study.
B.A., University of Wisconsin, 1935; M.A., Northwestern University, 1940; Ph.D., University of Chicago, 1949.
- NORMAN C. LAFFER, Associate Professor of Bacteriology.
B.S., Allegheny College, 1929; M.S., University of Maine, 1932; Ph.D., University of Illinois, 1937.
- LEROY L. LEE, Assistant Professor of Accounting.
A.B., George Washington University, 1948; C.P.A., Maryland, 1949; A.M., George Washington University, 1952.
- PETER P. LEJINS, Professor of Sociology.
Magister Philosophiae, 1930; Magister Iuris, 1933, University of Latvia; Ph.D., University of Chicago, 1938.
- JOHN LEMBACH, Associate Professor of Art and Art Education.
B.A., University of Chicago, 1934; M.A., Northwestern University, 1937; Ed.D., Columbia University, 1946.
- MARY R. LEWIS, Visiting Lecturer in Education.
B.S., 1928; M.A., 1932, Teachers College, Columbia University.
- IRVING LINKOW, Assistant Professor of Speech and Dramatic Arts.
B.A., 1937; M.A., 1938, University of Denver.
- EDWARD L. LONGLEY, Instructor of Art.
B.A., University of Maryland, 1950; M.A., Columbia University, 1953.
- DONALD MALEY, Associate Professor of Industrial Education.
B.S., State Teachers College, California, Pennsylvania, 1943; M.A., 1947; Ph.D., 1950, University of Maryland.
- BENJAMIN H. MASSEY, Professor of Physical Education.
A.B., Erskine College, 1938; M.S., 1947; Ph.D., 1950, University of Illinois.
- LYLE V. MAYER, Assistant Professor of Speech and Dramatic Arts.
B.A., University of North Dakota, 1938; M.A., Stanford University, 1943; Ph.D., University of Maryland, 1954.
- NANCY J. MEARIG, Instructor of Home Management.
B.S., New York State College for Teachers, 1947; M.S., Purdue University, 1952.
- WALTER S. MEASDAY, Instructor in Economics.
B.A., William and Mary College, 1945.
- HAROLD E. MEHRENS, Chief, Curriculum and Editorial Division, Headquarters, Civil Air Patrol. Director, Aviation Education Workshop.
B.A., State Teachers College, Silver City, New Mexico, 1927; M.A., Highlands University, Las Vegas, 1931; M.S., University of Southern California, 1936; Ed.D., University of Southern California, 1937.
- BRUCE L. MELVIN, Associate Professor of Sociology.
B.S. in Ed., 1916; M.A., 1917; Ph.D., 1921, University of Missouri.
- GEORGE R. MERRILL, Instructor in Industrial Education.
B.S., 1954; M.Ed., 1955, University of Maryland.
- MADELAINE J. MERSHON, Professor of Education, Institute for Child Study.
B.S., Drake University, 1940; M.A., 1943; Ph.D., University of Chicago, 1950.
- CHARLTON MEYER, Instructor of Music.
B.Mus., Curtis Institute, 1952.

- DELBERT T. MORGAN, Associate Professor of Botany.
B.S., Kent State University, 1940; M.A., 1942; Ph.D., 1948, Columbia University.
- H. GERTHON MORGAN, Professor of Education, Institute for Child Study.
B.A., Furman University, 1940; M.A., 1943; Ph.D., University of Chicago, 1946.
- EARL W. MOUNCE, Professor of Law and Labor.
B.S., University of Missouri, 1921; M.A., 1922; A.B., 1927; LL.B., 1929; LL.M., University of Southern California, 1945.
- CHARLES D. MURPHY, Professor and Acting Head of English.
B.A., University of Wisconsin, 1929; M.A., Harvard University, 1930; Ph.D., Cornell University, 1940.
- BOYD L. NELSON, Assistant Professor of Business Administration.
B.A., 1947; M.A., 1948; Ph.D., 1952, University of Wisconsin.
- CLARENCE A. NEWELL, Professor of Educational Administration.
B.A., Hastings College, Nebraska, 1935; M.A., 1939; Ph.D., Columbia University 1943.
- LEO W. O'NEILL, Associate Professor of Education.
B.A., University of Chicago, 1938; M.A., University of Kansas City, 1953; Ed.D., University of Colorado, 1955.
- ANNA B. OWENS, Visiting Lecturer in Botany.
B.S., 1940; M.S., 1949, University of Maryland.
- ARTHUR C. PARSONS, Assistant Professor of Foreign Languages.
B.A., 1926; M.A., 1928, University of Maryland.
- ARTHUR S. PATRICK, Associate Professor of Business Education.
B.E., State Teachers College, Whitewater, Wisconsin, 1931; M.A., University of Iowa, 1940.
- HUGH V. PERKINS, Associate Professor of Education, Institute for Child Study.
B.A., Oberlin College, 1941; M.A., 1946; Ph.D., University of Chicago, 1949.
- HUGH B. PICKARD, Associate Professor of Chemistry.
B.A., Haverford College, 1933; Ph.D., Northwestern University, 1938.
- JOHN PORTZ, Instructor of English.
B.A., Duke University, 1937; M.A., Harvard University, 1941.
- GORDON W. PRANGE, Professor of History.
B.A., 1932; M.A., 1934; Ph.D., 1937, University of Iowa.
- ERNEST F. PRATT, Professor of Chemistry.
B.A., University of Redlands, 1937; M.S., Oregon State College, 1939; M.A., 1941; Ph.D., 1942, University of Michigan.
- DANIEL A. PRESCOTT, Professor of Education and Director, Institute for Child Study.
B.S., Tufts College, 1920; Ed.M., 1922; Ed.D., Harvard College, 1923.
- ROBERT D. RAPPLEYE, Assistant Professor of Botany.
B.S., 1941; M.S., 1947; Ph.D., 1949, University of Maryland.
- PATRICK W. RIDDLEBERGER, Instructor of History.
B.A., Virginia Military Institute, 1939; M.A., 1949; Ph.D., 1952, University of California.
- CARL L. ROLLINSON, Professor of Chemistry.
B.S., University of Michigan, 1923; Ph.D., University of Illinois, 1939.
- WILLIAM G. ROSEN, Instructor of Mathematics.
B.S., 1943; M.S., 1947; Ph.D., 1954, University of Illinois.

- SHERMAN ROSS, Associate Professor of Psychology.
B.S., College of the City of New York, 1939; M.A., 1941; Ph.D., 1943, Columbia University.
- NORMAN R. ROTH, Assistant Professor of Sociology.
B.A., Hobart College, 1942; M.A. in Soc., University of Rochester, 1949; M.A. in Ed., Columbia Teachers College, 1950; Ph.D., Columbia University, 1950.
- ALVIN W. SCHINDLER, Professor of Education.
B.A., Iowa State College, 1927; M.A., 1929; Ph.D., University of Iowa, 1934.
- JOHN F. SCHMIDT, Instructor of Sociology.
B.A., 1941; M.A., 1946; Ph.D., 1950, University of Chicago.
- FERN D. SCHNEIDER, Associate Professor of Education.
B.S., Nebraska Wesleyan University, 1932; M.A., George Washington University, 1934; Ed.D., Columbia University, 1940.
- MARY C. SCHOLTES, Associate Professor of Home Economics.
B.S., University of Minnesota, 1944; M.S., Iowa State College, 1948; M.A., University of Minnesota, 1950.
- PAUL W. SHANKWEILER, Associate Professor of Sociology.
Ph.B., Muhlenberg University, 1919; M.A., Columbia University, 1921; Ph.D., University of North Carolina, 1943.
- JULIUS C. SHEPHERD, Instructor of Mathematics.
B.A., 1944; M.A., 1947, East Carolina Teachers College.
- DAVID E. SIMONS, Assistant Professor of Electrical Engineering.
B.S., 1949; M.S., 1951, University of Maryland.
- HUGH D. SISLER, Assistant Professor of Botany.
B.S., 1949; M.S., 1951; Ph.D., 1953, University of Maryland.
- DAVID S. SPARKS, Assistant Professor of History.
A.B., Grinnell College, 1944; M.A., 1945; Ph.D., 1951, University of Chicago.
- MABEL S. SPENCER, Assistant Professor of Home Economics Education.
B.S., 1925; M.S., 1946, West Virginia University.
- FAGUE K. SPRINGMANN, Associate Professor of Music.
B.Mus., Westminster Choir College, 1939.
- DONALD F. STANGER, Assistant Professor of Education, Institute for Child Study.
B.S., State Teachers College, Glassboro, N. J., 1948; M.A., Teachers College, Columbia University, 1949; Ed.D., University of Maryland, 1955.
- RUEBEN G. STEINMEYER, Professor of Government and Politics.
B.A., 1929; Ph.D., 1935, American University.
- RUSSELL W. STRANDTMANN, Visiting Lecturer in Zoology.
B.S., Southwestern Texas Technology College, 1935; M.S., Texas Agricultural and Mechanical College, 1937; Ph.D., Ohio State University, 1944.
- CLARA G. STRATEMEYER, Elementary Supervisor, Montgomery County Schools, Maryland. Visiting Lecturer in Education.
B.S., 1928; M.A., 1929; Ph.D., 1936, Teachers College, Columbia University.
- WARREN L. STRAUSBAUGH, Associate Professor and Head of Speech and Dramatic Arts.
B.S., Wooster College, 1932; M.A., University of Iowa, 1935.
- ROLAND N. STROMBERG, Assistant Professor of History.
B.A., University of Kansas City, 1939; M.A., American University, 1945; Ph.D., University of Maryland, 1952.
- CALVIN F. STUNTZ, Associate Professor of Chemistry.
B.A., 1939; Ph.D., 1947, University of Buffalo.

- HAROLD F. SYLVESTER, Professor of Personnel Administration.
Ph.D., Johns Hopkins University, 1938.
- FRED R. THOMPSON, Associate Professor of Education, Institute for Child Study.
B.A., 1929; M.A., 1934, University of Texas; Ed.D., University of Maryland, 1952.
- WILLIAM F. TIERNEY, Assistant Professor of Industrial Education.
B.S., Teachers College of Connecticut, 1941; M.A., Ohio State University, 1949;
Ed.D., University of Maryland, 1952.
- JOHN S. TOLL, Professor and Head of Physics.
B.S., Yale University, 1944; M.A., 1948; Ph.D., 1952, Princeton University.
- THEVON A. TOMPKINS, Associate Professor of Physical Education
B.S., Ypsilanti College, 1926; M.A., University of Michigan, 1939.
- ROBERT S. TRIPLETT, JR., Instructor of Mathematics.
B.S., University of Kentucky, 1940; M.A., University of Chicago, 1943.
- JAMES A. VAN ZWOLL, Professor of School Administration.
B.A., Calvin College, Grand Rapids, Michigan, 1933; M.A., 1937; Ph.D., 1942, University of Michigan.
- WALTER B. WAETJEN, Associate Professor of Education, Institute for Child Study.
B.S., Pennsylvania State Teachers College, Millersville, 1942; M.S., University of Pennsylvania, 1947; Ed.D., University of Maryland, 1951.
- KATHRYN M. P. WARD, Associate Professor of English.
B.A., 1935; M.A., 1936; Ph.D., 1947, George Washington University.
- SIVERT M. WEDEBERG, Professor of Accounting.
B.B.A., University of Washington (Seattle), 1925; A.M., Yale University, 1933;
C.P.A., State of Maryland, 1934.
- FRED W. WELLBORN, Professor of History.
B.A., Baker University, 1918; M.A., University of Kansas, 1923; Ph.D., University of Wisconsin, 1926.
- GLADYS A. WIGGIN, Professor of Education.
B.S., 1929; M.A., 1939, University of Minnesota; Ph.D., University of Maryland, 1947.
- JUNE C. WILBUR, Assistant Professor of Textiles and Clothing.
B.S., University of Washington, 1936; M.S., Syracuse University, 1940.
- FRANK H. WILCOX, JR., Assistant Professor of Poultry.
B.S., University of Connecticut, 1951; M.S., 1953; Ph.D., 1955, Cornell University.
- EARL T. WILLIS, Chairman of Social Science Department, State Teachers College, Towson, Maryland. Visiting Lecturer in Education.
B.A., Washington College, 1931; M.A., Columbia University, 1936; Ed.D., George Washington University, 1947.
- JANE B. WILSON, Director of Elementary School Libraries, Durham, North Carolina. Visiting Lecturer in Library Science.
A.B., Duke University, 1934; B.S. in Lib. Sci., University of North Carolina, 1937; M.A., Duke University, 1946.
- G. FORREST WOODS, Professor of Chemistry.
B.A., Northwestern University, 1935; M.S., 1937; Ph.D., 1940, Harvard University.
- ALFRED CHI-TAI WU, Graduate Assistant in Physics.
B.S., Wheaton College (Illinois), 1955.
- W. GORDON ZEEVELD, Professor of English.
B.A., University of Rochester, 1924; M.A., 1929; Ph.D., 1936, Johns Hopkins University.

SUMMER SESSION

Vernon E. Anderson, Ph.D., Director
Alma Frothingham, Secretary

REGISTRATION SCHEDULE AND CALENDAR OF DATES

Advanced Registration Schedule for Students in Education

(By appointment only)

May 1 through May 26—9:00 A.M.- 2:30 P.M., Mondays through Fridays
9:00 A.M.-11:00 A.M., Saturdays

Registration Schedule for New Graduate Students

Friday, June 22	9:00 A. M.	S—Z	11:00 A. M.	F—K
	10:00 A. M.	L—R	1:00 P. M.	A—E

Registration Schedule for Undergraduate Students and
Returning Graduate Students

Date	Time	Students	Time	Students
Monday, June 25	8:30 A. M.	T—Z	12:30 P. M.	G—K
	9:30 A. M.	P—S	1:30 P. M.	D—F
	10:30 A. M.	L—O	2:30 P. M.	A—C

To expedite registration, students have been put into groups on the basis of the first letter of the last name. All students should register according to the above schedule.

June 26, Tuesday.....Classes begin.

June 30, Saturday.....Classes as usual, Monday schedule.

July 4, Wednesday.....Holiday.

August 3, Friday.....Close of Summer Session.

REGISTRATION

Registration for undergraduate and graduate students will take place on Monday, June 25, from 8:30 A. M. to 2:30 P. M. **New graduate students** should register on Friday, June 22, from 9:00 A. M. to 1:00 P. M., and should report to the office of the department or college concerned with their graduate programs, at the time listed in the Registration Schedule.

All students must obtain admission to the University from the Director of Admissions or the Dean of the Graduate School before registration.

Registration begins in the office of the appropriate dean at the time listed in the Registration Schedule. After registration forms have been filled out and approved by the dean, students complete registration at the Armory where they receive bills, pay fees, and submit all forms to the Registrar's checking clerks.

Instruction will begin on Tuesday, June 26, at 8:00 A. M. The late registration fee, charged on and after Tuesday, June 26, is \$5.00.

Advanced Registration

Undergraduate and graduate students in Education may register for the Summer Session between May 1 and 26 **by appointment** with the advisers in the College of Education. The hours for advanced registration will be 9:00 A. M. to 2:30 P. M., Mondays through Fridays, and 9:00 A. M. to 11:00 A. M. on Saturdays.

Students who wish to register early should arrange to complete registration after conference with the Dean by paying fees at the Cashier's Office and submitting all approved registration forms to the Office of the Registrar.

New students who wish to register in advance must be formally admitted to the University prior to registration. New undergraduate students should file applications for admission with the Office of Admissions and new graduate students should apply to the Dean of the Graduate School.

TERMS OF ADMISSION

All summer school students must be admitted to the university. This applies to all non-degree as well as degree candidates. Persons not previously admitted should file their applications with Mr. G. W. Algire, Director of Admissions, not later than June 8, 1956.

Graduates of accredited two-and three-year normal schools with satisfactory normal school records may be admitted to advanced standing in the College of Education. The record and objectives of the individual student determine the exact amount of credit allowed. The student is given individual counsel as to the best procedure for fulfilling the requirements for a degree.

Candidates for admission to the Graduate School must file applications with the Dean of the Graduate School not later than June 8, and must have transcripts of undergraduate records sent to the Dean of the Graduate School at the time of filing applications for admission.

DEFINITION OF RESIDENCE AND NON-RESIDENCE

Students who are minors are considered to be resident students if at the time of their registration their parents have been domiciled in this State for at least one year.

The status of the residence of a student is determined at the time of his first registration in the University, and may not thereafter be changed by him unless, in the case of a minor, his parents move to and become legal residents of this State by maintaining such residence for at least one full year. However, the right of the minor student to change from a non-resident to resident status must be established by him prior to the registration period set for any semester.

Adult students are considered to be residents if at the time of their registration they have been domiciled in this State for at least one year provided

such residence has not been acquired while attending any school or college in Maryland or elsewhere.

The word domicile as used in this regulation shall mean the permanent place of abode. For the purpose of this rule only one domicile may be maintained.

ACADEMIC CREDIT

The semester hour is the unit of credit. During the Summer Session a course meeting five times a week for six weeks requiring the standard amount of outside work is given a weight of two semester hours.

Students who are matriculated as candidates for degrees will be given credit towards the appropriate degree for satisfactory completion of courses. All courses offered in the Summer Session are creditable towards the appropriate degree.

Teachers and other students will receive official reports specifying the amount and quality of work completed. These reports will be accepted by the Maryland State Department of Education and by the appropriate education authorities in other states for the extension and renewal of certificates in accordance with their laws and regulations.

MARKING SYSTEM

The following symbols are used for marks: A, B, C, and D—passing; F—Failure; I—Incomplete. Mark A denotes superior scholarship; mark B, good scholarship; mark C, fair scholarship; and mark D, passing scholarship. The mark of I (incomplete) is exceptional. Regulations governing the use of an incomplete mark are printed in the Academic Regulations.

NORMAL AND MAXIMUM LOADS

Six semester hours is the normal load for the Summer Session. Undergraduate students in the College of Education and teachers in service may take a maximum of eight semester hours if they have above-average grades.

The maximum load for graduate students is six semester hours. For details, see "Tuition and Fees."

TUITION AND FEES

Undergraduate Students

General Tuition Fee, Per Credit Hour	\$10.00
Non-residence Fee	15.00
Must be paid by all students who are not residents of Maryland.	
Matriculation Fee	10.00
Payable only once, upon admission to the University. Every student must be matriculated.	

Infirmary Fee	1.00
Recreation Fee	1.00
Required of all students registered in the Summer School.	

Graduate Students

General Tuition Fee, Per Credit Hour	\$10.00
Matriculation Fee	10.00
Payable only once, upon admission to the Graduate School.	
Recreation Fee	1.00
Required of all students registered in the Summer School.	
Medical attention is not provided for graduate students, consequently no Infirmary Fee is charged.	

There is no non-residence fee for graduate students.

Miscellaneous Information

Auditors pay the same fees as regular students.

The diploma fee is \$10.00 for bachelors' and masters' degrees, and \$50.00 for doctors' degrees.

A fee of \$3.00 is charged for each change in program after June 30. If such change involves entrance to a course, it must be approved by the instructor in charge of the course entered. Courses cannot be dropped after July 14.

A special laboratory fee may be charged for certain courses where such fee is noted in the course description.

All laboratory courses in chemistry carry laboratory fees of \$10.00; in addition the student is charged for any apparatus which cannot be returned to the stock room in perfect condition. Other laboratory fees are stated in connection with individual courses.

Physical Education Fee charged each student registered for any physical activity course, \$3.00.

Late Registration fee, \$5.00.

LIVING ACCOMMODATIONS—MEALS

Dormitory accommodations are available at the following cost per term, on the basis indicated:

Regular Dormitories	Single Room	Double Room
Women (with maid service)	\$45	\$35
Men (without maid service)	\$35	\$25

The Dining Hall will operate entirely on the Cafeteria plan and meals will be served at a minimum cost with a choice of foods.

THE UNIVERSITY DORMITORIES WILL NOT BE OPEN FOR OCCUPANCY UNTIL 12 O'CLOCK NOON, SUNDAY, JUNE 24.

Early application for reservations is advisable, as only those who have made reservations will be assured that rooms are ready for their occupancy. Rooms will not be held later than noon of Tuesday, June 26. For reservations write to Miss Marian Johnson, Assistant Dean of Women, or Mrs. Robert C. James, Men's Dormitory Manager. **Do not send a deposit for room.**

Students attending the Summer School and occupying rooms in the dormitories will provide themselves with towels, pillows, pillow cases, sheets, blankets, bureau scarf, desk blotter, and waste basket. Trunks for the men's dormitories should be marked with student's name and addressed to "Men's Dormitories." Trunks for the women's dormitories should include name of dormitory and room number if it has been assigned in advance. Trunks sent by express should be prepaid. Cleanliness and neatness of rooms is the responsibility of the individual.

OFF-CAMPUS HOUSING

Off-campus rooms are available. Inquiries concerning them should be addressed to Mr. Doyle Royal, Office of Director of Student Welfare. He will furnish the names of those householders to whom students should write to make their own arrangements.

The University assumes no responsibility for rooms and board offered to Summer Session patrons outside of the University dormitories and dining room. Eating establishments in the vicinity are inspected by the County Health Service.

CANCELLATION OF COURSES

Courses may be cancelled if the number of students enrolled is below certain minima. In general, freshman and sophomore courses will not be maintained for classes smaller than 20. Minimum enrollments for upper level undergraduate courses and graduate courses will be 15 and 10 respectively.

WITHDRAWAL AND REFUND OF FEES

Any student compelled to leave the University at any time during the summer session must file an application for withdrawal, bearing the proper signatures, in the office of the Registrar. If this is not done, the student will not be entitled, as a matter of course, to a certificate of honorable dismissal, and will forfeit his right to any refund to which he would otherwise be entitled. The date used in computing refunds is the date the application for withdrawal is filed in the office of the Registrar.

In the case of a minor, official withdrawal will be permitted only with the written consent of the student's parent or guardian.

Students withdrawing from the University will receive a refund of all charges, less the matriculation fee in accordance with the following schedule;

<i>Period from Date Instruction Begins</i>	<i>Percentage Refundable</i>
One week or less	60%
Between one and two weeks	20%
Over two weeks	0

No refunds of fixed charges, lodging, tuition, laboratory fees, etc., are allowed when courses are dropped, unless the student withdraws from the University.

STUDENT HEALTH

The University Infirmary, located on the campus, in charge of the regular University physician and nurse, provides medical service of a routine nature for the undergraduate students in the Summer Session. Students who are ill should report promptly to the University Infirmary, either in person or by phone (Extension 326).

PARKING OF AUTOMOBILES

For the use of students, staff members, and employees, several parking lots are provided. The University rules forbid the parking of cars on any of the campus roads. These rules are enforced by State police.

SUMMER GRADUATE WORK

Masters' degrees are offered through the Graduate School as follows:

- Master of Arts
- Master of Science
- Master of Arts in American Civilization
- Master of Education
- Master of Business Administration

Doctors' degrees offered through the Graduate School are as follows:

- Doctor of Philosophy
- Doctor of Education

Graduate work in the Summer School may be counted as residence toward a Master's degree or Doctor of Education degree. A full year of residence or the equivalent is the minimum requirement for each degree.

The requirements for each of the seven degrees above may be procured from the Graduate School upon request.

Special regulations governing graduate work in Education and supplementing the statements contained in the Graduate School Announcements are available in duplicated form and may be obtained from the College of Education. Each graduate student in Education should have a copy. Students seeking the Master's degree as a qualification for a certificate issued by the Maryland State Department of Education or any other certifying authority

should consult the appropriate bulletin for specific requirements. Advisers will assist students in planning to meet such requirements.

All students desiring graduate credit, whether for meeting degree requirements, for transfer to another institution, or for any other purpose, must be regularly matriculated and registered in the Graduate School.

CANDIDATES FOR DEGREES

All students who expect to complete requirements for degrees during the Summer Session should make applications for diplomas at the office of the Registrar during the first two weeks of the Summer Session.

UNIVERSITY BOOKSTORE

For the convenience of students, the University maintains a students' supply store, located in the Student Union Building, where students may obtain at reasonable prices textbooks, stationery, classroom materials and equipment.

The bookstore operates on a cash basis.

THE PROGRAM IN AMERICAN CIVILIZATION

Work in American Civilization is required of freshmen and sophomores and is offered for election to juniors, seniors, and graduates. Freshmen and sophomores study literature, history, sociology, and political science (Eng. 1, 2, and 3, 4 or 5, 6; Hist. 5, 6; Soc. 1; G. & P. 1). Upper class students may elect a combined major-minor in American Civilization stressing literature, history, sociology, or government and politics. Graduate students may take masters' or doctors' degrees in American Civilization.

The principal objectives of American Studies are broadly cultural rather than professional; but the work is an excellent preparation for many occupations such as teaching, writing, government service, and the law. A major in American Civilization is especially desirable for students who wish a broad background of knowledge about our country as a preparation for teaching Social Studies, English, or the Core. A student taking that major distributes his study more or less evenly among the various departments which give courses dealing with the American past and present. Then in his senior year he takes the Conference Course (a "great American books" pro-seminar) which aims particularly to integrate the knowledge he has received. The four departments which give most of the classes related to the American Civilization program are: English, Government and Politics, History, and Sociology. The student who is interested in majoring in American Civilization should see the Executive Secretary of the program, Professor Carl Bode. Close correlation with the student's work in the College of Education should result in an exceptionally satisfactory preparation for the prospective teacher.

PROGRAM OF COURSES DESIGNED FOR HIGH SCHOOL TEACHERS OF SCIENCE AND MATHEMATICS

The College of Agriculture, the College of Arts and Sciences, and the College

of Education are initiating a program of courses designed especially for high school teachers of science and mathematics who wish to learn more about the subjects they teach. These courses may be used toward a Master of Education degree. The courses are designed to meet the needs of teachers who wish to learn more about mathematics or the new developments in science. Courses are offered this summer by the Departments of Botany, Chemistry, Mathematics, Physics, and Zoology; and a seminar for science teachers by the College of Education. Courses especially planned for teachers are indicated by an asterisk (*). In addition, other courses holding unusual interest and value for teachers are designated by a dagger (†).

CONFERENCES, INSTITUTES AND WORKSHOPS

Institute for Child Study Summer Workshop

The Institute for Child Study, College of Education, offers a six-week human development workshop each summer providing opportunities for (1) study and synthesis of scientific knowledge about children and youth; (2) experience in the analysis of case records; (3) preparation of study group leaders for in-service child study programs; (4) planning in-service child study programs for teachers or other human relations workers; (5) planning pre-service teacher education courses and laboratory experiences for prospective teachers; (6) examination of implications of scientific knowledge about human development and behavior for school organization, curriculum development, guidance services, club leadership, and other agencies devoted to fostering the mental health and optimal development of children, youth, and adults.

While the workshop is designed mainly for teachers and administrators who have been actively engaged in the Child Study Program sponsored by the Institute or persons who are interested in participating in such a program, the experience has meaning for and has proved valuable for persons in other fields where human relations are a vital factor. Inquiries should be addressed to Director, Summer Workshop in Human Development.

Aviation Education Workshop

In cooperation with the State Department of Education, the public schools of the State, and the Civil Air Patrol, the College of Education and the College of Special and Continuation Studies are sponsoring an aviation education workshop for a two-week period June 25-July 6. The workshop will be planned to meet the needs of teachers for in-service education in the general education phases related to developments in aviation. It will be oriented around teaching in the classroom, providing opportunities for teachers to develop plans and teaching materials, and to become acquainted with instructional materials and information useful in teaching. Further information can be secured by writing to the Director of Summer Session.

Students will register for Ed. 189 for two (2) credits.

Institute of Acarology

The Institute of Acarology provides a unique opportunity for entomologists, parasitologists, zoologists and advanced students in the field of biology to study the mites and ticks. The recent important discoveries of the role of the Acarina in the fields of public health and agriculture have emphasized the need for an understanding of all phases of knowledge concerned with mites and ticks. Their part in the epidemiology of the encephalitides, scrub typhus, "Q" fever, haemorrhagic fever, and other diseases, as well as their increased destruction of plants that has followed the introduction of the newer insecticides have brought them to the attention of an increasing number of biologists. Three courses (see page 57) involving lecture, laboratory and field work will be offered from July 16 through August 3 in the Department of Zoology, University of Maryland.

In addition to these courses the Institute of Acarology sponsors a series of general lectures. The 1955 lectures were presented by Dr. Bryn M. Jones, Ashworth Laboratory, University of Edinburgh, Edinburgh, Scotland; Dr. Henry S. Fuller, Department of Entomology, Army Medical Graduate School, Walter Reed Medical Center, Washington, D. C.; Lt. Col. Robert Traub, Department of Entomology, Army Medical Graduate School, Walter Reed Medical Center, Washington, D. C.; Dr. Ralph E. Heal, Executive Secretary, National Pest Control Association, New York, New York; Dr. Floyd F. Smith, U. S. Department of Agriculture, Agriculture Research Center, Beltsville, Maryland; Mr. W. C. McDuffie, U. S. Department of Agriculture, Plant Industry Station, Beltsville, Maryland; Dr. Russell W. Strandtmann, Department of Biology, Texas Technological College, Lubbock, Texas; Dr. George Anastos, Department of Zoology, University of Maryland; and Dr. G. W. Wharton, Department of Zoology, University of Maryland. Lectures on subjects of acarological interest were presented at the Animal Parasite Laboratory, U. S. Department of Agriculture, Beltsville, Maryland, by Dr. Benjamin Schwartz, Dr. Kenneth C. Kates, Mr. John T. Lucker, Dr. A. O. Foster and Dr. E. E. Lund.

The Parent-Teacher Association Summer Conference

July 9, 10, 11

The College of Education will cooperate with the Maryland Congress of Parents and Teachers in planning their convention to be held this summer on the University campus. Persons of national reputation will be present as speakers and discussion leaders at the conference.

COURSE OFFERINGS AND DESCRIPTIONS

An "S" before a course number denotes that the course is offered in summer school only. An "S" after a course number indicates a regular course modified for summer school offering.

AGRICULTURAL ECONOMICS AND MARKETING

A. E. 109. Research Problems (1-2). To be arranged. (Staff.)

With the permission of the instructor, students will work on any research problems in agricultural economics. There will be occasional conferences for the purpose of making reports on progress of work.

A. E. 200. Special Problems in Farm Economics (2). To be arranged. (Staff.)

An advanced course dealing extensively with some of the economic problems affecting the farmer, such as land values, taxation, credit, prices, production adjustments, transportation, marketing and cooperation.

A. E. 203. Research. Credit according to work accomplished. (Staff.)

Students will be assigned research in agricultural economics under the supervision of the instructor. The work will consist of original investigation in problems of agricultural economics.

A. E. S207. Farm Business Analysis (1) July 2 to 20. (Staff.)

An advanced course dealing with farm records and accounts. Designed especially for teachers of agriculture and county agents.

AGRICULTURAL EDUCATION AND RURAL LIFE

The three-week courses in Agricultural Education and Rural Life are offered primarily for teachers of vocational agriculture, extension field agents and others interested in the professional and cultural development of rural communities. These courses are arranged to articulate with the three-week courses in Agricultural Economics and Marketing, Agronomy, Animal Husbandry, Botany, Dairy Husbandry, Horticulture, and Poultry. Courses in both groups are offered in a cycle. The normal load is three courses, which gives three semester hours of credit.

By pursuing such a program successfully for eight consecutive summers and submitting a satisfactory thesis a student can earn a Master of Science degree with a major in Agricultural Education. The time required for this degree can be shortened by attending some full six-week Summer School Sessions, by attending one or more full semesters, by taking University Extension courses given over the State, and by taking courses given in the evening and on Saturday on the campus. Minor credit can be taken in either Agricultural or Secondary Education courses.

In 1956 the three-week period will start on July 2. Classes will meet during the 2nd, 3rd and 4th weeks of Summer School. Registration is with regular Summer School students on June 22 or June 25, or on July 2 before the student starts attending classes.

R. Ed. S208 A-B. Problems in Teaching Farm Mechanics (1-1). July 2 to July 20. Part A. 2:00 and 3:00. (Gienger.)

This course deals with the latest developments in the teaching of Farm Mechanics. Various methods in use will be compared and studied under laboratory conditions.

R. Ed. S209 A-B. Adult Education in Agriculture (1-1). July 2 to July 20. Part A. 10:00; O-138. (Ahalt.)

Principles of adult education as applied to rural groups, especially young and adult farmers. Organizing classes, planning courses and instructional methods are stressed.

R. Ed. 220. Field Problems in Rural Education (1-3). Prerequisite, six semester hours of graduate study. Arranged; O-138. (Ahalt, Hopkins.)

Problems accepted depend upon the character of the work of the student and the facilities available for study. Periodic conferences required. Final report must follow accepted pattern for field investigations.

R. Ed. 250S, A-B. Seminar in Rural Education (1-1). July 2 to July 20. Part A. 11:00; O-138. (Hopkins.)

Current problems of teaching agriculture are analyzed and discussed. Students are asked to make investigations, prepare papers and make reports.

R. Ed. 251. Research. (1-6). Arranged, O-138. (Ahalt, Hopkins.)

Principles of research are studied, problems for theses are selected, methods of developing a thesis are discussed, and a thesis is written. All students who major in Agricultural Education are required to attend a series of meetings (unless specifically excused) in connection with this course after they have completed 12 semester hours of graduate study and before they start on their thesis.

Also see A.E. S207, Agron. S210, Dairy S201 and P.H. S111.

AGRONOMY

A. CROPS

Agron. 208. Research Methods (2). (Staff.)

Development of research viewpoint by detailed study and report on crop research of the Maryland Agricultural Experiment Station, review of literature, or original work by the student on specific phases of a problem.

Agron. 209. Research in Crops (1-8). Credit according to work accomplished. (Staff.)

With approval or suggestion of the head of the department the student will choose his own problems for study.

Agron. S210. Cropping Systems (1). July 2 to July 20—9:00; E103.

An advanced course primarily designed for teachers of vocational agriculture and county agents. It deals with outstanding problems and the latest developments in the field.

B. SOILS

Agron. 118. Special Problems in Soils (1). Prerequisite, Agron. 10 and permission of instructor. (Staff.)

A detailed study including a written report of an important soils problem.

Agron. 256. Soil Research (1-8). (Staff.)

ANIMAL HUSBANDRY

A. H. 172. Special Problems in Animal Husbandry (1-2). Work assigned in proportion to amount of credit. Prerequisite, permission of instructor. (Staff.)

A course designed for advanced undergraduates in which specific problems relating to Animal Husbandry will be assigned.

A. H. 201. Special Problems in Animal Husbandry (1-2). Work assigned in proportion to amount of credit. Prerequisite, permission of instructor. (Staff.)

Problems will be assigned which relate specifically to the character of work the student is pursuing.

A. H. 204. Research (1-6). Credit to be determined by amount and character of work done. (Green.)

With the approval of the head of the department, students will be required to pursue original research in some phase of Animal Husbandry, carrying the same to completion, and report the results in the form of a thesis.

BACTERIOLOGY

Bact. 1. General Bacteriology (4). Five lectures and five two-hour laboratory periods a week. Lecture, 8:00; T-129; laboratory, 9:00, 10:00. Laboratory fee, \$10.00. (Laffer.)

The physiology, culture, and differentiation of bacteria. Fundamental principles of microbiology in relation to man and his environment.

Bact. 5. Advanced General Bacteriology (4). Five lectures and five two-hour laboratory periods a week. Lecture, 9:00; T-219; laboratory, 10:00, 11:00; T-307. Prerequisite, Bact. 1 and Chem. 3. Laboratory fee, \$10.00. (Laffer.)

Emphasis will be given to the fundamental procedures and techniques used in the field of bacteriology. Lectures will consist of the explanation of various laboratory procedures.

Bact. 181. Bacteriological Problems (3). Eight two-hour lab. periods a week. To be arranged. Prerequisite 16 credits in bacteriology. Registration only upon consent of the instructor. Laboratory fee, \$10.00. (Faber.)

This course is arranged to provide qualified majors in bacteriology, and majors in allied fields an opportunity to pursue specific bacteriological problems under the supervision of a member of the Department.

Bact. 291. Research. Prerequisite, 30 credits in bacteriology. Laboratory fee, \$10.00.

Credits according to work done. The investigation is outlined in consultation with and pursued under the supervision of a senior staff member of the department.

BOTANY

Bot. 1. General Botany (4). Five lectures and five two-hour laboratory periods per week. Lecture 10:00; E-214. Laboratory 1:00, 2:00; E-236. Laboratory fee, \$5.00. (Owens.)

General introduction to botany touching briefly on all phases of the subject. Emphasis is on the fundamental biological principles of the higher plants. (Owens.)

†**Bot. 136. Plants and Mankind (2).** 8:00; E-214. Prerequisite, Bot. 1 or equivalent. (Rapplee.)

A survey of the plants which are utilized by man, the diversity of such utilization, and their historic and economic significance. (Rapplee.)

†Recommended for teachers.

Bot. 151S. Teaching Methods in Botany (2). Five two-hour laboratory periods a week. Prerequisite, Bot. 1 or equivalent. Laboratory fee, \$5.00. (Not offered 1956). (Owens.)

Bot. 206. Research in Plant Physiology. (Credit according to work done). (Gauch, Krauss.)

Bot. 214. Research in Plant Cytology and Morphology. (Credit according to work done). (D. T. Morgan, Jr., Rappleye.)

Bot. 225. Research in Plant Pathology. (Credit according to work done). (Cox, Sisler.)

BUSINESS AND PUBLIC ADMINISTRATION

B. A. 20. Principles of Accounting (4). Daily 8:00, 9:00; Q-28. Prerequisite, sophomore standing. (Wedeborg.)

The fundamental principles and problems involved in accounting for proprietorships, corporations and partnerships.

B. A. 21. Principles of Accounting (4). Daily 8:00, 9:00; Q-29A. Prerequisite, sophomore standing. (Edelson.)

The fundamental principles and problems involved in accounting for proprietorships, corporations and partnerships.

B. A. 111. Intermediate Accounting (3). Daily 8:00; M., W., F., 9:00; Q-29. Prerequisite, B. A. 21. (Lee.)

A comprehensive study of the theory and problems of valuation of assets, application of funds, corporation accounts and statements, and the interpretation of accounting statements.

B. A. 130. Elements of Business Statistics (3). Daily 8:00; M., W., F., 9:00; Q-243. Prerequisite, junior standing. Required for graduation. Laboratory fee, \$3.50. (Nelson.)

This course is devoted to a study of the fundamental of statistics. Emphasis is placed upon the collection of data; hand and machine tabulation; graphic charting; statistical distribution; averages; index numbers; sampling; elementary tests of reliability; and simple correlations.

B. A. 140. Financial Management (3). Daily 8:00; M., W., F., 9:00; Q-148. Prerequisite, Economics 140. (Calhoun.)

This course deals with principles and practices involved in the organization, financing, and reconstruction of corporations; the various types of securities, and their use in raising funds, apportioning income, risk and control; intercorporate relations; and new developments. Emphasis on solution of problems of financial policy faced by management.

B. A. 150a. Marketing Principles and Organization (3). Daily 10:00 M., W., F., 11:00; Q-146. Prerequisite, Economics 32 or 37. (Gentry.)

This is an introductory course in the field of marketing. Its purpose is to give a general understanding and appreciation of the forces operating, institutions employed, and methods followed in marketing agricultural products, natural products, services, and manufactured goods.

B. A. 160. Personnel Management (3). Daily 10:00; M., W., F., 11:00; Q-148. Prerequisite, Economics 160. (Sylvester.)

This course deals essentially with functional and administrative relationships between management and the labor force. It comprises a survey of the scientific selection of employees, "in-service" training, job analysis, classification and rating, motivation

of employees, employee adjustment, wage incentives, employee discipline and techniques of supervision, and elimination of employment hazards.

B. A. 181. Business Law (4). Daily 10:00, 11:00; Q-30. Prerequisite, senior standing. Required in all Business Administration curriculums. (Mounce.)

Legal aspects of business relationships, contracts, negotiable instruments, agency, partnerships, corporations, real and personal property and sales.

B. A. 262. Seminar in Contemporary Trends in Labor Relations. (Arranged). (Sylvester.)

CHEMISTRY

All laboratory courses in Chemistry carry a laboratory fee of \$10.00; in addition the student is charged for any apparatus which cannot be returned to the stock room in perfect condition.

Chem. 3. General Chemistry (4). Five lectures and five three-hour laboratory periods per week. Prerequisite, Chem. 1. Lecture, 11:00, C-215; laboratory, 1, 2, 3, C-120. (Rollinson.)

Chem. 19. Elements of Quantitative Analysis (4). Five lectures and five three-hour laboratory periods per week. Prerequisite, Chem. 1 and 3. Lecture, 9:00, C-215; laboratory 10, 11, 12, C-306. (Stuntz.)

Chem. 37. Elementary Organic Chemistry (2). Second semester. Five lectures per week. Prerequisite, Chem. 35. 8:00, C-215. (Woods.)

Chem. 38. Elementary Organic Laboratory (2). Second semester. Five three-hour laboratory periods per week. 9, 10, 11, C-221. (Woods.)

***Chem. 111. Chemical Principles (4).** Five lectures and five three-hour laboratory periods per week. Prerequisite, Chem. 1 and 3, or equivalent. Not open to students seeking a major in the physical sciences, since the course content is covered elsewhere in their curriculum. Lecture, 10:00; C-215; laboratory, 1, 2, 3, C-118. (Jaquith.)

A course in the principles of chemistry with accompanying laboratory work consisting of simple quantitative experiments. (Credit applicable only toward degree in College of Education.)

Chem. 144. Advanced Organic Laboratory (2 or 4). Five or ten three-hour laboratory periods per week. Prerequisites, Chem. 37 and 38. Laboratory periods arranged. C-206. (Pratt.)

Chem. 146, 148. The Identification of Organic Compounds (2, 2). Five three-hour laboratory periods per week. Prerequisites, Chem. 37 and 38. Laboratory periods arranged. C-208. Two recitations per week. Arranged. (Pratt.)

Chem. 192, 194. Glassblowing Laboratory (1, 1). Three three-hour laboratory periods per week. MW 7, 8, 9; S, 9, 10, 11. C-B3. (Carruthers.)

Chem. 254. Advanced Organic Preparations (2 or 4). Five or ten three-hour laboratory periods per week. Laboratory periods arranged. C-206. (Pratt.)

*Intended for teachers.

Chem. 258. The Identification of Organic Compounds, an advanced course (2 or 4). Five or ten three-hour laboratory periods per week. Laboratory periods arranged. C-208. Two recitations per week. Arranged. (Pratt.)

Chem. 295. Heterogenous Equilibria (2). Five lectures per week. 9:00; Y-18. (Pickard.)

Chem. 360. Research. (Staff.)

CLASSICAL LANGUAGES

Latin 2. Elementary Latin (3). Eight periods a week. Daily, 9:00; M., W., F., 12:00; M-102. Second semester of first-year Latin. (Avery.)

The essentials of Latin grammar, exercises in translation, composition, and connected reading.

Latin 70. Greek and Roman Mythology (3). Eight periods a week. Daily, 10:00; M., W., F., 1:00; M-102. No prerequisite; taught in English. (Avery.)

A systematic study of the divinities of ancient Greece and Rome and the classical myths concerning them.

NOTE: This course is particularly recommended for teachers and students in the fields of foreign languages, English, European history, the fine arts and journalism.

Latin 210. Vulgar Latin Readings (3). Six hours. Arranged. (Avery.)

An intensive review of the phonology, morphology, and syntax of Classical Latin, followed by the study of the deviations of Vulgar Latin from the classical norms, with the reading of illustrative texts. The reading of selections from the *Peregrinatio ad loca sancta* and the study of the divergences from Classical Latin usage therein, with special emphasis on those which anticipate subsequent developments in the Romance Languages.

NOTE: This course is particularly recommended for teachers of Latin and graduate students in the fields of Romance Languages and general linguistics.

DAIRY

Dairy S201. Advanced Dairy Production (1). 8:00; D-308, July 2 to July 20. (Beck.)

An advanced course primarily designed for teachers of vocational agriculture and county agents. It includes a study of the newer discoveries in dairy cattle nutrition, breeding and management.

Dairy 204. Special Problems in Dairying (1-5). Prerequisite, permission of Professor in charge of work. Credit in accordance with the amount and character of work done. (Staff.)

Methods of conducting dairy research and the presentation of results are stressed. A research problem which relates specifically to the work of the student is pursuing will be assigned. (Staff.)

Dairy 208. Research (1-6). Credit to be determined by the amount and quality of work done. (Staff.)

Original investigation by the student of some subject assigned by the Major Professor, the completion of the assignment and the preparation of a thesis in accordance with requirements for an advanced degree. (Staff.)

ECONOMICS

Econ. 5. Economic Developments (2). Daily 10:00; Q-147 (Measday.)

An introduction to modern economic institutions—their origins, development, and present status. Commercial revolution, industrial revolution, and age of mass production. Emphasis on developments in England, Western Europe and the United States.

Econ. 31. Principles of Economics (3). Daily 8:00; M., W., F., 9:00; Q-147. Prerequisite, sophomore standing. (Gruchy.)

A general analysis of the functioning of the economic system. A considerable portion of the course is devoted to a study of basic concepts and explanatory principles. The remainder deals with the major problems of the economic system.

Econ. 32. Principles of Economics (3). Daily 12:00 M., W., F., 1:00; Q-30. Prerequisite, Economics 31. (Grayson.)

A general analysis of the functioning of the economic system. A considerable portion of the course is devoted to a study of basic concepts and explanatory principles. The remainder deals with the major problems of the economic system.

Econ. 140. Money and Banking (3). Daily 8:00; M., W., F., 9:00; Q-146. Prerequisite, Economics 32 or 37. (Hamberg.)

A study of the organization, functions, and operation of our monetary, credit, and banking system; the relation of commercial banking to the Federal Reserve System; the relation of money and credit to prices; domestic and foreign exchange and the impact of public policy upon banking and credit.

Econ. 160. Labor Economics (3). Daily 12:00; M., W., F., 1:00; Q-146. Prerequisite, Economics 32 or 37. (Measday.)

The historical development and chief characteristics of the American Labor movement are first surveyed. Present day problems are then examined in detail; wage theories, unemployment, social security; labor organization, collective bargaining.

EDUCATION

BUSINESS EDUCATION

B. Ed., 256. Curriculum Development in Business Education (6). Daily, 9:00, 10:00, 11:00; Q-140. (Patrick.)

This course is especially designed for graduate students interested in devoting the summer session to a concentrated study of curriculum planning in business education. Emphasis will be placed on the philosophy and objectives of the business education program, and on curriculum research and organization of appropriate course content.

ELEMENTARY—SECONDARY

Ed. 52. Children's Literature (2). 8:00; T-4. (Bryan.)
A study of literary values in prose and verse for children.**Ed. 102. History of Education in the United States (2).** 11:00; T-17. (Wiggin.)

A study of the origins and development of the chief features of the present system of education in the United States.

Ed. 107. Philosophy of Education (2). 8:00; T-17. (Wiggin.)

A study of the great educational philosophers and systems of thought affecting the development of modern education.

Ed. 121. The Language Arts in the Elementary School (2).

Section 1— 8:00; R-113.

(Dunlap.)

Section 2—10:00; T-219.

(Lewis.)

Section 3—11:00; T-219.

(Lewis.)

Concerned with the teaching of spelling, handwriting, oral and written expression, and creative expression. Special emphasis given to skills having real significance to pupils.

Ed. 122. The Social Studies in the Elementary School (2).

Section 1—11:00; R-113.

(Stratemyer.)

Section 2— 9:00; T-5.

(O'Neill.)

Section 3—10:00; R-113.

(Stratemyer.)

Consideration given to curriculum, organization, methods of teaching, evaluation of newer materials, and utilization of environmental resources.

Ed. 124. Arithmetic in the Elementary School (2).

Section 1— 9:00; A-14.

(Schindler.)

Section 2— 8:00; A-14.

(Schindler.)

Emphasis on materials and procedures which help pupils sense arithmetical meanings and relationships. Helps teachers gain a better understanding of the number system and arithmetical processes.

Ed. 125. Art in Elementary Schools (2).

Section 1—M., W., 10:00-12:30; A-302.

(Lembach.)

Section 2—T., Th., 10:00-12:30; A-302.

(Lembach.)

Concerned with art methods and materials for elementary schools. Includes laboratory experiences with materials appropriate for elementary schools.

Applications for enrollment must be mailed to the Director of the Summer Session before June 15, 1956. Enrollment will be limited to 25 persons per section.

Ed. 127. Teaching in Elementary Schools (6). Daily, 9:00, 10:00, 11:00; T-18.

(Bowman.)

An overview of elementary school teaching designed for individuals without specific preparation for elementary school teaching or for individuals without recent teaching experience.

Applications for enrollment must be mailed to the Director of the Summer Session before June 15, 1956. Enrollment will be limited to 25 persons.

***Ed. 130. Theory of the Junior High School (2).** 9:00; A-203. (Fisk.)

This course gives a general overview of the junior high school. It includes consideration of the purposes, functions, and characteristics of this school unit; a study of its population, organization, program of studies, methods, staff, and other similar topics together with their implications for prospective teachers.

***Ed. 131. Theory of the Senior High School (2).** 9:00; A-203. (Fisk.)

The secondary school population; the school as an instrument of society; relation of the secondary school to other schools; aims of secondary education; curriculum and methods; extra-curricular activities; guidance and placement; teacher certification and employment in Maryland and the District of Columbia.

*Credit is accepted for Ed. 130 or Ed. 131, but not for both courses.

Ed. 133. Methods of Teaching the Social Studies (2). 9:00; A-7. (Willis.)

Designed to give practical training in the everyday teaching situations. Emphasis is placed on the use of various lesson techniques, audio and visual aids, reference materials, and testing programs. Attention is given to the adaption of teaching methods to individual and group differences. Consideration is given to present tendencies and aims of instruction in the social studies.

Ed. 134. Materials and Procedure for the High School Core Curriculum (2). 9:00; T-102. Fee, \$1.00. (Schneider.)

This course is designed to bring practical suggestions to teachers who are in charge of core classes in junior and senior high schools. Materials and teaching procedures for specific units of work are stressed.

Ed. 141. High School Course of Study—English (2). 10:00; T-4. (Bryan.)

Methods and techniques used in teaching the language arts in secondary schools.

Ed. 142. High School Course of Study—Literature (2). 11:00; T-4. (Bryan.)

Representative selections of the literature studied in secondary schools and methods of presentation.

Ed. 145. Principles of High School Teaching (3). Daily 9:00; M., T., W., 12:00; T-103. (Brechtbill.)

This course is concerned with the principles and methods of teaching in junior and senior high schools.

Ed. 147. Audio-Visual Education (2). Fee, \$1.00. (Maley.)

Section 1—10:00; P-306.

Section 2—11:00; P-306.

Sensory impressions in their relation to learning; projection apparatus, its cost and operation; slides, film-strips, and films; physical principles underlying projection; auditory aids to instruction; field trips; pictures, models, and graphic materials; integration of sensory aids with organized instruction.

Ed. 150. Educational Measurement (2). 9:00; T-20. (Byrne.)

Constructing and interpreting measures of achievement.

Ed. 153. The Teaching of Reading (2).

Section 1—11:00; R-205

Section 2— 9:00; T-10

Section 3—10:00; T-10

(Dunlap.)

(Bontrager.)

(Bontrager.)

Concerned with fundamentals of developmental reading instruction, including reading readiness, uses of experience records, procedures in using basal readers, the improvement of comprehension, teaching reading in all areas of the curriculum, uses of children's literature, the program in word analysis, and procedures for determining individual needs.

Ed. 154. Remedial Reading Instruction (2). 8:00; T-10. (Bontrager.)

For supervisors and teachers who wish to help retarded readers. Concerned with causes of reading difficulties, the identification and diagnosis of retarded pupils, instructional materials, and teaching procedures. Prerequisite, Ed. 153 or the equivalent.

Applications for enrollment must be mailed to the Director of the Summer Session before June 15, 1956. Enrollment will be limited to 30 persons.

Ed. 160. Educational Sociology (2). 10:00; A-7. (Willis.)

This course deals with data of the social sciences which are germane to the work of teachers. Consideration is given to implications of democratic ideology for educational endeavor, educational tasks imposed by changes in population and technological

trends, the welfare status of pupils, the socio-economic attitudes of individuals who control the schools, and other elements of community background which have significance in relation to schools.

Ed. 161. Principles of Guidance (2). 11:00; T-20. (Byrne.)
Overview of principles and practices of guidance-oriented education.

Ed. 162. Mental Hygiene in the Classroom (2). (Denecke.)
Section 1—8:00; T-103.
Section 2—10:00; T-102.
Section 3—11:00; T-103.

The practical application of the principles of mental hygiene to classroom problems.

Ed. 170. Introduction to Special Education (2). 10:00; R-112. (Dalton.)

Designed to give an understanding of the needs of all types of exceptional children, stressing preventive and remedial measures.

Ed. 171. Education of Retarded and Slow-Learning Children (2). 8:00; R-112. (Dalton.)

A study of retarded and slow-learning children, including discovery, analysis of causes, testing techniques, case studies, and remedial educational measures.

Ed. 188. Special Problems in Education (1-3). Arranged. Prerequisite, consent of instructor. Not required. Available only to mature students who have definite plans for individual study of approved problems. (Staff.)

NOTE: Course cards must have the title of the problem and the name of the faculty member who has approved it.

Ed. 189. Workshops, Clinics, Institutes, and Field-Laboratory Projects: Aviation Education Workshop (2). June 25 to July 6. Daily, full day. (Mehrens and others.)

Intended for both elementary and secondary school teachers. Designed to provide information concerning developments in aviation and their implications for classroom teaching. Includes group work to give assistance to teachers in planning for instruction, producing materials, locating materials. Field trips and laboratory experiences provided.

Ed. 203. Problems in Higher Education (2). 9:00; T-17. (Wiggin.)
A study of present problems in higher education.

Ed. 210. The Organization and Administration of Public Education (2). (Newell.)

Section 1—9:00; T-4.
Section 2—10:00; T-103.

The basic course in school administration. The course deals with the organization and administration of school systems—at the local, state, and federal levels; and with the administrative relationships involved.

Ed. 211. The Organization, Administration, and Supervision of Secondary Schools (2). 11:00; T-102. (Schneider.)

The work of the secondary school principal. The course includes topics such as personnel problems, supervision, school-community relationships, student activities, schedule making, and internal financial accounting.

Ed. 214. School Buildings and Equipment (2). 9:00; T-12. (Van Zwoll.)

An orientation course in which the planning of school buildings is developed as educational designing with reference to problems of site, building facilities, and equipment.

Ed. 216. High School Supervision (2). 8:00; T-20. (Schneider.)

Deals with recent trends in supervision; the nature and function of supervision; planning supervisory programs; evaluation and rating; participation of teachers and other groups in policy development; school workshops; and other means for the improvement of instruction.

Ed. 217. Administration and Supervision in Elementary Schools (2). 9:00; R-7. (Harris.)

Problems in organizing and administering elementary schools and improving instruction.

Ed. 219. Seminar in School Administration (2). 11:00; T-12. (Newell.)**Ed. 225. School Public Relations (2.)** 8:00; T-12. (Van Zwoll.)

A study of the interrelationships between the community and the school. Public opinion, propaganda, and the ways in which various specified agents and agencies within the school have a part in the school public relations program are explored.

Ed. 226. Child Accounting (2). 10:00; T-12. (Van Zwoll.)

An inquiry into the record keeping activities of the school system, including an examination of the marking system.

Ed. 229. Seminar in Elementary Education (2). 10:00; A-14. (Schindler.)

Primarily for individuals who wish to write seminar papers. Enrollment should be preceded by at least 12 hours of graduate work in education.

Ed. 230. Elementary School Supervision (2). 11:00; R-102. (Harris.)

Concerned with the nature and function of supervision, various supervisory techniques and procedures, human relationship factors, and personal qualities for effective supervision.

Ed. 232. Student Activities in the High School (2). 8:00; A-203. (Fisk.)

A consideration of the problems connected with student activities of the high school: (1) philosophical bases, (2) aims, (3) organization, and (4) supervision of student activities such as student council, school publications, musical organizations, dramatics, assemblies, and clubs.

Ed. 234. The School Curriculum (2).

Section 1—8:00; R-7

Section 2—10:00; T-211.

(Harris.)

(Hovet.)

A foundations course embracing the curriculum as a whole from early childhood through adolescence, including a review of historical developments, an analysis of conditions affecting curriculum change, an examination of issues in curriculum making, and a consideration of current trends in curriculum design.

Ed. 235. Curriculum Development in Elementary Schools (2). 8:00 T-5.

(O'Neill.)

Concerned with problems encountered in curriculum evaluation and revision. Sociological and philosophical factors, principles for the selection and organization of content and learning activities, patterns of curriculum organization and the utilization of personnel for curriculum development.

Ed. 236. Curriculum Development in the Secondary School (2). 11:00; A-203. (Fisk.)

Curriculum planning; philosophical bases, objectives, learning experiences, organization of appropriate content, and means of evaluation.

Ed. 239. Seminar in Secondary Education (2). 11:00; T-211. (Hovet.)

Ed. 242. Coordination in Work-Experience Programs (2). 11:00; P-221.
(Brown.)

This course surveys and evaluates the qualifications and duties of a teacher-coordinator in a work-experience program. It deals particularly with evolving patterns in city and county schools in Maryland, and is designed to help teacher-coordinators, guidance counselors, and others in the supervisory and administrative personnel concerned with functioning relationships of part-time cooperative education in a comprehensive educational program.

Ed. 243. Problems of Teaching Arithmetic in Elementary Schools (2). 10:00;
R-101. (Dunlap.)

Implications of current theory and results of research for the teaching of arithmetic in elementary schools.

Ed. 244. Problems in Teaching Language Arts in Elementary Schools (2).
9:00; R-113. (Stratemeyer.)

Implications of current theory and the results of research for the language arts in the elementary schools.

Ed. 245. Applications of Theory and Research to High School Teaching (2). 11:00; A-7. (Willis.)

Implications of experimental practices, the proposals of eminent writers, and the results of research for the improvement of teaching on the secondary level.

Ed. 246. Problems of Teaching Social Studies in Elementary Schools (2).
11:00; T-5. (O'Neill.)

Application to the social studies program of selected theory and research in the social sciences, emphasizing patterns of behavior, environmental influences, and critical thinking.

Applications for enrollment must be mailed to the Director of the Summer Session before June 15, 1956. Enrollment will be limited to 25 persons.

Ed. 247. Seminar in Science Education (2).

Section 1— 8:00; T-119.

(Blough.)

Section 2— 8:00; T-211.

(Haworth.)

Section 1 will be concerned with science education in the elementary school. Prerequisite, a science education course.

Applications for enrollment in this course must be mailed to the Director of the Summer Session before June 15, 1956. Enrollment will be limited to 25 students.

Section 2 will be concerned with science education in the secondary school.

Special problems in curriculum making, course of study development, and other science teaching problems. Class members may work on problems related to their own schools.

Ed. 250. Analysis of the Individual (2). 10:00; A-130. (Collins.)

Knowing students through use of numerous techniques. Ed. 161 desirable as prior course.

Ed. 253. Guidance Information (2). 9:00; A-130. (Collins.)

How to find, file, and use information needed by students for making choices, plans, and adaptations in schools, occupations, and in inter-personal relations. Ed. 161 desirable as prior course.

Ed. 254. Organization and Administration of Guidance Programs (2). 8:00;
A-7. (Collins.)

How to instill the guidance point of view, and to implement guidance practices. All guidance courses except Seminar are prerequisite.

Ed. 260. Principles of School Counseling (2). 10:00; T-20. (Byrne.)

Exploration of counseling theories and the practices which stem from them. Ed. 161, Ed. 250, Ed. 253 are prerequisite.

Ed. 278. Seminar in Special Education (2). 11:00; R-112. (Dalton.)

Ed. 280. Research Methods and Materials in Education (2). 9:00; T-211. (Hovet.)

A study of research in education, the sources of information and techniques available, and approved form and style in the preparation of research reports and theses.

Ed. 288. Special Problems in Education (1-6). Arranged. (Staff.)

Master of education or doctoral candidates who desire to pursue special research problems under the direction of their advisers may register for credit under this number.

NOTE: Course card must have the title of the problem and the name of the faculty member under whom the work will be done.

Ed. 289. Research—Thesis (1-6). Arranged. (Staff.)

Students who desire credit for a master's thesis, a doctoral dissertation, or a doctoral project should use this number.

HOME ECONOMICS EDUCATION

H. E. Ed. 102. Problems in Teaching Home Economics (3). 8:00; T-218; other meetings arranged. Required of seniors in Home Economics Education. Prerequisite, consent of instructor. (Spencer.)

A study of the managerial aspects of teaching and administering a homemaking program; the physical environment, organization, and sequence of instructional units, resource materials, evaluation, home projects.

Note: This course is also open to elementary teachers who, in their instructional and administrative responsibilities, are concerned with health and nutrition. Special emphasis on methods and instructional materials.

H. E. Ed. 120. Evaluation of Home Economics (2). 9:00, 10:00; T-218. (Spencer.)

The meaning and function of evaluation in education; the development of a plan for evaluating a homemaking program with emphasis upon types of evaluation devices, their construction, and use. First three weeks.

HUMAN DEVELOPMENT EDUCATION

H. D. Ed. 112, 114, 116. Scientific Concepts in Human Development I, II, III (3, 3, 3).

H. D. Ed. 113, 115, 117. Laboratory in Behavior Analysis I, II, III, (3, 3, 3).

Summer workshop courses for undergraduates. In any one summer, concept and laboratory courses must be taken concurrently.

H. D. Ed. 200S. Introduction to Human Development and Child Study (2). 8:00; A-8.

This course offers a general overview of the scientific principles which describe human development and behavior and makes use of these principles in the study of individual children. When this course is offered during the academic year, each student will observe and record the behavior of an individual child through the semester and must have one half-day a week free for this purpose. The course is basic to further

work in child study and serves as a prerequisite for advanced courses where the student has not had field work or at least six weeks of workshop experience in child study. When this course is offered during the summer it will be H. D. 200S and intensive laboratory work with case records may be substituted for the study of an individual child.

H.D. Ed. 212, 214, 216. Advanced Scientific Concepts in Human Development, I, II, III (3, 3, 3).

H. D. Ed. 213, 215, 217. Advanced Laboratory in Behavior Analysis I, II, III (3, 3, 3).

Summer workshop courses for graduates providing credit for as many as three workshops. In any one summer, concept and laboratory courses must be taken concurrently.

H. D. Ed. 218. Workshop in Human Development (6). Prerequisites, H. D. Ed. 212, 213, 214, 215, 216, 217.

Summer workshop in human development for graduate students who have had three workshops and wish additional workshop experience. This course can be taken any number of times, but cannot be used as credit toward a degree.

H. D. Ed. 270. Seminars in Special Topics in Human Development (2-6). Arranged. (Staff.)

An opportunity for advanced students to focus in depth on topics of special interest growing out of their basic courses in human development. Prerequisites, consent of instructor.

INDUSTRIAL EDUCATION

The technical courses which are offered are intended for industrial arts teachers, arts and crafts teachers, education for industry majors, and adult education leaders. Ind. Ed. 9, "Industrial Arts in the Elementary School", is intended for elementary school teachers.

The professional courses are open to industrial arts teachers and supervisors, to vocational-industrial teachers and supervisors, to school administrators and to other graduate students whose planned programs include work in this area.

The Industrial Education Department will continue to sponsor a series of Thursday noon luncheons. Outstanding speakers will address the luncheon groups. All summer school students are invited to attend these meetings.

Ind. Ed. 2. Elementary Woodworking (2). 10:00, 11:00; P-218. (Tierney.)

This is a woodworking course which involves primarily the use of hand tools. The course is developed so that the student uses practically every common woodworking hand tool in one or more situations. There is also included elementary wood finishing, the specifying and storing of lumber, and the care and conditioning of tools used. Laboratory fee, \$5.00.

Ind. Ed. 9. Industrial Arts in the Elementary School I (2). 8:00, 9:00; P-214. (Maley.)

A course for pre-service and in-service elementary school teachers covering construction activities in a variety of media suitable for classroom use. The work is organized on the unit basis so that the construction aspect is supplemented by reading and other investigative procedures. Laboratory fee, \$5.00.

Ind. Ed. 22. Machine Woodworking I (2). Prerequisite, Ind. Ed. 2. 10:00, 11:00; P-218. (Tierney.)

Machine Woodworking I offers initial instruction in the proper operation of the jointer, band saw, variety saw, jig saw, mortiser, shaper, and lathe. The types of jobs which may be performed on each machine and their safe operation are of primary concern. Laboratory fee, \$5.00.

Ind. Ed. 102. Advanced Woodfinishing and Upholstery (2). 1:00, 2:00; P-214. (Tierney.)

This course offers instruction in wood finishing techniques applicable to furniture restoration and in the processes of upholstering household furniture. Laboratory fee, \$5.00.

Ind. Ed. 124 a, b. Organized and Supervised Work Experience (3 credits for each internship period, total: 6 credits). (Merrill.)

This is a work experience sequence planned for students enrolled in the curriculum, "Education for Industry." The purpose is to provide the students with opportunities for first-hand experiences with business and industry. The student is responsible for obtaining his own employment with the coordinator advising him as regards the job opportunities which have optimal learning value.

The nature of the work experience desired is outlined at the outset of employment and the evaluations made by the student and the coordinator are based upon the planned experiences.

The time basis for each internship period is 6, forty-hour weeks or 240 work hours. Any one period of internship must be served through continuous employment in a single establishment. Two internship periods are required. The two internships may be served with the same business or industry.

The completion for credit of any period of internship requires the employer's recommendation in terms of satisfactory work and work attitudes.

More complete details are found in the handbook prepared for the student of this curriculum.

Ind. Ed. 150. Training Aids Development (2). 11:00; P-306. (Maley.)

Study of the aids in common use as to their sources and applications. Special emphasis is placed on principles to be observed in making aids useful to shop teachers. Actual construction and application of such devices will be required.

Ind. Ed. 165. Modern Industry (2). 9:00; P-300. (Hornbake.)

This course provides an overview of manufacturing industry in the American social, economic, and culture pattern. Representative basic industries are studied from the viewpoints of personnel and management organization, industrial relations, production procedures, distribution of products, and the like.

Ind. Ed. 168. Trade or Occupational Analysis (2). 10:00; P-221. (Brown.)

Provides a working knowledge of occupational and job analysis which is basic in organizing vocational-industrial courses of study.

Ind. Ed. 169. Course Construction (2). 10:00; P-221. (Brown.)

Surveys and applies techniques of building and reorganizing courses of study for effective use in vocational and occupational schools.

Ind. Ed. 170. Principles of Vocational Education (2). 9:00; P-221. (Brown.)

The course develops the Vocational Education movement as an integral phase of the American program of public education.

Ind. Ed. 171. History of Vocational Education (2). 9:00; P-221. (Brown.)

An overview of the development of Vocational Education from primitive times to the present. The evolution of Industrial Arts is also considered.

Ind. Ed. 207. Philosophy of Industrial Arts Education (2). 10:00; P-300.
(Hornbake.)

This course is intended to assist the student in his development of a point of view as regards Industrial Arts and its relationship with the total educational program. He should, thereby, have a "yardstick" for appraising current procedures and proposals and an articulateness for his own professional area.

Ind. Ed. 214. School Shop Planning and Equipment Selection (2). 9:00;
P-212. (Tierney.)

This course deals with principles involved in planning a school shop and provides opportunities for applying these principles. Facilities required in the operation of a satisfactory shop program are catalogued and appraised.

Ind. Ed. 240. Research in Industrial Arts and Vocational Education (2).
Arranged. (Staff.)

This is a course offered by arrangement for persons who are conducting research in the areas of Industrial Arts and Vocational Education.

MUSIC EDUCATION

Mus. Ed. 125. Creative Activities in Music in the Elementary School (2).
10:00; B-1. Prerequisite, consent of instructor. (Kemble.)

A study of the creative approach to singing, listening, playing, rhythmic activity, and composition. These topics are studied in correlation with other areas and creative programs.

Mus. Ed. 128. Workshop in Music for Elementary Schools (2). 9:00; B-1.
Prerequisite, consent of instructor. (Kemble.)

A study of the group activities and materials through which the child experiences music. The course is designed to aid both music specialists and classroom teachers. It includes an outline of objectives and a survey of instructional methods.

Mus. Ed. 132. Workshop in Music for the Junior High School (2). 8:00;
B-1. Prerequisite, consent of instructor. (Kemble.)

A study of the vocal and instrumental programs in the Junior High School; the relationship of music to the core curriculum. The place of the musically less gifted adolescent in the programs will be given special attention.

Mus. Ed. 155. Organization and Technique of Instrumental Class Instruction (2). 8:00; B-9. Prerequisite, consent of instructor. (Henderson.)

Practical instruction in the methods of tone production, tuning, fingering, and in the care of woodwind and brass instruments. A survey of the materials and published methods for class instruction.

Mus. Ed. 175. Methods and Materials in Vocal Music for the High School (2). 9:00; B-7. Prerequisite, consent of instructor. (Grentzer.)

A survey of suitable vocal and choral repertoire for the high school. Problems of diction, interpretation, tone production, and phrasing. The course is designed primarily for choral directors and teachers of voice classes.

Mus. Ed. 200. Research Methods in Music and Music Education (2). 10:00;
B-7. (Grentzer.)

The application of methods of research to problems in the fields of music and music education. The preparation of bibliographies and the written exposition of research projects in the area of the student's major interest.

Mus. Ed. 204. Current Trends in Music Education (2), Seminar. 11:00; B-7. (Grentzer.)

A survey of current philosophies and objectives of music in the schools. The scope and sequence of the music curricula, vocal and instrumental, on the elementary and secondary levels.

Mus. Ed. 209. Seminar in Instrumental Music (2). 9:00; B-9. (Jordan.)

A consideration of acoustical properties and basic techniques of the instruments. Problems of ensemble and balance, intonation, precision, and interpretation are studied. Materials and musical literature for orchestras, bands, and small ensembles are evaluated.

SCIENCE EDUCATION

***Sci. Ed. 6. The Natural Sciences in the Elementary School (2).** Laboratory fee, \$2.00. 9:00; T-119. (Blough.)

Selecting, organizing, and teaching plant and animal materials. For teachers who need help in identifying and making effective use of living materials brought to the classroom, assisting pupils to find answers to their questions, and planning other worthwhile science experiences.

***Sci. Ed. 7. The Physical Sciences in the Elementary School (2).** Laboratory fee, \$2.00. 10:00; T-119. (Campbell.)

Similar to the previous course except that problems for study are selected from the various fields of the physical sciences such as electricity and magnetism, weather, heat, light, sound, etc.

Sci. Ed. 105. Workshop in Science for Elementary Schools (2). Laboratory fee, \$2.00.

Section 1—11:00; T-119.

(Campbell.)

Section 2—12:00; T-119.

(Blough.)

General science content and teaching materials for practical use in classrooms. Includes experiments, demonstrations, constructions, observations, field trips, and use of audio-visual materials. Emphasis is on content and method related to science units in common use.

Enrollment in each of the above courses will be limited to 35 persons. Applications for enrollment must be mailed to the Director of the Summer Session before June 15, 1956.

ENGINEERING

E. E. 1. Basic Electrical Engineering (4). Eight lectures and one four-hour laboratory a week. Lecture, 8:00, M., T., W., Th., F., S., and 9:00 M., W.; J-114; laboratory, S., 9:00, 10:00, 11:00, 12:00; S-107-A. Prerequisites, Math. 21, Phys. 21 or concurrent registration. Required of sophomores in electrical engineering. Laboratory fee, \$4.00. (Simons.)

Basic concepts of electric potential, current, power, and energy; d-c circuit analysis by the mesh-current and nodal methods; network theorems; electric and magnetic fields.

*Students who have received four credits in Sci. Ed. 1, 2, 3, and 4 should not register for these courses.

ENGLISH

Eng. 1, 2. Composition and American Literature (3, 3). Eight periods a week. Eng. 1 is the prerequisite of Eng. 2. (Gravely and Staff.)

Eng. 1—

Section 1—Daily, 8:00; M., W., F., 9:00; A-209.

Section 2—Daily, 10:00; M., W., F., 11:00; A-209.

Eng. 2—

Section 1—Daily, 8:00; M., W., F., 9:00; A-17.

Section 2—Daily, 10:00; M., W., F., 11:00; A-17.

Eng. 3, 4. Composition and World Literature (3, 3). Eight periods a week. Prerequisite, Eng. 1, 2. (Cooley and Staff.)

Eng. 3—

Section 1—Daily, 8:00; M., W., F., 9:00; A-18.

Section 2—Daily, 10:00; M., W., F., 11:00; A-18.

Section 3—Daily, 10:00; M., W., F., 11:00; A-16.

Eng. 4—

Section 1—Daily, 8:00; M., W., F., 9:00; A-204.

Section 2—Daily, 10:00; M., W., F., 11:00; A-204.

Eng. 15S. Readings in Biography (2). 12:00; A-17. Prerequisite, Eng. 1, 2. (Ward.)

An analytical study in the form and technique of biographical writing in Europe and America.

Eng. 115S. Shakespeare (2). 11:00; A-133. Prerequisite, Eng. 1, 2 and 3, 4 or 5, 6. (Zeeveld.)

Outstanding plays to Shakespeare's mid-career.

Eng. 145S. The Modern Novel (2). 8:00; A-133. Prerequisite, Eng. 1, 2 and 3, 4 or 5, 6. (Portz.)

A study of six shorter novels by European, British, and American writers.

Eng. 150S. American Literature (2). 9:00; A-133. Prerequisite, Eng. 1, 2 and 3, 4 or 5, 6. (Bode.)

American poetry and prose to 1850.

Eng. 157S. Introduction to Folklore (2). 10:00; A-133. Prerequisite, Eng. 1, 2 and 3, 4 or 5, 6. (Cooley.)

Historical background of folklore studies; types of folklore with particular emphasis on folktales and folksongs, and on American folklore.

Eng. 200. Research (1-6). Arranged. (Murphy and Staff.)

ENTOMOLOGY

Ent. 110, 111. Special Problems (1, 1). Prerequisites to be determined by instructor. Arranged. (Cory.)

An intensive investigation of some entomological problem, preferably of the student's choice. Required of majors in entomology.

Ent. 201. Advanced Entomology. Credit and prerequisites to be determined by the department. To be arranged. (Cory and Staff.)

Studies of minor problems in morphology, taxonomy and applied entomology, with particular reference to the preparation of the student for individual research.

Ent. 202. Research. Credit depends upon the amount of work done. To be arranged. (Cory and Staff.)

Required of graduate students majoring in Entomology. This course involves research on an approved project. A dissertation suitable for publication must be submitted at the conclusion of the studies as a part of the requirements for an advanced degree.

FOREIGN LANGUAGES

Fr. 0. Intensive Elementary French (0). Eight periods a week. Daily, 9:00; M., W., F., 12:00; A-6. (Kramer.)

Intensive elementary course in the French language designed particularly for graduate students who wish to acquire a reading knowledge.

Fr. 2. Elementary French (3). Eight periods a week. Daily, 10:00; M., W., F., 1:00; A-8. Second semester of first-year French. (Arsenault.)

Elements of grammar; pronunciation and conversation; exercises in composition and translation.

Fr. 4 or 5. Intermediate Literary French (3) or Fr. 6 or 7. Intermediate Scientific French (3). Eight periods a week. Daily, 9:00; M., W., F., 12:00; A-8. Prerequisite, French 1 and 2, or equivalent. (Arsenault.)

Students interested in second year French should consult with Foreign Language Department at time of Registration. Arrangements will be made to meet needs of students interested in either the first or second semester of literary or scientific French.

Ger. 0. Intensive Elementary German (0). Eight periods a week. Daily, 8:00; M., W., F., 11:00; A-6. (Kramer.)

Intensive elementary course in the German language designed particularly for graduate students who wish to acquire a reading knowledge.

Ger. 2. Elementary German (3). Eight periods a week. Daily, 9:00; M., W., F., 12:00; A-228. Second semester of first-year German. (Hammerschlag.)

Elements of grammar; pronunciation and conversation; exercises in composition and translation.

Ger. 4 or 5. Intermediate Literary German (3) or Ger. 6 or 7. Intermediate Scientific German (3). Eight periods a week. Daily, 8:00; M., W., F., 11:00; A-212. Prerequisite, German 1 and 2, or equivalent. (Hammerschlag.)

Students interested in second year German should consult with Foreign Language Department at time of Registration. Arrangements will be made to meet needs of students interested in either the first or second semester of literary or scientific German.

Span. 2. Elementary Spanish (3). Eight periods a week. Daily, 9:00; M., W., F., 12:00; A-212. Second semester of first-year Spanish. (Parsons.)

Elements of grammar; pronunciation and conversation; exercises in composition and translation.

Span. 4 or 5. Intermediate Spanish (3). Eight periods a week. Daily, 10:00; M., W., F., 1:00; A-212. Prerequisite, Spanish 1 and 2, or equivalent. (Parsons.)

Translation, conversation, exercises in pronunciation. Reading of texts designed to give some knowledge of Spanish and Latin-American life, thought, and culture.

GEOGRAPHY

Geog. 42S. Weather and Climate (2). 9:00; N-101. Prerequisite, consent of instructor. (Augelli.)

An introduction to the principal causes of the weather and the major types of climate, with special emphasis upon North America.

Geog. 190. Political Geography (3). Daily, 10:00; M., W., F., 11:00; N-101. (Augelli.)

Geographical factors in national power and international relations; an analysis of the role of "Geopolitics" and "Geostrategy", with special reference to the current world scene.

Geog. 292, 293. Dissertation Research. (Credit to be arranged.)

GOVERNMENT AND POLITICS

Section 1—Daily, 9:00; M., W., F., 8:00; Q31. (Staff.)

Section 2—Daily, 9:00; M., W., F., 8:00; Q28A. (Staff.)

Section 3—Daily, 11:00; M., W., F., 12:00; A-106. (Staff.)

Section 4—Daily, 11:00; M., W., F., 12:00; Q-28A. (Staff.)

This course is designed as the basic course in government for the American Civilization program, and it or its equivalent is a prerequisite to all other courses in the Department. It is a comprehensive study of government in the United States—national, state, and local.

G. & P. 10. The Governments of Russia and the Far East (2). 10:00; A-12. (Steinmeyer.)

A study of the governments of Russia, China, and Japan.

G. & P. 101. International Political Relations (3). Eight periods a week. Daily 11:00; M., W., F., 12:00; A-12. Prerequisite, G. & P. 1. (Harrison.)

A study of the major factors underlying international relations, the influence of geography, climate, nationalism, and imperialism, and the development of policies of the major powers.

G. & P. 142. Recent Political Theory (3). Eight periods a week. Daily 9:00; M., W., F., 8:00; A-106. Prerequisite, G. & P. 1. (Dixon.)

A study of 19th and 20th century political thought, with special emphasis on recent theories of socialism, communism, and fascism.

G. & P. 174. Political Parties (3). Eight periods a week. Daily 9:00; M., W., F., 8:00; A-12. Prerequisite, G. & P. 1. (Hathorn.)

A descriptive and analytical examination of American political parties, nominations, elections, and political leadership.

G. & P. 207. Seminar in Comparative Governmental Institutions (3). To be arranged. (Steinmeyer.)

Reports on selected topics assigned for individual study and reading in governmental and political institutions in governments throughout the world.

G. & P. 299. Thesis Course (3, 6). To be arranged. (Staff.)

HISTORY

H. 1. History of Modern Europe (3). Daily, 9:00; M., W., F., 8:00; A-21.
(Stromberg.)

The basic course, prerequisite for all advanced courses in European history.

A study of European History from the Renaissance to 1815.

H. 2. History of Modern Europe (3). Daily, 10:00; M., W., F., 11:00; A-21.
(Staff.)

The basic course, prerequisite for all advanced courses in European history.

A study of European History since 1815.

H. 5. History of American Civilization (3). Eight periods a week.

Section 1—Daily, 8:00; M., W., F., 9:00; A-207. (Sparks.)

Section 2—Daily, 9:00; M., W., F., 8:00; A-110. (Chatelain.)

Section 3—Daily, 10:00; M., W., F., 11:00; A-110. (Wellborn.)

From the colonial period through the American Civil War. Required of all students for graduation.

H. 6. History of American Civilization (3). Eight periods a week.

Section 1—Daily, 9:00; M., W., F., 8:00; A-231. (Beard.)

Section 2—Daily, 10:00; M., W., F., 11:00; A-231. (Bates.)

Section 3—Daily, 11:00; M., W., F., 12:00; A-130. (Riddleberger.)

From the American Civil War to the present. Required of all students for graduation.

H. 115S. The Old South (2). 8:00; A-130. Prerequisites, H. 5, 6 or the equivalent. (Riddleberger.)

A study of the institutional and cultural life of the ante-bellum South with particular reference to the background of the Civil War.

H. 116S. The Civil War (2). 10:00; A-207. Prerequisites, H. 5, 6, or the equivalent. (Sparks.)

Military aspects; problems of the Confederacy; political, social, and economic effects of the war upon American society.

H. 133S. History of Ideas in America (2). 11:00; A-207; Prerequisites, H. 5, 6, or the equivalent. (Beard.)

An intellectual history of the American people, embracing such topics as liberty, democracy, and social ideas to 1865.

H. 155S. Medieval Civilization (2). 12:00; A-207; Prerequisites, H. 1, 2, or H. 53, 54 or the permission of the instructor. (Bauer.)

A survey of Medieval life, culture, and institutions from the fall of the Roman Empire to the thirteenth century.

H. 176. Europe in the World Setting of the Twentieth Century (3). Daily, 8:00; M., W., F., 9:00; A-16. Prerequisites, H. 1, 2, or H. 53, 54. (Prange.)

A study of World War II and its global impacts.

H. 191. History of Russia (3). Daily, 10:00; M., W., F., 11:00. A-228. Prerequisites, H. 1, 2, or the equivalent, or the permission of the instructor. (Bauer.)

A History of Russia from the earliest times to the present day.

H. 200. Research (1-6). Credit proportioned to amount of work. Arranged. (Staff.)

H. 201S. Seminar in American History (2). Arranged. (Staff.)

H. 202S. Historical Literature (2). Arranged. (Staff.)

Assignments in various selected fields of historical literature and bibliography to meet the requirements of qualified graduate students who need more intensive concentration.

H. 250S. Seminar in European History (2). Arranged. (Stromberg.)

H. 282S. Problems in the History of World War II (2). Arranged. (Prange.)

Investigations of various aspects of the Second World War, including military operations, diplomatic phases, and political and economic problems of the war and its aftermath.

HOME ECONOMICS

Cr. 102. Creative Crafts (3). For three credits, daily, 8:00, 9:00, 10:00; H102. Laboratory fee, \$3.00. Consent of the instructor required. (Longley.)

Interests of the persons enrolled will determine the crafts to be pursued. Suggested: block printing, wood burning, crayon decoration, paper sculpture, clay modeling, metalry, weaving. Excellent for teachers and for directors of recreation centers.

Pr. Art 136. Display (2). Daily, 11:00, 12:00; H135. Laboratory fee, \$3.00. Consent of instructor required. (Longley.)

Practice in effective display for teaching and for merchandising. Cooperation with retail establishments. Windows for display are available.

Home Mgt. 152. Experience in Management of the Home (3). Prerequisite, Home Mgt. 150, 151. Laboratory fee, \$7.00. (Mearig.)

Residence for five weeks in the Home Management House. Experience in planning, guiding, directing, coordinating and participating in the activities of a household composed of a faculty member and a small group of students.

Home Mgt. 156. Household Equipment (2). Daily, 8:00; M., W., F., 9:00; eight additional laboratory periods arranged; July 2-August 3; H9. (Mearig.)

Consumer problems in selection, use and care of small and large equipment in the home. Field trips are a part of the course.

Home Mgt. 158. Special Problems in Management (3). Daily, 10:00, 11:00; T., Th., 9:00; six additional laboratory periods arranged; July 2-August 3; H9. Prerequisite, Home Mgt. 150, 151 or equivalent. Laboratory fee, \$3.00. (Crow.)

Analysis of some of the important management problems in the home and in the home economics classroom. Financial problems, problems in work simplification, problems related to housing and household equipment.

Clo. 128. Home Furnishings (3). July 16 to August 3. Daily, 10:00, 11:00 and 1:00, 2:00, 3:00; three additional laboratory periods arranged; H215. Prerequisite, Clo. 20, or consent of instructor. Laboratory fee, \$3.00. (Wilbur.)

Students become thoroughly acquainted with upholstered furniture from the inside out. We stress how women in their homes or teachers in schools can refinish and reupholster furniture with the type of tools normally found in the home. Kinds of fabrics, in several price ranges, which are suitable to home furnishings in color, design and texture

are considered. Students also become familiar with techniques of drapery and slipcover construction. One or more field trips to places of historical interest are taken by the group as time permits.

Tex. 200. Special Studies in Textiles (4). May be taken without credit. July 9 to August 3. Daily, 11:00; M., W., F., 12:00; T., Th., 1:00, 2:00, 3:00; other laboratory hours arranged; H101. Laboratory fee, \$3.00. Enrollment limited. (Scholtes.)

The special emphasis for this year will be placed on techniques used in preparing and presenting textile and clothing programs on radio and television and for large groups. There will be individual and group projects, field trips and actual programming to give behind-the-scenes experiences.

Note: Inst. Mgt. 161 (1½) Equipment and Kitching Planning
Inst. Mgt. 160 (3) Orig. and Mgt.

4½

for Food Service and Cafeteria Managers in Md.

To be given 1957.

Note: Certain of the above courses have been arranged to allow for attendance at the annual meeting of the American Home Economics Association in Washington, D. C., June 26-29 inclusive.

HORTICULTURE

Hort. 122. Special Problems (2). Credit arranged according to work done. (Staff.)

For major students in Horticulture or Botany.

Hort. 208. Advanced Horticultural Research (2 to 6). (Staff.)
Credit granted according to work done.

LIBRARY SCIENCE

L. S. 101S. School Library Administration (3). Eight periods a week. Daily, 10:00; M., W., F., 11:00; M-101. (Wilson.)

The organization and maintenance of effective library service in the modern school. Planning and equipping library quarters, purpose of the library in the school, standards, instruction in the use of books and libraries, training student assistants, acquisition of materials, repair of books, publicity, exhibits, and other practical problems.

L. S. 103S. Book Selection for School Libraries (3). Eight periods a week. Daily, 1:00; M., W., F., 2:00; M-101. (Wilson.)

Principles of book selection as applied to school libraries. Practice in the effective use of book selection aids and in the preparation of book lists. Evaluation of publishers, editions, translations, format, etc.

MATHEMATICS

Math. 5. General Mathematics (3). Eight periods a week. Daily, 10:00; M., W., F., 11:00; Y-5. (Triplett.)

Prerequisite, one unit of algebra. Open only to students in the College of Business and Public Administration, the College of Agriculture, the College of Military Science, and the Department of Industrial Education.

Fundamental operations, fractions, ratio and proportion, linear equations; exponents, logarithms, percentage, trade discount, simple interest, bank discount, true discount, and promissory notes.

Math. 6. Mathematics of Finance (3). Eight periods a week. Daily, 10:00; M., W., F., 11:00; Y-101. (Shepherd.)

Prerequisite, Math. 5, or equivalent. Required of students in the College of Business and Public Administration and open to students in the College of Arts and Sciences for elective credit only.

Simple and compound interest, discount, amortization, sinking funds, valuation of bonds, depreciation, annuities.

Math. 10. Algebra (3). Eight periods a week. Daily, 10:00; M., W., F., 11:00; Y-27. Prerequisite, one unit each of algebra and plane geometry. (Burda.)

Fundamental operations, factoring, fractions, linear equations, exponents and radicals, logarithms, quadratic equations, progressions, permutations and combinations, probability.

Math. 11. Trigonometry and Analytic Geometry (3). Eight periods a week. Daily, 8:00; M., W., F., 9:00; Y-101. (Triplett, Shepherd.)

Prerequisite, Math. 10, or equivalent. This course is not recommended for students planning to enroll in Math. 20.

Trigonometric functions, identities, addition formulas, solution of triangles, coordinates, locus problems, the straight line and circle, conic sections, graphs.

Math. 14. Plane Trigonometry (2).

Section 1a—8:00; Y-122. (Rosen.)

Section 1b—8:00; Y-4. (Fadnis.)

Prerequisite, Math. 15 or concurrent enrollment in Math. 15. Open to students in engineering, education, and the physical sciences.

Trigonometric functions, identities, the radian, graphs, addition formulas, solution of triangles, inverse functions, trigonometric equations.

Math. 15. College Algebra (3). Eight periods a week.

Section 1a—Daily, 10:00; M., W., F., 11:00; Y-121. (Hall.)

Section 1b—Daily, 10:00; M., W., F., 11:00; Y-3. (Dyer.)

Prerequisite, high school algebra completed. Open to students in engineering, education, and the physical sciences.

Fundamental operations, variation, functions and graphs, quadratic equations, theory of equations, binomial theorem, complex numbers, logarithms, determinants, progressions.

Math. 17. Analytic Geometry (4). Twelve periods a week.

Section 1a—M., T., W., Th., F., S., 8:00, 9:00; Y-26. (Ehrlich.)

Section 1b—M., T., W., Th., F., S., 8:00, 9:00; Y-27. (Correl.)

Section 1c—M., T., W., Th., F., S., 8:00, 9:00; Y-28. (Hsu.)

Prerequisite, Math. 14 and 15, or equivalent. Open to students in engineering, education, and the physical sciences.

Coordinates, locus problems, the straight line and circle, graphs, transformation of coordinates, conic sections, parametric equations, transcendental equations, solid analytic geometry.

Math. 20. Calculus (4). Twelve periods a week. M., T., W., Th., F., S., 10:00, 11:00; Y-28. (Greenspan.)

Prerequisite, Math. 17, or equivalent. Open to students in engineering, education, and the physical sciences.

Limits, derivatives, differentials, maxima and minima, curve sketching, curvature, kinematics, integration.

Math. 21. Calculus (4). Twelve periods a week. M., T., W., Th., F., S., 8:00, 9:00; Y-2. (Good.)

Prerequisite Math. 20, or equivalent. Open to students in engineering, education, and physical sciences.

Integration with geometric and physical applications, partial derivatives, space geometry, multiple integrals, infinite series.

Math. 64. Differential Equations for Engineers (3). Eight periods a week. Daily, 10:00; M., W., F., 11:00; Y-4. (Fadnis.)

Prerequisite, Math. 21, or equivalent. Required of students in mechanical and electrical engineering.

Differential equations of the first and second order with emphasis on their engineering applications.

Math. 116. Introduction to Complex Variable Theory (3). Eight periods a week. Daily, 10:00; M., W., F., 11:00; Y-122. (Rosen.)

Prerequisite, Math. 21 or equivalent. Open to students in engineering and the physical sciences. Graduate students in mathematics should enroll in Math. 210, 211.

Fundamental operations with complex numbers, differentiation and integration, sequences and series, power series, analytic functions, conformal mapping, residue theory.

†**Math. 122S. Elementary Topology (2).** Five periods a week. 9:00; Y-121. (Hall.)

Fundamental geometric properties of sets of points in the plane. Many of these ideas may be used in guiding exceptional high school students and working with high school mathematics clubs.

***Math. 181. Foundations of Number Theory (3).** Eight periods a week. Daily, 10:00; M., W., F., 11:00; Y-123. (Jackson.)

Designed primarily for those enrolled in programs with emphasis in the teaching of science and mathematics. Not open to students seeking a major directly in the physical sciences since the course content is usually covered elsewhere in their curriculum.

Axiomatic development of the real numbers. Elementary number theory.

MUSIC

Music 15. Chapel Choir (1). 12:00; B-7. (Springmann.)

Open to all students. A program will be prepared and will be presented in the Chapel late in the Summer Session.

Music 16. Music Fundamentals for the Classroom Teacher (3). Daily, 10:00; M., W., F., 11:00; B-9. (Jordan.)

Open to students majoring in Elementary Education or Childhood Education; other students take Music 7. Music 7 and 16 may not both be counted for credit.

The fundamentals of music theory and practice, related to the needs of the classroom and kindergarten teacher, and organized in accord with the six-area concept of musical learning.

APPLIED MUSIC

A new student or one taking music for the first time at this University

†Recommended for teachers.

*Intended for teachers.

should register for Music X (Piano) or Music X (Voice), etc. He will receive the proper classification at the end of the Summer Session.

Music 12, 13, 52, 53, 112, 113, 152, 153, Applied Music (2). Hours to be arranged with instructor; B-4. Prerequisite, the next lower course in the same instrument. Three half-hour lessons and a minimum of ten practice hours per week. (Meyer, Springmann.)

The student will register for Music 12 (Piano) or Music 12 (Voice), etc. Special fee of \$40.00 for each course.

PHILOSOPHY

Phil. 201. Research in Philosophy (1-3). Selected projects under individual guidance. Arranged. (Garvin.)

Phil. 203. Selected Problems in Philosophy (1-3). Study of selected topics in systematic philosophy under individual guidance. Arranged. (Garvin.)

PHYSICAL EDUCATION, RECREATION AND HEALTH

Physical Education Fee per semester (to be charged any student registered for any physical activity course), \$3.00.

P. E. S10. Physical Education Activities (1-6). Fee, \$3.00.

Instruction and practice in selected sports; tennis, badminton, golf, archery, swimming and square dance.

Note: 1. Not available for credit by physical education majors.

Note: 2. Non-majors in physical education may use this credit to fulfill graduation requirements in physical education.

Section 1. Swimming (1), 3:00; Pool. (Staff.)

Section 2. Golf (1), Wednesdays, 1:00-5:00; Armory. (Cronin.)

Section 3. Tennis (1), 2:00; Courts. (Staff.)

P. E. 100. Scientific Bases of Movement (4), M., T., W., Th., F., 1:00, 2:00, GG-160. (Staff.)

A course designed to study kinesiological and physiological principles of exercise and the solution of problems concerned with increasing efficiency of movement in motor activities and work, as well as those of physical conditioning and training. In addition, their relationships to growth and development will be emphasized.

P. E. 120. Physical Education for the Elementary School (3), M., T., W., Th., 8:00, 9:00; G-100. (Humphrey.)

Theory and practice of elementary school physical education planned particularly for the general elementary teacher. The course content will include curriculum participation, utilization of restricted play areas, class organization, instruction techniques, and introduction to a variety of appropriate activities.

P. E. 150. Physical Fitness of the Individual (3), M., T., W., Th., 1:00, 2:00; GG-128. (Massey.)

A study of the major physical fitness problems confronting the adult in modern society. Consideration is given to the scientific appraisal and development in maintenance of fitness. At all levels, such problems as obesity, weight reduction, chronic fatigue, posture, and special exercise programs are explored. This course is open to majors in all areas of education.

P. E. 180. Measurement in Physical Education and Health (3), M., T., W., Th., 10:00, 11:00; GG-205.
(Massey.)

The application of the principles and techniques of educational measurement to the teaching of health and physical education; study of the functions and techniques of measurement in the evaluation of student progress toward the objectives of health and physical education, and in the evaluation of the effectiveness of teaching.

P. E. 200. Seminar in Physical Education, Recreation, and Health (1), T., 7:00 P. M.; G-202.
(Johnson.)

P. E. 230. Source Material Survey (3), M., T., W., Th., 8:00, 9:00; GG-205.
(Massey.)

A library survey course, covering the total areas of physical education, recreation, and health, plus research in one specific limited problem of which a digest, including a bibliography, is to be submitted.

P. E. 250. Mental and Emotional Aspects of Physical Education Activities (3), M., T., W., Th., 10:00, 11:00; GG-202.
(Johnson.)

An exploration of psychological aspects of physical education, athletic sports and recreation. Applications of psychology are made to teaching and learning, coaching, athletic efficiency (motivation, emotional upset, staleness, etc.) and the problem of interpreting physical education and recreation experiences. Means of studying problems of these kinds are evaluated.

P. E. 288. Special Problems in Physical Education, Recreation and Health (1-6). (Arranged.)

Master or Doctoral candidates who desire to pursue special research problems under the direction of their advisers may register for 1-6 hours of credit under this number.

P. E. 289. Research—Thesis (1-5). (Arranged.)

Students who desire credits for a Master's thesis, a Doctoral dissertation, or a Doctoral project should use this number.

Hea. 80. The Driver, His Characteristics and Improvement (3), M., T., W., Th., 8:00, 9:00; GG-201.
(Tompkins.)

This course is designed to study the driver-behavior problems in their relation to many of the psycho-physical factors and forces in the traffic environment that impinge upon the man behind the wheel.

Hea. 105. Basic Driver Education (3), M., T., W., Th., 1:00, 2:00; GG-201.
(Tompkins.)

This course is the study of the place of the automobile in modern life and deals with the theory and practice of the following: traffic accidents and other traffic problems; objectives and scope of driver-education; motor vehicle laws and regulations; basic automobile construction and maintenance from the standpoint of safety; methods in classroom instruction; aids to learning and practice driving instruction.

Hea. 145. Advanced Driver Education (3), M., T., W., Th., 10:00, 11:00; GG-201.
(Tompkins.)

Progressive techniques and practice of advanced driver education; comprehensive programming for traffic safety; psychology in traffic safety; improving the attitudes of younger drivers; teaching to meet driving emergencies; program planning in driver education; resources and agencies; the teacher and driver education; consumer education; measuring and evaluating results; driver education for adults; research and needed research; new developments in driver education; insurance and liability; the future of driver education. Prerequisites, Hea. 50, Hea. 70, Hea. 80, and Hea. 175.

Hea. 150. Health Problems of the School Child (3), M., T., W., Th., 8:00, 9:00; GG-160. (Johnson.)

A study of the problems and basic health needs of the school child.

Hea. 170. The Health Program in the Elementary School (3), M., T., W., Th., 10:00, 11:00; GG-160. (Humphrey.)

This course gives consideration to health service, healthful school environment and health instruction. These phases of the health program are considered from a standpoint of organization and administration, health appraisal and counseling, health protection and emergency care, and other features which involve the health of the elementary school child. In addition, modern methods of health instruction will be considered and students will be given an opportunity to construct health units and engage in teaching demonstrations.

PHYSICS

†**Phys. 1. Elements of Physics: Mechanics, Heat, and Sound (3).** Four two-hour lectures per week. M., T., W., Th., 5:00, 6:00; Z-115. Prerequisite, successful passing of the qualifying examination in elementary mathematics. Lecture demonstration fee, \$3.00. (Heverly and Staff.)

The first half of a survey course in general physics. This course is for the general student and does not satisfy the requirements of the professional schools.

Phys. 100. Advanced Experiments. Eight hours laboratory work per week for each credit hour. One or more credits may be taken concurrently. Hours arranged; Z-306. Prerequisites, Phys. 52 or 54 and four credits in Phys. 60. Laboratory fee, \$10.00 per credit hour. (Krumbein and Staff.)

Selected fundamental experiments in electricity and magnetism, elementary electronics, atomic physics, and optics.

†**Phys. 101. Laboratory Arts (1).** Two hours of lecture and four hours of laboratory per week. T., Th., 7:15, 10:05 P. M.; Z-209 and Z-220. Laboratory fee, \$10.00. (Arranged.)

Phys. 110. Applied Physics Laboratory (1, 2 or 3). Eight hours laboratory work per week for each credit hour. One to three credits may be taken concurrently. Hours arranged; Z-308. Prerequisite, Phys. 52 or Phys. 54, and one credit in Phys. 100. (Krumbein and Staff.)

Phys. 118. Introduction to Modern Physics (3). Hours arranged. Prerequisite, major in physical sciences or engineering. (Herzfeld.)

***Phys. 118A. Atoms, Nuclei, and Stars (3).** Four two-hour lectures per week. M., T., W., Th., 5:30, 7:20; Z-227. (Herzfeld.)

This course is intended primarily for high school science teachers and contains a thorough introduction to basic ideas of the constitution and properties of atomic and subatomic systems, and the overall structure of the universe. The development of present ideas will be outlined, and their shortcomings indicated. Subjects treated include the electron, the Bohr theory of the atom, the uncertainty principle and quantum mechanics, nuclear reactions, fission, fusion, cosmic radiation, the solar system, the life cycle of a star, systems of galaxies, and scientific theories about the past and future of the universe.

†Recommended for teachers.

*Intended for teachers.

†**Phys. 130-131S. Basic Concepts of Physics (4).** Five two-hour lectures per week. Daily, 10:00, 11:00; Z-115. Prerequisite, junior standing. Lecture demonstration fee, \$4.00. (Anderson, J. and Staff.)

A primarily descriptive course intended mainly for students in the liberal arts and high school science teachers. This course does not satisfy the requirements of professional schools nor serve as a substitute for other physics courses. The main emphasis in the course will be on the concepts of physics, their evolution and their relation to other branches of human endeavor.

Phys. 150. Special Problems in Physics. Credit according to work done. Hours and location arranged. Research or special study. Laboratory fee, \$10.00 per credit hour when appropriate. Prerequisite, major in physics and consent of Department Head. (Staff.)

***Phys. 160A. Physics Problems (1, 2, or 3).** Lectures and discussion sessions arranged. Credit according to work done. (Anderson, J. and Staff.)

This course, intended primarily for high school science teachers, introduces the student to the proper methods of presenting and solving basic problems in physics. The course consists of lectures and discussion sessions. Those problems which illustrate best the fundamental principles of physics are treated fully. The necessary mathematical methods are developed as needed.

Phys. 230. Seminar; Methods of Theoretical Physics (1). Two 75 minute lectures per week. T., Th., 7:30-8:45 P. M.; Z-115. Prerequisite, Phys. 201 or consent of instructor. (Toll.)

During Summer 1956, subject matter will stress use of special functions and complex variable methods in physics.

Phys. 250. Research. Credit according to work done. Hours and location arranged. Laboratory fee, \$10.00 per credit hour. Prerequisite, approved application for admission to candidacy or special permission of the Department Head. (Staff.)

Thesis research conducted under approved supervision.

POULTRY

P. H. S111. Poultry Breeding and Feeding (1). July 2 to July 20. 9:00; II-111. (Wilcox and Combs.)

This course is designed primarily for teachers of vocational agriculture and extension service workers. The first half will be devoted to problems concerning breeding and the development of breeding stock. The second half will be devoted to nutrition.

P. H. 205. Poultry Literature (1-4). (Staff.)

Readings on individual topics are assigned. Written reports required. Methods of analysis and presentation of scientific material are discussed.

P. H. 206. Poultry Research. Credit in accordance with work done. (Staff.)

Practical and fundamental research with poultry may be conducted under the supervision of staff members toward the requirements for the degrees of M.S. and Ph.D.

†Recommended for teachers.

*Intended for teachers.

PSYCHOLOGY

Psych. 1. Introduction to Psychology (3). Eight periods a week. Daily, 9:00; M., W., F., 8:00; M-105. (Ross.)

A basic introductory course, intended to bring the student into contact with the major problems confronting psychology and the more important attempts at their solution.

Psych. 110. Educational Psychology (3). Eight periods a week. Daily, 10:00; M., W., F., 11:00; M-104. Prerequisite, Psych. 1 or equivalent. (Ross.)

Researches on fundamental psychological problems encountered in education; measurement and significance of individual differences; learning, motivation, transfer of training, and the educational implications of theories of intelligence.

Psych. 288. Special Research Problems (1-3). Hours arranged. (Staff.)

Psych. 290. Research for Thesis (Credit arranged). Hours arranged. (Staff.)

SOCIOLOGY

Soc. 1. Sociology of American Life (3). Eight periods a week. Daily, 8:00; M., W., F., 9:00; R-205. (Hirzel.)

Sociological analysis of the American social structure; metropolitan, small town, and rural communities; population distribution, composition and change; social organization.

Soc. 2. Principles of Sociology (3). Eight periods a week. Daily, 10:00; M., W., F., 11:00 R-7. Prerequisite, Soc. 1 or sophomore standing. (Melvin.)

The basic forms of human association and interaction; social processes; institutions; culture, human nature and personality.

Soc. 51S. Social Pathology (2). 10:00; R-205. Prerequisite, Soc. 1 and sophomore standing. (Shankweiler.)

Personal-social disorganization and maladjustment; physical and mental handicaps; economic inadequacies; programs of treatment and control.

Soc. 52S. Criminology (2). 10:00; R-6. Prerequisite, Soc. 1 and sophomore standing. (Lejins.)

Criminal behavior and the methods of its study; causation; typologies of criminal acts and offenders; punishment, correction, and incapacitation; prevention of crime.

Soc. 121S. Population (2). 11:00; R-103. (Hirzel.)

Population distribution, composition, and growth in North America and Eurasia; trends in fertility and mortality; migrations; population prospects and policies.

Soc. 125S. Cultural History of the Negro (2). 8:00; R-103. (Anderson.)

The cultures of Africa south of the Sahara and the cultural adjustments of the Negro in North and South America.

Soc. 141S. Sociology of Personality (2). 11:00; R-6. (Schmidt.)

Development of human nature and personality in contemporary social life; processes of socialization; attitudes, individual differences, and social behavior.

Soc. 153S. Juvenile Delinquency (2). 10:00; R-103. (Lejins.)

Juvenile delinquency in relation to the general problem of crime; analysis of factors underlying juvenile delinquency; treatment and prevention.

NOTE: The following three courses satisfy the requirements for certification of Supervisor of Pupil Personnel and Visiting Teacher in Counseling Techniques and Social Case Work (with supervised field work.)

Soc. 160. Interviewing in Social Work (1½). Time to be arranged; R-204.
(Roth.)

The techniques of interviewing in social work with particular reference to methods applicable to visiting teacher work.

Soc. 162. Basic Principles and Current Practice in Public Welfare (3).
Time to be arranged; R-204. (Roth.)

The broad basis of public welfare principles as applied to the particular problems of visiting teacher work. This course includes field work and individual consultation with the instructor.

Soc. 163. Attitude and Behavior Problems in Public School Work (1½).
Time to be arranged; R-204. (Roth.)

Attitude and behavior problems of public school pupils with particular reference to visiting teacher work.

(Application for participation in the above-described integrated course program should be made to the instructor before June 15.)

Soc. 164s. The Family and Society (2). 9:00; R-6. Prerequisite, Soc. 1 and Soc. 64 or equivalent. (Shankweiler.)

Study of the family as a social institution; its biological and cultural foundations of marriage and parenthood, disorganizing and reorganizing factors in present day trends.

Soc. 191. Social Field Training (3). (Credit to be determined). Time to be arranged. (Staff.)

Prerequisites: For social work field training, Soc. 131; for crime control field training, Soc. 52 and 153. Enrollment restricted to available placements.

Supervised field training in public and private social agencies. The student will select his particular area of interest and be responsible to an agency for a definite program of in-service training. Group meetings, individual conferences, and written progress reports will be required of the course.

Soc. 290. Research in Sociology (3-6). (Credit to be determined). Time to be arranged. (Staff.)

Soc. 291. Special Social Problems (2-3). (Credit to be determined). Time to be arranged. (Staff.)

SPEECH AND DRAMATIC ART

Speech 1. Public Speaking (2). 8:00; R-101. Fee, \$1.00. (Linkow.)

The preparation and delivery of short original speeches. Outside readings; reports, etc.

Speech 2. Public Speaking (2). 9:00; R-101. Fee, \$1.00. Prerequisite, Speech 1. (Linkow.)

Speech 4. Voice and Diction (3). Eight periods a week. Daily, 9:00; M., W., F., 10:00; Studio. (Mayer.)

Emphasis upon the improvement of voice, articulation, and phonation. May be taken concurrently with Speech 1, 2.

Speech 10. Group Discussion (2). 11:00; R-101. (Linkow.)

A study of the principles, methods, and types of discussion and their application in the discussion of contemporary problems.

Speech 105. Speech-Handicapped School Children (3). Eight periods a week. Daily, 11:00; M., W., F., 12:00; R-110. (Craven.)

The occurrence, identification and treatment of speech handicaps in the classroom. An introduction to speech pathology.

Speech 106. Clinical Practice (1 to 5 credits). Hours arranged. (Craven.)

A laboratory course dealing with the various methods of correction plus actual work in the clinic.

Speech 111. Seminar (3). Hours arranged. (Strausbaugh.)

Required of speech majors. Present-day speech research.

Speech 126. Semantic Aspects of Speech in Human Relations (3). Eight periods a week. Daily, 9:00; M., W., F., 10:00; R-109. (Hendricks.)

An analysis of speech and language habits from the standpoint of General Semantics.

Speech 136. Principles of Speech Therapy (3). Prerequisite, Speech 120. Eight periods a week. Daily, 11:00; M., W., F., 12:00; R-109. (Hendricks.)

Application of psychological principles of learning, motivation and adjustment in the treatment of speech disorders.

Speech 138. Methods and Materials in Speech Correction (3). Eight periods a week. Daily, 9:00; M., W., F., 10:00; R-102. Prerequisite, Speech 120 or the equivalent. (Craven.)

The design and use of methods and materials for diagnosis, measurement, and re-training of the speech-handicapped.

Speech 201. Special Problems (2, 4). Hours arranged. (Hendricks.)

Special research problems in speech or hearing.

ZOOLOGY**Zool. 1. General Zoology (4).** Five lectures and five two-hour laboratory periods a week. Lecture, 8:00; K-307; laboratory, 9:00, 10:00; K-306. Laboratory fee, \$8.00. (Grollman.)

This course, which is cultural and practical in its aim, deals with the basic principles of animal life.

Zool. 55S. Development of the Human Body (2). Five lecture periods a week. 11:00; K-208. (Burhoe.)

A study of the main factors affecting the pre-natal and post-natal growth and development of the child with special emphasis on normal development.

***Zool. 102. General Animal Physiology (4).** Five lectures and five three-hour laboratory periods a week. Lecture, 11:00; K-106; laboratory, 1:00, 2:00, 3:00; K-106. Prerequisite, one year of zoology and one year of chemistry. Laboratory fee, \$8.00. (Brown.)

The general principles of physiological functions as shown in mammals and lower animals.

***Zool. 104. Genetics (3).** Eight lecture periods a week. Lecture daily, 9:00;

M., W., F., 8:00; K-208. Prerequisite, one course in zoology or botany.

(Burhoe.)

A consideration of the basic principles of heredity.

Zool. 206. Research. Credit to be arranged. Laboratory fee, \$8.00 (Staff.)

***Zool. 207S. Recent Advances in Zoology (1).** Three periods a week.

M., W., F., 4:00; K-307.

(Staff.)

A discussion of recent advances in zoology of interest to secondary school biology teachers.

Zool. 208. Special Problems in Zoology. Credit to be arranged. Hours, topics and credits to be arranged. Laboratory fee, \$8.00. (Brown.)

Zool. 231S. Acarology (3). July 16 through August 3. Lectures, recitations, and laboratory daily, 9:00-12:00, 2:00-4:00; K-307 and K-9. Laboratory fee, \$8.00. (Camin.)

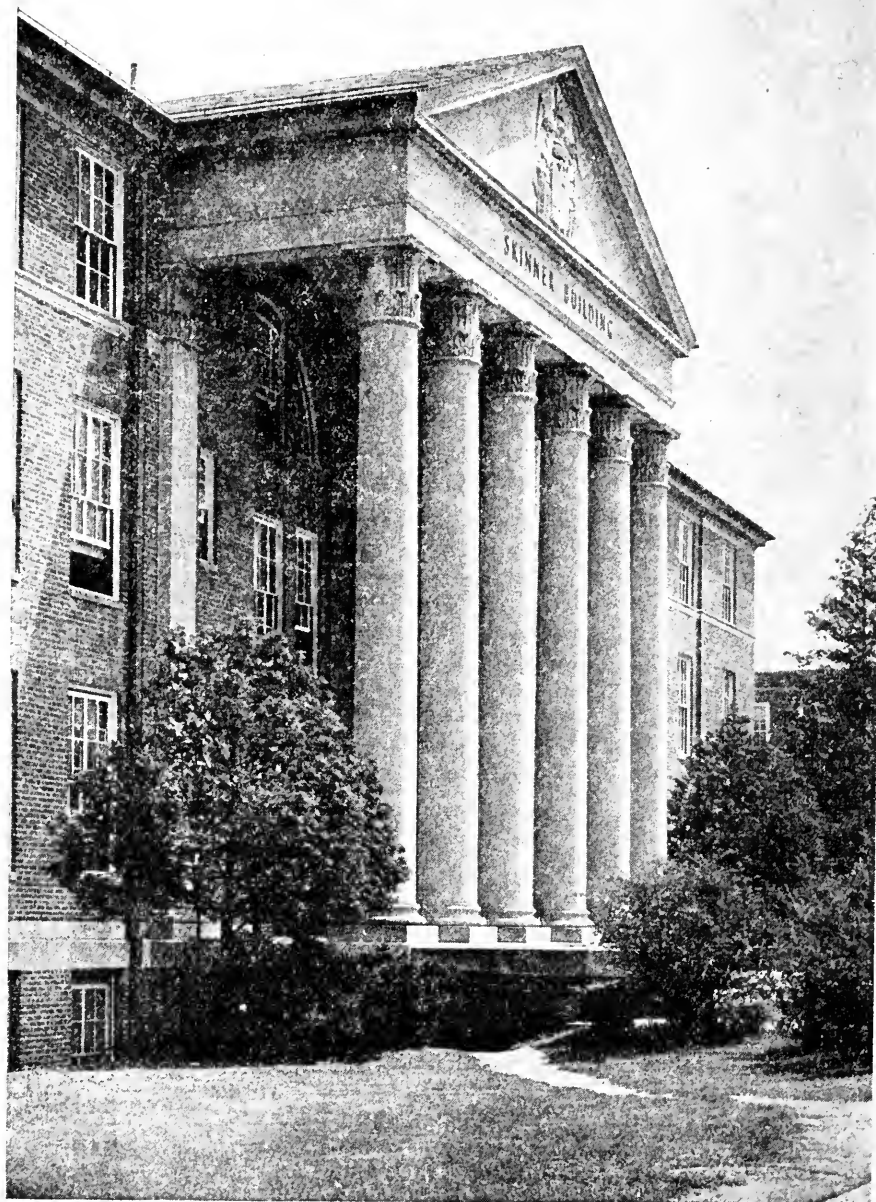
An introductory study of the Acarina, or mites and ticks, with special emphasis on classification and biology.

Zool. 232S. Medical and Veterinary Acarology (3). July 16 through August 3. Lectures, recitations, and laboratory daily, 9:00-12:00, 2:00-4:00; K-307 and K-109. Laboratory fee, \$8.00. (Strandtmann.)

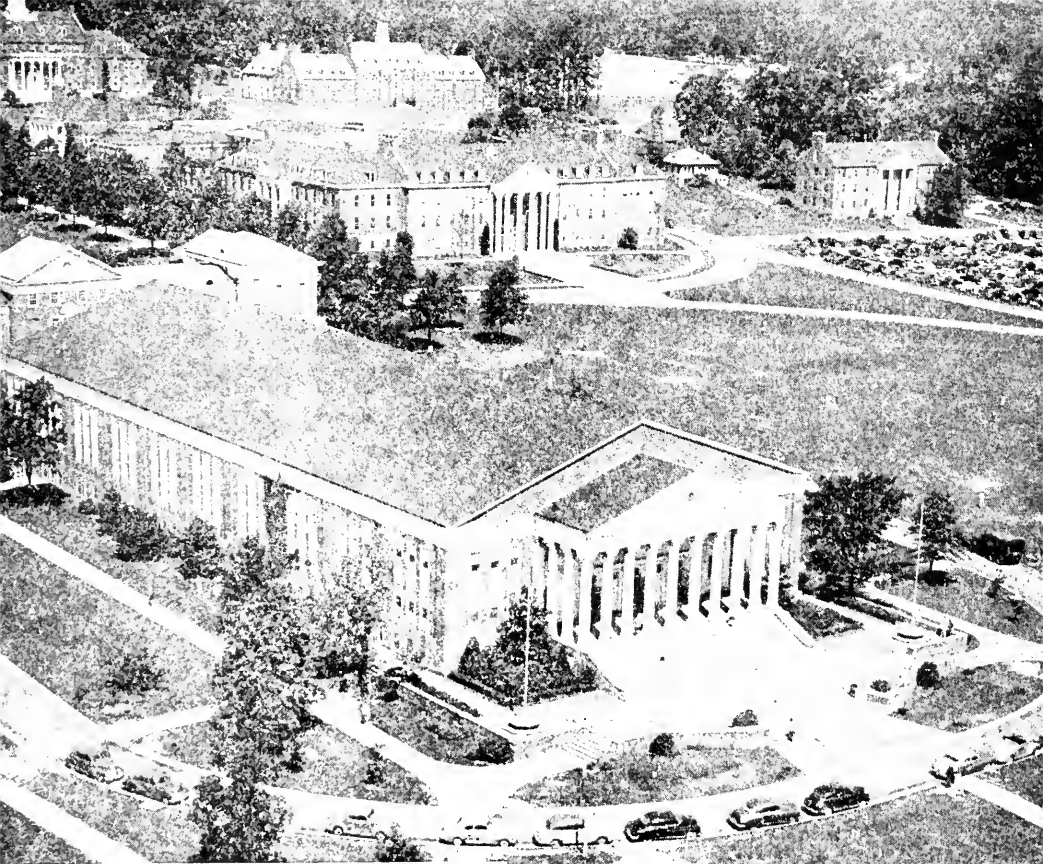
The recognition, collection, culture, and control of Acarina important to public health and animal husbandry with special emphasis on the transmission of diseases.

Zool. 233S. Agricultural Acarology (3). July 16 through August 3. Lectures, recitations, and laboratory daily, 9:00-12:00, 2:00-4:00; K-307 and K-6. Laboratory fee, \$8.00. (Baker.)

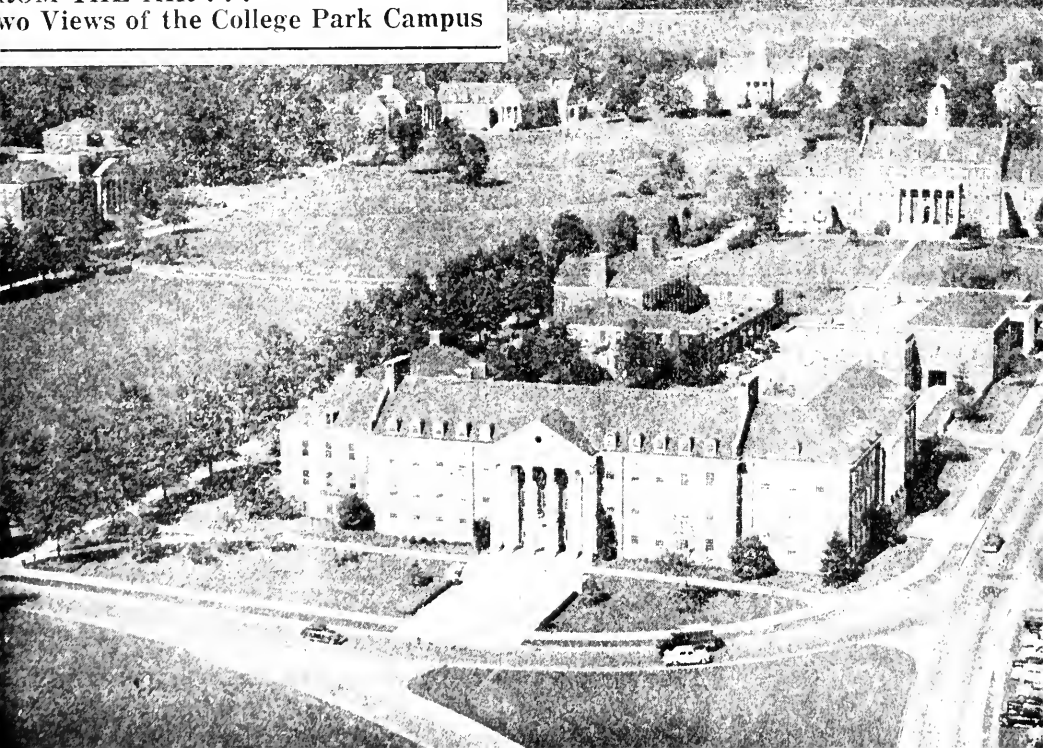
The recognition, collection, culture and control of Acarine pests of crops and ornamentals.



SKINNER BUILDING
Headquarters of the Summer School



FROM THE AIR . . .
Two Views of the College Park Campus



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EDUCATION

“**E**DUCATION does not mean teaching people what they do not know. It means teaching them to behave as they do not behave. It is not teaching the youth the shapes of the letters and the tricks of numbers, and then leaving them to turn their arithmetic to roguery and their literature to lust. It means, on the contrary, training them into the perfect exercise and kingly continence of their bodies and souls. It is a painful, continual and difficult work to be done by kindness, by watching, by warning, by precedent, and by praise, but above all—by example.”—John Ruskin.

“In our country no man is worthy the honored name of statesman, who does not include the highest practicable education of the people in all his plans of administration.”—Horace Mann.

“Promote, then, as an object of primary importance institutions for the general diffusion of knowledge. In proportion as the structure of a government gives force to public opinion, it is essential that public opinion should be enlightened.”—George Washington.

“The good education of youth has been esteemed by wise men in all ages as the surest foundation of the happiness both of private families and of commonwealths.”—Benjamin Franklin.

“The whole people must take upon themselves the education of the whole people and be willing to bear the expense of it.”—John Adams.

“If a nation expects to be ignorant and free in a state of civilization, it expects what never was and never will be.”—Thomas Jefferson.

“A popular government without popular information or the means of acquiring it, is but the prologue to a farce or a tragedy, or perhaps both.”
—James Madison

“An educated man is never poor and no gift is more precious than education.”—Abraham Lincoln.

“Without popular education no government which rests on popular action can long endure; the people must be schooled in the knowledge and in the virtues upon which the maintenance and success of free institutions depend.”
—Woodrow Wilson

“We have faith in education as the foundation of democratic government.”
—Franklin D. Roosevelt



SEPARATE CATALOGS

At College Park

Individual catalogs of colleges and schools of the University of Maryland at College Park may be obtained by addressing the Director of Publications, University of Maryland, College Park, Maryland.

These catalogs and schools are:

1. General Information
2. College of Agriculture
3. College of Arts and Sciences
4. College of Business and Public Administration
5. College of Education
6. College of Engineering
7. College of Home Economics
8. College of Military Science
9. College of Physical Education, Recreation and Health
10. College of Special and Continuation Studies
11. Summer School
12. Graduate School

At Baltimore

Individual catalogs for the professional schools of the University of Maryland may be obtained by addressing the Deans of the respective schools at the University of Maryland, Lombard and Greene Streets, Baltimore 1, Maryland. The professional schools are:

13. School of Dentistry
14. School of Law
15. School of Medicine
16. School of Pharmacy
17. School of Nursing

At Heidelberg

The catalog of the European Program may be obtained by addressing the Dean, College of Special and Continuation Studies, College Park, Maryland.