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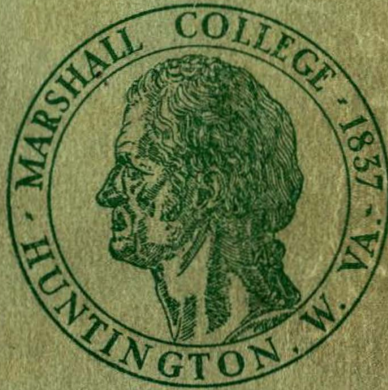
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Marshall College

MARSHALL COLLEGE BULLETIN



James E. Morrow
Marshall College

ANNOUNCEMENTS

1954 - 1956

This bulletin of Marshall College contains information of general value to high school graduates and other prospective students and their parents. Complete information as to entrance fees, living conditions, requirements for degrees in either of the colleges, and a brief statement of the courses of study offered are given. This bulletin is sent on request and without cost.

Marshall College is accredited by the North Central Association of Colleges and Secondary Schools, and the American Association of Colleges For Teacher Education; is a member of the Association of American Colleges, and of the American Council on Education, and is approved by the American Association of University Women.

For Non-Resident tuition, see Fees.

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For further information address the Registrar, Marshall College.



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Marshall College

MARSHALL COLLEGE

(FOUNDED 1837)

BULLETIN



THE TEACHERS COLLEGE
THE COLLEGE OF ARTS AND SCIENCES
GRADUATE SCHOOL



ANNOUNCEMENTS FOR 1954-1955
ANNOUNCEMENTS FOR 1955-1956



JANUARY 1, 1954

WEST VIRGINIA BOARD OF EDUCATION
CHARLESTON, WEST VIRGINIA

	<i>Term Expires</i>
CHARLES A. WILLIAMSON, <i>President</i> , Charleston.....	1956
THELMA BRAND LOUDIN, <i>Vice President</i> , Fairmont.....	1955
ROSS H. TUCKWILLER, Lewisburg.....	1954
PAIGE WOOLDRIDGE, Bluefield.....	1957
LACY I. RICE, Martinsburg.....	1958
LAWRENCE R. LYNCH, Clarksburg.....	1959
JAMES KELVIN HOLLIDAY, Montgomery.....	1960
RAYMOND BREWSTER, Huntington.....	1961
JAMES H. ROWLAND, Beckley.....	1962
W. W. TRENT, <i>State Superintendent</i> , Ex-Officio, Charleston	
H. K. BAER, <i>Secretary and Director of Teacher Training</i> , Charleston	

The West Virginia Board of Education has charge of the educational, administrative, financial and business affairs of Marshall College.

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COLLEGE CALENDAR 1954-1955

FIRST SEMESTER

September 13-18.....	Freshman Orientation and Registration
September 17.....	Registration of Upperclassmen
September 17, Friday 7:00-9:00 p. m.....	Registration of Part Time and Evening Students
September 20.....	Classes Begin
September 25, Saturday 12:00 noon.....	Last Day of Registration for Semester
October 23.....	Homecoming
November 2.....	Academic Progress Reports Due
November 24, Wednesday 12:00 Noon.....	Thanksgiving Recess
November 29, Monday 8:00 A. M.....	Class Work Resumed
December 7.....	Academic Progress Reports Due
December 18, Saturday 12:00 Noon.....	Christmas Recess Begins
January 3, Monday 8:00 A. M.....	Class Work Resumed
January 3.....	Beginning of Advance Registration
January 24-29.....	Semester Examination Period
January 29.....	Semester Ends

SECOND SEMESTER

January 31-February 1.....	Freshman Orientation
February 2.....	Registration
February 3, Thursday 8:00 A. M.....	Classes Begin
February 4, Friday 7:00-9:00 P. M.....	Registration of Part Time and Evening Students
February 9.....	Last Day of Registration for Semester
March 15.....	Academic Progress Reports Due
April 7, Thursday 9:00 P. M.....	Easter Recess
April 12, Tuesday 8:00 A. M.....	Class Work Resumed
April 19.....	Academic Progress Reports Due
May 2.....	Beginning of Advance Registration
May 23-28.....	Semester Examination Period
May 29, Sunday.....	Baccalaureate
May 30, Monday.....	Commencement

SUMMER SESSION 1955

FIRST TERM

June 6, Monday.....	First Term Begins
June 11, Saturday 12:00 Noon.....	Last Day of Registration
July 15.....	First Term Ends

SECOND TERM

July 18.....	Second Term Begins
July 23, Saturday 12:00 Noon.....	Last Day of Registration
August 26.....	Second Term Ends
August 26.....	Commencement

COLLEGE CALENDAR

1955-1956

FIRST SEMESTER

September 12-17.....	Freshman Orientation and Registration
September 16.....	Registration of Upperclassmen
September 16, Friday 7:00-9:00 P. M.....	Registration of Part Time and Evening Students
September 19, Monday 8:00 A. M.....	Classes Begin
September 24, Saturday 12:00 noon.....	Last Day of Registration for Semester
October 25.....	Academic Progress Reports Due
November 23, Wednesday 12:00 Noon.....	Thanksgiving Recess
November 28.....	Class Work Resumed
December 6.....	Academic Progress Reports Due
December 17, Saturday 12:00 Noon.....	Christmas Recess Begins
January 2, Monday 8:00 A. M.....	Class Work Resumed
January 2.....	Beginning of Advance Registration
January 23-28.....	Semester Examination Period
January 28.....	Semester Ends

SECOND SEMESTER

January 30-31.....	Freshman Orientation
February 1.....	Registration
February 2, Thursday 8:00 A. M.....	Classes Begin
February 3, Friday 7:00-9:00 P. M.....	Registration Part Time and Evening Students
February 8.....	Last Day of Registration
March 13.....	Academic Progress Reports Due
March 29, Thursday 9:00 P. M.....	Easter Recess
April 3, Tuesday 8:00 A. M.....	Class Work Resumed
April 17.....	Academic Progress Reports Due
May 7.....	Beginning of Advance Registration
May 21-26.....	Semester Examination Period
May 27.....	Baccalaureate
May 28.....	Commencement

SUMMER SESSION 1956

FIRST TERM

June 4, Monday.....	First Term Begins
June 9, Saturday 12:00 Noon.....	Last Day of Registration
July 13, Friday.....	First Term Ends

SECOND TERM

July 16.....	Second Term Begins
July 21, Saturday 12:00 Noon.....	Last Day of Registration
August 24, Friday.....	Commencement
August 24, Friday.....	Second Term Ends

OFFICERS OF ADMINISTRATION

STEWART HAROLD SMITH, B. S., M. A., Ph. D., Litt. D.....	<i>President</i>
DANIEL BANKS WILBURN, A. B., M. A., Ed. D.....	<i>Dean, Teachers College</i>
JOHN FRANK BARTLETT, A. B., M. A., Ph. D.....	<i>Dean, College of Arts and Sciences</i>
ARVIL ERNEST HARRIS, A. B., M. A., Ph. D.....	<i>Dean, Graduate School</i>
LILLIAN HELMS BUSKIRK, A. B., M. A.....	<i>Dean of Women</i>
HAROLD LEE WILLEY, A. B., M. A.....	<i>Dean of Men</i>
LUTHER E. BLEDSOE, A. B., M. A.....	<i>Registrar and Director of Admissions</i>
VETA LEE SMITH, A. B., M. A.....	<i>College Secretary</i>
FRED R. SMITH, A. B.....	<i>Comptroller and Business Manager</i>
PAUL H. COLLINS, A. B., M. A.....	<i>Director of Adult Education</i>
ROSA V. OLIVER, A. B., Library Certificate.....	<i>Librarian</i>

THE FACULTY

PROFESSORS

JAMES J. BARRON, *Professor of Mathematics*, 1946*.

Ph. D. 1934, University of Wisconsin; post-doctorate study, Yale University, Brown University

JOHN FRANK BARTLETT, *Dean of the College of Arts and Sciences and Professor of Chemistry*, 1932

Ph. D. 1932, West Virginia University; post-doctorate study, University of Zurich, University of Edinburgh, and Technische Hochschule in Munich

ROBERT LLOYD BECK, *Professor of Philosophy*, 1934

Ph. D. 1931, Cornell University

ROBERT LEE VERN BRITTON, *Professor of Geography*, 1930

M. S. 1930, University of Chicago; graduate study, University of Chicago, The Ohio State University

JACK RICHARD BROWN, *Professor of English*, 1948

Ph. D. 1937, Northwestern University

ELIZABETH COMETTI, *Professor of History*, 1948

Ph. D. 1939, University of Virginia; post-doctorate study, Columbia University

HOLLIE CLAYTON DARLINGTON, *Professor of Science*, 1930

Ph. D. 1942, University of Chicago

LESLIE MARTZ DAVIS, *Professor of Geography*, 1939

Ph. D. 1935, University of Chicago

CONLEY HALL DILLON, *Professor of Political Science*, 1934

Ph. D. 1936, Duke University

RALPH M. EDEBURN, *Professor of Zoology*, 1945

Ph. D. 1938, Cornell University

NORMAN BAYARD GREEN, *Professor of Zoology*, 1938

Ph. D. 1952, Ohio State University.

MARGARET THELMA HAMPEL, *Professor of Education*, 1953

Ed. D. 1938, Columbia University

CHARLES PRICE HARPER, *Professor of Political Science*, 1946

Ph. D. 1937, The Johns Hopkins University

ARVIL E. HARRIS, *Dean of the Graduate School and Professor of Political Science*, 1936.

Ph. D. 1936, State University of Iowa

HAROLD MANSFIELD HAYWARD, *Professor of Sociology*, 1938

Ph. D. 1937, Clark University

HERSCHEL HEATH, *Professor of History*, 1947

Ph. D. 1933, Clark University

JOSEPH S. JABLONSKI, *Professor of Art*, 1929

M. A. 1925, Harvard University; graduate study, University of Cincinnati

RAYMOND ELLSWORTH JANSSEN, *Professor of Geology*, 1942

Ph. D. 1939, University of Chicago

* Date following name indicates first appointment to a staff position at Marshall College.

- VERNON DAKE JOLLEY, *Professor of Business Administration*, 1949
M. B. A. 1935, University of Michigan; graduate study, University of Chicago
- CHARLES LAWRENCE KINGSBURY, *Professor of Music*, 1950
Ed. D. 1945, Indiana University
- KENNETH KARL LOEMKER, *Professor of Psychology*, 1930
Ph. D. 1941, University of Chicago
- AMBROSE EVERETT McCASKEY, JR., *Professor of Engineering*, 1936
M. S. C. E. 1936, West Virginia University; graduate study, University of Michigan, University of Wisconsin
- DONALD C. MARTIN, *Professor of Physics*, 1943
Ph. D. 1936, Cornell University
- CHARLES HILL MOFFAT, *Professor of History*, 1946
Ph. D. 1946, Vanderbilt University
- PAUL N. MUSGRAVE, *Professor of Education*, 1938
Ph. D. 1936, West Virginia University
- WILLIAM PAGE PITT, *Professor of Journalism*, 1926
M. S. J. 1930, Columbia University
- ALLEN OTIS RANSON, *Professor of Speech*, 1931
M. S. 1935, University of Wisconsin
- JAMES TULL RICHARDSON, *Professor of Sociology*, 1949
Ph. D. 1943, University of Missouri
- RUTH ROBINSON, *Professor of Physical Education*, 1932
M. A. 1928, Columbia University
- ORA E. RUMPLE, *Professor of Chemistry*, 1947
Ph. D. 1937, Indiana University; post-doctorate study, Indiana University
- ALLEN W. SCHOLL, *Professor of Chemistry*, 1948
Ph. D. 1934, Pennsylvania State College
- ROBERT PORTER SECHLER, *Professor of English*, 1946
Ph. D. 1931, University of Pennsylvania
- RUSSELL B. SMITH, *Professor of Education*, 1949
Ph. D. 1939, Ohio State University
- HORACE GRESHAM TOOLE, *Professor of History*, 1925
Ph. D. 1932, University of Pennsylvania
- FLORENCE HOLLIDAY VanBIBBER, *Professor of Psychology*, 1937
Ph. D. 1935, University of Arizona; post-doctorate study, The University of Chicago
- LUCY ADELE WHITSEL, *Professor of Latin and Greek*, 1929
Ph. D. 1929, University of Wisconsin; post-doctorate study, American Academy at Rome, University of Wisconsin, American School of Classical Studies in Athens.
- DANIEL BANKS WILBURN, *Dean of the Teachers College and Professor of Education*, 1947
Ed. D. 1945, The George Washington University
- ROY CLEO WOODS, *Professor of Education*, 1927
Ph. D. 1927, University of Iowa

ASSOCIATE PROFESSORS

- CURTIS FRANKLIN BAXTER, *Associate Professor of English*, 1936
M. A. 1936, Washington and Jefferson College; graduate study, New York University, Cambridge University, Columbia University
- CHARLOTTE E. BERRYMAN, *Associate Professor of Physical Education*, 1927
M. A. 1926, Columbia University; graduate study, University of Wisconsin, Columbia University
- SAM CLAGG, *Associate Professor of Geography and Assistant Coach*, 1948
M. A. 1947, Marshall College; graduate study, University of Kentucky
- GEORGE BRUCE CORRIE, *Associate Professor of Economics*, 1948
M. A. 1941, University of North Carolina; graduate study, University of North Carolina
- EDWIN A. CUBBY, *Associate Professor of Social Studies*, 1949
M. A. 1941, Syracuse University; graduate study, Syracuse University
- MADELEINE H. FEIL, *Associate Professor of Psychology*, 1946
Ph. D. 1948, Ohio State University
- DOROTHY A. FISHER, *Associate Professor of Zoology*, 1946
Ph. D. 1942, Cornell University; post-doctorate study, University of North Carolina
- FREDERICK A. FITCH, *Associate Professor of Physical Education*, 1930
M. A. 1932, New York University; graduate study, New York University, Florida State University
- RUTH MARION FLOWER, *Associate Professor of English*, 1926
M. A. 1929, University of Michigan; graduate study, University of Washington, University of Michigan
- JUAN C. FORS, *Associate Professor of Spanish*, 1931
Ph. B. 1921, Colegio Nacional; A. B. 1927, Valparaiso University; graduate study, Washington State College, University of Chicago
- ¹ MIRIAM PEARL GELVIN, *Associate Professor of Music*, 1940
M. Ed. 1940, University of Cincinnati; M. Mus. 1940, Cincinnati Conservatory of Music; graduate study, Columbia University, Northwestern University
- MARY ALICE GOINS, *Associate Professor of Mathematics*, 1946
M. A. 1933, University of Michigan; graduate study, Purdue University, University of Kentucky, University of Chicago, University of Michigan
- CLEO MARGARET GRAY, *Associate Professor of Home Economics*, 1947
M. S. 1927, University of Wisconsin; graduate study, University of Wisconsin, Iowa State College, Columbia University, University of Southern California
- OTTO ANDREW GULLICKSON, *Associate Professor of Physical Education*, 1930
M. A. 1926, Columbia University; graduate study, American University
- JOHN HOLLAND HOBACK, *Associate Professor of Chemistry*, 1945
Ph. D. 1947, West Virginia University
- RAY WAYNE HUGOBOOM, *Associate Professor of Music*, 1950
M. A. 1941, University of Wisconsin; graduate study, Indiana University, Fontainebleau Conservatory, Conservatoire de Paris, France
- MICHAEL B. JOSEPHS, *Associate Professor of Physical Education*, 1953
Ph. D. 1950, University of Pittsburgh

- CARL LEIDEN, *Associate Professor of Political Science*, 1949
Ph. D. 1949, State University of Iowa
- MELVIN PARSONS LOY, *Associate Professor of Science*, 1926
M. A. 1931, Ohio State University
- LOUISE McDONOUGH, *Associate Professor of Physical Education*, 1929
M. A. 1929, Columbia University; graduate study, Columbia University,
State University of Iowa
- JOHN LEWIS MARTIN, *Associate Professor of Spanish*, 1935
Ph. D. 1940, University of Pittsburgh
- CARL BARTH MILLER, *Associate Professor of Business Administration*, 1946
M. A. 1942, Northwestern University; graduate study, University of
Kentucky, University of Colorado
- GEORGE E. MUNN, *Associate Professor of Economics*, 1950
M. A. 1939, University of Wisconsin; graduate study, University of
Wisconsin
- ALMA NEASE NOBLE, *Associate Professor of French*, 1941
Ph. D. 1938, Ohio State University; M. A. 1942, Western Reserve University
- CLAYTON R. PAGE, *Associate Professor of Speech*, 1946
M. A. 1940, Baylor University; graduate study, University of Southern
California, State University of Iowa
- VIRGINIA N. PARRISH, *Associate Professor of French*, 1947
M. A. 1940, University of Kentucky; graduate study, University of Kentucky
- EDWARD LEWIS PLYMALE, *Associate Professor of Botany*, 1946
Ph. D. 1942, State University of Iowa
- JOSEPH DONALD POLLITT, *Associate Professor of English*, 1936
M. A. 1935, Duke University; M. A. 1953, Marshall College; graduate study,
Ohio State University, University of Missouri, Marshall College
- RALPH DAVID PURDY, *Associate Professor of Education*, 1950
Ph. D. 1949, Ohio State University
- ALVA WENONAH RICE, *Associate Professor of English*, 1946
M. A. 1947, Indiana University; graduate study, Indiana University
- MYRTLE MacDANNALD ROUSE, *Associate Professor of Home Economics*, 1936
M. A. 1934, Columbia University; graduate study, Columbia University
- CHARLES S. RUNYAN, *Associate Professor of Education*, 1953
Ed. D. 1953, University of Missouri
- JOHN LAWRENCE STENDER, *Associate Professor of English*, 1929
M. A. 1938, West Virginia University; graduate study, Duke University
- PAUL D. STEWART, *Associate Professor of Political Science*, 1948
Ph. D. 1948, Duke University
- ADELLA E. STROUSS, *Associate Professor of Home Economics*, 1943
M. S. 1941, Cornell University; graduate study, Iowa State College, Ohio
State University, University of Tennessee, Cornell University
- LINDLEY EDWARD VANDERZALM, *Associate Professor of Education*, 1928
M. A. 1920, Columbia University; graduate study, University of Chicago,
Columbia University, University of Michigan
- FRANCES W. WHELPLEY, *Associate Professor of Chemistry*, 1946
Ph. D. 1931, Columbia University
- MARY WILLIAMSON WHITE, *Associate Professor of English*, 1934
M. A. 1937, University of Kentucky; graduate study, The Johns Hopkins
University, University of Kentucky, Syracuse University

ASSISTANT PROFESSORS

- HOWARD W. BAEUMLER, *Assistant Professor of Mathematics*, 1954
M. A. 1950, University of Buffalo
- DOROTHY BERRY BRAGONIER, *Assistant Professor of Mathematics*, 1927
M. A. 1939, Columbia University
- ARTHUR SIDNER CARPENTER, *Assistant Professor of Art*, 1951
M. A. Ed. 1947, Pennsylvania State College; graduate study, Pennsylvania State College, Marshall College
- RUTH ELIZABETH COFFMAN, *Assistant Professor of Speech*, 1953
M. A. 1946, Ohio University; graduate study, Northwestern University
- PAUL H. COLLINS, *Assistant Professor of Education and Director Adult Education*, 1949
M. A. 1943, West Virginia University; graduate study, Harvard University, University of Virginia.
- DONALD D. COX, *Assistant Professor of Science*, 1950
M. A. 1950, Marshall College; graduate study, Ohio State University, Michigan State College, Syracuse University
- JOHN W. CREIGHTON, *Assistant Professor of Music*, 1945
M. A. 1942, Northwestern University, graduate study, Saint Louis University, Juilliard School of Music
- CAROLYN FORE DWIGHT, *Assistant Professor of Business Administration*, 1938
M. B. A. 1938, Ohio State University; graduate study, University of Chicago
- IRENE CLARK EVANS, *Assistant Professor of Business Administration*, 1939
M. A. 1940, Columbia University; graduate study, University of Chicago
- WALTER C. FELTY, *Assistant Professor of Social Studies*, 1950
M. A. 1950, Marshall College; graduate study, Indiana University
- RUBY CALVERT FOOSE, *Assistant Professor of Home Economics*, 1946
M. A. 1940, Ohio State University; graduate study, University of Tennessee
- REX C. GRAY, *Assistant Professor of Education and Principal of Elementary School*, 1948
M. A. 1941, West Virginia University; graduate study, University of Minnesota
- ¹ GEORGE JAMES HARBOLD, *Assistant Professor of Speech*, 1947
M. A. 1947, University of Florida; graduate study, University of Missouri, Marshall College
- HUNTER HARDMAN, *Assistant Professor of Mathematics*, 1946
M. S. 1940, University of Chicago; graduate study, Ohio State University, University of Pittsburgh
- HELEN BRANDBURY HARVEY, *Assistant Professor of English*, 1942
M. A. 1941, Marshall College; graduate study, Columbia University
- HENRIETTA HEPBURN, *Assistant Professor of English*, 1946
M. A. 1919, Indiana University; graduate study, Columbia University, University of Chicago, University of California
- CLARKE FREAS HESS, *Assistant Professor of Education*, 1951
M. A. 1947, Clark University; graduate study, University of Pennsylvania

- ¹ BEN WALTER HOPE, *Assistant Professor of Speech*, 1947
M. A. 1947, State University of Iowa; graduate study, Northwestern University, The Pennsylvania State College, Ohio State University
- WILLIAM ANTHONY HUEBNER, *Assistant Professor of Business Administration*, 1951
M. A. 1949, New York University; graduate study, New York University
- LOUIS B. JENNINGS, *Assistant Professor of Bible and Religion*, 1948
B. D. 1945, Crozer Theological Seminary; graduate study, University of Chicago, University of Pennsylvania
- LAVELLE THOMPSON JONES, *Assistant Professor of Music*, 1947
M. A. 1942, George Peabody College
- RUFUS L. LAND, *Assistant Professor of Economics*, 1946
M. A. 1948, Marshall College; graduate study, Ohio State University, University of Virginia
- ALFRED P. LANEGGER, *Assistant Professor of Music*, 1947
M. M. 1947, Syracuse University; diploma, State Academy of Music, Munich
- VIRGINIA ELIZABETH LEE, *Assistant Professor of Journalism*, 1930
M. A. 1942, Marshall College; graduate study, University of Wisconsin, University of Minnesota
- JOSEPH M. LICHTENSTEIN, *Assistant Professor of Psychology*, 1946
M. A. 1940, Fordham University; graduate study, Columbia University, Rutgers University, University of Cincinnati
- JULIUS LIEBERMAN, *Assistant Professor of German*, 1946
Ph. D. 1943, University of Cincinnati
- EUGENIA ROE McMULLEN, *Assistant Professor of Music*, 1945
M. A. 1947, Columbia University; graduate study, Columbia University, Juilliard School of Music
- HOWARD LEONARD MILLS, *Assistant Professor of Botany*, 1951
Ph. D. 1951, State University of Iowa
- WOODROW MORRIS, *Assistant Professor of Education*, 1950
M. Ed. 1941, Duke University; graduate study, Ohio State University
- REVA BELLE NEELY, *Assistant Professor of Home Economics*, 1946
M. Ed. 1946, Colorado Agricultural and Mechanical College
- LAWRENCE HOWARD NUZUM, *Assistant Professor of Education, and Principal of High School*, 1947
M. A. 1939, West Virginia University; graduate study, University of Tennessee
- THOMAS S. O'CONNELL, *Assistant Professor of Music*, 1948
M. M. 1947, University of Michigan
- ¹ JEANNE OWEN, *Assistant Professor of Business Administration*, 1947
M. C. S. 1945, Indiana University; graduate study, University of Colorado
- WALTER H. PERL, *Assistant Professor of German*, 1948
Ph. D. 1936, University of Zurich
- JAMES DONALD PERRY, *Assistant Professor of Psychology*, 1950
M. A. 1949, Marshall College; graduate study, Ohio State University
- GERALD R. PHILLIPS, *Assistant Professor of Social Studies*, 1948
M. A. 1947, University of Minnesota; graduate study, University of Minnesota
- ² VIRGINIA RIDER, *Assistant Professor of Education*, 1937
M. A. 1933, University of Michigan

- KATHLEEN ROBERTSON, *Assistant Professor of Speech*, 1946
M. A. 1936, Northwestern University; graduate study, Northwestern University
- DOROTHY WILHELMINA SEABERG, *Assistant Professor of Business Administration*, 1947
M. A. 1947, University of North Carolina; graduate study, University of Colorado, University of Minnesota
- ¹ JAMES STAIS, *Assistant Professor of Spanish*, 1950
M. A. 1950, University of Michigan; graduate study, New York University
- ³ DAVID P. STEWART, *Assistant Professor of Geology*, 1949
M. S. 1948, Michigan State College; graduate study, West Virginia University, Marshall College
- SAMUEL TURLEY STINSON, *Assistant Professor of Engineering*, 1940
M. S. E. 1950, University of Michigan
- HAROLD EUGENE WARD, *Assistant Professor of Education*, 1950
M. A. 1951, Marshall College; graduate study, Michigan State College
- MARY LOUISE WASHINGTON, *Assistant Professor of English*, 1946
M. A. 1936, West Virginia University; graduate study, University of Pennsylvania
- BERNICE F. WRIGHT, *Assistant Professor of Mathematics*, 1946
M. A. 1929, University of Michigan; graduate study, University of Washington, Marshall College

INSTRUCTORS

- EDITH WILSON AMICK, *Instructor in Education*, 1913
M. A. 1946, Marshall College
- RAYMOND D. CHEYDLEUR, *Instructor in Speech*, 1949
M. S. 1949, University of Wisconsin; graduate study, University of Indiana
- EUNICE S. COOK, *Instructor in Education*, 1943
M. S. 1943, West Virginia University; graduate study, University of Minnesota
- WALTER S. CORRIE, JR., *Instructor in Sociology*, 1949
M. A. 1948, Baylor University; graduate study, Cornell University
- NELLIE S. DAILEY, *Instructor in Education*, 1946
M. A. 1943, Colorado State College of Education; graduate study, University of Southern California
- FLORENCE A. DAVIS, *Instructor in Education*, 1946
M. A. 1941, Marshall College
- LYELL V. DOUTHAT, *Instructor in Education*, 1926
M. A. 1930, The Ohio State University
- JOANNE DRESCHER, *Instructor in Music*, 1950
M. M. 1948, Indiana University
- ST. ELMO FOX, *Instructor in Music*, 1918
B. Mus. 1932, Cincinnati Conservatory of Music; graduate study, Cincinnati Conservatory of Music
- OURANIA GRAMBOS, *Instructor in Education*, 1952
A. B. 1950, Marshall College; graduate study, Marshall College
- PATRICIA ANN GREEN, *Instructor in Education*, 1953
A. B. 1951, Marshall College; graduate study, Cincinnati Conservatory of Music, Ohio University

- INA WOODFORD HART, *Instructor in Education*, 1928
M. A. 1936, West Virginia University
- JAMES H. HERRING, *Instructor in Journalism, and Director of Information Service*, 1953
A. B. 1941, Marshall College; graduate study, State University of Iowa, West Virginia University
- CHARLES STEWART HOKE, *Instructor in Engineering*, 1952
B. S. M. E. 1951, Oklahoma A & M College
- MAE NECESSARY HOUSTON, *Instructor in Education*, 1951
M. A. 1950, Marshall College
- LEO V. IMPERI, *Instructor in Music*, 1952
M. A. 1951, Columbia University; graduate study, Columbia University, University of Denver
- ERNESTINE T. JONES, *Instructor in English*, 1948
M. A. 1948, Marshall College
- PHILLIP EDWARD LAMBERT, *Instructor in Education*, 1952
A. B. 1951, Marshall College; graduate study, Marshall College
- ANNA VIRGINIA LOCKE, *Instructor in Library Science and Librarian*, 1953
M. A. 1948, Western Reserve University; graduate study, Marshall College, University of Michigan
- VIRGINIA PFEIFFER LYNCH, *Instructor in Mathematics*, 1946
B. A. 1927, Seton Hill College; graduate study, Pennsylvania State College, Kentucky University
- ELIZABETH ANN McDANALD, *Instructor in Education*, 1953
A. B. 1952, Marshall College; graduate study, Pennsylvania State College
- EVA LOUISE MILLER, *Instructor in Business Administration*, 1946
M. A. 1942, Columbia University
- LOIS ADAMS MILLER, *Instructor in Music*, 1953
M. M. E. 1949, Indiana University
- DORA MAY MITCHELL, *Instructor in Education*, 1951
M. A. 1939, George Peabody College; graduate study, George Peabody College
- MARVIN O'NEILL MITCHELL, *Instructor in English*, 1952
Ph. D. 1953, University of North Carolina
- WILBUR PURSLEY, *Instructor in Music*, 1950
M. M. 1950, Eastman School of Music
- MARY ELIZABETH RENSFORD, *Instructor in Education, Kindergarten*, 1949
M. A. 1951, Marshall College
- HERBERT H. ROYER, *Instructor in Physical Education and Head Football Coach*, 1953
M. A. 1952, Marshall College
- MARTHA BOHART RUMMELL, *Instructor in Education*, 1938
M. Ed. 1938, University of Cincinnati
- BERKELEY R. SHAFER, *Instructor in Physics*, 1943
B. S. E. E. 1927, University of Michigan
- WILLIAM WILFRED SHIPE, *Instructor in Education*, 1950
M. A. 1949, Ohio State University

- GERALD WAYNE SMITH, *Instructor in Extension*, 1950
 M. A. 1949, West Virginia University; graduate study, West Virginia University
- THELMA THOMAS SMITH, *Instructor in Education*, 1950
 M. A. 1950, Marshall College
- † DONALD W. SPROUSE, *Instructor in Geology*, 1953
 M. S. 1950, University of Illinois
- FRIEDA STARKEY, *Instructor in English*, 1946
 M. A. 1940, West Virginia University
- MARY JO STEPHENS, *Instructor in Education*, 1939
 A. B. 1938, Marshall College; graduate study, Marshall College
- SHIRLEY FOSTER STREEBY, *Instructor in Education*, 1945
 M. A. 1944, University of Wisconsin; graduate study, University of Southern California
- GEORGE G. URIAN, *Instructor in Engineering*, 1947
 B. E. S. 1941, Marshall College; graduate study, Washington University, Harvard, Massachusetts Institute of Technology
- DANIEL WICKLINE, *Instructor in Physical Education and Assistant Coach*, 1953
 M. A. 1952, Marshall College
- MARTHA MALONEY ZELNAK, *Instructor in Education*, 1950
 M. A. 1948, Marshall College

LIBRARIES

THE JAMES E. MORROW LIBRARY

Margaret S. Bobbitt, B. S. L. S.	Assistant Librarian
Jean Jackson Buchanan, B. S. L. S.	Assistant Librarian
Ann H. Dodrill, B. S.	Assistant Librarian
Helen S. Jenkins, B. S. L. S.	Assistant Librarian
Kathryn M. Kraybill, A. B., Library Certificate	Assistant Librarian
Doris Jean Lucas	Secretary
Mary Irene Neal	Clerk-Typist

MARSHALL HIGH SCHOOL LIBRARY

Anna Virginia Locke, M. A.	Librarian
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ATHLETIC STAFF

Robert A. Morris, Jr., M. A.	Director of Athletics
Herbert A. Royer, M. A.	Head Football Coach
Cam Henderson, A. B.	Basketball Coach
Sam Clagg, M. A.	Assistant Coach
Daniel Wickline, M. A.	Assistant Coach
Patricia J. Luskey, A. B.	Secretary
Grace Sturm	Clerk-Typist
Edward James Prelaz, A. B.	Trainer and Athletic Department Assistant

DEPARTMENT OF MILITARY SCIENCE AND TACTICS

- WILLIAM P. O'NEAL, Lt. Colonel, *Professor of Military Science and Tactics*, 1951
- PURDY PHILLIPS, Major, *Assistant Professor of Military Science and Tactics*, 1953
- HARRY J. MCGINNESS, Captain, *Assistant Professor of Military Science and Tactics*, 1951
- BENJAMIN P. LIBERA, Master Sergeant, *Instructor in Military Science and Tactics*, 1952
- CHARLES ROBERT LONG, Master Sergeant, Sergeant Major, *Department of Military Science and Tactics*, 1953
- JOHN M. MILLER, Master Sergeant, *Instructor in Military Science and Tactics*, 1951
- GEORGE W. TOPE, Master Sergeant, *Instructor in Military Science and Tactics*, 1952
- EUGENE J. BARNUM, Sergeant, *Instructor in Military Science*, 1953

HEALTH SERVICE

- Sheffer Clark, B. S., M. D. *College Physician*
- Margaret Lambert, R. N. *Clinic Nurse*

GRADUATE ASSISTANTS

- JOHN EDWARD AMBLER, *Botany*, 1953
B. S. 1951, Marshall College
- CHARLES JOSEPH AMBROSE, *Chemistry*, 1953
B. S. 1953, Marshall College
- PAUL F. ARVIS, *English*, 1953
A. B. 1953, Concord College
- DANA RAY CARTWRIGHT, *Chemistry*, 1953
B. S. 1953, Marshall College
- SALLY ORETHA CYRUS, *Physical Education*, 1954
A. B. 1954, Marshall College
- WILLIAM CLARENCE DUDLEY, *Chemistry*, 1953
B. S. 1950, Marshall College
- WAYNE EVEREST MORGANROTH, *Chemistry*, 1953
B. S. 1953, Marshall College
- THOMAS G. KENNEDY, *Zoology*, 1953
A. B. 1952, Salem College

TEACHING FELLOW

- NANCY CAROL SCHUMAN, *Kindergarten*

PART-TIME STAFF MEMBERS

- ROBERT H. BURFORD, *Instructor in Business Administration*
LL. B. Michigan University, 1952
- HARRY G. CLAGG, *Freshman Coach and Scout*
M. A., Marshall College, 1947
- CLARA CLOSTERMAN, *Instructor in Business Administration*
M. Ed., University of Pittsburgh, 1940
- FRANK DANIELS, JR., *Instructor in Business Administration*
B. S. E., University of Illinois, 1943
- CHARLES FRANKLIN DODRILL, *Instructor in Business Administration*
LL. B. Harvard, 1948
- BERT H. EARLY, *Instructor in Business Administration*
LL. B., Harvard, 1947
- GRACE GREENAWALT, *Instructor in Business Administration*
A. B., Marshall College, 1940
- CLARA HARRISON, *Instructor in Business Administration*
M. A., The Ohio State University, 1933
- AUGUSTA R. LITTLE, *Instructor in Chemistry*
M. S., Marshall College, 1941
- PAUL McCREIGHT, *Instructor in Business Administration*
LL. B., University of Michigan, 1949
- BLAINE C. MAYS, *Instructor in Chemistry*
A. B., Marshall College, 1932
- WILLIAM DWIGHT STAATS, *Equipment Manager, Athletic Department*
- EVELYN STAFFORD, *Physical Education Assistant*
A. B., Marshall College, 1926
- LILLIAN WOLFE, *Instructor in Art*
M. A., The Ohio State University, 1940

NOTES

- ¹ On leave, Graduate Study
- ² On leave
- ³ On leave—First Semester 1953-54
- ⁴ First Semester only—1953-54

ADMINISTRATIVE ASSISTANTS

OFFICE OF THE PRESIDENT

Adrienne Arnett, A. B.....Secretary

OFFICE OF THE TEACHERS COLLEGE

Ethelene Holley, A. B.....Secretary

Edna L. Ball.....Stenographer

OFFICE OF THE COLLEGE OF ARTS AND SCIENCES

Sylvia Wilson Summers.....Secretary

Betty Jane Evans, A. B.....Stenographer

OFFICE OF THE GRADUATE SCHOOL

Clara Mae Hall, M. A.....Secretary

OFFICE OF THE DEAN OF WOMEN

Mildred Klein Heller, A. B.....Secretary

Golda E. Dakan.....Hostess, College Hall

Leva R. Huffman, A. B.....Hostess, Laidley Hall

OFFICE OF THE DEAN OF MEN

Elizabeth Anne Moss.....Secretary

Maria Jane C. Pepper, LL. B.Student Employment Clerk

Cora Foltz.....Hostess, Hodges Hall

Edward Prelaz, A. B.....Men's Counselor, Hodges Hall

OFFICE OF THE REGISTRAR AND DIRECTOR OF ADMISSIONS

Ernest L. Jones, M. A.....Assistant Registrar

Rogers McAvoy, A. B.....Assistant Director of Admissions

Helen Harlow, M. A.....Statistician

Elma Frances Sines, A. B.....Secretary, Registrar

Mary Theodore, A. B.....Secretary, Assistant Director of Admissions

Patricia Fortney Duffey, A. B.....Recorder

Betty B. Howes, A. B.....Transcript Clerk

Mary Frances Wassum, A. B.....Transcript Clerk

Ann Shaver.....Veterans Clerk

Sybil Carol Sayble, A. B.....Central File Clerk

OFFICE OF THE COLLEGE SECRETARY

Virginia L. Durrett.....Secretary

OFFICE OF THE COMPTROLLER AND BUSINESS MANAGER

Ethel M. Martin.....	<i>Secretary</i>
Louise Thompson.....	<i>Treasurer</i>
Constance Arthur.....	<i>Cashier</i>
Vida M. Franklin.....	<i>Bookkeeper</i>
Velma S. McCaskie, A. B.	<i>Bookkeeper</i>
Helen Jordan Clayton.....	<i>Payroll Clerk</i>
Mabel Ratcliff, A. B.....	<i>Clerk-Typist</i>
Thomas A. Bolyard, M. A.....	<i>Superintendent, Buildings and Grounds</i>
George R. Beckett.....	<i>Operating Engineer, Buildings and Grounds</i>
Robert P. Schurman, M. A.....	<i>Chief Engineer, Buildings and Grounds</i>
Cloyde E. Childers.....	<i>Inventory Record Clerk</i>
Norma Leontine Trice.....	<i>Clerk, Buildings and Grounds</i>
Georgia Darves Rollins, B. S., Dietetic Certificate	<i>Dietitian and Cafeteria Manager</i>
W. Don Morris.....	<i>Manager, Student Union</i>
Sue Nicklas.....	<i>Hostess, Student Union</i>
Percy L. Galloway.....	<i>Manager, Bookstore</i>
Everett D. Newman.....	<i>Assistant Manager, Bookstore</i>
Lillian O. Newcomb.....	<i>Manager, Duplicating Department</i>
Shirley Anne Handy.....	<i>Clerk, Duplicating Department</i>
Elizabeth G. Trice, A. B.....	<i>Junior Accountant</i>
Lavera Oswald Verlander.....	<i>Telephone Operator</i>
Anna Gay Hager.....	<i>Clerk-Typist, Switchboard Operator</i>

OFFICE OF DIRECTOR OF ADULT EDUCATION

Margaret E. Clark, A. B.....	<i>Secretary</i>
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LABORATORY SCHOOL

Ann Powell Howgate.....	<i>Secretary</i>
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DEPARTMENT OF MILITARY SCIENCE AND TACTICS

Dorothy W. Pinson.....	<i>Secretary</i>
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OFFICE OF THE DIRECTOR OF INFORMATION SERVICE

Anna Gay Hager.....	<i>Clerk-Typist</i>
Gordon von Stroh.....	<i>College Photographer</i>

DEPARTMENT OF CHEMISTRY

Ruth Gay Thayer.....	<i>Secretary and Librarian</i>
Martha Ann Davidson.....	<i>Head Storekeeper</i>
Mary Etta Fleming.....	<i>Assistant Storekeeper</i>

DEPARTMENT OF PSYCHOLOGY

Dorothy Head Call, A. B.....*Secretary*
Jane Murray Kitchen.....*Stenographer*

DEPARTMENT OF HOME ECONOMICS

Helen R. Cline.....*Secretary*

SPECIAL SERVICES

Rev. Lander L. Beal, A. B., B. D.....*Religious Counselor*
Kenneth Luoto, M. S.....*Veterans Vocational and Educational Counselor*
Kenneth William Hylbert, D. Ed.....*Counseling Psychologist*
Margaret Hoye, M. A.....*Psychometrist*

GENERAL INFORMATION

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STATEMENT OF INSTITUTIONAL PURPOSES

Marshall College, an institution of higher education supported by the State of West Virginia, has for its general purpose the highest development of the personality of its students. It encourages them in the attainment of scholarship and the acquisition of skills. Further, the college recognizes an obligation to contribute to the cultural growth of its community.

The college aids in developing those who come under its influence by providing them the opportunity to understand and to contribute in a positive way to the culture in which they live; to develop and maintain physical health; to participate in democratic processes. It endeavors to inculcate worthwhile spiritual, social and economic values; to stimulate intellectual curiosity and the desire to continue personal and professional growth.

Various departments of the college provide for education and training in specialized fields to prepare for professional, technical, and industrial careers.

The institution offers for community advancement evening courses, extension classes, lectures, musical programs, conferences, forums, and other campus and field activities.

HISTORY

Marshall College was founded as Marshall Academy in 1837 by a group of Cabell County citizens. According to tradition, they met first at the home of John Laidley, who chose the name "Marshall" in honor of his close friend, Chief Justice John Marshall, who had died two years earlier.

A subscription school, operated by Isaac Peck at Mount Hebron, two miles down the Ohio River from the town of Guyandotte, became the nucleus of the new institution. The school had met in a log structure, also used as a church, which stood on a knoll, now the site of part of "Old Main."

A year later the Academy was incorporated by the Virginia Assembly with Mr. Laidley as president of the Board of Trustees. The Trustees purchased one and one-half acres of land from James and Lucy Holderby who stipulated that it was to be used "for purposes of an academy and no other." They also erected a two-story brick building to replace the log structure, enclosed the land and sank a well.

For more than a decade the Academy was successful in attracting students and preparing them for college entrance and for teaching positions in the county schools, in spite of inadequate financial support.

In 1850 the Academy and its financial obligations was accepted by the Conference of the Methodist Episcopal Church

South. Under church auspices educational progress continued and, in 1858, the original act of incorporation was amended to raise the institution to college level. The name was changed to Marshall College, a faculty of five was elected, and a full college program was offered.

However, financial difficulties, doubtless aggravated by the sectional difference of the time, became acute and, near the beginning of the Civil War, the institution was sold for debt.

During the war years the college premises were occupied by a family some members of which, tradition says, conducted a private school to satisfy the clause in the deed which limited use of the property to school purposes. Another tradition holds that the building was also used for a time as a hospital for Union soldiers.

In 1867, four years after the birth of the new state of West Virginia, its legislature passed an act creating a normal school ". . . to be called West Virginia State Normal School . . . to be established at Marshall College in the County of Cabell."

College preparatory work was offered in addition to teacher training and, by 1886, there was also a full "academical" course of two years. Through the later years of the nineteenth century and the first two decades of the twentieth, the college offered, in addition to secondary work, two years of liberal arts work and two years of teacher training.

In 1920 the West Virginia State Board of Education approved the granting of a Bachelor's degree in education. Teachers College conferred degrees upon four candidates in June, 1921.

The College of Arts and Sciences was established in 1923 and awarded the first liberal arts degrees in 1925. The degree of Bachelor of Science was authorized in 1938, Bachelor of Engineering Science in 1940, and Bachelor of Science in Chemistry in 1951. In 1945 two-year programs leading to the degrees of Associate in Arts and Associate in Science were approved in ten fields.

The Graduate School, authorized in May, 1948, grew out of a program of graduate work in six departments which had been established in 1938. Courses leading to the degree of Master of Arts or Master of Science are now offered in nine major fields with ten additional departments offering work in a minor field.

BUILDINGS AND GROUNDS

The Marshall College campus consists of about twenty-five acres near the center of Huntington. On these beautifully shaded grounds are the following buildings:

Old Main, the oldest and largest building on the campus, contains the auditorium, numerous classrooms, offices for many

members of the faculty, and all the administrative offices. The college bookstore and the college post office are in the basement.

Northcott Hall, completed in 1915 and named in honor of the late G. A. Northcott, a distinguished citizen of Huntington, provides facilities for the Business Administration, Art, and Home Economics Departments.

Science Building, completed in 1950 at a cost of \$2,353,000, includes a large lecture auditorium with a seating capacity of 300, a temperature control room, special research laboratories for graduate students, and a greenhouse, in addition to the regular classroom, laboratory, and office space.

The Physical Education Building, completed in 1921, provides facilities for the physical activities of men and women. It has two swimming pools, one large and two small playing floors, lounges, and offices for the teachers and executives of this department.

The Music Hall provides a small auditorium for recitals, practice rooms for piano and voice students, a band room, and a number of classrooms.

The James E. Morrow Library, erected in 1930 and named in honor of a former president of the college, contains the entire library collection, reading rooms, art museum, and offices and workrooms for the library staff.

The Clinic, a building located at 1712 Fifth Avenue, is readily accessible to the dormitories. A full-time nurse and a resident physician are at the clinic during definite hours.

College Hall, the "old dormitory," is a residence hall for women. On the first, the second and third floors are rooms sufficient to house sixty-eight students.

Laidley Hall, a modern dormitory opened in 1937, will house 150 women. It contains the nurse's suite with a two-bed infirmary and diet kitchen.

Hodges Hall, opened in 1937, is a residence hall for men. It provides living room for 175 men.

The College Dining Hall, located between Hodges and Laidley Halls, accommodates the residents of the dormitories.

Everett Hall, a three-story residence on Fifth Avenue, is the Home Management House under supervision of the Department of Home Economics. A nursery school occupies the first floor; senior women in home economics use the second and third floors as the Home Management House.

Veteran's Housing is provided in the Donald Avenue Housing Project located two miles south of the campus. Sixty-two units are available for married veterans.

The Albert Gallatin Jenkins Laboratory School at the time of its dedication in 1938 was named in honor of a distinguished Confederate cavalry officer who was a native of Cabell County. Because the laboratory school provides for kindergarten, elementary, and high school education, the work done in this modern, fully equipped building makes possible an enriched program for pupils and prospective teachers.

The Shawkey Student Union was built in 1932 and named in honor of Dr. Morris P. Shawkey, who for twelve years was president of the college. As the social center of the college it is the scene of many informal gatherings, college dances, and receptions.

The College Book Store in the basement of Old Main is maintained by the college for the convenience of students and faculty. Here textbooks and other school supplies are sold at reasonable prices. The college post office is housed in the book store.

Fairfield Stadium, about eight blocks from the campus, is a modern structure accommodating about 12,000 persons.

The Engineering Building, located on the north campus, is a two-story temporary structure, which includes ten classrooms, two conference rooms, and sixteen offices.

Huntington Memorial Field House, on Fifth Avenue about ten blocks east of the College, serves as Marshall's home basketball court.

DIVISIONS

Marshall College functions through three main divisions: the Teachers College, the College of Arts and Sciences, and the Graduate School.

The academic year is divided into two semesters of eighteen weeks each. Two terms of six weeks each are offered during the summer.

ACCREDITATION

Marshall College is accredited by the North Central Association of Colleges and Secondary Schools and the American Association of Teachers Colleges; is a member of the Association of American Colleges, the American Council on Education, and is approved by the American Association of University Women. Therefore, academic credits earned in Marshall College are fully standardized, and are accepted by all other colleges and universities.

LOCATION

Marshall College is advantageously located in Huntington, West Virginia's largest city. Huntington is served by three major railway systems, major airlines and motor bus lines. The growth in industrial enterprise in southern and southwest West Virginia means constant growth in population and in business and professional opportunities for students.

RESERVE OFFICERS' TRAINING CORPS

The Reserve Officers' Training Corps program was established in September of 1951, when the Department of the Army placed an Ordnance Corps unit at Marshall College. In order to increase the opportunities for graduates to receive commissions in all branches and services of the army, this unit was converted to a Branch General unit in September 1954.

The objective of the Reserve Officers' Training Corps is to qualify students for positions of leadership in time of national emergency and to produce fully qualified officers for the various components of the Army. The program consists of two parts, the Basic Course and the Advanced Course, each of two academic years, with the Advance Course including attendance at summer camp.

Military Science and Tactics is an elective, and enrollment in either course is voluntary. However, when a course has been entered upon by the student, completion of the course becomes a prerequisite for graduation unless relieved of this obligation by the college under regulations prescribed by the Department of the Army.

Students desiring to enroll must meet the following requirements established by the Department of the Army for enrollment in the Reserve Officers' Training Corps:

1. Applicant must be a citizen of the United States.
2. Applicant must be between 14 and 23 years old.
3. Applicant must be a regularly enrolled student.
4. Applicant must be screened and found acceptable by the Department of Military Science and Tactics.
5. Applicant must be examined and found physically qualified.
6. Applicants for enrollment who have a record of conviction by any civil court or by any type of military court martial, for other than a minor traffic violation, are not eligible for enrollment in the ROTC without specific approval of the Department of the Army. Request for such waiver must be made through the Professor of Military Science and Tactics.

In addition to the requirements above for Basic students, Advanced students, prior to enrollment must:

1. Be less than 27 years old prior to enrollment in the Advanced Course.
2. Have completed the Basic Course or be a veteran with 12 or more months' service.
3. Execute a written contract with the government to continue the course of instruction in two years and to attend the ROTC Summer Camp of six weeks' duration, and to accept a commission as a Second Lieutenant, if offered, and to serve on active duty for a period of two years, if called by the Secretary of the Army.
4. Be approved by the Professor of Military Science and Tactics and the President of the College on the basis of previous academic standing and proved qualities of leadership.
5. If a member of the Air Force, Navy, or Coast Guard Reserves, resign from such organizations prior to enrollment.

Basic Course

The first year Basic Course, MS 101, is designed to provide the student with a fundamental background of military information and training applicable to all branches of the Army or the Air Force.

Advanced Course

The Advanced Course is designed to qualify students for commissions in the Officers' Reserve Corps of the United States Army.

Attendance at the ROTC camp, normally during June and July following the first year of the Advanced Course, offers practical training in leadership and exercise of command and field exercises. In exceptional cases, attendance at camp may follow the sophomore year or may be postponed until after the senior year.

Fees and Remuneration

A deposit of Twenty-five Dollars (\$25.00) is required by the college of all ROTC students to cover possible loss or damage to uniforms and equipment. This deposit is returnable. Textbooks, notebooks and other instructional material required by ROTC students are furnished without cost to the student. Uniforms, to be worn as prescribed, will be issued by the Military Department. Commutation of subsistence at the rate of \$.90 a day is paid to students enrolled in the Advanced Course. Students attending summer camp are paid at the rate of \$78.00 per month. All expenses, including transportation to and from summer camp, are borne by the Government."

Credit

Students in the ROTC Basic Course will attend classes three hours per week and will receive two semester hours' credit per semester toward graduation requirements. Students in the Advanced Course will attend classes five hours per week and will receive three semester hours' credit per semester. In addition, all ROTC students normally will attend a one hour combined period of leadership and drill practice each week. Three semester hours' credit is given for attendance at summer camp. Students who have completed two years of the Basic Course and are unable to continue their College education may be granted a Certificate of Eligibility which is of value in securing selection to Officer Candidate Schools or appointments as non-commissioned officers.

Students who attain a high standard of military and academic achievement during the first year of advanced training may be designated Distinguished Military Students. If such standards are maintained until graduation, they may be designated Distinguished Military Graduates, which permits them to apply for Regular Army commissions if otherwise qualified.

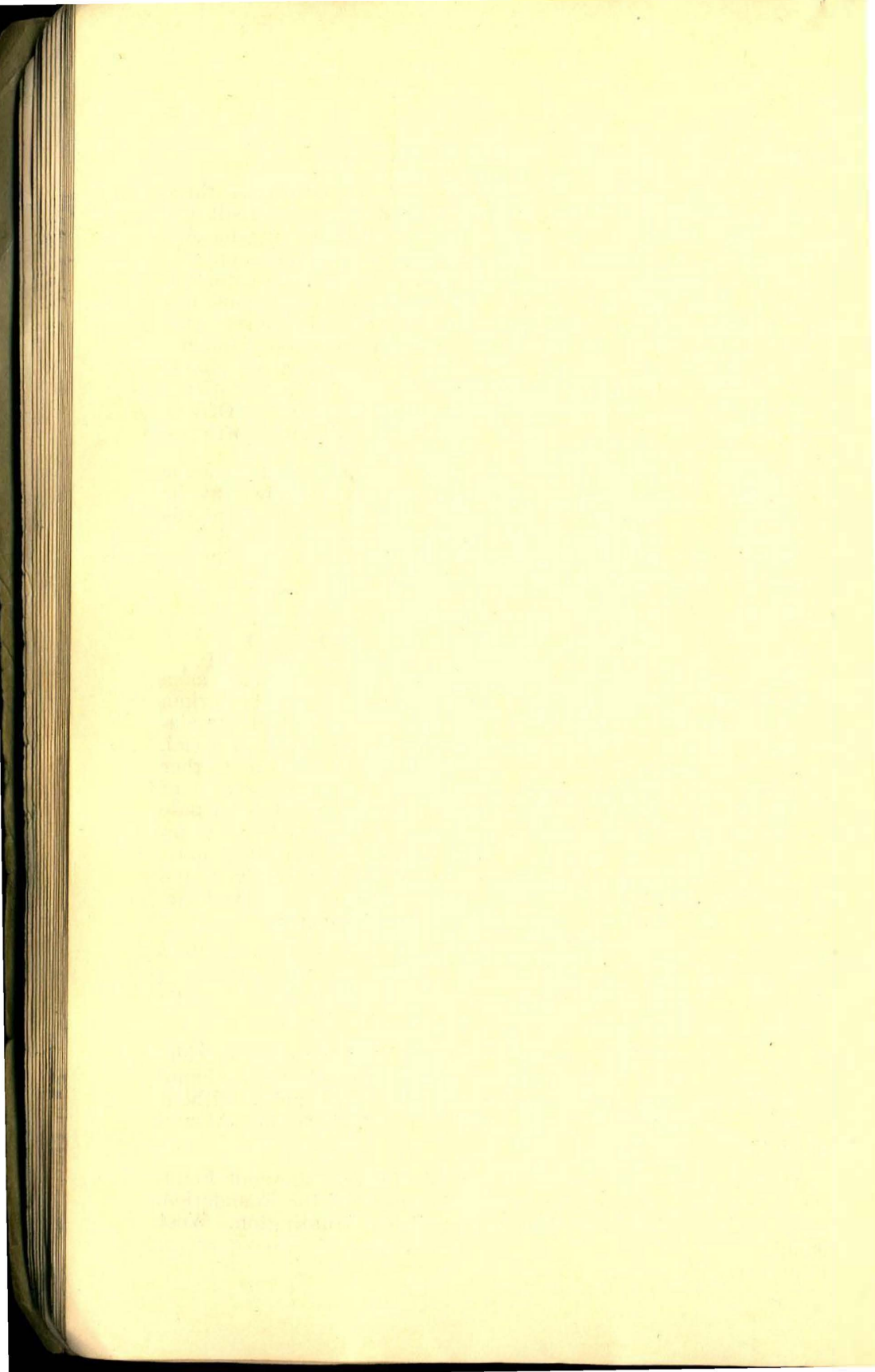
THE MARSHALL FOUNDATION, INCORPORATED

The Marshall Foundation, Incorporated, was organized as a non-profit corporation under the laws of the State of West Virginia in 1947 to support the program of Marshall College. The Foundation receives and holds in trust property, real and personal, that is given, devised, bequeathed, given in trust or in any other way made over to the corporation for the use or benefit of Marshall College, or of any student or professor, for the purpose of carrying on at the College any line of work, teaching or investigation, which the donor, grantor, or testator may designate. The corporation invests and disperses all monies received and manages, administers, and controls all property received according to the specifications established by the donors.

For the purposes of the Foundation, the needs of the College have been grouped into five general projects—Scholarships and Fellowships, Library Improvement, Research, The President's Fund for general undesignated aid, and Capital Funds.

The Foundation is governed by a Board of Directors of thirteen members, representing the administration, faculty, alumni of the College, and three members of the community without reference to their affiliation with the College or Alumni Association.

Contributions may be made payable to The Marshall Foundation, Incorporated, and sent to the Secretary of the Foundation, Administration Building, Marshall College, Huntington, West Virginia.



GENERAL INFORMATION

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ACADEMIC

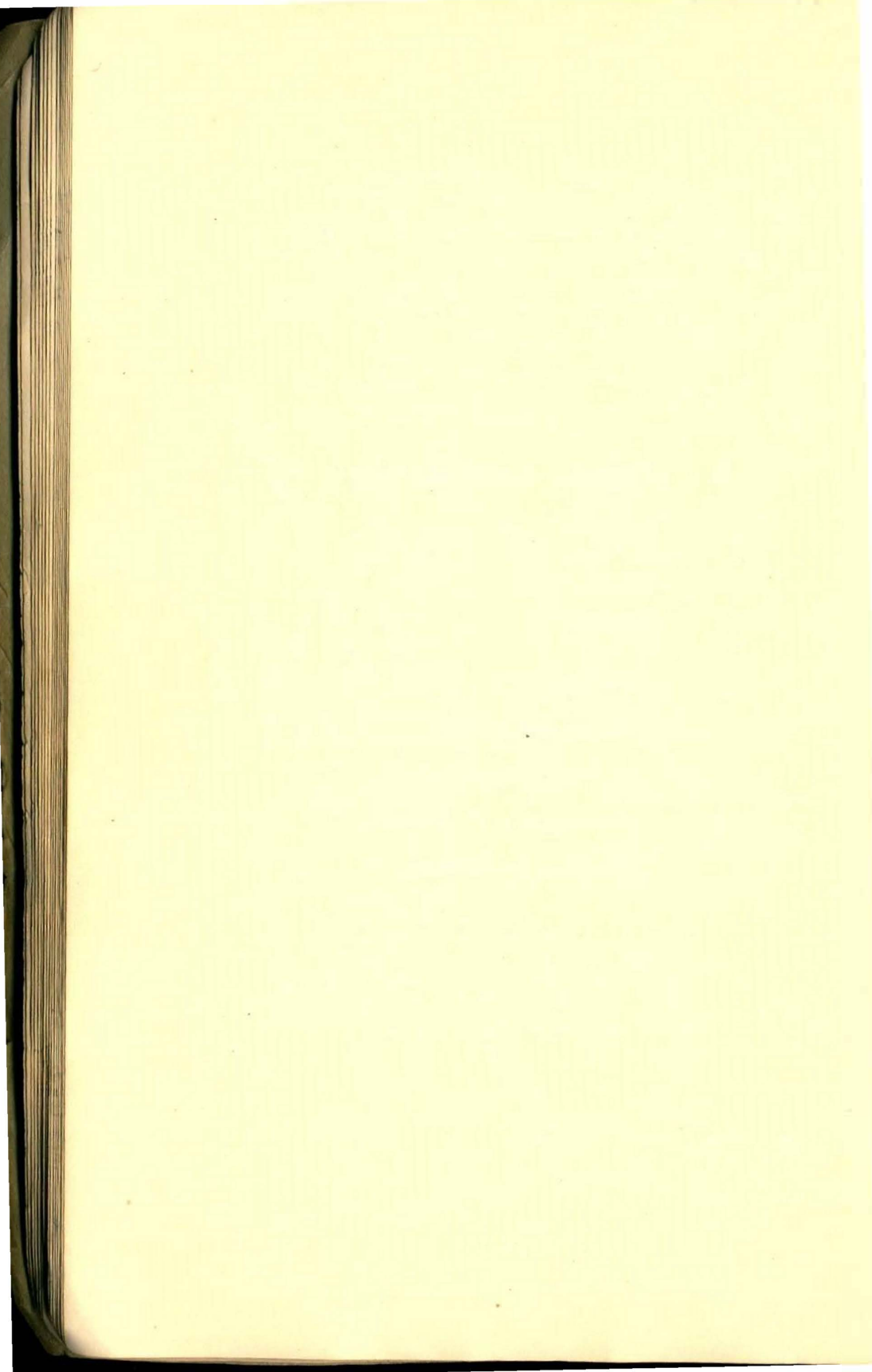
Admissions

Grades and Credits

Academic Regulations

Classification of Students

Academic Publications



ADMISSION

General Admission Procedure

All persons desiring admission to Marshall College, whether directly from high school or as a transfer student from another college or university, must file an application on forms provided by the Director of Admissions. All correspondence relative to admissions should be addressed solely to:

Director of Admissions
Marshall College
Huntington 1, West Virginia

The high school graduate must request his high school principal to forward a certified transcript of high school credits and graduation containing certification of grades to the Director of Admissions at least thirty days prior to the date of registration.

The transfer students must request the Registrar of each institution previously attended to forward an official transcript containing a statement of good standing and honorable dismissal direct to the Director of Admissions at least thirty days prior to the opening of the semester or term in which the student wishes to enroll. To be official, a transcript must carry the official seal of the institution and the manual signature of the proper authority.

All applicants will be notified in writing when credentials have been received and again after admission has been granted or denied.

General Admission Requirements

Admission to Marshall College may be obtained in one of three ways:

1. By a certificate of graduation and credits properly certified by an accredited* secondary or preparatory school.
2. By a properly certified transcript and statement of good academic and social standing from an accredited** college or university.
3. By the Test of General Educational Development, provided the applicant is a veteran of the U. S. Armed Forces or is twenty-one years of age or over.

Admission of High School Graduates

1. Residents of West Virginia:

Graduates of accredited high schools are admitted in good standing if they have a minimum of a "C" average on those high school subjects accepted by the college.

Graduates whose scholastic average on high school subjects accepted by the college is below a "C" will be admitted on WARNING which will limit academic and social activities until the condition is removed.

2. Non-Residents of West Virginia:

Non-resident students are eligible for admission if they are graduates of an accredited high school and have a minimum of a "C" average on those high school subjects accepted by the college. Non-resident students who have less than a "C" average on those high school subjects regularly accepted for admission will not be admitted to the college.

*Accredited schools are standard high or preparatory schools as classified by the Department of Education in the various states, or by any of the regional accrediting agencies, such as the North Central Association of Colleges and Secondary Schools.

**Accredited by membership in one of the associations of colleges, or on the approved list of the state university in the state in which it is located.

Admission of Transfer Students

Any person who applies for admission and has attended another institution of collegiate rank, whether he has earned credit or not, will be classified as a transfer student.

A transfer student must meet the entrance requirements of this institution and present evidence that he is in good standing in every respect at the institution last attended. Students who have been dismissed for academic or social reasons will not be eligible for admission. In no case shall a student be admitted whose record is such that he would have been dropped at Marshall College.

Transfer credits which are "C" quality or better will be accepted from accredited** colleges and universities.

Admission by Examination

The Test of General Educational Development, used as an entrance examination, is administered to those who have not graduated from high school prior to the opening of each semester and summer term. Applicants must be twenty-one years of age or older. All candidates for admission by examination must notify the Director of Admissions of their intentions of taking the examination at least two weeks prior to the opening of the semester or term which they wish to enter. Successful completion of this test will enable the applicant to qualify for a high school equivalency diploma which will be issued by the State Department of Education.

Advance Standing by Examination

Full time students who have studied a subject elsewhere may take examinations for advanced standing. Such students must convince the appropriate Department Head and Dean that the subject matter which they have mastered is equivalent to the course content of the course in which they desire to be examined. Examinations must be taken within three months after the opening of a semester. Candidates for examinations must secure a permission form from the Registrar's Office at least five days before the date of the examination and must secure the signature of the appropriate Department Head and Dean and pay the fee before undergoing the examination.

Specific Admission Requirements

In the evaluation of high school credits, not more than one unit each in journalism, dramatics, arithmetic, and public speaking will be accepted. Not less than one unit of a foreign language, chemistry, and physics will be accepted. Less than one-half unit in any subject will not be accepted.

Admission to the college does not necessarily qualify a student for admission to the various curricula or departments. In every case the student must meet the requirements for the curriculum or department in which he wishes to enroll.

Teachers College

By regulation of the West Virginia Board of Education any graduate of a first-class high school in West Virginia, with credits obtained in any one of the curricula provided for high schools, may enter upon a teacher training curriculum.

**Accredited by membership in one of the associations of colleges, or on the approved list of the state university in the state in which it is located.

Arts and Sciences

Degrees offered within the College of Arts and Sciences require slightly different entrance credits. The entrance requirements for the different degree curricula follow:

A. A. or A. B. Degree

Recommended:

2 units of a foreign language

A. S., B. S., or B. B. A. Degree and Pre-professional students

1 unit of algebra, 1 unit of plane geometry

Recommended:

2 units of a foreign language

B. E. S.—Bachelor of Engineering Science Degree

1½ units of algebra, 1½ units of geometry

Recommended:

1 unit each of physics and chemistry •
2 units of a foreign language

B. S. in Chemistry—Bachelor of Science in Chemistry

1½ units of algebra, 1 unit of plane geometry

Recommended:

1 unit each of chemistry and physics
2 units of a foreign language

Students not meeting these requirements must make up the deficiency during the first year.

Graduate Study

For information concerning admission to the Graduate School, see the Graduate School Catalogue.

FRESHMAN WEEK

In order to give freshmen an opportunity to adjust themselves to their new surroundings, the college sets aside a period at the beginning of each semester for their reception and registration. (See college calendar for dates.) During these days the freshmen become acquainted with the campus and the facilities provided for their instruction and welfare. Selected upper-classmen and members of the faculty greet the new students and assist them in adapting themselves to college life.

During this period, placement tests in English will be given to all entering freshmen and to transfer students who have not had college English. Students who show proficiency in certain other subjects which they began in high school and wish to continue in college, such as music, general biology, physical science, and foreign languages, will be assigned to advanced sections or classes.

An opportunity is given each student to confer with advisers regarding living accommodations and personal problems; to take required medical examination at the college clinic; to become acquainted with the campus and location of buildings, including lecture and laboratory rooms, library, and other points of interest.

All freshmen are required to attend a special Freshman Convocation at 9:00 A. M. in the college auditorium on the first day of the program. At this time the administrative officers of the college will be introduced, the president will address the new students, and the program for Freshman Days will be outlined. Freshmen who miss or arrive late for this program will experience considerable delay and confusion in starting their college work.

FACULTY-STUDENT ADVISORY PROGRAM

Under this program each student who is admitted to Marshall College is assigned to a faculty adviser. Whenever possible the adviser is chosen from the field in which the student has expressed an interest. There is thus provided a common bond between the student and the faculty adviser. The major service rendered by the adviser is one of academic guidance. He is ready to assist the student in the preparation of semester class schedules and to guide the student in meeting the degree requirements. The student is urged to consult his adviser concerning any question that has a bearing on his academic advancement.

SEMESTER HOURS-DEFINITION

The semester hour is the basis of college credit within the institution. A semester hour is the credit received for taking a subject one hour per week for one semester of eighteen weeks.

Laboratory courses require two—three hours per week for eighteen weeks for each semester hour of credit.

GRADES AND QUALITY POINTS

The following system of grades and quality points is used within the institution:

- A—Honor, given only to student of superior ability and performance. Four (4) quality points are earned for each semester hour with a grade of A.
- B—Good, given for ability and performance distinctly above the average in quality. Three (3) quality points are earned for each semester hour with a grade of B.
- C—Average, given for ability and performance of average quality. Two (2) quality points are earned for each semester hour with a grade of C.
- D—Lowest passing grade, given for ability and performance of poor quality. One (1) quality point is earned for each semester hour with a grade of D.
- F—Failure, signifies entirely unsatisfactory work. Courses must be repeated if credit is to be received. No (0) quality points.
- FIW—Failure because of irregular withdrawal. No (0) quality points. (See regulations on withdrawal.)
- W—Withdrawn during the first calendar month after the date for the first class meeting in the semester, or during the first ten days after the date for the first class meeting in the summer session. No (0) quality points. (See regulations on withdrawal.)
- WP, WF—Withdrawn later than the first calendar month after the date for the first class meeting in the semester, or later than the first ten days after the date for the first class meeting in the summer session. The grades WP (withdrawn passing) and WF (withdrawn failing) will show the status of the student's work up to the official withdrawal date (not the last day of class attendance) unless otherwise directed by the Academic Dean and so noted on the drop slip. The official withdrawal date shall be the date on the withdrawal slip issued by the Registrar's Office. (See regulations on withdrawal.) No (0) quality points.

I—Incomplete, given to students who miss some or the last exercises of the class work because of illness, or some other equally good reason. When the work missed is done satisfactorily the final grade may be any one of the four passing grades. If the deficiency represented by I is not made up within a year of residence, or for those who attend summer school only, within the next summer's residence and if the make-up work is unsatisfactory, the grade will become an F. No (0) quality points for I grade.

Grades of A, B, C, D, F, FIW and WF in all semester hours registered are to count toward quality point averages.

Candidates for graduation must have at least a 2.00 average.

Quality points in excess of two per semester hour are transferable only on grades earned in West Virginia state supported colleges.

It is the student's responsibility to keep informed on his quality point standing. This information can be obtained at any time from the Dean of the College in which the student is registered.

REGULATIONS GOVERNING WITHDRAWAL FROM COURSES OR FROM COLLEGE

Official Withdrawal from Courses or From College:

A student desiring to withdraw from one or more courses or from the College must apply to the Academic Dean for permission. Upon giving permission the Dean will inform the Registrar who in turn will inform the instructors concerned. The instructor will report grades for the students as follows:

1. If permission for withdrawal is given during the first calendar month after the date of the first class of the semester or within ten days after the first class meeting of a summer term the instructor will report a grade of W followed by the date of official withdrawal; thus W 2-14-52.
2. If permission for withdrawal is given later than one calendar month within a semester or ten days within a summer term and before the 12th week of the semester or the 4th week of a summer term the W shall be accompanied by a grade to show the status of the student's work up to the time of official withdrawal; thus WP 4-15-52 or WF 4-15-52.
3. Students who withdraw from one or more courses or from college after the 12th week of a semester or the 4th week of a summer term will automatically receive a grade of WF unless the Academic Dean declares the withdrawal to be for reasons beyond the control of the student, in which case the W will be followed by the grade P or F being made at the time of official withdrawal.

Irregular Withdrawal from Courses or from College:

Students who drop one or more courses without permission will receive at the end of the semester or summer term a grade of FIW (failure because of irregular withdrawal) in each course involved and will automatically be placed on Academic Probation the following semester or summer term in attendance.

ABSENCE FROM EXAMINATIONS

Students are required to take all regular examinations. If a student attends a course throughout the semester and is absent from the examination without permission, the instructor shall count the examination as zero and report the final grade as FIW. If in the opinion of the instructor the absence of the student was for a satisfactory reason, the grade I will be reported and the student may, upon application, take the examination at a later date.

STUDENT ABSENCES FROM CLASSES

1. A student is expected to be present at all class sessions.
2. Unavoidable absences such as those due to health, death in the immediate family, or similar reasons, should be reported to the instructor concerned by students. In such case, and whenever possible, the instructor will provide an opportunity for the student to make up work missed.
3. There is a distinction between willful absences and institutional absences. Institutional absences include those which result from participation in an activity sponsored by the College such as athletics, music, debate, and other activities approved by the academic deans. Students who are absent for such reasons are expected to make up their work but should receive no undue penalty.
4. When a student misses classes for reasons other than those stated above, he does so at the risk of jeopardizing his academic standing.

CLASSIFICATION OF STUDENTS

Students who have completed ninety hours of college work are classified as seniors.

Students who have completed fifty-eight hours and less than ninety hours of college work are classified as juniors.

Students who have completed twenty-six hours and less than fifty-eight hours of college work are classified as sophomores.

Students who have completed the high school or secondary course and less than twenty-six hours of college work are classified as freshmen.

CLASSIFICATION OF ENGINEERING STUDENTS

Students who have completed 106 hours of college work are classified as seniors.

Students who have completed 68 hours and less than 106 hours of college work are classified as juniors.

Students who have completed 30 hours and less than 68 hours of college work are classified as sophomores.

Students who have completed the high school or secondary course and less than 30 hours of college work are classified as freshmen.

ASSIGNMENTS AND CREDITS

1. **Semester Load.** Sixteen semester hours constitutes a normal semester schedule. However, additional hours may be taken with permission of the academic dean.

2. **Change of Schedule**, i. e., adding courses, dropping courses, changing class hours or days, changing instructors, or other changes of any kind will not be permitted after the student has registered for the semester except by permission of an academic dean.

3. **Full Time Student Defined.** A student carrying at least twelve semester hours.

4. **Numbering of Courses.** Courses numbered 1-99 are sub-college courses and do not carry college credit.

Courses numbered 100-199 are primarily for freshmen, open to sophomores unless otherwise specified.

Courses numbered 200-299 are primarily for sophomores, open to freshmen and juniors unless otherwise stated.

Courses numbered 300-499 are primarily for juniors and seniors.

Courses numbered 500-599 are the same courses that carried a 400 series number accompanied by an asterisk (400*) for graduate students in earlier catalogue announcements. Only persons wishing to work towards the Master's Degree may register for a 500 series course and they must register in the Graduate School to receive graduate credit. Those who are not working towards a Master's Degree must use the 400 series numbers and register in the appropriate undergraduate college. Credit earned under a 400 series number after September 1, 1954, cannot be converted to graduate credit.

Courses numbered 600-699 are open to graduate students only.

5. **Repetition of Courses.** A student may not register for a course more than twice except as hereinafter provided. If the grade earned in the first registration is "C" or higher, the course may not be repeated. If the grade earned in the first registration is below a "C", the course may be repeated. If the student finds it impossible to complete a course in the second registration because of withdrawal from college, he may repeat the course. In all other instances, the student must secure permission from the Academic Dean for a third registration.

6. **Class Preparation.** A student is expected to devote not less than two hours of preparation for each class hour. This minimum is indispensable to the success of the student in any college course.

7. **Academic Probation.**

- a. A first semester freshman who earns a quality point average of less than 1.50 on all work attempted will be placed on Probation.
- b. A student other than a first semester freshman who has earned fewer than seventy-five (75) semester hours and whose cumulative quality point average on all work attempted is lower than 2.00 to the extent of more than ten points will be placed on Probation.
- c. A student who has earned seventy-five (75) or more semester hours and whose cumulative quality point average is lower than 2.00 will be placed on Probation.
- d. A student who withdraws irregularly from part or all of the academic load during the last semester or term of attendance will be placed on Probation. (A student makes normal progress toward graduation when he earns sixteen (16) semester hours each semester with a minimum quality point average of 2.00. Quality point averages are based upon hours attempted including all courses for which a student registers and in which grades of A, B, C, D, F, WF, and FIW are received.)

(A student on probation is limited to the minimum load of a regularly enrolled full-time student. Should the student fail to return to good academic standing, he is subject to dismissal or, at the discretion of the academic dean, he may be permitted to remain in college one additional semester or term on extended probation.)

Removal of Academic Probation

A student returns to good academic standing when he meets the quality point average required for his classification.

8. **Suspension.** Students are subject to the rules and regulations made by the college for their guidance and government; for any failure to comply with such regulations, a student may be suspended or expelled as provided by the West Virginia Board of Education.

9. **Minimum Resident Requirements for Graduation.** For the A. B., B. S., or B. E. S. degree, at least one year's work in residence is required, one semester of which must be in the senior year. A "year in residence" must represent not less than thirty-six weeks' work in residence with not less than twenty-four hours' credit.

Students who entered Marshall College previous to September, 1947, and whose residence was interrupted by military service or other good reason may, on their return to Marshall College, elect to satisfy the graduation requirements that were in effect when they first entered Marshall College or to meet the requirements in effect at the time they return to Marshall College.

Candidates for Bachelor's degrees who entered Marshall College in September, 1947, or at a later time, may graduate by meeting the requirements in effect on the date of their entrance provided that there be not more than ten years time between their entrance and graduation. When the time between entrance and graduation is greater than ten years, the student will have to meet the graduation requirements in effect on the date of his graduation.

In all cases students in Teachers College must meet prevailing requirements for teacher certification.

AUDIT AND NON-CREDIT COURSES

With the consent of the instructor and the adviser or the Dean, lecture and recitation courses may be audited without credit. Enrollment for audit is limited to the regular registration period for the semester or term. All students who desire to audit classes shall enroll and pay fees in the same manner and at the same tuition rate as students enrolling for credit. Faculty members desiring to audit courses must secure approval of their Dean as well as that of the instructor of the course or courses desired and must enroll in the regular manner for such courses. Faculty members may audit courses without charge.

THE DEAN'S LIST

Those students who are registered for twelve or more hours and who at the end of the semester receive grades averaging B or above are considered honor students and a list of such students constitutes what is known as the Dean's List.

HONOR STUDENTS

Candidates for graduation who have achieved special distinction in academic work are recognized at Commencement by having printed on their diplomas, first, second, or third honors as determined by quality points; *summa cum laude* (3.85 and above); *magna cum laude* (3.6 to 3.85); *cum laude* (3.3 to 3.6).

Three factors are taken into consideration in determining eligibility for graduation with honors:

1. A transfer* student must have earned at least 96 hours of work at Marshall College.
2. All work completed by a student at Marshall College is included in determining graduation with honors.
3. Work transferred from another institution is not included in determining graduation with honors.

TRANSCRIPTS

Every student at Marshall is entitled to one official transcript of his record free; for each additional copy a fee of one dollar (\$1.00) cash will be charged. Students are urged not to request transcripts at the beginning of a semester or between semesters if they want prompt service as the press of other work in the Registrar's office makes it impossible to prepare transcripts immediately.

A student who defaults in the payment of any college dues or loans forfeits his right to claim a transcript.

An application for a transcript of credit should furnish the date of last attendance at Marshall College, and a married woman should give both her maiden and married names.

All requests for transcripts should be sent directly to the Registrar.

Transcripts are prepared in the order received.

ACADEMIC PUBLICATIONS OF THE COLLEGE

The College issues four bulletins bi-annually; the General Catalogue, the Teachers College Bulletin, the Bulletin of the College of Arts and Sciences, and the Graduate Bulletin. Other special publications are issued from time to time.

*Includes students in combined college and professional courses as well as students transferring from another institution.

GENERAL INFORMATION

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FACILITIES

Health Service

Psychological Clinic

Speech Clinic

Library

Audio-Visual Program

HEALTH SERVICE

Health service is organized to provide medical service to students of the college, as well as to supervise health conditions on the campus.

A student clinic is maintained in which are located the offices of the physician and nurse. The College Physician is available only for such services as may be rendered at the clinic, except in emergency cases. Students who wish to avail themselves of the health service are expected to call at the office of the physician in the clinic.

Medical Examination

Students entering Marshall must take a medical examination given by the College Physician. It may be taken immediately before or after registration. Applicants for admission must have been successfully vaccinated against smallpox.

STUDENT HOSPITAL SERVICE

Hospitalization coverage for students attending Marshall College is not compulsory, but every student is advised and urged by the administration to take out hospitalization for himself.

THE PSYCHOLOGICAL CLINIC

The Psychological Clinic, Main 307, is open to students for consultation on scholastic, vocational, social, and personal problems. Students are invited to make use of the facilities of the Clinic.

SPEECH CLINIC

The Department of Speech operates a Clinic where assistance is provided without charge to any Marshall student who desires help with speech problems. In addition, the Clinic is designed to give training in clinical procedures to future public school correctionists.

Consultation, examination, and recommendations will be made available to the public in so far as time and facilities permit. The Clinic is located in Room 18 of the Science Building.

JAMES E. MORROW LIBRARY

The James E. Morrow Library contains 91,032 catalogued volumes, 13,166 of which are bound magazines. 500 current periodicals are received regularly. The Art Collection, a gift of the Carnegie Corporation, contains 233 books and 2,500 photographic reproductions of famous works of art. The library is a depository for a selected group of United States government documents. Many pamphlets are regularly received.

The main reading room and the reserve room are on the second floor. Many books are placed in the open shelves where students may browse if they wish.

The periodical room is on the first floor. Current magazines are kept there on open shelves. Bound volumes of magazines may be procured from the attendant at the desk. Pamphlets and some pictures are kept in the vertical files there.

The library has microfilm editions of the *Christian Science Monitor* from 1924 to date, *New York Times* from 1920 to date, *Parthenon*, and the *Virginia Gazette* 1736-1780. A Recordak reader is available for the reading of the microfilm.

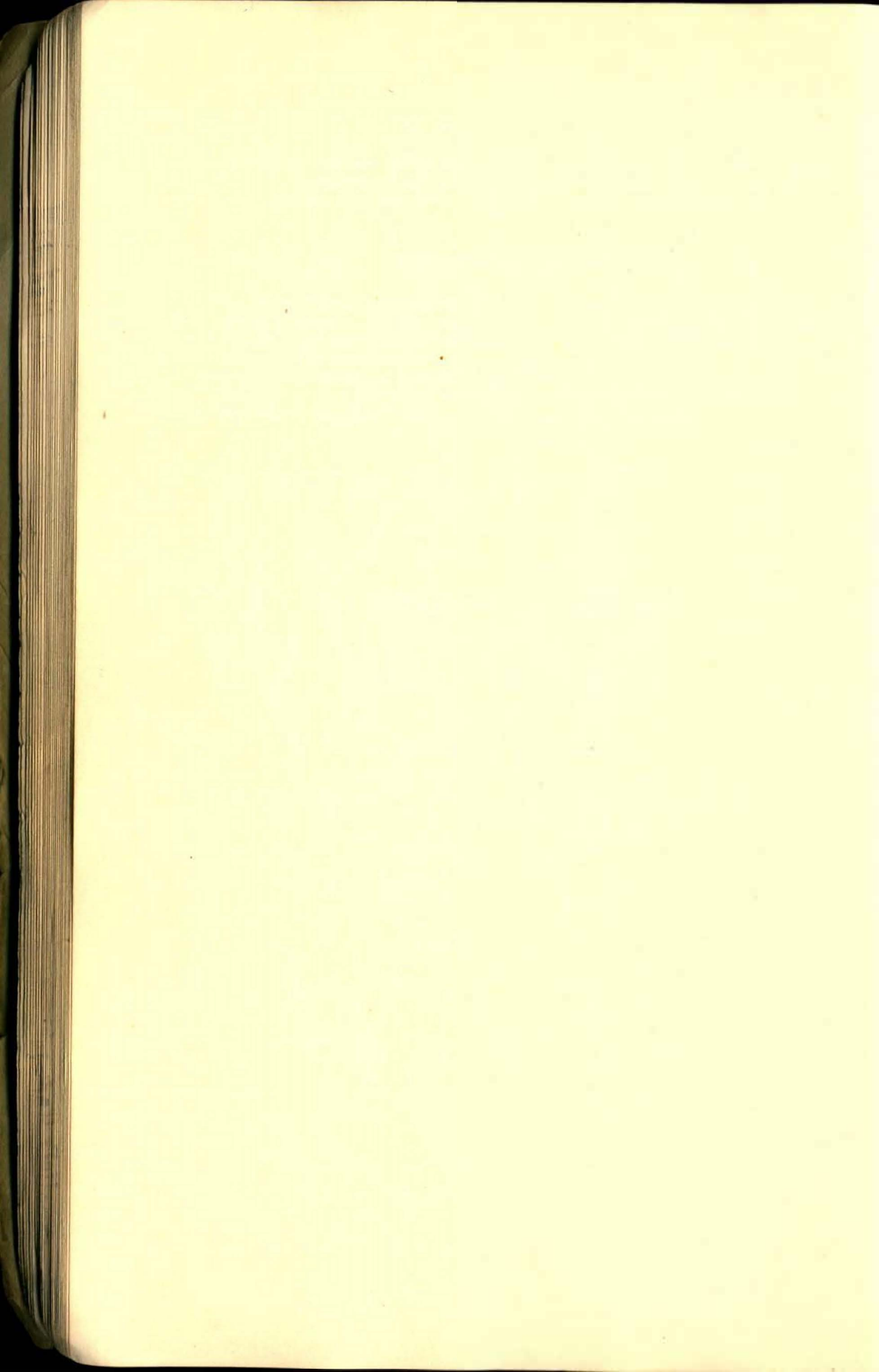
AUDIO-VISUAL PROGRAM

The Audio-Visual program at Marshall College is planned to accomplish two broad purposes: to aid the College faculty in selecting and utilizing audio-visual aids; and to train teachers and prospective teachers in the use of all types of audio-visual materials, equipment, and techniques. To these ends an audio-visual center is maintained on the campus, and courses and workshops in audio-visual education are offered both at the College and in extension centers throughout the state.

GENERAL INFORMATION

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FEEES AND EXPENSES



FEES AND EXPENSES

All registration and laboratory fees are due and payable at the cashier's office on the day of registration.

The cashier accepts cash, postal money orders, or approved personal checks written for the exact amount of the obligation. All checks must be made payable to Marshall College, and no check will be accepted until day of registration.

REGISTRATION FEES

Full-time Students (twelve or more semester hours)	Resident of West Virginia	Non- resident ¹
Tuition Fee	\$25.00	\$100.00
Student Activity Fee	15.00	15.00 ²
Health Service Fee	2.50	2.50
Total Registration Fee.....	\$42.50	\$117.50

Part-time Students (less than twelve semester hours)		
Fee per semester hour ³ :		
First hour	\$ 5.00	\$ 9.00
Second hour	3.00	9.00
Third hour	2.00	9.00
Each hour above three semester hours	3.00	9.00
Extension classes	7.50	7.50

SPECIAL FEES

Late Registration Fee
\$1.00 per day cumulative to and including the fifth day of class sessions.

Graduation Fees	
Associate Degree	\$ 5.00
Baccalaureate Degree	5.00
Graduate Degree	10.00

Cap and Gown Fee	
Associate Degree	\$ 2.50
Baccalaureate Degree	2.50
Graduate Degree	5.00

¹NON-RESIDENT FEES shall apply to those students who are legally domiciled in states or countries other than West Virginia. The official domicile of a minor is that of his or her parents or legal guardian.

²THE STUDENT ACTIVITY FEES are allocated as follows: Assemblies and Forums \$1.00; Athletics \$5.00; Artists Series \$2.50; Chief Justice \$1.50; College Theater \$.50; Parthenon \$2.00; Student Council \$.50; Student Union \$2.00. Total for semester \$15.00.

³FEE PER CREDIT HOURS. This fee does not include a student activity book. Part-time students may purchase the book for \$15.00.

1 Semester Hour	\$ 5.00	7 Semester Hours	\$22.00
2 Semester Hours	8.00	8 Semester Hours	25.00
3 Semester Hours	10.00	9 Semester Hours	25.00
4 Semester Hours	13.00	10 Semester Hours	25.00
5 Semester Hours	16.00	11 Semester Hours	25.00
6 Semester Hours	19.00	Full time (12 or more hours)	25.00

⁴PENALTY for those who register after the registration date stated in the catalogue.

Fee for Change of Schedule	\$ 1.00
Special Examination per sem. hr.	3.00

Graduation fees will be due and payable on notification from the dean of the student's respective college.

Music Fees

Piano practice, one hour per day	\$3.00
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Laboratory Fees

Laboratory fees are stated in the description of the courses and are payable at the time of registration. (See Courses of Instruction.)

Military Science Fee

A deposit of \$25.00, payable at the time of registration, is required of ROTC students to cover possible loss or damage of uniforms and equipment issued. This deposit is returned at the completion of each academic year or upon withdrawal of the student from ROTC.

ROOM RENT

(Per Semester of 18 Weeks)

Laidley Hall

Small doubles, each student	\$55.00
Large doubles, each student	60.00
Singles	65.00

College Hall

Doubles, each student	\$55.00
Singles	60.00

Hodges Hall

All rooms	per person.....	60.00
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See STUDENT HOUSING (page I-55) for room deposit fee and reservations.

BOARD

All students living in the dormitories must purchase meal books and take their meals in the College Dining Hall. Meals are available to students rooming off the campus at the same rate as resident students.

The cost of board is \$180.00 for each semester. This cost is based on prevailing prices and subject to change in the event of continued price increases in food cost. Board may be paid in full upon entrance or in two equal installments each semester. The first installment is due and payable on the day of registration; the second installment is due on the first day of the second half of the semester.

Meal books are not valid during vacation periods. If it is necessary for the student to remain on the campus during such periods, he can obtain meals at regular cafeteria prices if the cafeteria remains open.

Two per cent (2%) consumers' tax will be added to the board and room charges. This tax must be paid in full each semester on the first room and board payment.

NOTE: No deduction or refund will be made in board charges unless the student has been absent from the campus for *more* than a calendar week because of personal illness or a college-approved trip. No deduction or refund will be made in room charges for absences.

ESTIMATE OF EXPENSES

Estimated semester expenses of a student at Marshall College are outlined in the following table. These estimates are made of both minimum and average expenses and cover the usual charges for board, room, tuition, and fees which are paid to the college. In addition, the costs of college supplies, personal and social expenses are calculated.

	Minimum	Average
TUITION	\$ 25.00	\$ 25.00
Student Activity Fee	15.00	15.00
Health Service	2.50	2.50
Board	180.00	180.00
Room	55.00	60.00
Books, Gym outfit	30.00	35.00
Supplies, laboratory fees, etc	10.00	15.00
	\$317.50	plus tax \$332.50 plus tax
Out-of-state students pay an addi- tional fee of	\$ 75.00	\$ 75.00

The activity fee entitles students to admission to the Forum, Artists Series for the season, athletic events, College Theatre, copies of *The Parthenon* (college paper), the college yearbook, *The Chief Justice*, use of the Student Union, and the advantage of hearing lectures brought to the Marshall College Auditorium.

REFUND OF FEES

I. Withdrawal from college

Students who withdraw regularly from the college* may have a refund in accordance with the following schedule:

	Amount of Refunds
During the first and second weeks.....	90%
During the third and fourth weeks.....	70%
During the fifth and sixth weeks.....	50%
Beginning with the seventh week.....	No refunds allowed

Laboratory, activity and course fees are to be refunded in the same percentages as outlined above.

All refunds are to be estimated from the first day of registration of a given semester or term.

II. Withdrawals due to administrative action

When it becomes necessary to cancel a class by administrative and/or faculty action, all students involved will be granted full refund for the class cancelled unless the students register in another course of like value in terms of semester hours. This section shall not apply to withdrawals due to disciplinary action.

* See Withdrawal page I-37.

III. Fees for fractional hour courses

Tuition for one-half semester hour courses or other fractional hour credit shall be the same as that charged for one semester hour. The present rate of three dollars (\$3.00) per semester hour shall apply to each hour or fraction thereof.

IV. Fees for auditing courses

a. Faculty members may audit courses without charge. All faculty members desiring to audit courses must secure the approval of their Dean as well as that of the instructor of the course or courses they desire to audit. It will, also, be necessary for them to enroll in the regular manner for such courses.

b. All persons other than faculty members who desire to audit classes shall enroll and pay fees in the same manner and at the same tuition rate as students enrolling for credit.

V. ROTC Deposit

The \$25.00 ROTC deposit, payable at the time of registration to cover possible loss or damage of uniforms or equipment, is returned at the completion of each academic year or upon withdrawal of the student from ROTC.

STUDENT LIFE

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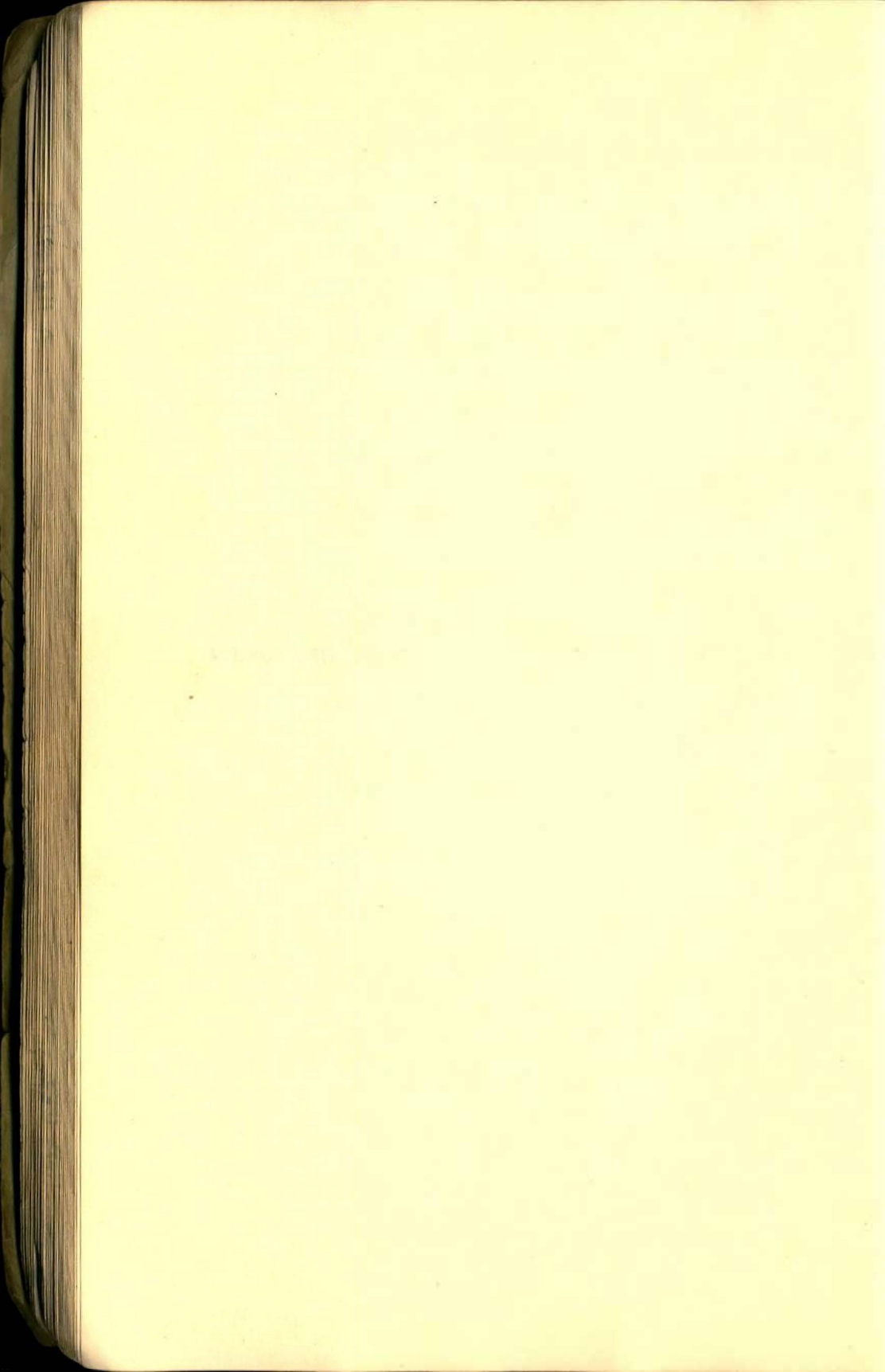
OFFICES OF THE DEAN OF MEN AND DEAN OF WOMEN

STUDENT HOUSING

STUDENT GOVERNMENT

STUDENT ACTIVITIES

STUDENT LOANS AND SCHOLARSHIPS



STUDENT LIFE

OFFICES OF THE DEAN OF MEN AND DEAN OF WOMEN

The offices of the Dean of Men and the Dean of Women are organized for counseling students in their more personal problems. Some of the problems most frequently brought to these offices concern personal adjustments to campus life, housing, finding part-time employment, budgeting expenses, obtaining loans, participation in extra-curricular activities, fraternity and sorority pledging procedures, and interpretation of rules and regulations of the college for guidance of students.

The deans and their assistants welcome inquiries of all kinds from parents and guardians who visit the campus or write for information. Correspondence may be addressed to either the Dean of Men or the Dean of Women, Marshall College.

HOUSING

Women students are housed in Laidley Hall and College Hall. Men students are housed in Hodges Hall. Room rents for each dormitory may be found under fees.

Both men and women students must provide sheets, blankets, pillows, towels, study lamps, small rugs, dresser scarfs, and bedspreads. Laundry is sent home or to one of the city laundries.

All residence halls will be closed during the Christmas holidays.

Living conditions of students in college dormitories are under the immediate supervision of the housemothers who are responsible to the Dean of Men and the Dean of Women. All residence halls, fraternity and sorority houses are subject to periodic inspection and official approval. Sorority houses are in charge of college-approved hostesses who are responsible to the social deans.

Before a student can occupy a room in any dormitory for any one semester a \$10.00 deposit must be made which will be credited to the student's semester room rent providing the student occupies dormitory facilities for the entire semester. If, for any reason, the student does not desire to use the facilities on which he (or she) has made a \$10.00 deposit, he (or she) must notify his (or her) dean in person or in writing before July 15 for the first semester and before January 5 for the second semester, in which case the dean will authorize a refund of \$8.00. In case of withdrawal from the dormitory during a semester the \$10.00 deposit plus the pro-rated rent based upon the total semester rate is deducted from the refund given.

A refundable security fee (breakage) is required of all who rent campus units. The fee is \$5 for dormitory and \$10 for family dwelling units.

Room assignments are made in order of application after students in residence have been placed, and in case a double room has a single occupant the college reserves the right to place that student in a single room of the same price.

All students living in the campus dormitories must get meal books and take their meals in the College Dining Hall.

Rooming Houses

Lists of rooming houses are available in the Offices of the Social Deans. A personal inspection and approval of the residence by the student and his parents is urged. Mailing lists have not proved satisfactory. Single men and women may not rent rooms in the same rooming house.

The fraternities and sororities provide housing accommodations for approximately two hundred students.

Family Dwelling Units

The College has sixty-two temporary housing units, located at Donald Court two miles south of the campus, which are rented to veterans and their families at rents ranging from \$22.50 to \$27.50 per month. Applications may be procured at the Office of the Dean of Men.

STUDENT GOVERNMENT

The purpose of student government is to provide an instrument which will make it possible for all students to have a voice in any program which would make Marshall a better college. It is constructed to represent democratically all members of the Student Body. It is designed to reflect student opinion, and to crystallize and make effective any constructive program. It encourages initiative and civic development; it trains for intelligent citizenship.

STUDENT CONDUCT

The regulations of the college shall require from every student decorous, sober, and upright conduct so long as he remains a member of the college student body, whether within the precincts or anywhere else.

SHAWKEY STUDENT UNION

The Shawkey Student Union, devoted wholly to social life, provides a recreational center for all students. For the convenience of students, a soda fountain is operated, and other light refreshments are served. Many formal and informal dances, receptions, and teas are held in the Union—the social center of the college.

INTRAMURAL

Intramural athletics at Marshall College is a program of competitive athletics promoted for every student on the campus. The program is sponsored and personally conducted by members of the Physical Education staff. Marshall College conducts a comprehensive program. Plaques and medals are awarded to all championship teams.

BAND, ORCHESTRA, AND CHORAL GROUPS

All students at Marshall College are eligible to enroll for any one of the major musical organizations on the campus, such as the Marching Band, Concert Band, Symphony Orchestra, Symphonic Choir, Men's Concert Choir, A Cappella Choir, and Choral Union. These organizations perform for many school functions and make a number of appearances in Huntington and occasionally make trips to other parts of West Virginia and neighboring states. Each major organization rehearses daily and offers the student an enjoyable experience and an opportunity for advancement to higher musical achievement. Students interested in enrolling for any of the organizations should consult first with the Music Department.

COLLEGE THEATRE

College Theatre is under the general direction of the Department of Speech. Normally four full-length plays and several studio and experimental dramas are produced each year.

College Theatre experience is intended not merely to give training in dramatic skills and techniques, but to develop such qualities as poise, confidence, initiative, self-reliance, and cooperativeness. A further purpose is to encourage appreciation of dramatic literature, and to help keep alive the plays which have made dramatic history.

DEBATE AND PUBLIC SPEAKING

Marshall College debaters meet teams from other colleges through a season which culminates in the State Intercollegiate Tournament, and in the National or Regional Pi Kappa Delta Tournament. Marshall students also compete in intercollegiate contests in Oratory and Extemporaneous Speaking.

The Debate Club provides opportunity for student discussion of public questions. Pi Kappa Delta is a national honorary forensics fraternity. Membership is conferred on those achieving distinction in intercollegiate debate, oratory, and extemporaneous speaking.

INTERCOLLEGIATE ATHLETICS

Marshall College is a member of the Mid-American Conference which is composed of Miami University, Ohio University, Bowling Green University, Toledo University, Kent State University, Western Michigan College and Marshall College. In addition to these, the college schedules games with institutions of similar academic and athletic standards.

The president of Marshall College is charged by the West Virginia Board of Education with the enunciation and administration of athletic policy as part of the internal administration of the college. All persons serving on committees appointed by the president act solely in an advisory capacity.

The athletic program is under the direction of the Athletic Board, consisting of four faculty members, an alumnus, the college comptroller, the president of the student body and the Athletic Director who serves as secretary ex-officio. The function of the Board is to supervise the maintenance and development of the athletic program in conformity with the standards of the Mid-American Conference. Upon the request of the president, the Athletic Board assists in all matters concerning athletic personnel. This Board is responsible for a well-balanced athletic program including the academic eligibility of athletes.

The Athletic Director carries out those actions of the Athletic Board which have been approved by the president.

All coaches, except one, teach classes in academic departments. The college participates in intercollegiate football, basketball, baseball, track, cross country, tennis, golf and wrestling.

STUDENT PUBLICATIONS

The Parthenon is a semi-weekly news publication issued by students under the direction of the Department of Journalism.

The Student Directory is published each fall by the Home Economics Club of the College.

The Student Handbook is published annually in September by the Social Deans and contains general information for all students with particular emphasis on information for freshmen.

The Chief Justice, the college annual, is published by the Student Government under the supervision of the Chief Justice Board.

The Hodges Haul is published by students living in the three college dormitories—Hodges Hall, Laidley Hall and College Hall.

Et Cetera is a campus literary magazine, established in 1953 as an outlet for student creative writing. It is published semi-annually and is under the direction of the English Department.

ARTISTS SERIES, FORUMS, CONVOCATIONS

The Marshall College Artists Series, the Community Forum and Special Convocations annually offer students professional talent of international reputation, including symphony orchestras, opera and lecture authorities. All programs are designed to instruct and entertain the student. Informal teas and conferences with artists and speakers contribute to the cultural life of the campus and students find a ready welcome to all of these events. An activity fee is included in the total registration cost and no further admission charge is collected for any of the above programs. Freshmen are required to attend Convocation Programs.

STUDENT ORGANIZATIONS

As a helpful adjunct to classroom experience a number of scholastic, professional, and social (including sororities and fraternities) groups offer opportunities in preparation for citizenship following college graduation. These organizations supplement certain aspects of classroom experiences by meeting needs for religious, aesthetic and social experiences that are recognized as essential.

Honor Groups: Alpha Epsilon Delta, Alpha Kappa Delta, Alpha Lambda Delta, Alpha Psi Omega, Alpha Phi Omega, Chi Beta Phi, D-Rho-D-Theta, Eta Mu Pi, Eta Sigma Phi, Fagus, Fourth Estate, Honor Council, Kappa Delta Pi, Kappa Omicron Phi, Omicron Delta Kappa, Phi Eta Sigma, Pi Kappa Delta, Phi Alpha Theta, Pi Delta Phi, Pi Omega Pi, Pi Sigma Alpha, Psi Society, The Rope, Sigma Delta Pi, Trilobite.

Interest and Professional Groups: American Chemical Society, Choral Union (Symphonic Choir, Men's Concert Choir, A Cappella Choir), Collegiate Academy of Science, Debate Club, Delta Omicron, Future Teachers of America, German Club, Good Government Party, Home Economics Club, International Relations Club, Kappa Pi, La Sociedad Hispanica, Le Cercle Francais, Mabes, MARS Club, Marshall Classical Association, Marshall Religious Council, Marshall Editors Council, Orchestra and Band, Music Educators, Mu Epsilon Sigma, Pershing Rifles, Pre-Law, Philosophical Society, Psi Chi, Sociology Club, Varsity "M", Women's Athletic Association, W. Va. Society of Professional Engineers, Young Democratic Club, Young Republican Club.

Religious Groups: Baptist Student Fellowship, B'nai B'rith Hillel, Intersarsity Christian Fellowship, Kappa Theta Chi, Newman Club, Student Christian Association, Westminster Fellowship.

Social Groups

Fraternities: Alpha Sigma Phi, Kappa Alpha Order, Lambda Chi Alpha, Sigma Alpha Epsilon, Pi Kappa Alpha, Sigma Phi Epsilon, Tau Kappa Epsilon.

Sororities: Alpha Chi Omega, Alpha Sigma Alpha, Alpha Sigma Tau, Alpha Xi Delta, Delta Sigma Epsilon, Pi Kappa Sigma, Sigma Sigma Sigma.

Interfraternity Council, Panhellenic Council, Junior Panhellenic.

Non-Greek: Cavalettes, Cavaliers, Independent Student Association, Sportlettes.

RELIGIOUS LIFE

Religion on the campus is concerned with the education of the whole man. It sees Religion as an integral part of Man's education because "learning and technical skills without humane convictions are futile and dangerous." The

programs of worship, study and action by the Student Christian Association, Newman Club, Intersarsity Fellowship and Kappa Delta Chi are coordinated through the Marshall College Religious Council to fulfill this purpose.

Through weekly and monthly meetings, special convocations, Life Planning Week and various other activities we attempt to develop the skills and convictions of each student, strengthen his concept of God and man and gain a commitment to some worthy cause. This is the concern of the College and the campus religious program.

Through a full time Religious Activities Director we attempt to do those things parents would do for their sons and daughters if they were here on the campus.

STUDENT EMPLOYMENT AND PLACEMENT OFFICE

An employment service is conducted by the Office of the Dean of Men to aid students who desire part-time employment while in college. A guarantee of employment cannot be made, although every effort is exerted to place students on the campus or in the city. Students are advised not to attempt entire self-support. Freshmen are urged to defer employment until the second semester if at all possible.

It is also a function of this office to assist in the placement of graduates and undergraduates in permanent positions. During the senior year each student will have an opportunity for several interviews with representatives of government, business and industry. For Teacher Placement see page II-7.

ELIGIBILITY FOR PARTICIPATION IN EXTRA CURRICULAR ACTIVITIES

Students who are eligible to participate in extra-curricular organizations and activities must be in good academic* and social standing (not on Probation) and must be carrying a minimum of twelve (12) semester hours work.

Eligibility for participation in extra-curricular activities applies to:

1. Officers and standing committee representatives of all recognized student campus organizations and activities that have been approved by the College Council.

2. All college or departmental activities including the following: Student Government, *Parthenon* staff, College Theatre, Majorettes, Intramural Board, Student Assistants, *Chief Justice* staff, Cheerleaders, Forensic activities and Intercollegiate Athletics, including managers.

3. No student on Probation may become a pledge or member of any student organization.

SOCIAL PROBATION

Social probation constitutes a warning to the student and his parents or guardian that his social conduct bears improvement. Recommendations that a student be placed on probation may be made by the Student Court or the appropriate social dean to the President of the College whenever such action is indicated by the abuse of privileges or conduct at variance with college standards. A student on social probation is subject to suspension in the event of further instances of social misconduct. (When a student is placed on social probation, the social deans, the academic deans, and the registrar should be notified.)

* See page I-39 for definition of Academic Probation.

STUDENT LOANS AND SCHOLARSHIPS

Applications for loans or scholarships may be made to the Registrar or Dean of Men. Consideration will be given each applicant according to the rules of the college and specifications of the loan or scholarship grant involved. Scholarships are generally outright grants of money while loans are to be repaid in accordance with the wishes of the donor. The Loan Funds and Scholarship grants listed below are administered by the Student Aid Committee of the college unless otherwise stated.

LOANS

Woman's Club Loan Scholarship. This scholarship of \$150 is to be awarded to a student who could not otherwise attend school. Administered by Miss Lucy Prichard.

Huntington Branch, American Association of University Women Loan Scholarship, total amount of \$1,000 is awarded to girls who cannot otherwise attend college. Administered by Miss Lucy Prichard.

Class of 1889 Fund. The class of 1889 is permitting its class fund of \$225 to be used for student loans until it may be increased materially, at which time a more permanent disposition of the fund may be decided upon.

The Mr. and Mrs. James W. Burgess Loan Fund. This fund, established in 1928 by Miss Frances Burgess as a memorial to her parents, is a fund of \$1,000 to be held in trust for worthy and promising students of junior and senior standing who need temporary financial aid. The fund is to be loaned with interest.

Square No. 52 Scholarship Loan. A scholarship loan of \$50 is to be awarded by Marshall Square No. 52 of Square and Compass Fraternity to a young man of promise and ability, preferably, a senior. This loan is designed to mature on the January first following the borrower's graduation or withdrawal from Marshall College. Interest at four per cent per annum begins to accrue on the first day of the month following the time of graduation or withdrawal from college.

Class of January 1943 Fund. This fund is available to second semester seniors, to assist in meeting emergency graduation expenses.

The Huntington Current History Club Loan Scholarship. This fund, totalling \$1,000 is to be awarded to students, preferably women, who need financial assistance either to attend or to continue in college.

The Lucille Druen Memorial. In honor of their classmate, Lucille Druen, the members of the Home Economics Club of Marshall College of the year 1926 raised a fund of \$725. This money is to be loaned to worthy students at three per cent interest. The income is to be used as a gift scholarship to stimulate the interest of high school students in West Virginia in home economics.

The Marshall College Panhellenic Loan. This loan fund of \$450, made available to students requiring an emergency loan.

The D. B. Smith Memorial. In honor of her husband, Senator D. B. Smith, a loyal and devoted friend of Marshall College, Mrs. Smith on July 23, 1925, turned over to the College the sum of \$1,000 as a memorial fund. This money is to be invested in perpetuity and the income used in assisting worthy students.

The Paul Morgan Fund. In memory of their son, John Paul Morgan, a student in the pre-medical department of the College, Mr. and Mrs. W. S. Morgan, of Mason County, have given the College \$1,000 as a scholarship fund, the income from which is to be awarded annually to some worthy student preparing for the medical profession.

The Mrs. James Lewis Caldwell Fund. As a memorial to her mother, Mrs. Mary O'Bannon Smith Caldwell, Mrs. Charles Wellington Watts established in June, 1928, a fund of \$400 annually to 1934. This will be used for student loans until it may have materially increased, at which time a more permanent disposition of a portion of it may be decided upon. In the awarding of the loans, preference will be given to junior and senior students who have established high scholastic records.

The Moina Martha Prator Fund. Dr. Moina Prator, Professor of Geography, who died in July, 1930, provided a bequest of \$1,000 which is held in trust and the proceeds of which are available to worthy girls who require assistance in obtaining a college education.

Kappa Delta Pi. Phi Chapter. Loan Fund. A small loan fund is administered for the benefit of worthy students of Teachers College whose scholastic average for two years is B or better.

John P. Lipscomb, Jr., Memorial Fund. In memory of Captain John P. Lipscomb, Jr., a graduate of the class of 1941, the sum of \$500 was made available on November 3, 1944, to assist worthy students and veterans of World War II. Captain Lipscomb, an army pilot, was killed in action in France on July 31, 1943.

The Kappa Theta Sorority Loan Fund. A small sum of money has been made available by the alumnae of Kappa Theta Sorority to students who are in need of money to help them over financial emergencies.

Ruth Stark Hunter Memorial Fund. This loan fund of \$200 has been made available by the Delta Sigma Epsilon Sorority, Lambda Chapter, in memory of one of their members, Ruth Stark Hunter, Lieutenant, jg., U. S. N. (W. R.), who was killed in the service of her country during World War II.

Rotary Student Loan Fund. The Rotary Club of Huntington, West Virginia, has established a Student Loan Fund which permits an eligible male student to borrow a maximum of \$300 in any one school year. An applicant for a loan must submit evidence of the following qualifications. He must be a bona fide resident of Cabell County or that part of Wayne County lying within the city limits of Huntington, West Virginia. He must be physically and mentally capable of completing his proposed course of study and reliable as to character and moral responsibility. He shall sign the prescribed promissory note for the loan. For further details consult the Registrar.

The Lillian C. Isbell Loan Fund. This fund has been made available by friends of Miss Isbell to be loaned to students who wish to enter the Elementary Field of Teaching.

The Huntington Kiwanis Student Aid Fund. The Kiwanis Club of Huntington has established a fund in the amount of \$300 to be loaned to undergraduate students who excel in scholarship, extra-curricular activities, and citizenship and are of sound moral character. Loan to be repaid following graduation or withdrawal from college.

Engineers Club of Huntington Emergency Loan Fund. The Engineers Club of Huntington maintains an emergency loan fund available to engineering students at Marshall College. The approval of the Head of the Engineering Department and president of the Engineers Club is required. This emergency fund is loaned on a short time basis.

SCHOLARSHIPS

The Community Players Scholarship. The Community Players of Huntington annually award a tuition scholarship to a student majoring in speech and dramatics.

The Julius Broh Memorial Scholarship. This fund provides one hundred dollars annually for the assistance of worthy, needy students of journalism. It is not a loan but a grant in pursuance of the wishes of the late Julius Broh as indicated by his initiation of this philanthropy in 1935. This living memorial, perpetuating the memory of Julius Broh, has been established by his widow, Mrs. Ruth J. Broh. The scholarship is to be administered by a journalism committee headed by Professor W. Page Pitt.

The Huntington Publishing Company Journalism Scholarship. The Huntington Publishing Company provides a grant of \$200 a year for needy students in journalism who show promise in the profession. Administered by the Journalism Scholarship Committee.

Marshall College Student Council Scholarships. The Student Council of Marshall College awards two tuition scholarships annually to high school seniors who are in need of financial assistance, and who hold outstanding scholarship and leadership records in high school. The award amounts to \$44.00 per semester, which covers fees and tuition. Applications must be filed with the Director of Admissions by March 1. Administered by a Committee of Student Council and a faculty adviser.

Lion's Club of Milton Scholarship. Each year the Lion's Club of Milton, West Virginia, awards a scholarship of \$250 to an outstanding graduate of Milton High School.

The West Virginia Steel and Manufacturing Company of Huntington has created two scholarships in the amount of \$500 each in memory of Mr. S. N. Summer, former president, and Mr. H. A. Zeller, former vice-president of the company. The S. N. Summer Scholarship is in Engineering and the H. A. Zeller Scholarship is in Business Administration. These scholarships are based upon financial need, leadership, character and academic record.

West Virginia Board of Education Scholarships for Elementary Education. The West Virginia Board of Education offers five four-year scholarships for students in elementary education. These scholarships are awarded on the basis of scholarship, interest in becoming a teacher in the elementary schools, and financial need. Each scholarship carries financial assistance to the extent of all payments of tuition and fees for a period of four years. Prospective students who are interested in being considered for one of these scholarships should make application for consideration to the Registrar on or before May 1.

Kappa Delta Pi Scholarships. Phi Chapter of Kappa Delta Pi offers two scholarships the value of each being one hundred fifty dollars (\$150). This scholarship is awarded each year to a prospective student in teacher education. The chapter reserves the right to renew this scholarship for a period of not more than four years.

Fred Fleshman Scholarship Fund. Two substantial scholarships have been established by the late Mrs. Eunice Fleshman in memory of her husband, Mr. Fred Fleshman. These scholarships provide one year grants for students who qualify on the following points: (1) Promise of outstanding usefulness in life as evidenced by character, ambition, record of contributions while in high school; (2) High school record; (3) Financial need. The scholarships may be renewed upon application provided original conditions continue to be met.

Johnson Memorial Church Scholarships. This fund of \$800 per year is granted to Marshall students majoring in music and singing in the church choir. It is administered by the Music Scholarship Committee.

Trinity Episcopal Church Scholarships. This fund of \$1,000 per year is granted to Marshall students majoring in music and singing in the church choir. It is administered by the Music Scholarship Committee.

The Charleston Press Club Scholarships. The Press Club of Charleston, W. Va., offers \$200 annually to students majoring in journalism. Recipients must be residents of West Virginia.

Retail Merchants' Scholarships. These scholarships, covering tuition and fees, are awarded on the basis of scholarship, need, and interest in the field of retailing.

The Huntington Kiwanis Club Science Scholarship. Effective September 1, 1954, Marshall College will award to one of the winners of the West Virginia Science Talent Search a one hundred dollar (\$100) scholarship sponsored by the Huntington Kiwanis Club. The scholarship may be used only at Marshall College and may be renewed annually through a four-year period. Candidates for the scholarship must be nominated by the Chairman of the State Science Talent Search Committee.

The Huntington Civitan Club Scholarship. This scholarship of \$200 a year is awarded to a student in Elementary Education who shows outstanding promise with respect to scholarship, character, personality, and leadership.

The LeJohn Manufacturing Company Scholarships. Two scholarships will be awarded freshmen who enter Marshall College in September, 1954, and who plan to major in the subject of physics. These scholarships pay for tuition and fees for both semesters of the Academic Year 1954-55. They will be awarded upon the basis of scholarship and need.

The Gertrude Roberts Scholarship in Education. The Cabell County Classroom Teachers Association has established a scholarship in honor of the late Miss Gertrude Roberts, founder of the Classroom Teachers Association in West Virginia. This scholarship provides tuition and activity fees for a student in Teachers College during the junior and seniors years in college. Selection will be made by the Executive Board of the Cabell County Classroom Teachers Association.

Rotary Scholarship Fund. The Rotary Club of Huntington, West Virginia, has established a scholarship for use at Marshall College. The maximum amount of such yearly scholarship shall be \$200. To be eligible for such scholarship, an applicant must be a bona fide resident of Cabell County or that part of Wayne County lying within the city limits of Huntington, West Virginia. He must be physically and mentally capable of completing his proposed course of study and reliable as to character and moral responsibility. For further details consult the Registrar.

GENERAL INFORMATION

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ADULT EDUCATION

EVENING SCHOOL

EXTENSION CLASSES

COMMUNITY SERVICES

DIVISION OF ADULT EDUCATION

EVENING SCHOOL

The method of meeting community needs is expressed primarily in the Evening School. Here, non-credit courses may be taken for personal, business, cultural, domestic, industrial and recreational improvement or as a refresher of other interests.

Evening classes will be provided for any group not interested in college credit which wishes to meet for one to twelve or more sessions to discuss some topic of vital interest to them in their daily work. A class of twelve or more students is required to organize a special interest group.

It is the desire of Marshall College through its Evening School to serve all who feel the need or have the desire to extend their education, therefore, adult education does not limit itself to non-credit courses. It is possible to earn college credit which will serve the needs of those working toward college degrees in the various fields of study.

For those who want college credit there are two lines of work:

1. Undergraduate work will appeal to all who are high school graduates and who wish to improve their employment status through education or those who want to extend their knowledge in some direction or wish to satisfy their intellectual curiosity by following a particular line of studies.

2. Graduate work for those who hold a baccalaureate degree and who wish to work for a master's degree. Work done in evening classes carries residence credit. By taking advantage of the evening program, the time needed to secure a master's degree may be shortened.

EXTENSION CLASSES

Classes in extension are offered to meet the demands of teachers and others who cannot be in residence. Credit or non-credit courses in several fields are offered each semester.

The extension work is given on a semester basis. Not more than 28 semester hours are acceptable toward an undergraduate degree and 12 hours toward a master's degree. Not more than 6 semester hours may be earned during a semester nor more than 8 semester hours within one year. (This applies to public school teachers under contract in the state).

The fee for extension work is \$7.50 per semester hour, payable in advance.

The quality of instruction in extension is on the same high level as that of regularly taught classes on the campus, since all staff members doing extension are full time faculty members.

Admission requirements for those who desire credit in extension are set forth below:

Undergraduates

Undergraduates who wish to take extension courses and who have not been previously enrolled in Marshall College must furnish the Registrar's Office immediately with official transcripts of credit from other colleges or with transcripts of high school credit. Those who wish to earn credit to be transferred to other colleges or to renew certificates may satisfy this requirement by having letters of good standing written from their undergraduate colleges to the Registrar of Marshall College.

Graduate Students

College graduates who wish to begin work for the master's degree in extension courses must do the following before credit can be earned to count toward a degree in Marshall College or to be transferred to another graduate school.

1. File application for admission to the Graduate School on a form furnished by the Graduate School Office.
2. Furnish two official transcripts of all previous college work. Those holding the bachelor's degree from Marshall College must have one copy of a transcript sent from the Registrar's Office to the Graduate School Office.
3. Receive a letter from the Dean of the Graduate School concerning eligibility for admission.

Extension students who are college graduates and who do not wish to work toward a degree may be excused from the transcript and application requirements by signing a form forfeiting graduate credit. However, these students must furnish the Registrar's Office with letters of good standing from their undergraduate colleges. Compliance with these regulations is a required part of the registration procedure for graduate students.

Students who fail to comply with these regulations within a reasonable time (dates to be announced each semester) may be withdrawn from courses by administrative action by the Dean of the Graduate School.

COMMUNITY SERVICES

As a state-supported institution Marshall College recognizes its obligation to provide to the people of West Virginia certain community services in addition to the regular academic campus program. Some of the services available upon request are:

Speakers and Programs—The division will be glad to receive requests for speakers to appear before school, civic and community organizations, scientific societies, service clubs, etc.

A limited number of musical and dramatic programs are available for presentation during the year.

School Surveys and Consultant Services—The college will provide consultant services and assist in surveys in the field of education. Counties desiring assistance with such problems as transportation, building programs, curriculum development and other problems of similar nature should request such assistance. The Director should be informed of the needs and desires of a particular organization or county before the beginning of the semester whenever possible.

Conferences and Workshops—In so far as possible facilities of the College will be made available to industrial, educational and other groups for conducting special conferences and workshops.

TEACHERS COLLEGE

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PURPOSE

DEGREES AND DIPLOMAS

CAMPUS LABORATORY SCHOOL

SEQUENCE OF PROFESSIONAL COURSES

STUDENT TEACHING

SCHOLASTIC REQUIREMENTS

PLACEMENT SERVICE

NURSERY SCHOOL

HOME MANAGEMENT HOUSE

ELEMENTARY CURRICULUM

KINDERGARTEN-PRIMARY CURRICULUM

SECONDARY CURRICULUM

COURSES OF INSTRUCTION

THE TEACHERS COLLEGE

PURPOSE

Teachers College has for its purpose the providing of general and professional education for prospective teachers.

Teachers should first be educated men and women. After that they should be professionally qualified. In addition they should have those personal traits of character and those attitudes of mind which are necessary for success in working with children and with the community.

The dominant purpose of Teachers College is expressed by its faculty in a statement of objectives. That purpose, in part, is to prepare for certification:

(1) Teachers who have sound physical and mental health and who are free from major physical handicaps.

(2) Teachers who have a broad liberal education functional in character and in terms of their needs as individuals, as citizens, and as members of the teaching profession.

(3) Teachers who are informed and keenly interested in the history, the achievements, and the cultures of other countries as well as their own.

(4) Teachers for elementary and secondary schools who are thoroughly grounded in the subject-matter of their teaching fields to a breadth and depth surpassing that which is to be taught.

(5) Teachers who have an understanding of pupil growth and development and who, through a knowledge of psychology and physiology, are able to diagnose learning difficulties of the individual pupil and provide proper remedial instruction.

(6) Teachers who have demonstrated proficiency in speaking and writing the English language correctly; teachers who are free from speech defects which will interfere with teaching; and teachers who have attained voice control appropriate to the classroom.

(7) Teachers who are prepared to participate intelligently and cheerfully in the non-instructional functions of the secondary school.

(8) Teachers who possess those superior qualities which are usually found in successful leaders in other fields. Such qualities should include sympathy, tact, enthusiasm, sense of humor, expectancy of good, sociability, energy, friendliness, and reliability.

(9) Teachers who have a strong desire to teach because of their interest in children, their love of learning, their eagerness to follow a worthwhile and respected vocation, and because of their special fitness for teaching.

(10) Teachers, who in consequence of experience such as is implied by the objectives listed above, have formulated for themselves such philosophies of life and education as will function successfully in personal relations and professional activities.

WHAT STUDENTS ENROLL IN TEACHERS COLLEGE

Those students who desire to become teachers and who feel that they can attain the standards of academic and professional competency enroll in Teachers College. Such students pursue one of the curricula under the direction of their academic dean.

COURSES IN COLLEGE OF ARTS AND SCIENCES

Subject matter courses required of students and not offered by Teachers College will be completed in the several departments of the College of Arts and Sciences. Students enrolled in the College of Arts and Sciences may be admitted to courses offered by the several departments of Teachers College. However, while students are enrolled in the College of Arts and Sciences, they may not complete more than eight semester hours in education.

"TEACHER IN SERVICE" CREDIT

A total of eight semester hours with a limit of six hours in one semester is the maximum credit allowed for work completed during any school year by a teacher in service, regardless of whether the courses are completed in extension or in residence.

THE BACCALAUREATE DEGREE

Students enrolled in Teachers College who complete one of the four-year curricula, and meet all requirements as to honor points and residence will receive the Bachelor of Arts degree. The completion of any of the four-year curricula automatically carries with it completion of requirements for the appropriate first class certificate for teachers valid in West Virginia for five years.

THE CAMPUS LABORATORY SCHOOLS

The campus laboratory schools with their complete equipment and refined appointments accommodate pupils of grades kindergarten to twelve, inclusive.

The campus laboratory schools offer exceptional advantages for students entering upon the initial experiences in student teaching. The supervising teachers are ever ready to assist the novice grow toward teaching efficiency. The laboratory schools include a four and five-year kindergarten, a six-year elementary school, and a six-year high school accredited by the North Central Association of Colleges and Secondary Schools.

In the laboratory school the prospective teacher spends one or more hours daily for one semester teaching groups of pupils under the direction of experienced supervisors. This limited internship is for the purpose of helping the prospective teacher apply educational theory in terms of practical classroom situations. When the student gains competency in classroom techniques and has fulfilled course requirements, he or she may be certified as a teacher.

The campus laboratory schools offer opportunity for other essential services in relation to the total teacher education program. In fact, they are an integral part of the Teachers College. Members of the college faculty have responsibilities daily in the laboratory schools. Some work with elementary pupils in music and art, others in the Marshall High School in health and physical education, in teaching classes, in observation of teaching, and in studying growth and development of children.

THE SEQUENCE OF PROFESSIONAL COURSES

Students who are enrolled in one of the four-year curricula must include each year in their academic program the professional courses in education in the sequence as designated below:

First Year

Education 117, Human Development, 3 semester hours.

Second Year

Education 118, Human Development, 3 semester hours.

Third Year

Students in elementary education:

Education 319, Human Adjustment, 3 semester hours.

Students in secondary education:

Education 310, Principles of High School Teaching, 2 semester hours.

Education 319, Human Adjustment, 3 semester hours.

Fourth Year

Students in elementary education:

Education 150, Teaching in the Elementary School, 3 semester hours.

Education 250-350, Supervised Student Teaching (Grades 1-6), 6 semester hours.

Education 365, Teaching and Management in the Elementary School, 3 semester hours.

Students in secondary education:

Education Elective, Materials and Methods in Teaching Field, 2 semester hours.

Education, General Elective, 3-6 semester hours.

Education 450, Supervised Student Teaching in Secondary Schools, 6 semester hours.

All students must participate in professional laboratory experiences which are an integral part of the courses in education. These experiences may be described as activities in which students systematically observe the reactions of children in learning situations. Students will make a majority of their observations as participants of group activities of children.

All students will participate in organized activities involving direct association with children in the following courses:

Education 118, Human Development, 3 semester hours.

Education 310, Principles of High School Teaching, 2 semester hours.

Education 319, Human Adjustment, 3 semester hours.

The activity which is an integral part of Education 118, Human Development, involves being associated directly with children in a regularly organized learning activity which is a part of the school or community. As a part of Education 310, Principles of High School Teaching, and Education 319, Human Adjustment, the students engage in a single activity which is to be an organized teaching experience and is to be pursued during the first or second semester of the third year under the direction of a supervising teacher in the campus laboratory schools. The professional laboratory experiences of the students in Teachers College will culminate in the fourth year with a semester of experiences including full-time student teaching.

STUDENT TEACHING

A student who expects to meet graduation requirements at Marshall College must complete student teaching and the major amount of professional work in this institution. If the courses in student teaching are done elsewhere, arrangements must be made in advance for such privilege.

A student who has had no experience in teaching prior to the time of enrollment in any course in student teaching at Marshall College must participate in student teaching on a full-time basis. In other words, each student must reserve one semester for a particular schedule of courses including student teaching. No student without experience in teaching will be permitted to enroll in student teaching during a summer session.

A student in elementary education who is completing the requirements of the Third Class Elementary Certificate must reserve the second semester of the second year for enrollment in the following courses including student teaching:

Education 150	3	semester	hours
Education 250	3	"	"
Education 319	3	"	"
Mathematics 200	2	"	"
Physical Education 221	2	"	"
Social Studies 202	3	"	"
	16		

A student in elementary education who has not completed a course in student teaching or has not had experience in teaching and is completing the requirements for the First Class Elementary Certificate must reserve either the first or second semester of the fourth year for enrollment in the following courses including student teaching:

Education 150	3	semester	hours
Education 250	3	"	"
Education 350	3	"	"
Education 365	3	"	"
Education, General Elective	3	"	"
	15		

A student in secondary education who has not had experience in teaching must reserve either the first or second semester of the fourth year for enrollment in the following courses including student teaching:

Education Elective, Materials and Methods in Teaching Field	2	semester	hours
Education, General Elective	3-6	"	"
Education 450	6	"	"
Elective, 300-400 series	0-3	"	"
	14		

In order to enroll in student teaching and other courses to be completed in the particular semester mentioned above, a student must file in the office of the Dean of Teachers College an application for permission to enroll for each course in student teaching at least nine weeks prior to the opening of the semester in which the work in teaching is to be done.

A student with experience in teaching must file an application for permission to enroll for each course in student teaching in the manner stated above nine weeks prior to the opening of the semester or summer session in which the work in teaching is to be done.

The scholarship averages required before a student is permitted to enroll in student teaching are the same as those required for graduation.

During the semester in which student teaching is included in the schedule, a student shall not enroll in more than seventeen (17) semester hours. Nor shall a student include in the schedule along with full-time student teaching any course which meets regularly two or more times per week throughout the semester at an hour prior to 4:15 P. M.

SCHOLASTIC REQUIREMENTS FOR GRADUATION

All students must attain a certain scholastic standing as partial requirements for graduation. Students completing the course requirements for the

Single Curriculum and the various curricula for high school teachers are required to have at least an average grade of "C" for all courses completed, for courses in each of the two teaching fields, and for courses in education, including at least a grade of "C" in student teaching. Students completing the course requirements for the various curricula leading to the elementary certificates must have at least an average grade of "C" for all courses completed, for courses in education, including at least a grade of "C" in student teaching.

ELECTIVES IN LANGUAGES

The knowledge of a foreign language is usually helpful to students who expect to do graduate study. Students desiring to enroll in courses in foreign languages may do so at any time. At least six semester hours must be completed in order to count toward graduation.

PLACEMENT SERVICE

Teachers College maintains a placement service for its graduating seniors and alumni. Annually many teachers are helped to find desirable teaching positions, and annually many superintendents and principals are aided in filling their vacancies. This placement service is recognized as an institutional privilege as well as a duty. The service is prompt and courteous.

THE NURSERY SCHOOL

A nursery school is located on the college campus to which children two to five years of age may be admitted. This nursery school is modern in every particular in its equipment as well as in the services given to the young children. It is located on the first floor of the home management house and it is the laboratory for Child Development, a required course in vocational home economics.

THE HOME MANAGEMENT HOUSE

A home management house for vocational home economics girls is located on the Marshall campus and affords adequate opportunities for the training of girls in the operation and management of a home. Seniors in home economics live in the home management house eight weeks of their last semester, then go out into the field for student teaching in high schools approved for the purpose.

While living in this house the students do their own purchasing of groceries, cook and serve their own meals, keep their own rooms, budget their expenses, and do all other essential things required in the ordinary home.

TEACHER EDUCATION CURRICULA

Outlined as follows are the requirements leading to the Bachelor of Arts degree and five kinds of certificates at graduation (minimum requirements 128 semester hours). The certificates for which students are eligible upon graduation are The First Class Elementary, The Public School, The Kindergarten-Primary Education, The Special Non-Academic in Music, and The First Class High School with two teaching fields. Also outlined below are the requirements for two certificates based upon less than the Bachelor of Arts degree. These certificates are the Third Class Elementary (65 semester hours), and the Second Class Elementary (96 semester hours).

GENERAL REQUIREMENTS FOR THE FIRST, SECOND, AND THIRD CLASS ELEMENTARY CERTIFICATES, THE PUBLIC SCHOOL CERTIFICATE, AND THE FIRST CLASS HIGH SCHOOL CERTIFICATE

	Third Class Elementary Certificate	Second Class Elementary Certificate	A. B. Degree First Class Elementary Certificate Grades 1-9	A. B. Degree Public School Certificate Grades 1-12	A. B. Degree First Class High School Certificate
English					
English 103-104	6	6	6	6	6
English 203		3	3	3	
*English 215	3	3	3	3	3
English 223	3	3	3	3	3
English 308		3	3	3	3
Minimum hours required	12	18	18	18	15
Social Studies					
Social Studies 104-105	6	6	6	6	6
Social Studies 201-202	6	6	6	6	6
Geography 317 or Social Studies 303		3			
Geography 317			3	3	
Social Studies 303			3	3	
Political Science 201		3	3		
Economics 340			3		
History 311-312-313			9		
Sociology 300			3		
Minimum hours required	12	18	36	18	12
Science					
Science 107-108 or Science 109-110	6				6
Science 107-108		6	6	6	
Science 109-110		6	6	6	
Mathematics 100-200	5	5	5	5	
Minimum hours required	11	17	17	17	6
Art					
Art 113	2	2	2	2	
Art 312	2	2	2	2	2
Art 333		2	2	2	
Minimum hours required	4	6	6	6	2
Music					
Music 175	2	2	2	2	2
Music 203	2	2	2	2	
Music 370		2	2	2	
Minimum hours required	4	6	6	6	2

*All students must enroll in English 215 prior to the first semester of the junior year. Any student failing to receive a passing grade in English 215 must enroll for it each succeeding semester until successfully completed.

	Third Class Elemen- tary Certifi- cate	Second Class Elemen- tary Certifi- cate	A. B. Degree First Class Elemen- tary Certifi- cate Grades 1-9	A. B. Degree Public School Certifi- cate Grades 1-12	A. B. Degree First Class High School Certifi- cate
Physical Education					
Physical Education 113-114	2	2	2	2	2
Physical Education 221	2	2	2	2	
Physical Education 315-316			2	2	
Physical Education 311 or 330.....					1
Physical Education 330-418				2	
Minimum hours required.....	2	4	6	8	3
Education					
Education 117-118	6	6	6	6	6
Education 150-250	6	6	6	6	
Education 310				2	2
Education 319	3	3	3	3	3
Education 350-365			6		
Education 450				3	6
Education Electives			2-3	0-4	3-7
Minimum hours required	15	15	21	20	20
General Electives and Teaching Fields	3	12	18	35	68
Total hours required	65	96	Bachelor of Arts Degree		

NOTE: Of the 128 semester hours required for graduation with the Bachelor of Arts degree, 100 semester hours in non-professional courses and 20 semester hours in professional courses (education) must be completed as a minimum. At least 45 semester hours of the total required for graduation must be in the 300-400 series.

CURRICULUM IN ELEMENTARY EDUCATION

The general requirements for the First, Second, and Third Class Elementary Certificates are listed below by years:

FIRST CLASS ELEMENTARY CERTIFICATE AND BACHELOR OF ARTS DEGREE

First Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Art 113	2	Art 312	2
English 103	3	English 104	3
Mathematics 100	3	Education 117	3
Physical Education 113	1	Physical Education 114	1
Science 107 or 109	3	Science 108 or 110	3
Social Studies 104	3	Social Studies 105	3
		Music 175	2
	15		

Second Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Art 333	2	English 203	3
Education 118	3	English 223	3
English 215	3	Mathematics 200	2
Music 203	2	Physical Education 221	2
Science 107 or 109	3	Science 108 or 110	3
Social Studies 201	3	Social Studies 202	3
	16		16

Third Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
English 308	3	Economics 340	3
Geography 317 or Social Studies 303	3	Education 319	3
History 311	3	Geography 317 or Social Studies 303	3
Music 370	2	History 312	3
Political Science 201	3	Sociology 300	3
Elective (300-400)	2-3	Physical Education 315	1
	16-17	Physical Education 316	1
			17

Fourth Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester*</i>	<i>Hrs.</i>
History 313	3	Education 150	3
Electives (300-400)	13-14	Education 250	3
	16-17	Education 350	3
		Education 365	3
		Education Elective	3
			15

*If students have had no previous experience in teaching, they must in one semester enroll for the courses listed for the second semester of the fourth year. Students may enroll for the courses listed for the second semester of the fourth year in either the first or second semester.

SECOND CLASS ELEMENTARY CERTIFICATE
(Minimum Requirements: 96 Semester Hours)

First Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Art 113	2	Art 312	2
English 103	3	English 104	3
Mathematics 100	3	Education 117	3
Physical Education 113	1	Physical Education 114	1
Science 107 or 109	3	Science 108 or 110*	3
Social Studies 104	3	Social Studies 105	3
	15	Music 175	2
			17

*Science 108 must follow Science 107, and Science 110 must follow Science 109.

Second Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester**</i>	<i>Hrs.</i>
Education 118	3	Education 150	3
English 215	3	Education 250	3
English 223	3	Education 319	3
Music 203	2	Mathematics 200	2
Social Studies 201	3	Social Studies 202	3
Elective	2	Physical Education 221	2
	16		16

**If students have had no previous experience in teaching, they must in one semester enroll for the courses listed for the second semester of the second year.

Third Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Art 333	2	Geography 317 or Social	
English 203	3	Studies 303	3
English 308	3	Science 108 or 110	3
Music 370	2	Electives (300-400)	10
Political Science 201	3		
Science 107 or 109	3		16
	16		

THIRD CLASS ELEMENTARY CERTIFICATE
(Minimum Requirements: 65 Semester Hours)

First Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
English 103 ✓	3	English 104 ✓	3
Art 113	2	English 223 ✓	3
Art 312 ✓	2	Education 117 ✓	3
Music 175 ✓	2	Physical Education 114	1
Physical Education 113	1	Science 108 or 110*** ✓	3
Science 107 or 109	3	Social Studies 105 ✓	3
Social Studies 104 ✓	3		
	16		16

***Science 108 must follow Science 107, and Science 110 must follow Science 109.

Second Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester*</i>	<i>Hrs.</i>
Education 118 ✓	3	Education 150	3
English 215 ✓	3	Education 250	3
Mathematics 100 ✓	3	Education 319	3
Music 203 ✓	2	Mathematics 200	2
Social Studies 201 ✓	3	Physical Education 221	2
Electives <i>Eng 223</i> ✓	3	Social Studies 202	3
	17		16

*If students have had no previous experience in teaching, they must in one semester enroll for the courses listed for the second semester of the second year.

Suggested Electives for Students in Elementary Education

Art: 334, 338.
 Bible: 302, 304, 315, 323.
 Botany: 301.
 Economics: 346, 408, 444.
 Education: 405, 415, 435, 443, 460, 465, 490, 495.
 English: 307, 316, 317, 325, 329, 351, 402.
 Geography: 305, 309, 315, 401, 403.
 Geology: 200.
 History: 375, 425, 427.
 Home Economics: 303, 358, 400, 440.
 Philosophy: 201, 312, 315, 320, 410, 411, 419.
 Political Science: 307, 405, 406, 410, 426.
 Science: 306, 307, 400, 482.
 Sociology: 308, 311, 315, 408, 409, 426, 427.
 Speech: 250, 260, 418, 419, 432, 445.

A MINOR WITH ELEMENTARY EDUCATION

Students in Elementary Education may, if they wish, during the third and fourth years group electives so as to form a minor field. A minor in Music or Physical Education may be obtained by completing the following courses:

Music—18 semester hours

Music 175	2 hrs.
Music 176	2 hrs.
**Music 195 a, b, c, d (may substitute voice by demonstrating piano proficiency)	4 hrs.
Music 203	2 hrs.
Music 204	2 hrs.
Music 231	1 hr.
Music 232	1 hr.
Music 305	2 hrs.
Music 370	2 hrs.

Physical Education—12 semester hrs.

Physical Ed. 113-114	2 hrs.
Physical Ed. 221	2 hrs.
Physical Ed. 222	2 hrs.
Physical Ed. 307	1 hr.
Physical Ed. 308	1 hr.
Physical Ed. 315	1 hr.
Physical Ed. 316	1 hr.
Electives	2 hrs.

**Secondary Piano: All students majoring or minoring in music will take four semesters of piano courses. Music 195 a, b, c, d, one hour credit each semester, and pass a proficiency examination at the end of the fourth semester. If this examination is not satisfactory, the student will be required to audit piano until the secondary piano requirements are met. The examination will include sight reading from a community song book, simple accompaniment from a given melodic line, simple transposition, and Clementi sonatinas, or the equivalent. Secondary applied music courses with one hour credit, require two lessons per week and one hour daily preparation.

KINDERGARTEN-PRIMARY CURRICULUM

The general requirements leading to graduation with the Bachelor of Arts degree and the Kindergarten-Primary School Certificate are listed below by years.

Students completing the course requirements of this curriculum must in connection with the courses observe and participate a minimum of two hours per week in the Laboratory Elementary School each semester beginning with the second semester of the freshman year. Also at least 45 semester hours of the total required for the Bachelor of Arts degree must be in the 300-400 series.

First Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
English 103	3	Art 113	2
Mathematics 100	3	Education 117	3
Music 175	2	English 104	3
Physical Education 113	1	Physical Education 114	1
Science 107 or 109	3	Science 108 or 110*	3
Social Studies 104	3	Social Studies 105	3
	15		15

*Science 108 must follow Science 107 and Science 110 must follow Science 109.

Second Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Art 312	2	English 223	3
Education 318	3	Home Economics 303	3
English 203	3	Mathematics 200	2
English 215	3	Physical Education 221	2
Social Studies 201	3	Social Studies 202	3
Speech 250	3	Electives	3-4
	17		16-17

Third Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Art 333	2	Art 334	2
Education 319	3	Home Economics 440	3
English 308	3	Music 305	2
Music 203	2	Physical Education 316	1
Physical Education 315	1	Physical Education 320	1
Physical Education 319	1	Speech 418	3
Science 307	3	Electives (300-400)	4-5
Elective (300-400)	1-2		
	16-17		16-17

Fourth Year

<i>First Semester*</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Education 367	4	Education 460	3
Education 409	4	Electives (300-400)	12-13
Education 410	8		
	16		15-16

*Students may enroll in the schedule of courses designated for the first semester of the fourth year in either the first or second semester.

Suggested Electives

English: Literature in 300-400 series, such as English 316, 317, 325, 351, 402.

Library Science: 301, 404.

Science: Botany 301, 305; Science 306, 400, 482.

Social Studies: Economics 340, Sociology 300.

CURRICULUM FOR TEACHERS OF MUSIC

(Leading to Special Non-Academic Certificate valid in both elementary and high school for teaching vocal and instrumental music.)

First Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Education 117	3	Education 118	3
Music 115	4	Music 116	4
Music 175	2	Music 123	2
Applied Music, Major	2	Applied Music, Major	2
Applied Music, Secondary	1	Applied Music, Secondary	1
Band, Orchestra, or Chorus	1	Band, Orchestra, or Chorus	1
English 103	3	English 104	3
Physical Education 113	1	Physical Education 114	1
	17		17

Second Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Music 215	4	Music 216	4
Applied Music, Major	2	Music 262	1
Applied Music, Secondary	1	Speech 305	2
Band, Orchestra, or Chorus.....	1	Applied Music, Major	2
Science 107 or 109	3	Applied Music, Secondary	1
English 215	3	Band, Orchestra, or Chorus	1
Social Studies 104	3	Science 108 or 110*	3
	17	Social Studies 105	3
			17

*Science 108 must follow Science 107 and Science 110 must follow Science 109.

Third Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Music 262	1	Music 313 or Secondary Piano or Voice continued	1
Music 301	2	Music 317	2
Music 312 or Secondary Piano or Voice continued	1	Music 422	3
Music 316	2	Music 462	1
Music 380	2	Applied Music, Major	2
Applied Music, Major	2	Band, Orchestra, or Chorus	1
Band, Orchestra, or Chorus	1	Education 319	3
English 223	3	Physical Education 311 or 330	1
Social Studies 201	3	Social Studies 202	3
	17		17

Fourth Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Music 320	2	Music Education 338	3
Music 381	2	Music Education 340	2
Music 423	3	Music Education 371	3
Music 462	1	Applied Music, Major (with public recital)	2
Applied Music, Major	2	Band, Orchestra, or Chorus	1
Band, Orchestra, or Chorus	1	Education 350	3
English 308	3	Education 450	3
Art 312	2		17
	16		

Summary

Music	72
Education and Music Education.....	23
English	15
Social Studies	12
Science	6
Physical Education	3
Art	2
Speech	2
	135

CURRICULUM IN SECONDARY EDUCATION

The general requirements leading to graduation with the Bachelor of Arts degree and the First Class High School Certificate with two teaching fields are listed below by years:

First Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
English 103 ✓	3	Education 117 ✓	3
Physical Education 113 ✓	1	English 104 ✓	3
Science 107 or 109 ✓	3	Physical Education 114	1
Social Studies 104 ✓	3	Science 108 or 110 ✓	3
Electives in Teaching Fields	6	Social Studies 105 ✓	3
	16	Elective in Teaching Fields	3
			16

*Science 107 must be followed by Science 108, and Science 109 must be followed by Science 110.

Second Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Art 312	2	English 223	3
Education 118	3	Music 175	2
English 215	3	Social Studies 202	3
Social Studies 201	3	Electives in Teaching Fields	8
Electives in Teaching Fields	5		16
	16		

Third Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Education 310	2	Physical Education 311 or 330	1
Education 319	3	Electives in Teaching Fields and	
English 308	3	300-400 series	15-16
Electives in Teaching Fields	8-9		16-17
	16-17		

Fourth Year
(See note below)

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Education 450	6	Electives in Teaching Fields	
Education Electives including		and 300-400 series	16
Methods and Materials in			16
Teaching Fields	5-8		
General Elective	0-3		
	14-17		

NOTE: If students have had no previous experience in teaching, they must in one semester enroll for the courses listed for the first semester of the fourth year. Students may enroll for the courses listed for the first semester of the fourth year in either the first or second semester.

Courses in education designed particularly for students in elementary education may not be completed by students in secondary education. Forty-five semester hours of the 128 required for graduation must be completed in courses of the 300-400 series.

Suggested Electives (300-400 Series) for Students in Secondary Education

- Art: 307, 333, 401, 402.
- Bible: 302, 304, 315, 323.
- Botany: 301, 302, 304, 305, 316.
- Business Administration: 307, 320, 330, 340, 343, 350.
- Economics: 346, 408, 444.
- Education: 405, 415, 417, 435, 441, 445, 460, 465, 490.
- English: 302, 307, 316, 317, 325, 329, 331, 351, 402, 409, 411.
- Geography: 302, 305, 309, 315, 317, 320, 401, 403, 405, 410, 412.
- Geology: 300, 303, 315.
- Greek: 335.
- History: 301, 308, 309, 402, 420, 425, 426, 427, 432.
- Home Economics: 350, 351, 354, 358, 400, 440, 454.
- Journalism: 304, 305, 310, 311, 320, 321, 327, 328.
- Latin: 336.
- Library Science: 301, 310, 401, 405.
- Philosophy: 312, 315, 320, 410, 411, 419.
- Physical Education: 307, 308, 313, 330, 403, 405, 418, 460.
- Political Science: 301, 303, 307, 405, 406, 407, 408, 409, 410, 426.
- Safety Education: 485, 486.
- Science: 306, 400, 482.
- Social Studies: 303.
- Sociology: 301, 305, 308, 311, 315, 320, 342, 401, 408, 412, 421, 426, 427, 428, 430.
- Spanish: 306.
- Speech: 306, 320, 360, 418, 432, 445, 450.
- Zoology: 307, 403, 408.

Teaching Fields in Secondary Education

In addition to completing the general requirements, the student preparing for high school service is expected to concentrate in two areas, called teaching fields. These fields are listed below (A to R) and under each designation the course requirements are indicated.

A. FOR TEACHERS OF ART

The requirements for the Special Non-Academic Certificate in Art valid in Grades I through XII include in addition to the course requirements listed below the following courses: Art 113, 333, and 338, and Education 350. The total number of hours required in Art is 40.

<i>Subject Groups</i>	<i>Hours</i>	<i>Hours</i>	<i>Hours</i>
Art: Minimum requirements for graduation.....			32
1. Freehand Drawing		6	
Art 101-102, Drawing	6		
Art 406, Figure Drawing	3		
2. Design		6	
Art 103, Theory of Color and Design	3		
Art 200, Design	2		
Art 305, Design	3		
3. Painting and Sculpture		6	
Art 307, Sculpture	3		
Art 350, Water Color Painting	3		
Art 455-456, Oil Painting	6		
4. History and Appreciation		6	
Art 312, Art Appreciation	2		
Art 401-402, History of Art	6		

B. FOR TEACHERS OF BIOLOGICAL SCIENCE

<i>Subject Groups</i>	<i>Hours</i>	<i>Hours</i>	<i>Hours</i>
Minimum requirements for graduation.....			32
Biology		24	
1. Required Courses	13		
Science 107-108, Biological Science	6		
Science 306, Field Biology	4		
Science 482, Conservation of Forest, Soil, and Wild Life	3		
2. Suggested Electives	11		
Botany 203, General Botany	4		
Botany 302, Bacteriology	4		
Botany 305, Economic Botany	3		
Botany 315, Plant Morphology	4		
Botany 316, Local Plants	4		
Zoology 211, General Zoology	4		
Zoology 212, Vertebrate Zoology	4		
Zoology 302, Comparative Vertebrate Anatomy	4		
Zoology 307, Genetics	4		
Zoology 315, Human Anatomy and Physiology	4		
Zoology 401, Laboratory Techniques	2		
Zoology 403, Entomology	3		
Zoology 408, Ornithology	3		
Chemistry 101-102, General Chemistry		8	

C. FOR TEACHERS OF BIOLOGICAL AND GENERAL SCIENCE

<i>Subject Groups</i>	<i>Hours</i>	<i>Hours</i>	<i>Hours</i>
Minimum requirements for graduation			39
Biology		21	
1. Required Courses	13		
Science 107-108, Biological Science	6		
Science 306, Field Biology	4		
Science 482, Conservation of Forest, Soil, and Wild Life	3		
2. Suggested Electives	8		
Botany 203, General Botany	4		
Botany 302, Bacteriology	4		
Botany 305, Economic Botany	3		
Botany 315, Plant Morphology	4		
Botany 316, Local Plants	4		
Zoology 211, General Zoology	4		
Zoology 212, Vertebrate Zoology	4		
Zoology 302, Comparative Vertebrate Anatomy	4		
Zoology 307, Genetics	4		
Zoology 315, Human Anatomy and Physiology	4		
Zoology 401, Laboratory Techniques	2		
Zoology 403, Entomology	3		
Zoology 408, Ornithology	3		
Chemistry 101-102, General Chemistry		8	
Science 109-110, Physical Science		6	
Geology 200, General Introductory Geology		4	

D. FOR TEACHERS OF BUSINESS ADMINISTRATION—BUSINESS PRINCIPLES*

Subject Groups	Hours	Hours	Hours
Minimum requirements for graduation			24
Money, Credit and Banking		3	
Economics 310, Money and Banking.....	3		
Marketing or Retail Merchandising		3	
Business Administration 340, Principles of Marketing	3		
or Business Administration 343, Principles of Retailing....	3		
Typewriting		4	
Business Administration 103-104, Typewriting	4		
Business Mathematics or Mathematics of Finance		2	
Business Administration 311, Advanced Accounting	3		
or Business Administration 323, Principles of Business Finance	3		
or Business Administration 313, Mathematics of Finance and Statistics	2		
Accounting		6	
Business Administration 215-216, Principles of Accounting	6		
Business Law		3	
Business Administration 307, Principles of Business Law	3		
Consumer Business—Economic Problems		3	
Economics 340, Principles of Economics.....	3		
or Economics 346, Labor Problems	3		

E. FOR TEACHERS OF BUSINESS ADMINISTRATION—OCCUPATIONAL*

Subject Groups	Hours	Hours	Hours
Minimum requirements for graduation			27
1. Accounting		6	
Business Administration 215-216, Principles of Accounting	6		
2. Typewriting		4	
Business Administration 103-104, Typewriting.....	4		
3. Shorthand		8	
Business Administration 201-202, Shorthand-Typewriting	8		
4. Secretarial Training and Office Practice		6	
Business Administration 404, Secretarial Training.....	3		
Business Administration 405, Office Practice and Management	3		
5. Retail Merchandising, Salesmanship, Advertising		3	
Business Administration 231, Principles of Selling.....	2		
or Business Administration 330, Advertising.....	3		
or Business Administration 340, Marketing	3		
or Business Administration 343, Principles of Retailing	3		
or Business Administration 344, Store Management	3		

*It is recommended that business administration majors complete requirements for both Occupational and Business Principles. If the student will do this, the number of hours required for the combination of fields will be 38. It is understood that an additional major other than business administration will also be selected.

F. FOR TEACHERS OF ENGLISH

Subject Groups	Hours	Hours	Hours
English: Minimum requirements for graduation.....			40
1. Composition, Oral and Written		12	
Eng. 103-104, First Year Written and Spoken English	6		
Eng. 215, Second Year Written and Spoken English	3		
Eng. 405, Study of the English Language	3		

2. Literature	20
Eng. 223, Study and Appreciation of American Literature 3	✓
Eng. 308, Study and Appreciation of English Literature.. 3	
Eng. 325, Shakespeare	3
Eng. 402, World Literature	3
Eng. 420, Senior Seminar in English Literature..... 2	
Electives in English*	6
3. Special Activities	2
Journalism 327 or 328, or Library Science 301	2
4. Latin or a modern language	6

*NOTE: Students completing requirements for the Public School Certificate must elect English 307, 317, or 351.

G. FOR TEACHERS OF FRENCH

Subject Groups	Hours	Hours	Hours
Minimum requirements for graduation			24
(Any reduction in minimum requirements for graduation will be determined in accordance with the results obtained from placement tests.)			
French 121-122, First Year French		6	
French 223-224, Intermediate French		6	
French 241-242, Intermediate Oral French		4	
French 315-316, Advanced Composition and Reading ...		6	
French 327-328, Seventeenth Century Literature		6	
French 355-356, French Civilization and Culture.....		4	
French 361-362, Advanced Oral French		4	
French 435-436, Nineteenth Century Literature		6	
French 455-456, Special Topics	4-8		
French 495H-496H, Readings for Honors in French ...		8	

H. FOR TEACHERS OF VOCATIONAL HOME ECONOMICS

Note: The chemistry and biology requirements below automatically cover the science item in general requirements for all high school teachers and that portion of a major in science.

First Year

First Semester	Hrs.	Second Semester	Hrs.
✓English 103	3	✓English 104	3
✓Science 107	3	✓Science 108	3
✓Physical Education 113	1	Physical Education 114	1
✓Chemistry 101	4	✓Chemistry 102	4
✓*Home Economics 104	3	✓Education 117	3
✓Home Economics 205	2	✓*Home Economics 127	2
	16		16

Second Year

First Semester	Hrs.	Second Semester	Hrs.
✓English 215	3	Social Studies 105	3
✓Social Studies 104	3	Social Studies 202	3
Social Studies 201	3	Education 118	3
✓English 223	3	Music 175	2
Physical Education 311 or 330.....	1	Home Economics 203	3
✓Home Economics 202	3	*Home Economics 227	3
	16		17

Third Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
*Home Economics 329	3	*Home Economics 303	3
Home Economics 301	4	English 308	3
**Education 319	3	**Home Economics 405	3
**Education 310	2	Sociology 308	3
Botany 302	4	Art 312	2
	16	**Home Economics Education 306	3
		17	

Fourth Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
**Home Economics 350	3	**Home Economics Education 406	3
*, **Home Economics 426	3	Home Economics 354	3
*, **Home Economics Education 450	8	Home Economics 353	2
	14	*Home Economics 351	2
		Home Economics 420	3
		Elective	3
		16	

* —offered both semesters.
 **—block course.

I. FOR TEACHERS OF LATIN

<i>Subject Groups</i>	<i>Hours</i>	<i>Hours</i>	<i>Hours</i>
Minimum requirements for graduation			27
(Any reduction in minimum requirements for graduation will be determined in accordance with the results obtained from placement tests. Latin 336 is required for all Latin majors.)			
Latin 101-102, First Year Latin		6	
Latin 203-204, Intermediate Latin		6	
Latin 306, Selections from Horace		3	
Latin 307, Cicero's Letters		3	
Latin 309, Livy: History		3	
Latin 312, Tacitus: Annals		3	
Latin 327, Advanced Prose Composition		3	
Latin 336, Roman Civilization		3	
Latin 401, Roman Life: Pliny, Martial, Juvenal		3	
Latin 402, Vergil: Aeneid, VII-XII		3	
Latin 403, The Roman Stage		3	
Latin 450-451, Special Topics in Latin		1-4	
Latin 495H-496H, Honors in Latin		8	

J. FOR SCHOOL LIBRARIANS

<i>Subject Groups</i>	<i>Hours</i>	<i>Hours</i>	<i>Hours</i>
Minimum requirements for graduation			24
English		3	
English 203, Children's Literature.....	3		
Library Science		21	
Library Science 301, Teaching How to Use A Library	2		
Library Science 310, Administration of School Libraries	3		
Library Science 315, Reference and Bibliography	3		
Library Science 320, Cataloguing and Classification	3		
Library Science 401, History of Books and Libraries	3		
Library Science 404, Book Selection	2		
Library Science 405, Book Selection for Adolescents	2		
Library Science 450, Library Practice	3		

K. FOR TEACHERS OF MATHEMATICS

<i>Subject Groups</i>	<i>Hours</i>	<i>Hours</i>	<i>Hours</i>
Minimum requirements for graduation			27
(Any reduction in minimum requirements for graduation will be determined in accordance with the results obtained from placement tests.)			
Mathematics 121, Solid Geometry		3	
Mathematics 122, Plane Trigonometry		3	
Mathematics 223, College Algebra		3	
Mathematics, 224, Analytic Geometry		4	
Mathematics 325, Differential Calculus		4	
Mathematics 332, Theory of Equations		4	
Mathematics 420, College Geometry		3	
Mathematics 450, Fundamental Concepts and History of Mathematics		3	

L. FOR TEACHERS OF MUSIC AND A SECOND TEACHING FIELD

<i>Subject Groups</i>	<i>Hours</i>	<i>Hours</i>	<i>Hours</i>
Minimum requirements for graduation			40
1. Theory		16	
Music 115, Theory	4		
Music 116, Theory	4		
Music 215, Theory	4		
Music 216, Theory	4		
2. History and Literature of Music		3	
Music 423, History and Literature of Music	3		
3. Technique		9	
Music 262-462, Instrumental Techniques	3		
Music 380, Instrumental Conducting	2		
Music 381, Choral Conducting	2		
Music 312, Voice Training	1		
Music 313, Voice Training	1		
4. Ensemble		8	
Band, Orchestra, or Chorus (8 semesters)	8		
5. *Applied Music		4	
Music 195 a, b, c, d, Piano (may substitute voice by demonstrating piano proficiency)	4		

NOTE: This curriculum is open only to outstanding music students who can demonstrate a high level of proficiency in one instrument or voice in a senior recital, to be approved by the music faculty before being recommended for graduation.

*Additional courses may be elected in applied music upon permission of Department of Music, but credit will not be counted toward the requirements for the degree.

M. FOR TEACHERS OF PHYSICAL EDUCATION

The requirements for the Special Non-Academic Certificate in Physical Education valid in Grades I through XII include in addition to the course requirements listed below the following courses: Physical Education 113, 114, 307 or 308, 316, and 450, and Education 350. The total number of hours required in physical education is 40.

<i>Subject Groups</i>	<i>Hours</i>	<i>Hours</i>	<i>Hours</i>
Minimum requirements for graduation			30-32
1. Anatomy, Physiology and Kinesiology		6	
Phys. Ed. 440, Physiology of Exercise	3		
Phys. Ed. 321, Kinesiology	3		
2. Health Education and Hygiene		4	
Phys. Ed. 221, Health Education	2		
Phys. Ed. 313, Personal Hygiene	2		
3. Principles, Organization and Administration of Health and Physical Education		2	
Phys. Ed. 410, Organization and Administration	2		

4. Physical Inspection and Correction of Remedial Defects	4		
Phys. Ed. 322, Individual Gymnastics	3		
Phys. Ed. 310, Postural Gymnastics	1		
5. Theory and Practice of Physical Education.			
Differentiated courses for men and women:			
		Men	Women
Team Sports			
Phys. Ed. 103, Football	1	5	3
Phys. Ed. 103, Field Ball and Hockey	1		
Phys. Ed. 109, Track		1	½
Phys. Ed. 110, Basketball	1	1	½
Phys. Ed. 111, Baseball		1	½
Phys. Ed. 206, Soccer and Speedball	1		
Phys. Ed. 420, Advanced Practice and Officiating	1		
Phys. Ed. 421, Advanced Practice and Officiating	1		
Recreational Activities		3	3
Phys. Ed. 205, 403, 404, Aquatic Sports	1		
Phys. Ed. 207, Archery and Tennis	1		
Phys. Ed. 306, Tumbling	1		
School and Community Activities		4	4
Phys. Ed. 316, Games	1		
Phys. Ed. 222, First Aid	2		
Phys. Ed. 307, Scouting	1		
Phys. Ed. 308, Camping and Hiking	1		
Phys. Ed. 450, Playground and Community Recreation	2		
Rhythms		1	3
Phys. Ed. 104, Marching and Calisthenics	1		
Phys. Ed. 304, Creative Dancing	1		
Phys. Ed. 305, Advanced Dancing	1		
Phys. Ed. 405, Folk Dancing and Clogging	1		

The requirements for teachers of physical education are listed below by years:

First Semester Theory	Hrs.		Second Semester Theory	Hours	
	Men	Women		Men	Women
English 103	3	3	Education 117	3	3
Physical Education 221	2	2	English 104	3	3
Science 107 or 109	3	3	Science 108 or 110*	3	3
Social Studies 104	3	3	Social Studies 105	3	3
Practice			Practice		
Physical Education 113	1	1	Physical Education 109	1	½
Physical Education 103, 104, 108	2	1	Physical Education 110	1	1
Elective in Other			Physical Education 111	1	½
Teaching Field	2	3	Physical Education 114	1	1
			Elective	2	2
	16	16		16	16

* Science 107 must be followed by Science 108, and Science 109 must be followed by Science 110.

First Semester Theory	Hours		Second Semester Theory	Hours	
	Men	Women		Men	Women
Education 118	3	3	English 223	3	3
English 215	3	3	Music 175 or Art 312	2	2
Social Studies 201	3	3	Social Studies 202	3	3
Art 312 or Music 175	2	2	Practice		
Practice			Physical Education 207, 307, or 308, 222	2	2
Physical Education 205, 206, or 306, 104, or 108	2	3	Electives in Other		
Elective in Other			Teaching Field	6	6
Teaching Field	3	2		16	16
	16	16			

Third Year

First Semester Theory	Hours		Second Semester Theory	Hours	
	Men	Women		Men	Women
English 308	3	3	Education 310	2	2
Physical Education 313	2	2	Education 319	3	3
Physical Education 321	3	3	Physical Education 322	3	3
<i>Practice</i>			<i>Practice</i>		
Physical Education 206, 304, 305, 307, 405, 420	2	2	Physical Education 310	1	1
Electives in Other			Physical Education 305, 308, 316, 403, 404, 421, 450	2	2
Teaching Field	7	7	Physical Education 420	1	1
	17	17	Electives in Other		
			Teaching Field	4	4
				16	16

Fourth Year

First Semester* Theory	Hours		Second Semester Theory	Hours	
	Men	Women		Men	Women
Education 450	6	6	Physical Education 410	2	2
Education Electives	8	8	Physical Education 440	3	3
	14	14	<i>Practice</i>		
			Physical Education 403 or 404	1	1
			Physical Education 421	1	1
			Electives in Other		
			Teaching Field	10	10
				17	17

*Students may enroll for the courses listed for the first semester of the fourth year in either the first or second semester.

Students who are veterans will receive 8 semester hours credit for military training. This credit may be applied as follows:

Physical Education 221, Health Education.....	2 hours
Physical Education 222, First Aid	2 hours
Recreational Activities	4 hours
Team Sports	4 hours

Only four hours of the eight may be counted toward upper division work. Any unused portion of these eight hours may be used as a general elective unless some course has been repeated. It is impossible to designate specific courses except in Health Education and First Aid. So, in order to be fair to the veteran, he is permitted to apply these credits as he chooses in the above group.

The Department of Physical Education recommends an elective in Zoology 315, Human Anatomy and Physiology.

N. FOR TEACHERS OF PHYSICAL SCIENCE

Subject Groups	Hours	Hours	Hours
Minimum requirements for graduation			32
Chemistry		16	
Chemistry 101-102, General	8		
Chemistry 203, Qualitative Analysis	4		
Chemistry 204, Quantitative Analysis	4		
Chemistry 317, Organic	5		
Chemistry 318, Physiological	5		
Physics		13	
Physics 201, 202, 203, 204, General	8		
Physics 314-315, Electronics	5		
Science 400, Astronomy			3

O. FOR TEACHERS OF PHYSICAL AND GENERAL SCIENCE

<i>Subject Groups</i>	<i>Hours</i>	<i>Hours</i>	<i>Hours</i>
Minimum requirements for graduation			38
Chemistry		16	
Chemistry 101-102, General	8		
Chemistry 203, Qualitative Analysis	4		
Chemistry 204, Quantitative Analysis	4		
Chemistry 317, Organic	5		
Chemistry 318, Physiological	5		
Physics		13	
Physics 201, 202, 203, 204, General	8		
Physics 314-315, Electronics	5		
Science			9
Science 107-108, Biological Science	6		
Science 400, Astronomy	3		

P. FOR TEACHERS OF SPANISH

<i>Subject Groups</i>	<i>Hours</i>	<i>Hours</i>	<i>Hours</i>
Minimum requirements for graduation			27
(Any reduction in the minimum requirements for graduation will be determined in accordance with the results obtained from placement tests.)			
Spanish 101-102, Elementary Courses		6	
Spanish 203-204, Intermediate Courses		6	
Spanish 306, Hispanic Civilization		3	
Spanish 310-311, Advanced Conversation		4	
Spanish 312-313, Spanish American Literature		4	
Spanish 320, Prose Readings of the Nineteenth and Twentieth Centuries, or			
Spanish 330, Modern Drama		3	
Spanish 410, Cervantes, or			
Spanish 420, Drama of the Golden Age		3	
Spanish 496H-496H, Readings for Honors in Spanish		8	

Q. FOR TEACHERS OF SOCIAL STUDIES

<i>Subject Groups</i>	<i>Hours</i>	<i>Hours</i>	<i>Hours</i>
Minimum requirements for graduation			36
Social Studies (Integrated Courses)		15	
Social Studies 104-105, Development of Social Institutions	6		
Social Studies 201-202, Fundamental Social Problems	6		
Social Studies 303, West Virginia History, Government, and Geography	3		
History		12	
History 221-222, Modern Europe (1492-Present)	3-6		
History 311-312-313, American History (1492-Present)	9		
Government		3	
Political Science 201, American National Government	3		
Economics or Sociology		3	
Economics 340, Principles of Economics	3		
Sociology 300, Principles of Sociology	3		
Sociology 308, Marriage and Family Life	3		
Sociology 311, Problems of Poverty	3		
Sociology 408, The Family	3		
Geography		3	
Geography 317, World Geographical Problems	3		

R. FOR TEACHERS OF SPEECH

<i>Subject Groups</i>	<i>Hours</i>	<i>Hours</i>	<i>Hours</i>
Minimum requirements for graduation			32
Speech 101, Practical Public Speaking	2		
Speech 102, Practical Public Speaking	2		
Speech 205, Argumentation and Debate	3		
Speech 210, Acting	3		
Speech 240, Voice Training	3		
Speech 260, Fundamentals of Radio and Television	3		
Speech 312-313, Play Production	4		
Speech 320, Oral Interpretation of Literature	3		
Speech 403, Play Direction	3		
Speech 418, Speech Correction	3		
Speech 450, Direction of Speech Activities	3		

COURSES OF INSTRUCTION

ART

Professor Jablonski
Assistant Professor Carpenter

Note: A laboratory fee of \$4.00 will be charged for the following Art courses: 200, 201, 305, 306, 307, and 333.

- 101-102. Drawing.** 3-3 hours. I, II.
Freehand drawing, principally from plaster casts; study of perspective projection.
- 103. Principles of Drawing and Painting, and Theory of Design.** 3 hours.
- 113. Creative Expression in the Fine Arts.** 2 hours. I, II, S.
Experiments in drawing, painting, and design directed to the needs of students in elementary education.
- 200-201. Design.** 2-2 hours.
Elementary design projects in clay, wood, metal, and other materials.
- 202. Lettering.** 2 hours.
Study and practice of lettering with pen and brush.
- 216. Commercial Art.** 3 hours.
Projects in advertising layouts, merchandise display, and container design.
Prerequisites: Art 103, Art 202.
- 305-306. Design.** 3-3 hours.
Advanced projects in clay, wood, metal, and other materials.
Prerequisite: Art 200.
- 307. Sculpture.** 3 hours.
Practice of clay modeling from the human figure.
- 312. Art Appreciation.** 2 hours. I, II, S.
Significance of art in everyday living. Required of all students in Teachers College.
- 333. Creative Expression in the Applied Arts.** 2 hours. I, II, S.
Design projects in a variety of materials, with reference to the needs of students in elementary education.
- 334. Kindergarten-Primary Art.** 2 hours. II.
Consideration of children's art expressions in a variety of materials.
- 338. Art Education.** 4 hours.
A study of the scope of instruction in art in the elementary school. Periods of observation to be arranged.
- 350. Water Color Painting.** 3 hours.
The watercolor medium in expressing still life, landscape, and the human figure.
Prerequisites: Art 102, Art 103.
- 401-402. History of Art.** 3-3 hours. I, II, S.
A survey of the development of architecture, sculpture, painting, and the minor arts to ca. 1400 A. D. and from 1400 A. D. to the present.
- 406. Figure Drawing.** 3 hours.
Practice in drawing from the posed human figure.
Prerequisite: Art 102.
- 455-456. Oil Painting.** 3-3 hours.
Study and practice of oil painting in expressing still life, landscape, and the human figure.
Prerequisites: Art 102, Art 103.

ECONOMICS

Associate Professor Cubby

- 340. Principles of Economics.** 3 hours. I, II, S.
Survey of principles involving basic economic problems.

EDUCATION

Professors Hampel, Musgrave, R. Smith, Wilburn, Woods

Associate Professors Purdy, Runyan, VanderZalm

Assistant Professors Collins, Felty, Gray, Hess, Morris, Nuzum, Rider, Ward
Instructors Amick, Blankenship, Cook, Dailey, Davis, Douthat, Grambos,
Green, Hart, Houston, Lambert, McDonald, Mitchell, Rensford,
Rummell, Shipe, T. Smith, Stephens, Streeby, Zelnak

Note: A laboratory fee of \$3.00 will be charged for Education 466.

- 117-118. Human Development.** 3-3 hours. I, II, S.
Basic courses in which student studies children's emotional, mental, and physical development. Field experience required.
- 150. Teaching in the Elementary School.** 3 hours. I, II, S.
The procedures and techniques to be employed in teaching the basic subjects of the elementary school.
Prerequisite: (See "Student Teaching," Page II-5)
- 233. The West Virginia Elementary School System.** 2 hours. II, S.
Provisions of state school system for finance, laws, program of studies, reports and public relations.
- 250. Supervised Student Teaching (Grades 1-6).** 3 hours. I, II, S.
Teaching daily under supervision in Laboratory Elementary School and affiliated schools.
Prerequisites: Education 117 and 118 or equivalent. (See "Student Teaching," Page II-5)
- 310. Principles of High School Teaching.** 2 or 4 hours. I, II, S.
Secondary school activities as they relate to best teaching procedures.
- 319. Human Adjustment.** 3 hours. I, II, S.
The nature of mental health and the biological and psychological foundations of personality.
Prerequisites: Education 117 and 118.
- 340. Materials and Methods in Public School Music (Grades 7-12).** 2 hours. I, II.
Vocal materials and methods of presentation in Grades 7-12 inclusive.
Prerequisites: 20 hours of music, enrollment in Education 450.
- 350. Supervised Student Teaching (Grades 1-6).** 2 or 3 hours. I, II, S.
Continuation of Education 250. Required of students completing the First Class Elementary Certificate or the Special Non-Academic Certificate in Art, Music, or Physical Education, Grades 1-12.
Prerequisites: Education 117 and 118 or equivalent. (See "Student Teaching," Page II-5)
- 365. The Elementary School.** 3 hours. I, II, S.
Organization and management of the elementary school with emphasis upon provisions for individual differences, unit construction, safety and health of pupils.
Prerequisites: Education 117 or 118 or equivalent. Enrollment in Education 350.
- 367. The Primary School.** 4 hours. I.
Techniques of meeting children and parents, studying the school as a part of the community, evaluation of pupil progress, making reports to parents, principals, and superintendents.
- 405. Educational Sociology.** 2 hours. I, II, S.
Study of educational problems in terms of what sociology has to offer in the way of solutions.
Prerequisite: Enrollment in Education 350 or 450.
- 409. Kindergarten-Primary Curriculum.** 4 hours. II.
Educational needs of kindergarten-primary children with reference to the adjustment of learning experiences.
- 410. Supervised Student Teaching.** 8 hours. I, II.
For students completing the kindergarten-primary curriculum.

- 415. History of Modern Education.** 2 or 3 hours. I, II, S.
Our debt to the ancient Hebrews, Greeks, and Romans. Emphasis also is placed upon the movements since the beginning of the Renaissance.
Prerequisite: Enrollment in Education 350 or 450.
- 417. Statistical Methods:** 3 hours. S.
Elementary statistics to meet the needs of students in economics, education, political science, and sociology.
Prerequisites: Consent of instructor, Enrollment in Education 350 or 450.
- 435. Tests and Measurements.** 3 hours. I, II, S.
History, basic philosophy, and elementary statistical devices for evaluating pupil progress are studied. New type tests are constructed, and standardized tests for elementary and secondary schools are examined and administered.
Prerequisite: Enrollment in Education 350 or 450.
- 441. Literary Materials for English and Social Studies.** 3 hours. I, S.
To acquaint teachers of English and social studies with a variety of literary selections suitable for students, Grades 7-12.
Prerequisite: Enrollment in Education 450.
- 443. Teaching Reading in Elementary Schools.** 3 hours. I, II, S.
Presenting modern techniques and practices in the teaching of reading.
Prerequisite: Enrollment in Education 350.
- 445. Teaching Reading in Secondary Schools.** 3 hours. I, II, S.
Principles underlying the teaching of reading in junior and senior high schools.
Prerequisite: Enrollment in Education 450.
- 450. Supervised Student Teaching in Secondary Schools.** 5 or 6 hours. I, II, S.
Teaching daily under supervision in Laboratory Secondary School and affiliated schools.
Prerequisites: Education 117 and 118 or equivalent. (See "Student Teaching," Page II-5)
- 460. Philosophy of Education.** 2 or 3 hours. I, II, S.
Surveys basic philosophic schools and concepts and their application to educational practice.
Prerequisite: Enrollment in Education 350 or 450.
- 465. Audio-Visual Aids in Learning.** 2 or 3 hours. I, II, S.
Utilization of audio-visual materials, equipment, and techniques.
Prerequisite: Enrollment in Education 350, 410, or 450.
- 466. Production of Audio-Visual Aids.** 3 hours. I, S.
Basic techniques in making slides, photographs, dry and wet mountings, felt board materials, movies, tape recordings, and similar teaching aids.
- 467. Teaching Social Studies in Secondary Schools.** 2 or 3 hours. I, II, S.
Survey of various techniques for teaching the social studies with suggestions for the procurement and use of pertinent materials.
Prerequisite: Enrollment in Education 450.
- 468. Teaching Art in Secondary Schools.** 2 hours. I, II.
Survey of materials and methods for teaching art.
Prerequisite: Enrollment in Education 450.
- 469. Teaching Business Education.** 2 or 3 hours. I, II, S.
Survey of materials and methods for teaching business subjects in junior and senior high schools.
Prerequisite: Enrollment in Education 450.

- 470. Teaching English in Secondary Schools.** 2 hours. I, II.
The curriculum in English with emphasis upon the use of instructional materials and procedures.
Prerequisite: Enrollment in Education 450.
- 471. Teaching the Languages.** 2 hours, I, II.
The curriculum in the languages in the junior and senior high school with emphasis upon materials and methods used in teaching the subjects.
Prerequisite: Enrollment in Education 450.
- 472. Teaching Mathematics in Secondary Schools.** 2 hours. I, II.
The program of mathematics in junior and senior high schools with emphasis upon materials and methods to be used in teaching the several subjects.
Prerequisite: Enrollment in Education 450.
- 473. Teaching Physical Education.** 2 hours. I, II.
The program of physical education in elementary, junior, and senior high schools, with emphasis upon materials and methods used in an adequate program.
Prerequisite: Enrollment in Education 450.
- 474. Teaching the Sciences in Secondary Schools.** 2 hours. I, II.
The program in the sciences in junior and senior high schools with emphasis upon materials and methods used in teaching the several subjects.
Prerequisite: Enrollment in Education 450.
- 482-485. Special Topics.** 1-4 hours. I, II, S.
- 490. Principles and Practices of Guidance.** 2 or 3 hours. I, II, S.
The objectives, principles, and practices of guidance.
Prerequisites: Enrollment in Education 450.
- 495. Clinical Practice in Reading Instruction.** 2 or 3 hours. S.
Diagnosis of difficulties, plans for corrective treatment, and actual work with pupils.
Prerequisite: Education 443 or consent of instructor.

ENGLISH

Professors Brown, Sechler

Associate Professors Baxter, Flower, Pollitt, Rice, Stender, White

Assistant Professors Harvey, Hepburn, Washington

Instructors Jones, Mitchell, Starkey

Graduate Assistant Arvis

- 103-104. First Year Written and Spoken English.** 3-3 hours. I, II, S.
Fundamentals of correct speaking and writing for prospective teachers.
- 303. Children's Literature (Backgrounds of Literature).** 3 hours. I, II, S.
Various types of poetry and prose appropriate for elementary and junior high school pupils.
- 215. Second Year Written and Spoken English.** 3 hours. I, II, S.
Advanced course in speaking and writing.
Prerequisites: English 103, 104.
- 223. Study and Appreciation of American Literature.** 3 hours. I, II, S.
Selections from seven major authors. Not open to students having had English 324, or English 341 and/or 342.
- 302. Elizabethan Drama.** 3 hours.
A study of the plays of Shakespeare's contemporaries and successors to the close of the theatre in 1642.
- 307. Modern Drama.** 3 hours.
A study of the modern English and American drama.

- 308. Study and Appreciation of English Literature.** 3 hours. I, II, S.
A study of poetry and prose selections from six major authors.
Not open to students who have had English 208, 221, or 222.
- 316. Contemporary Poets, English and American.** 2 hours.
A study of twentieth century poetry.
- 317. The Development of the English Novel.** 3 hours.
A general history of the English novel to the contemporary period.
- 325. Shakespeare.** 3 hours.
An appreciation of the plays of Shakespeare.
- 329. Modern Novel.** 3 hours.
A survey of modern British and American novels.
- 331. The Short Story.** 3 hours.
Types of short stories with emphasis on modern American writers.
- 335. Literature of the Renaissance and Reformation.** 3 hours.
Non-dramatic literature from early Renaissance to the Reformation.
No credit if English 315 has been taken.
- 351. Development of the English and American Drama.** 3 hours.
From the Elizabethan Age to the present.
- 377. Creative Composition.** 3 hours.
Practice in literary forms for those interested in creative writing.
Prerequisites: English 102 or 104 and consent of the instructor.
- 402. World Literature.** 3 hours.
Selections from the literature of great nations, ancient and modern,
excluding American and British.
- 405. Study of the English Language.** 3 hours.
The growth, structure, and present usages of the English language.
- 408. Advanced Expository Writing.** 3 hours.
Preparation of reports, theses, briefs, abstracts, and other expository
types. Material adapted to the needs of the individual student.
- 409. Milton and His Contemporaries.** 3 hours.
Milton, Donne, Browne and others related to the intellectual back-
ground of the century.
- 411. Chaucer.** 3 hours.
The background of and influences on the author and his major works
in the original language.
- 420. Senior Seminar in English Literature.** 2 hours. I, II.
An advanced study of the forms and movements in English literature.
An individual piece of research will be required.
Prerequisites: Senior standing, major in English, and consent of
instructor.
- 422. Nineteenth Century American Poetry.** 3 hours. I, S.
Studies in American poets from Bryant to Moody.
- 436. Early and Medieval Literature.** 3 hours.
First ten centuries of English literature exclusive of Chaucer.
- 446. Drama of the Restoration and Eighteenth Century.** 3 hours.
- 447. Studies in the Romantic Poets.** 3 hours.
Not open to students having credit in English 321 or 344.
- 455. Literary Criticism.** 3 hours.
History of literary criticism with application of principles. Open only
to seniors, or juniors with the consent of the instructor.
- 460. Studies in English Literature from 1660 to 1745.** 3 hours. I.
Dryden, Swift, Pope, and their contemporaries. Open only to seniors,
or juniors with the consent of the instructor.
- 461. Studies in English Literature from 1745 to 1800.** 3 hours. II.
Major figures of the Age of Johnson. Open only to seniors, or juniors
with the consent of the instructor.

470. Twentieth Century Literature. 2 or 3 hours. S.

A study of the twentieth century mind through representative genres of literature.

495H-496H Readings for Honors in English. 4-4 hours. I, II.

Open only to seniors who have a major in English, a general average of 3.3 and an average of 3.5 or better in English. The student chooses his field for conferences and monthly examinations. The student is assigned to a director. Both courses must be taken in sequence in order to have credit.

GEOGRAPHY

Professors Britton, Davis
Associate Professor Clagg

203. General Economic Geography. 3 hours. I, II, S.

World geography with units built around specific products of agriculture, manufacturing, and mining, as related to soil, climate, geology, and other factors of natural environment.

206. Geography of West Virginia. 2 hours.

Transportation, population, mining, industry, and agriculture as related to climate, soils, land forms, and other natural environmental items.

302. Economic Geography of Europe. 3 hours.

Relationship between man's activities and natural environment studied by countries, with attention given to inter-relation of countries.

305. Economic Geography of North America. 3 hours. I, II, S.

Natural regional divisions emphasizing major economic activities and environmental factors.

309. Economic Geography of Latin America. 3 hours.

Relationship between man's activities and natural environment studied in each country.

315. Economic Geography of Africa and Australia. 3 hours.

Low latitude and lower middle latitude regions given relationship approach with colonial problems stressed.

317. World Geographical Problems. 3 hours. I, II, S.

Agriculture, industry, mining, and transportation studied in major countries. Political geography introduced and regional approach clarified.

320. Conservation of Natural Resources. 3 hours. I, II, S.

Through study of present wastes a plan for wise use of our natural and human resources is developed.

401. Historical Geography of the United States. 3 hours.

Study of coastal settlements, the population spread through Appalachia and the Mississippi Valley, and the development of inter-mountain and Pacific Coast centers.

403. Economic Geography of Asia. 3 hours.

Special attention given activities and environment in continental countries and nearby islands.

405. World Political Geography. 3 hours.

Survey of international relations showing influence of economic-environmental adjustments stressing studies of the United States, Russia, the British Empire, and Germany.

406. Geography of Brazil. 2 hours.

Regional study of relation of man's activities to natural environment.

407. Geography of Argentina. 2 hours.

Regional study of relation of man's activities to natural environment.

408. Geography of Mexico. 2 hours.

Regional study of relation of man's activities to natural environment.

409. Geography of Canada. 2 hours.

Regional study of relation of man's activities to natural environment.

- 410. Urban Geography.** 3 hours.
Study of numerous cities of the world with local field survey made.
- 412. Geography of Soviet Lands.** 2 hours.
Russian agriculture, mining, grazing, industry, and transportation explained in environmental terms.
- 413. Geography of the British Isles.** 2 hours.
Climate, minerals, and land forms checked in explaining major economic activities of the islands.
- 415. Geography of India.** 2 hours.
India, Pakistan, Ceylon, and Burma studied to show cultural-environmental relationships.
- 420. Field Geography of West Virginia.** 3 hours.
Type areas in lumbering, mining, agriculture, and industry checked through field methods.
- 425. Climatology.** 3 hours.
Causes and results of regional weather of the world studied under modified Koppen's classification.
- 429. Map Intelligence and Projections.** 3 hours.
Principles and practice in construction of map grill, use of drafting equipment, and understanding of earth features as shown on a map.
- 430. Applied Cartography.** 3 hours.
Map making with regard to projection selection, source materials, compilation, restitution, and photo revision.

HISTORY

Professors Cometti, Heath, Moffat, Toole

- 105-106. English History.** 3-3 hrs. I, II.
From Anglo-Saxon time to the present.
- 207. History of West Virginia and the Trans-Allegheny Frontier.** 3 hrs. I, II.
- 219-220. Early European History, from Earliest Times to 1500 A. D.** 3-3 hrs. I, II.
- 221-222. Later European History, 1492-present.** 3-3 hrs. I, II, S.
- 301. Hispanic America.** 3 hrs. II.
- 308. Social and Economic History of the South.** 3 hrs. I.
- 309. Social and Economic History of the West.** 3 hrs. II.
- 311-312-313. American History, 1492-present.** 3-3-3 hrs. I, II, S.
- 375. The Far East.** 3 hrs.
- 402. American Diplomacy.** 3 hrs. I.
- 420. Makers of European History.** 3 hrs.
- 421. The Era of the Renaissance and the Reformation.** 3 hrs.
- 422. The French Revolution and the Napoleonic Era.** 3 hrs.
- 425-426. Modern European History, 1814-present.** 3-3 hrs.
- 427. Russia in the Nineteenth and Twentieth Centuries.** 3 hrs.
- 432. American History since 1914.** 3 hrs.

HOME ECONOMICS

Associate Professors Gray, Rouse, Strouss
Assistant Professors Foose, Neely

NOTE: A laboratory fee of \$1.00 will be paid for the following Home Economics courses: 104, 205, 301, 304, 350, 354, 420, 440, and 454.

A laboratory fee of \$2.00 will be charged for the following Home Economics courses: 125, 127, 202, 203, 227, 300, 329, and 405.

- 104. Applied Art.** 3 hrs.
Fundamentals of design and application of art principles in the selection of clothing and home furnishings.

125. **Clothing: Introductory Course.** 2 hrs.
For students who have had no study of clothing in high school.
127. **Textiles.** 2 hrs.
Study of natural and synthetic textile fibers and fabrics made from them.
- 202-203. **Food Selection and Preparation.** 3-3 hrs. I, II.
Food selection from the standpoint of body requirements, cost, methods of preparation. Planning, preparing, and serving meals from the standpoint of various budget levels.
205. **Elementary Nutrition.** 2 hrs.
To give a working knowledge of the dietary essentials for physical fitness.
227. **Clothing Construction.** 3 hrs.
Intermediate clothing construction and problems in selection.
300. **Experimental Cookery.** 3 hrs.
A study of and experience with the factors affecting standard cookery procedures.
Prerequisites: Home Economics 202 and 203.
301. **Dietetics.** 4 hrs.
Advanced course in nutrition relating to food, health, and dietary construction.
303. **Child Development.** 3 hrs.
A study of the physical, emotional, and social development of the infant and pre-school child. Lecture 2 hrs. Nursery School participation 2 hrs.
304. **Diet and Disease.** 3 hrs.
Study of the relation of diet to disease with emphasis upon prevention as well as dietary treatment.
329. **Advanced Clothing Construction.** 3 hrs.
Construction of tailored suits and coats.
Prerequisite: Home Economics 227.
350. **Home Nursing.** 3 hrs.
Prevention and control of diseases; home care of the sick, including prenatal care of the mother, postnatal care and training of the infant.
351. **Home Architecture.** 2 hrs.
A non-technical course in the understanding of the house in terms of better living facilities.
354. **Home Decoration.** 3 hrs.
A study of suitable furnishings for homes of various types.
355. **Flower Arrangement.** 1 hour.
A working knowledge of flower arranging as it pertains to the home. An understanding of flower show procedures.
358. **Economics of the Household.** 2 hrs.
The economic problems of the home.
400. **Consumer Buying.** 3 hrs.
Opportunities and responsibilities of the consumer; problems in purchasing specific household commodities.
401. **Special Topics.** 1-4 hrs.
Work consists of special problems in the fields of home economics.
Prerequisite: Permission of instructor.
405. **Quantity Cookery.** 3 hrs.
Practice in large-quantity food purchasing, preparation, and serving.
407. **Institutional Management.** 3 hrs.
A study of the organization and administration problems of food in institutions such as the school lunch, residence halls, hospitals, and cafeterias.

- 420. Household Equipment.** 3 hrs.
A study of household equipment, its selection, care, and use.
- 426. Home Management House Residence.** 3 hrs.
Residence in the home management house for a period of eight weeks to gain experiences in all phases of homemaking. Reservations a semester in advance.
- 440. Nutrition in the Home and School.** 3 hrs. II, S.
A course for teachers and any person interested in the home and school. A study of the fundamental principles of human nutrition, and their applications to the school lunch program.
- 454. Problems in Home Furnishings.** 3 hours.
Problems relating to modern decorating. Considering the selection and using of suitable fabrics for making curtains, draperies and slipcovers.

HOME ECONOMICS EDUCATION

Note: All students in teacher education in home economics should plan to enroll in each of the following courses in the year as designated below:

- 306. Methods of Teaching Home Economics Education.** 3 hours.
Curriculum planning, organization and evaluation of homemaking in secondary schools.
- 406. Methods in Adult Home Economics Education.** 3 hours.
Philosophy, promotion, organization, methods and techniques of working with out-of-school groups.
- 450. Student Teaching in Home Economics Education.** 8 hrs.
Directed teaching in an approved off-campus federally reimbursed homemaking program in a secondary school.

JOURNALISM

(Offered in Teachers College by the Department of Journalism of the College of Arts and Sciences)

- 327. Journalistic English.** 2 hrs. I, S.
A study of the methods of teaching and subject matter of courses in high school journalism.
- 328. High School Newspapers.** 2 hrs. II, S.
Designed to train high school teachers in the methods of directing high school papers. A study of editorial, news, feature, advertising, and circulation problems of high school newspapers.

LIBRARY SCIENCE

Instructor Locke

- 301. Teaching How to Use A Library.** 2 hrs. I, II.
For helping prospective teachers assist pupils in using a library more effectively.
- 310. Administration of School Libraries.** 3 hrs. S.
Organization of book collections, housing, equipment and maintenance, planning instruction in use of books; qualifications and duties of librarians.
- 315. Reference and Bibliography.** 3 hours. S.
Basic reference books, dictionaries, encyclopedias, indexes, yearbooks, and other reference materials are studied and evaluated with practice in detailed bibliography making.
- 320. Cataloguing and Classification.** 3 hrs. S.
Principles of cataloguing and classification, with practical experience in handling all types of books.
- 401. History of Books and Libraries.** 3 hrs. S.
The development of writing, history of writing materials, books from earliest manuscript form, history of printing and libraries.

404. Book Selection. 2 hrs.

Principles and methods of book selection for the elementary school library with practice in the use of aids in book selection.

405. Book Selection for Adolescents. 2 hrs.

Choice and evaluation of books for the junior and senior high school libraries, using the standard book selection aids and criteria.

450. Library Practice. 3 hrs. I, II, S.

General library policies; the circulation routine, library ethics for the attendant and everyday problems of a library. Daily practice in laboratory school or affiliated schools.

MATHEMATICS

Professor Wilburn

Associate Professor Goins

Assistant Professors Bragonier, Gray, Hardman, Wright

100. College Arithmetic. 3 hrs. I, II, S.

Important mathematical concepts in the fields of arithmetic, algebra, and geometry, including such items as interpretation of data, use of tables, ratios, etc. Diagnostic and remedial work in fundamentals.

200. Arithmetic for Teachers. 2 hrs. II, S.

Organization of subject matter in Grades 1-9; the relation of arithmetic to the whole curriculum; presentation of teaching procedures, and the study of the testing program.

NOTE: Additional courses in mathematics are listed in the College of Arts and Sciences.

MUSIC

Professor Kingsbury

Associate Professors Gelvin, Hugoboom

Assistant Professors Creighton, Jones, Lanegger, McMullen, O'Connell

Instructors Drescher, Fox, Imperi, Miller, Pursley

115-116. Elementary Theory. 4-4 hrs. I, II.

A thorough study of the melodic, harmonic, and rhythmic elements of music through writing, playing, singing, and listening. Study of triads, intervals, keys, scales, cadences, sight-singing, melodic and harmonic dictation. Includes seventh chords, modulation, clefs, and modal scales.

123. Introduction to Music Literature. 2 hrs.

A survey of music with special emphasis upon the relationship of music between music and the other major arts of each important period of Western civilization.

Prerequisite: Music 175.

175. Music in Human Relations. 2 hrs. I, II, S.

Emphasis is placed upon the use of music in school and society.

176. Listening and Reading Materials in Music for Children. 2 hrs.

Presents recorded materials suitable for children, books on and about music and musicians to be used in the elementary school program.

203. Music as an Art and a Science. 2 hrs. I, II, S.

Theoretical techniques used in reading and teaching song materials of elementary level.

204. Music Theory for Elementary Teachers. 2 hrs.

Further development of the content listed under Music 203.

Prerequisite: Music 203.

215-216. Advanced Theory. 4-4 hrs. I, II.

Sight-singing a wide variety of material, part writing including all types of modulation and altered chords, advanced work in melodic and harmonic dictation. Counterpoint in eighteenth century style.

231-232. Voice Techniques for Elementary Teachers. 1-1 hrs. I, II.

Problems in developing the voice of elementary school children.

262-462. Instrumental Techniques. 1-1 hrs. I, II.

The study of orchestra and band instruments with special emphasis on techniques of teaching beginning students. The course will be repeated with a different instrument each semester.

301-302. Analysis. 2-2 hrs. I, II.

The study of small and large forms; song form, minuet, variation, fugue, rondo, sonata, etc. Recognition of various forms by ear and by sight.

Prerequisite: Music 216.

305. Essentials of Kindergarten-Primary Music. 2 hrs.

Music materials and methods for use with kindergarten-primary children; songs, rhythms, recorded music, rhythm band instruments, and piano music.

312-313. Vocal Techniques. 1-1 hrs. I, II.

Foundation principles of voice usage, interpretation, and problems of vocal pedagogy. For instrumental music major students.

316-317. Keyboard Harmony. 2-2 hrs. I, II.

Applied harmony to develop facility in transposition, modulation, and harmonization of melodies with varied styles of accompaniments.

320. Orchestration. 2 hrs.

The study of the instruments of the modern orchestra, their history, technical possibilities and limitations, and practical application of technique in public school work.

370. Public School Music Methods. 2 hrs. I, II, S.

Methods and materials for teaching music in the elementary grades. Prerequisites: Music 175 and 203.

380. Instrumental Conducting. 2 hrs.

Technique and mechanics of the baton with emphasis on securing attacks, releases, dynamics, and tempo changes. Analysis of band and orchestral scores with practical application.

Prerequisite: Junior standing.

381. Choral Conducting. 2 hrs.

Continuation of Music 380 with emphasis on interpretation, voice classification, intonation, choral repertoire, and program building. Opportunity for practical experience is provided by the various college choral organizations.

422-423. History and Literature of Music. 3-3 hrs. I, II.

From early music to romantic period, including form and texture in music, study of major works of music of all periods, listening to music, project reports. Designed for music majors.

497-498. Piano Tuning and Repair. 2-2 hrs.

A study of the mechanism of the piano and training in the use of piano maintenance tools. Combination of lecture, demonstration and laboratory practice. Open to junior, senior, and graduate students by permission of department head.

MUSIC EDUCATION

338. Materials and Methods in School Music (Grades 1-6). 3 hrs.

Intensive study of vocal materials and methods of presentation in grades 1-6 inclusive.

340. Materials and Methods in School Music (Grades 7-12). 2 hrs.

Intensive study of general and vocal materials and methods of presentation of music in grades 7-12 inclusive.

371. Instrumental Methods and Materials. 3 hrs.

The study of methods of organizing classes and ensembles of instruments at all levels and materials for use in such groups. The band will be a required laboratory for all male members of the class.

480. Music Administration. 3 hrs.

The study of the administrative details involved in public school music at all levels and in all types of organizations.

481. Workshop in Music Education. 1-2 hrs. S.

A study of instructional problems encountered by teachers of band and orchestra.

APPLIED MUSIC

Major: All students following the Single Field Music Curriculum are required to select a major instrument or voice and complete 16 semester hours in this field, 8 semester hours of lower division courses and 8 semester hours of upper division courses. Students must pass a proficiency examination at the end of the fourth semester before being admitted to upper division applied music courses. If students fail this examination, they may be required to audit fourth semester courses until successful in the examination. Major applied music courses, with two semester hours credit, require two lessons per week with two hours daily preparation.

Secondary Piano: All students majoring in music will take four semesters of piano courses, Music 195 a, b, c, d, one semester hour credit each semester, and pass a proficiency examination at the end of the fourth semester. If this examination is not satisfactory, the student will be required to audit piano until the secondary piano requirements are met. The examination will include sight reading from a community song book, simple accompaniment from a given melodic line, simple transposition, and Clementi sonatinas, or the equivalent. Secondary applied music courses with one hour credit require two lessons per week and one hour daily preparation.

Elective: Students may elect applied music courses upon approval of the music department, for one hour credit each semester. Two lessons per week with one hour daily preparation.

Senior Recital: All music majors will appear on a senior public recital to be approved by the music faculty before becoming eligible for graduation.

182 a, b, c, d	-	382 a, b, c, d	Flute	1-2 hours
183 a, b, c, d	-	383 a, b, c, d	Oboe	1-2 hours
184 a, b, c, d	-	384 a, b, c, d	Clarinet	1-2 hours
185 a, b, c, d	-	385 a, b, c, d	Bassoon	1-2 hours
186 a, b, c, d	-	386 a, b, c, d	French Horn	1-2 hours
187 a, b, c, d	-	387 a, b, c, d	Trumpet	1-2 hours
188 a, b, c, d	-	388 a, b, c, d	Trombone	1-2 hours
189 a, b, c, d	-	389 a, b, c, d	Baritone	1-2 hours
190 a, b, c, d	-	390 a, b, c, d	Tuba	1-2 hours
191 a, b, c, d	-	391 a, b, c, d	Violin	1-2 hours
192 a, b, c, d	-	392 a, b, c, d	Viola	1-2 hours
193 a, b, c, d	-	393 a, b, c, d	Cello	1-2 hours
194 a, b, c, d	-	394 a, b, c, d	String Bass	1-2 hours
195 a, b, c, d	-	395 a, b, c, d	Piano	1-2 hours
196 a, b, c, d	-	396 a, b, c, d	Voice	1-2 hours
197 a, b, c, d	-	397 a, b, c, d	Organ	1-2 hours

Course Descriptions: Complete descriptions of all applied music courses are stated in a special bulletin, "Applied Music at Marshall College," available upon request from the registrar or the Department of Music.

MAJOR ENSEMBLES

All music majors are required to enroll in a major ensemble for eight semesters, representing their applied music major field as assigned by the Department of Music. Regular attendance at all rehearsals and performances is required.

107-307. Choral Union. ½-½ hr. I, II.

Combined chorus of students from all other choral organizations plus elective students. Presents two major oratorios each year plus one or two concerts of large sacred and secular compositions of all periods. Open to all Marshall students by consultation. Credit applies only to persons not enrolled in one of the other choral ensembles.

207-407. Ensemble Singing. 1-1 hrs. I, II.

Students will be assigned to one of the following groups:

Treble Clef Club: Unselected women's choir singing standard literature for women's voices. Daily rehearsals with frequent concerts. Open to all college female students.

Men's Concert Choir: Concert group performing concert and radio music from all periods of music literature with emphasis on audience appeal. No previous training required but strict attendance required. Daily rehearsals and frequent concerts are presented in Huntington and other cities. Open to all male college students.

A Capella Choir: Mixed training choir, open to all students on the campus. Music reading ability not essential but preferred. Daily rehearsals with frequent public concerts.

Symphonic Choir: Mixed choir singing the best of choral literature from all periods. Sight reading a prerequisite—admission by audition only. Primarily for music majors but open to all students of at least sophomore standing desiring audition. Daily rehearsals and frequent concerts are presented in Huntington and other cities.

208-408. Orchestra. 1-1 hr. I, II.

A study of the standard symphonic literature. The orchestra presents frequent concerts and plays the accompaniment for college productions of oratorios, operas and other large choral compositions. Open to all college students by consultation. Daily rehearsals.

265-465. Band. 1-1 hr. I, II.

The band studies the standard literature and presents several concerts in Huntington and other cities as well as playing at all college athletic events. Open to all college students by consultation.

PHYSICAL EDUCATION

Professor Robinson

Associate Professors Berryman, Fitch, Gullickson, Josephs, McDonough

Assistant Professor Willey

Instructor Wickline

Graduate Assistant Cyrus

103. Football. 1 hr. I.

Theory and technique of football fundamentals and not credit for playing football.

104. Marching and Calisthenics. 1 hr. I.

Theory and practice in teaching. Separate sections for men and women. Offered alternate years for women.

108. Field Ball and Hockey. 1 hr. I.

Theory and technique of field ball and hockey. Offered alternate years.

109. Track. 1 hr. for men (full semester); $\frac{1}{2}$ hr. for women (one-half semester). II.

Fundamentals in track and not credit for participating in track. Separate sections for men and women. Women take course same semester as Physical Education 111. Offered alternate years for women.

110. Basketball. 1 hr. II.

Theory and technique of basketball fundamentals and not credit for playing basketball. Separate sections for men and women. Offered alternate years for women.

111. Baseball. 1 hr. for men (full semester); $\frac{1}{2}$ hr. for women (one-half semester). II.

Theory and technique of baseball fundamentals and not credit for playing baseball. Separate sections for men and women. Offered alternate years for women.

113-114. Orientation in Physical Education. 1-1 hrs. I, II, S.

Designed to acquaint students with the following activities: volleyball, rhythm, swimming, basketball, stunts, postural work, softball.

NOTE: Sections of Physical Education 113-114 are maintained for those who, on college physician's advice, are restricted to certain types of physical activity. Carried on under college physician's supervision to improve general physical condition and to correct physical handicaps as far as possible.

205. Intermediate Swimming. 1 hr. I.

Theory and practice of fundamental strokes and diving. Separate pools for men and women.

206. Soccer and Speedball. 1 hr. I.

Theory and technique of play. Separate sections for men and women. Offered alternate years for women.

207. Archery and Tennis. 1 hr. II.

Theory and technique of play. Separate sections for men and women.

221. Health Education. 2 hrs. I, II.

Study of health problems as they relate to the classroom, to the individual pupil and to the school community.

222. First Aid. 2 hrs. I or II.

First aid and safety education in the home, in the school, and on the playground. Practical demonstrations, discussions, lectures. Standard and Advanced Red Cross First Aid Certificates will be issued to students successfully completing the course.

304. Creative Dance. 1 hour. I.

Analysis and technique of rhythm of body movement with emphasis upon elementary dance design. Open to men and women.

305. Creative Dance. 1 hour. II.

Continuation of Physical Education 304 with emphasis upon more advanced dance designs. Open to men and women.

306. Tumbling. 1 hour. I.

Fundamentals and practice of stunts, tumbling, and pyramid building. Separate sections for men and women. Offered alternate years for women.

307. Scouting. 1 hr. I.

Men: Organization and administration of Boy Scout troops, badge tests, etc. Women: Principles of Girl Scouts and Campfire organization.

308. Camping and Hiking. 1 hr. II.

Lecture and laboratory. Problems in organization, food, and shelter. Separate sections for men and women.

309. Advanced Tumbling (Men). 1 hr.**310. Postural Gymnastics. 1 hr. II.**

Laboratory work for men and women in administering remedial exercises. Coordinating with Physical Education 322.

311. Physical Education for Secondary Schools. 1 hr. I.

Organization and practice of games appropriate for secondary schools. Juniors and seniors preparing to teach in secondary schools but not majoring in physical education. Separate sections for men and women.

313. Personal Hygiene. 2 hrs. I, II.

Study of those phases of hygienic living which should be understood by all college students. Special emphasis placed on the personal aspects of hygiene. Separate sections for men and women.

315. Leadership in Physical Education. 1 hr. II.

Emphasis will be placed upon organization and practice of handling groups including grades 1-12 for physical activities on the playgrounds, in the gymnasium, in the classroom.

316. Games. 1 hr. I, II.

Students will experience the selection, adaptation, and presentation of games and rhythmic material on the elementary level.

- 319. Laboratory for 315.** 1 hr. II.
Laboratory consisting of practice in the Laboratory School.
Prerequisite: Physical Education 315.
- 320. Laboratory for 316.** 1 hr. II.
Laboratory consisting of practice in the Laboratory School.
Prerequisite: Physical Education 316.
- 321. Kinesiology.** 3 hrs. I.
Applied anatomy of the human musculature in relation to physical activity.
- 322. Corrective Physical Education.** 3 hrs. II.
Theory of remedial exercise and individualizing of physical activities to meet the needs of the physically handicapped and postural cases. Correlates with Physical Education 310.
Prerequisite: Physical Education 321.
- 330. Rhythmic Activities.** 1 hr. II.
Rhythmic activities for secondary schools.
- 403. Advanced Swimming.** 1 hour. I.
Instruction and tests for American Red Cross Senior Life Saving. Upon satisfactory completion, Senior Life Saving Certificate issued. Separate sections for men and women.
- 404. Water Safety Instruction.** 1 hour. II.
Material and methods of teaching American Red Cross Water Safety Course. Upon satisfactory completion, Water Safety Instructor's Certificate issued. Separate sections for men and women.
- 405. Folk Dancing and Clogging.** 1 hour. I.
Theory and practice of folk dancing and clogging. Open to men and women.
- 410. Organization and Administration.** 2 hrs. I, II.
Procedures in the organization and administration of a physical education program, including purchase, care, and use of equipment.
- 418. Individual or Dual Sports.** 1 hr. I.
The following sports are offered: badminton, ping pong, handball, shuffleboard and horseshoes. Women only
Note: Archery, tennis, and advanced swimming are offered in other courses which will meet this requirement.
- 420-421. Advanced Practice and Officiating.** 1-1 hrs. I, II.
Separate sections for men and women.
- 422. Athletic Training.** 2 hrs. II.
Massage, conditioning, first aid, and treatment of injuries. Both theory and practice. Men only.
- 425. Methods of Coaching Football and Basketball.** 2 hours. II, S.
Different styles of playing, methods of selecting and teaching players, officiating, scouting and a scientific analysis of the player and methods of playing.
- 440. Physiology of Exercise.** 3 hrs. I, II.
Analysis of physiological changes which occur in the body during exercise.
- 450. Playground and Community Recreation.** 2 hrs. I, II.
Theory and practice in organization and administration of playground and community recreational programs.
- 460. Education for Personal and Family Life.** 2 or 3 hrs.
Development of programs concerned with sex-character education in schools and other community agencies.

POLITICAL SCIENCE

Professor Harris

- 201. American National Government.** 3 hrs. I, II, S.
Survey of principles of American philosophy of government, emphasizing their development in a practical study of the mechanism through which the public will is formulated, expressed and carried out.

- 202. American State Government.** 3 hrs. I, II, S.
General study with special attention to the state government of West Virginia.
- 351. Modern Governments.** 3 hrs.
A general survey of the organization and functioning of contemporary major European governments.
- 352. The United States and Western Hemisphere Neighbors.** 3 hrs.
Political, economic, racial and social factors in our relations with the countries of North and South America.
- 353. Oriental Politics and Civilization.** 3 hrs.
A study of the political, social, economic, and religious factors that have promoted the awakening of China, Japan, and India.

SAFETY EDUCATION

Associate Professor Fitch

- 485. Driver Education and Training.** 2 hrs.
A course in materials and methods in teaching driver education and training to students preparing to teach in high schools. Two periods of classroom instruction and one hour laboratory per week.
Prerequisites: Ability to drive an automobile and the possession of a West Virginia driver's license. Non-drivers with the instructor's permission may enroll without credit for the laboratory section of this course in order to learn to drive an automobile.
- 486. Education for Safe Living.** 2 hrs.
An approach to the various problems in safety education as related to the development of proper attitudes and practices for safe living.

SCIENCE

GENERAL, BIOLOGICAL, AND PHYSICAL

Professor Darlington
Associate Professor Loy
Assistant Professor Cox

NOTE: A laboratory fee of \$2.00 will be charged for the following courses:

- 107-108. Biological Science.** 3-3 hrs. I, II, S.
The cell, tissue, human body; familiar animal and plant life; conservation of soil, forests, and wild life. Nutrition, poisons, bacteria and disease and other pathogens; heredity and eugenics; animal and vascular plant life.
- 109-110. General Physical Science.** 3-3 hrs. I, II, S.
The solar system, the stellar universe, energy with its various forms, sources, transformations, and uses. Forms and structures of matter, the earth's crust, the changing earth, hydrosphere and atmosphere, wind and weather.
- 306. Field Biology.** 3 or 4 hrs. II, S.
Identification, classification, different habitats, and communities of animal and plant life in field and laboratory.
Prerequisite: 6 semester hours of biological science.
- 307. Science in the Elementary School.** 3 hrs.
The place of science in the elementary school. Methods and technique presented in classroom and laboratory.
Prerequisite: 6 semester hours of biological or physical science.
- 400. Astronomy.** 3 hours. I, S.
A study of the stars and planets designed especially to assist teachers and others develop an interest in the science of astronomy.
- 482. Conservation of Forests, Soil, and Wild Life.** 3 hours. II, S.
Primarily for teachers in the biological sciences, general and applied sciences. Includes field work, seminars, and demonstrations on phases of conservation.

SOCIAL STUDIES

Professor Harris

Associate Professor Cubby

Assistant Professors Felty, Phillips

Instructor Smith

104-105. Development of Social Institutions. 3-3 hrs. I, II, S.

An interpretive survey of the growth of Western and the major Eastern civilizations from the earliest times to the present.

201-202. Fundamental Social Problems. 3-3 hrs. I, II, S.

Integrated social science. A study of the functions of contemporary social, political, and economic institutions.

303. West Virginia History, Geography, and Government. 3 hrs. I, II, S.

COLLEGE OF ARTS AND SCIENCES

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PURPOSE

ORGANIZATION

HONORS COURSES

BACCALAUREATE DEGREES

REQUIREMENTS FOR DEGREES

TWO-YEAR CURRICULA

PRE-PROFESSIONAL CURRICULA

COURSES OF INSTRUCTION

THE COLLEGE OF ARTS AND SCIENCES

EDUCATION AND LIBERAL ARTS

In order to be of the greatest service to society, one must have a liberal view, broad sympathies, and a constructive attitude toward the rights of others. The student who receives a liberal arts education is much more likely to have this broader outlook, and is also more likely to see beyond the horizon of his own selfish interests than is the individual whose training has been directed along a single line of specialization.

The primary purpose of a liberal arts course is to acquaint the student "with what man has done, that is, history; with what he has thought, that is, philosophy; with what he has found out, that is, science; with what man has created, that is, art; with what he has felt and expressed, that is, literature; and with what he has worshipped, that is, religion." Knowledge alone must not be the purpose and the end of education. Courses of study should produce students able to deal with general as well as specific occasions. This faculty is best acquired by means of a liberal education and so the requirements for the Bachelor of Science degree and those for the Bachelor of Arts degree do not differ widely. In other words, one of the main purposes of the College of Arts and Sciences is to educate rather than to train. Training belongs to the more specialized schools. The person best fitted for life is usually one who combines both these types of education.

The College of Arts and Sciences now offers the following four-year degrees: Bachelor of Arts, Bachelor of Science, Bachelor of Science in Chemistry, and Bachelor of Engineering Science; also the following two-year degrees: Associate in Arts, and Associate in Science.

For admission requirements see page I-33.

ORGANIZATION

The various departments of the College of Arts and Sciences are grouped as follows:

Division of Humanities: Language, English, and the Arts

English, Latin, French, Spanish, German, Greek, art, speech, music, physical education, Bible.

Division of Sciences: Mathematics and the Natural and Physical Sciences

Mathematics, physics, chemistry, geology, home economics, botany including bacteriology, zoology, engineering, business administration.

Division of Social Sciences

History, sociology, economics, political science, journalism, philosophy, psychology, geography, education.

Through the requirement of a minimum number of hours from each group, over-specialization will be avoided, while through the requirement of a maximum number of hours in a particular group an opportunity is afforded for intensive study in closely related subjects.

HONORS COURSES

Students of exceptional ability who possess a high degree of initiative may be registered by a department in Honors Courses. Such students are excused from some of the routine demands of the undergraduate courses but are required to maintain a higher standard of work both as to quantity and quality. Any junior with an outstanding scholastic record may apply to the head of the department for the privilege of enrolling as a candidate for honors in the field of his choice. Students so recommended by the head of the department, and approved by the Honors Committee, may receive eight hours credit during their senior year in courses numbered 495H and 496H. Applications should be filed by the opening of the second semester of the junior year, and must be recommended by the head of the department. Requirements, 3.5 in major, 3.3 over-all average. Both courses must be taken in sequence in order to receive credit.

THE BACCALAUREATE DEGREE

A student registering in the College of Arts and Sciences may elect to receive one of the following degrees: Bachelor of Arts (A.B.), Bachelor of Science (B.S.), Bachelor of Science in Chemistry (B.S. in Chem.), Bachelor of Business Administration (B.B.A.), or Bachelor of Science in Engineering (B.E.S.). To obtain the degree of his choice the student must fulfill the requirements of 128 semester hours of credit for the A.B., B.S., B.S. in Chemistry, and B.B.A. degrees or 144 hours for the B.E.S. degree in the curriculum specified by the department in which he is majoring.

REQUIREMENTS FOR THE A. B., B. S., AND B. S. IN CHEMISTRY DEGREES

GENERAL REQUIREMENTS

- (1) Candidates for graduation must have a quality point average of 2.0 or higher.
- (2) In no one of the divisions listed under "organization" may more than 72 hours be credited toward the A. B. degree or 84 toward the B. S. degree.
- (3) Forty-eight hours must be earned in courses numbered 300-499 for the A. B. and B. S. degrees.
- (4) Before admission to the junior year, a student must have a quality point average of 2.0 or better on the work which was completed in the freshman and sophomore years. Students who have completed two years of work with a quality point average of less than 2.0 may not take courses in advance of the 200 series.
- (5) ALL SPECIFIC REQUIREMENTS (pages III-5, III-6), for the A. B. and B. S. degrees must be completed before the student reaches the senior level. All seniors, however, who find it necessary to take a required course in the 100 series must make a grade of B or better to receive full credit toward graduation, otherwise half credit will be allowed.
- (6) Candidates for the A. B. and B. S. degrees must earn at least 26 hours in a major subject, (see, however, departmental requirements), no more than 6 of which may be selected from courses in the 100 series.
The quality point average in the major subject must be 2.0 or better, and no grade of less than C will be accepted as meeting the requirement in the major subject.
Candidates must also earn at least 12 hours in a minor subject, no more than three of which may be from the 100 series. The minor subject may be such as the student elects.
- (7) No more than eight hours may be elected in the Department of Education by students in the College of Arts and Sciences.
- (8) The maximum amount of work which any student may take in a single department is 40 hours for the A. B. degree and 46 hours for the B. S. degree.

GENERAL REQUIREMENTS FOR THE B. B. A. DEGREE

- (1) Candidates for the B. B. A. degree must earn a minimum of 128 semester hours, and must complete all of the specific requirements set forth in one of the Business Administration curricula. (presented on pages III-19, III-20, III-21, and III-22.
- (2) The quality point average for all subjects elected must be 2.0 or better and a grade of C or better must be earned in each required business administration course.
- (3) Before admission to the junior year, a student must have a quality point average of 2.0 or better on the work which was completed in the freshman and sophomore years. Students who have completed two years of work with a quality point average of less than 2.0 may not take courses in advance of the 200 series.

- (4) Seniors who find it necessary to take a required course in the 100 series must make a grade of B or better in that course to receive full credit for it toward graduation; otherwise half credit will be given.

GENERAL REQUIREMENTS FOR B. E. S. DEGREE

- (1) Candidates for the B. E. S. degree must earn a minimum of 144 semester hours, and must complete all of the specific requirements in the Engineering option which they elect to follow.
- (2) The quality point average for all subjects elected must be 2.0 or better and the quality point average in the major field must be 2.0 or better. No grade of less than C will be accepted as meeting the requirement in the major field.
- (3) Before admission to the junior year, a student must have a quality point average of 2.0 or better on the work which was completed in the freshman and sophomore years. Students who have completed two years of work with a quality point average of less than 2.0 may not take courses in advance of the 200 series.
- (4) Seniors who find it necessary to take a required course in the 100 series must make a grade of B or better to receive full credit toward graduation, otherwise half credit will be allowed.

In computation of quality point averages, all grades of A, B, C, D, F, and FIW will be taken into consideration.

For students in Engineering, the major field is interpreted to include all courses in mathematics as well as in engineering, and to include physics, chemistry, business administration, or geology as appropriate for the particular option elected.

SPECIFIC REQUIREMENTS FOR THE A. B. DEGREE

HUMANITIES

I. English

- a. English Composition 101 and 102 6 hrs.
- b. English Literature 221 and 222 4 hrs.
- c. American Literature 341 or 342 3 hrs.

II. Speech 101 and 102 4 hrs.

III. Foreign Language

Twelve hours must be earned in one foreign language. These hours may be earned either in a new language or in one already begun in high school. If a student enters deficient in one unit of foreign language he must present 15 hours for graduation; if he enters deficient in two units he must present 18 hours for graduation 12 hrs.

(Those students contemplating graduate study in any field should have French and German. German is especially recommended for students majoring in science.)

IV. Physical Education 113 and 114 or Military Science 2 hrs.—8 hrs.

SCIENCES

I. Natural and Physical Sciences

Choose two from a, b, c, and d.

- a. Physics 8 hrs.
- b. Chemistry 8 hrs.
- c. 4-hr. lab. course in Botany and 4-hr. lab. course in Zoology 211. 8 hrs.
- d. Geology 200 and any 300 course 7 hrs.

Total 15-16 sem. hrs.

Candidates for the A. B. degree with journalism as a major may satisfy the science requirement by choosing one of a, b, c, or d.

II. Mathematics 3 hrs.

SOCIAL SCIENCES

I. History, Economics or Political Science (in two)	8-9 hrs.
II. Psychology, Sociology or Philosophy (may be distributed)	8-9 hrs.
Total	16-18 sem. hrs.
GRAND TOTAL	65-67-68 hrs.

SPECIFIC REQUIREMENTS FOR THE B. S. DEGREE

HUMANITIES

I. English

a. English Composition 101 and 102	6 hrs.
b. English Literature 221 and 222	4 hrs.
c. Speech 101 and 102	4 hrs.

II. Foreign Language

Twelve hours must be earned in one foreign language. These hours may be earned either in a new language or in one already begun in high school

12 hrs.

Not required of business administration majors if two years of high school language has been presented. It is urgently recommended that all business administration majors take at least twelve hours of college work in a foreign language, as such will be required in pursuit of all advanced degrees by graduate schools.

(Students contemplating graduate study in any field should have French and German. German is especially recommended for students majoring in science.)

III. Physical Education 113-114 or Military Science	2 hrs.—8 hrs.
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SCIENCES

I. a. Physics	8 hrs.
b. Chemistry	8 hrs.
c. 4-hr. lab. course in Botany and 4-hr. lab. course in Zoology 211	8 hrs.
d. Geology 200	4 hrs.
e. Mathematics	6 hrs.
Total	34 hrs.

Candidates for the B. S. degree must take the subjects mentioned under a, b, c, d, and e with the following exceptions: business administration majors are required to take only 8 hours from a or b or c, or geology 200 plus 3 additional hours in geology, and 3 hours in mathematics. Majors in dietetics and home economics take only b and c.

SOCIAL SCIENCES

I. History, Economics, or Political Science (in two)	8-9 hrs.
II. Psychology, Sociology, or Philosophy (may be distributed)	8-9 hrs.
GRAND TOTAL	78-80 hrs.

TWO-YEAR CURRICULA

For those who for various reasons may not be able, or may not wish to complete four years of college work, a number of two-year special curricula have been organized. These courses will serve three purposes: (1) They will enable the student to avoid rambling aimlessly through a number of unrelated courses merely to say that he has attended college for a certain length of time; (2) they will enable the student to prepare better for some vocation or phase of work in which he may be interested; (3) they will give the student a feeling of satisfaction of having completed a course of study.

Upon the completion of one of these courses the student may be granted the degree of Associate in Arts or Associate in Science, depending on the course pursued. However, after the completion of a two-year course the student may, if he wishes, continue toward a Baccalaureate degree.

GENERAL EDUCATION

Two-Year Course

First Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
English 101	3	English 102	3
English 221	2	English 222	2
Botany 203	4	Zoology 211	4
History	3	Psychology 100	3
Mathematics 120	3	*Mathematics 122	3
Orientation 100	1	Electives	2
	16		17

*Required if Physics is taken.

Second Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
English 341	3	English 342 (or Humanities)	3
Chemistry or Physics	4	Chemistry or Physics	4
Pol. Sci. 101 or Economics 109.....	2	Sociology 132	2
Electives	7	Electives	7
	16		16

BUSINESS ADMINISTRATION

ACCOUNTING

Two-Year Course*

First Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
English 101	3	English 102	3
Business Administration 215	3	Business Administration 216	3
Political Science 101	2	Political Science 102	2
Geography 203	3	Mathematics 120 or 223 or 150	3
Orientation 100	1	Elective	4
Elective	3		
	15		15

Second Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Business Administration 307	3	Business Administration 312	3
Business Administration 311	3	Business Administration 318	3
Business Administration 313	2	Business Administration 324	3
Business Administration 323	3	Business Administration 413	3
Business Administration 411	3	Economics 242	3
Economics 241	3	Elective	3
	17		18

*For degree curricula see page III-20.

GENERAL BUSINESS

Two-Year Course

First Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
English 101	3	English 102	3
Business Administration 215	3	Business Administration 216	3
Political Science 101	2	Political Science 102	2
Geography 203	3	Mathematics 120 or 223 or 150	3
Orientation 100	1	Business Administration 231	2
Elective	3	Elective	2
	15		15

Second Year

<i>First Semester</i>	<i>Hours</i>	<i>Second Semester</i>	<i>Hrs.</i>
Economics 241	3	Economics 242	3
Business Administration 307	3	Business Administration 308	3
Business Administration 323	3	Business Administration 324	3
Business Administration 320	3	Business Administration 330	3
Business Administration 340	3	English 222	2
English 221	2	Elective	3
	17		17

RETAILING

Two-Year Course**

First Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
English 101	3	English 102	3
Speech 101	2	Speech 102	2
*Economics 109	2	*Economics 110	2
*Mathematics 150 or 100	3	Geography 203	3
Orientation 100	1	Electives	6
Electives	5		
	16		16

*Students having a possible interest in the four-year degree should take Economics 241-242, in their sophomore year, and Mathematics 150.

Second Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Psychology 201	4	Business Administration 330	3
Business Administration 340	3	Business Administration 344	3
Business Administration 343	3	Electives	10
Business Administration 345 or 346	3		
Elective	3		
	16		16

**For degree curricula see pages III-20—III-21.

SECRETARIAL

Two-Year Secretarial Course*

First Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
English 101	3	English 102	3
Economics 109	2	Economics 110	2
Business Administration 201	4	Business Administration 202	4
Speech 101	2	Mathematics 120 or 223 or 150	3
**Business Administration 103	2	Speech 102	2
Orientation 100	1	Business Administration 104	2
Electives	2		
	16		16

Second Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Business Administration 215	3	Business Administration 216	3
Business Administration 301	3	Business Administration 302	3
Business Administration 305	3	Business Administration 304	2
Business Administration 307	3	Business Administration 308	3
Business Administration 404	3	Business Administration 405	3
		Elective	3
	15		17

*For degree curricula see pages III-20—III-22.

**Not open to students who have had one year typing in high school or the equivalent.

LABORATORY TECHNOLOGIST**TWO-YEAR COURSE**

The Laboratory Technologist course leading to the degree of Associate in Science, (A.S.), should be elected by students interested in entering a professional school in Medical Technology or in securing employment as a technician in an industrial or health laboratory.

First Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Chemistry 101	4	Chemistry 102	4
Zoology 211	4	Business Administration 103	2
English 101	3	English 102	3
Mathematics 120	3	Mathematics 122	3
Speech 101	2	Speech 102	2
Orientation 100	1	Electives	2-3
	17		16-17

Second Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Chemistry 203	4	Chemistry 204	4
Chemistry 317	5	Chemistry 318 or Zoology 315	5-4
Psychology 318	2	Physics 203 and 204	4
Physics 201 and 202	4	Botany 302	4
	15		17-16

Recommended electives: art, mechanical drawing, economics, foreign languages, history, mathematics, or sociology.

**CURRICULUM IN ADVERTISING
B. S. DEGREE**

Students wishing to prepare for work in advertising may elect a joint major into which is incorporated courses in business administration, journalism and speech.

First Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
English 101	3	English 102	3
Speech 101	2	Speech 102	2
*Language	3	*Language	3
Science (Arts & Science Courses)	4	Science (Arts & Science Courses)	4
Journalism 101	2	Mathematics 100, 120, 150, or 223	3
Physical Education 113	1	Physical Education 114	1
Orientation 100	1		

Second Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
English 221	2	✓English 222	2
*Language	3	*Language	3
Psychology 201	4	✓Art 202	2
✓Political Science 201	3	**Business Administration 103	2
✓Art 103	3	✓Business Administration 231	2
Electives	2-3	Sociology 200	3
		***Electives	3

Third Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Speech 207	3	Economics 242	3
Economics 241	3	Speech 260	2
Psychology 332	2	Business Administration 330	3
Business Administration 340	3	Journalism 382	4
***Electives	6	***Electives	3

Fourth Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Art 312	2	Speech 360	2
Journalism 335	3	Journalism 402	3
Business Administration 342	2	Speech 431	3
Business Administration 318	3	Business Administration 442	3
Journalism 355	2	***Electives	5
***Electives	4		
Total			128

*Twelve hours of one foreign language are required unless the student presents two units from high school.

**Not open to students who have had one year of typewriting in high school or the equivalent.

***A student whose major interest is in BUSINESS ADMINISTRATION should include the following courses in his electives:

Business Administration 215	3	Business Administration 216	3
Business Administration 307	3	Business Administration 308	3
		Business Administration 320	3

***A student whose major interest is in JOURNALISM should include the following courses in his electives:

Journalism 201	4	Journalism 202	4
Journalism 301	4	Journalism 302	4
Journalism 336	3	Journalism 405	2

***A student whose major interest is in SPEECH (Radio-TV) should include the following courses in his electives:

Speech 240	3	Speech 306	3
Speech 312	2	Speech 313	2
Speech 320	3	Speech 361	2
Speech #18	3		

CURRICULUM FOR ART MAJORS
(DIVISION OF HUMANITIES)

For course descriptions see listing of courses in Teachers College bulletin under the heading of Art.

Students in the College of Arts and Sciences may major in Art and earn the A. B. Degree by meeting the general and specific requirements and by taking the following courses in Art:

Art 101, 102, Drawing	6 hrs.
Art 103, Principles of Drawing and Painting	3 hrs.
Art 200, 305, Design	5 hrs.
Art 307, Sculpture	} 6 hrs.
Art 350, Water Color Painting	
Art 455, Oil Painting	
Art 401, 402, History of Art	6 hrs.
TOTAL	26 hrs.

Elect six hours from the following:

Art 202, Lettering	2 hrs.
Art 216, Commercial Art	3 hrs.
Art 312, Art Appreciation	2 hrs.
Art 306, Design	3 hrs.
Art 406, Figure Drawing	3 hrs.
GRAND TOTAL	32 hrs.

CURRICULUM FOR BIOLOGICAL SCIENCE MAJORS

The major in Biological Science has been designed for those students whose interests are divided between the fields of Botany and Zoology and whose vocational preparation requires a well-balanced background in these two fields.

A major in this field must complete 32 semester hours in Biological Science of which 12 are specifically designated in Zoology and 12 in Botany. The remaining 8 hours may be divided between the two fields or elected in either field. The major may lead to either an A. B. or a B. S. degree although the latter is recommended because of the training it provides in the other sciences and will be useful to students who plan to enter the fields of conservation, government biologist, park naturalist, wildlife technician, teaching or research.

In addition to the general and specific requirements for the A. B. or B. S. degree, majors will fulfill the following requirements:

Zoology 211	4 hrs.	
Zoology 212	4 hrs.	
Zoology 301 or 302	4 hrs.	12 hrs.
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Botany 203	4 hrs.	
Botany 316	4 hrs.	
Botany 302 or 315 or 304	4 hrs.	12 hrs.
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Additional courses in Botany and/or Zoology.....	8 hrs.	
TOTAL	32 hrs.	

Recommended:

French or German
Geology
Chemistry
Psychology.

PREPARATION REQUIRED FOR STUDENTS PLANNING TO BE DIETITIANS

Students planning to prepare for positions as dietitians must be graduates of a four-year college of approved standing. During their undergraduate years they must follow the courses prescribed by the American Dietetic Association for students applying for admission to graduate training courses.

The following curriculum includes all required courses.

CURRICULUM FOR DIETITIANS

B. S. DEGREE

First Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
English 101	3	English 102	3
Language	3	Language	3
Speech 101	2	Chemistry 101	4
Home Economics 202	3	Home Economics 203	3
Home Economics 205	2	Physical Education 114	1
Physical Education 113	1	Speech 102	2
Orientation 100	1		
	<hr/>		<hr/>
	15		16

Second Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
English 221	2	English 222	2
Language	3	Language	3
Chemistry 102	4	Sociology 200	3
Home Economics 301	4	Zoology 211	4
Economics 241	3	Psychology 201	4
	<hr/>		<hr/>
	16		16

Third Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Chemistry 317	5	Chemistry 318	5
Psychology 302	3	Zoology 315	4
History 311	3	Home Economics 420	3
Home Economics 300	3	History 312	3
Electives	2		
Recommended:			<hr/>
Home Economics 127			15
Home Economics 351			
	<hr/>		<hr/>
	16		

Fourth Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Botany 302	4	Home Economics Education 406	3
Home Economics 303	3	Home Economics 405	3
Home Economics 304	3	Home Economics 407	3
Electives	8	Electives	7
	<hr/>		<hr/>
	18		16

NOTE: Concentration subject within the major division must include 26 semester hours, no more than six of which may be counted from courses in the 100 series. An A. B. degree may be earned by adding three hours of American Literature.

**PREPARATION FOR ENTRANCE TO SECOND YEAR OF
FORESTRY SCHOOL**

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
English 101	3	English 102	3
Botany 203	4	Zoology 211	4
Mathematics 120	3	Mathematics 122	3
Chemistry 101	4	Geology 200	4
Physical Education 113	1	Chemistry 102	4
Orientation 100	1	Physical Education 114	1
	16		19

NOTE: Students expecting to enroll in forestry at West Virginia University must do so before July 15 for second year work.

**CURRICULUM FOR GEOGRAPHY MAJORS
(DIVISION OF SOCIAL SCIENCES)**

For course descriptions see listing of courses in Teachers College bulletin under the heading of Geography.

Students in the College of Arts and Sciences may major in Geography and earn the A. B. or B. S. degree by meeting the general and specific requirements and by taking the following courses in Geography:

Required in this group	15 hours
Geography 203, General Economic	3 hrs.
Geography 305, North America	3 hrs.
Geography 317, World Problems	3 hrs.
Geography 320, Conservation	3 hrs.
Geography 405, World Political	3 hrs.
Required in this group	3 hours
Geography 309, Latin America	3 hrs.
Geography 406, Brazil	2 hrs.
Geography 407, Argentina	2 hrs.
Geography 408, Mexico	2 hrs.
Required in this group	3 hours
Geography 429, Map Projections	3 hrs.
Geography 430, Cartography	3 hrs.
Required in this group	6 hours
Geography 302, Europe	3 hrs.
Geography 315, Africa and Australia	3 hrs.
Geography 401, Historical	3 hrs.
Geography 403, Asia	3 hrs.
Geography 409, Canada	2 hrs.
Geography 412, Soviet Lands	2 hrs.
Geography 413, British Isles	2 hrs.
Geography 415, India	2 hrs.
Total required	27 hours

CURRICULUM FOR HOMEMAKING

A. B. or B. S. DEGREE (Home Economics Major)

First Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
English 101	3	English 102	3
Language	3	Language	3
Chemistry 101	4	Chemistry 102	4
Home Economics 104	3	Home Economics 205	2
Speech 101	2	Speech 102	2
Physical Education 113	1	Physical Education 114	1
Orientation 100	1		
	17		15

Second Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
English 221	2	English 222	2
Language	3	Language	3
Zoology 211	4	Sociology 200	3
Home Economics 127	2	Home Economics 227	3
Home Economics 202	3	Home Economics 203	3
Elective (for A. B.—Mathematics) 3	3	Elective	2
	17		16

Third Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Psychology 201	4	Sociology 308	3
History 311	3	History 312	3
Home Economics 303	3	Home Economics 358 or 400	2-3
Home Economics Elective	3	Psychology 302	3
Elective (For A.B.—Eng. 341 or 342) 3	3	Economics 241	3
	16	Elective	2
			16-17

Fourth Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Botany 302	4	Home Economics 420	3
Home Economics 426	3	Home Economics Education 406	3
*Home Economics Elective	3	*Home Economics Elective	3
Electives	6	Electives	6
	16		15

*Any 300-400 courses in Home Economics, not more than 2 in any one field.

COMBINED COLLEGE AND PROFESSIONAL COURSES

A student wishing to study medicine, dentistry, or law at a professional school may be granted a leave of absence during his senior year at Marshall College. At the end of the first year in the professional school the student then is eligible for the baccalaureate degree from Marshall College, provided that all requirements for graduation are met and that the student can present certification from the professional school that a sufficient number of semester hours of good quality work has been completed to total 128 when added to those earned at Marshall College. Students wishing to receive a degree under this plan must file a written request for the degree in the office of the Dean before leaving Marshall College.

Students working under this combined program will be permitted to exceed the maximum number of hours normally allowed in any one division. At least 96 hours (100 for pre-law) of study must have been completed and a quality point average of 2.0 earned by the student at Marshall College. In order to receive the degree the student must be present at the regular Marshall College commencement, or have permission to graduate "in absentia."

Students who expect to engage in premedical or related work should include in their high school subjects: two units of Latin, one unit of algebra, one unit of geometry, one unit of chemistry and one unit of physics. Any entrance deficiency in mathematics must be made up in the freshman year without college credit.

CURRICULUM PREPARATORY FOR MEDICINE OR ZOOLOGY MAJORS

For B. S. and A. B. specific requirements see page III-5, III-6.

First Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Chemistry 101 or 201	4	Chemistry 102 or 202	4
English 101	3	English 102	3
Zoology 211	4	Zoology 212	4
*Speech 101 or R.O.T.C.	2	*Speech 102 or R.O.T.C.	2
Mathematics 120	3	Mathematics 122	3
Pre-medical conference	0		16
Orientation 100	1		
	<u>17</u>		

*Speech may be postponed.

Second Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Chemistry 203	4	Chemistry 204	4
English 221	2	English 222	2
Physics 201	2	Physics 203	2
Physics 202	2	Physics 204	2
Foreign language	3	Foreign language	3
Physical Education 113 or ROTC ...	1-2	Physical Education 114 or ROTC ...	1-2
**Speech 101	2	**Speech 102	2
Electives:		Electives:	
Recommended:		Recommended:	
Geology 200	4	Psychology 201	4
Sociology 231	2	History	3
Political Science 101	2	Sociology 232	2
	<u>16-18</u>		<u>16-18</u>

**Unless taken in first year.

Third Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Chemistry 355	5	Chemistry 356	5
Zoology 301	4	Zoology 302	4
Foreign language	3	Foreign language	3
Psychology 201	4	Electives:	
Electives:		Recommended:	
Recommended:		Psychology 308	3
Sociology	2-3	Botany 203	4
Political Science	2-3	Philosophy 303-304	3
	<u>16-18</u>		<u>16-18</u>

Fourth Year

The senior year must include those courses needed to meet degree requirements and department major requirements.

The present trend among schools of medicine is to recommend against intensive training in the natural sciences. Instead they prefer that the candidate have a broader training with more attention being given to the liberal arts courses.

Special attention is called to the increasing tendency among the best medical colleges to require four years of premedical preparation. In all colleges preference is given to those applicants having such preparation. Students are urged to plan their undergraduate work toward securing the A. B. or B. S. degree. **Premedicine is not a major, therefore the student must select a major field such as Zoology, etc.** The curriculum is intended to serve as a guide and may be varied to suit the individual needs of the student.

Students who are preparing themselves for medicine should keep in mind the fact that certain schools of medicine require specific courses in addition to those listed above. Such courses are best taken as electives during the third or fourth year.

The curriculum presented above is designed to meet the needs of students preparing to enter medical colleges which require three or four years of premedical preparation. It may be altered to suit the individual student's specific need, since colleges vary somewhat in certain requirements.

Note: Those students requiring ten hours of general physics may take Light Laboratory (Physics 305) or Heat Laboratory (Physics 309) for the extra two hours credit.

In order to secure a favorable recommendation to a medical or dental college the student must have a scholastic average of 2.5. The student should keep in mind, however, the fact that competition in the field of medicine is extremely severe. There are many more candidates for admission to medical schools than can be accepted and, other things being equal, those students with the highest scholastic standing are given preference.

DENTISTRY

Students preparing to enter dental college should take a similar course, except that foreign language is not usually required. The ruling of the Dental Educational Council of America calls for a minimum of six semester hours in each of the following: English, biology, physics, inorganic chemistry, three semester hours of organic chemistry, and electives to make a total of sixty semester hours, as preparation for four years in any leading school of dentistry.

RELATED PROFESSIONAL SCHOOLS

A student preparing to enter Chiropody, Osteopathy, Veterinary, Optometry, or any related professional school should take a course similar to that suggested above for admission to medicine. The student is advised to consult with the particular school he plans to attend to determine the exact minimum requirements for admission.

CURRICULUM FOR MUSIC MAJORS

(DIVISION OF HUMANITIES)

For course descriptions see listing of courses in Teachers College bulletin under the heading of Music.

Students may major in music and earn the A. B. degree in the College of Arts and Sciences by meeting the general and specific requirements and by taking the following curriculum:

Freshman Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
English 101	3	English 102	3
Speech 101	2	Speech 102	2
Foreign language	3	Foreign language	3
Physical Education	1	Physical Education	1
Music 115	4	Music 116	4
Music, applied (100 level)	1	Music, applied (100 level)	1
Music, ensemble (100-200 level)	1	Music, ensemble (100-200 level)	1
Orientation 100	1	Music 375	2

Sophomore Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Foreign language	3	Foreign language	3
English 221	2	English 222	2
History, Economics or Political Science	3	Philosophy, Psychology or Sociology	2-4
Music, applied (200 level)	1	Music, applied (200 level)	1
Music, ensemble (200 level)	1	Music, ensemble (200 level)	1
Music 215	4	Science	4
Mathematics	3	Possible elective	2
	17		15-17

Junior Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
English 341	3	History, Economics or Political Science	3
History, Economics or Political Science	2-3	Philosophy, Psychology or Sociology	3
Science	4	Science	3-4
Music, applied (300 level)	2	Music, applied (300 level)	2
Music, ensemble (300 level)	1	Music, ensemble (300 level)	1
Science	4	Electives, (300-400 level)	3
	16-17		15-16

Senior Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Music 422	3	Music 423	3
Music, applied (400 level)	2	Music, applied (400 level)	2
Music, ensemble (400 level)	1	Music, ensemble (400 level)	1
Philosophy, Psychology or Sociology	2-3	Electives (300-400 level)	10
Electives, (300-400 level)	9		—
	17-18		16

Piano Proficiency: All students entering this curriculum will be required to pass a proficiency examination in piano which will include sight reading, simple accompaniment from a given melodic line, simple transposition, and Clementi sonatinas or the equivalent. Students who cannot qualify under this examination as entering Freshmen will be required to take piano without credit until the examination can be passed.

Applied Music: In this curriculum students will be required to pursue courses in applied music on one particular instrument or voice for eight semesters leading to a Senior Recital which must be approved by the faculty of the Music Department before qualifying for a degree with a major in Music.

CURRICULUM PREPARATORY FOR NURSING AND HEALTH FIELDS

Students planning to enter the nursing field have a distinct advantage in larger hospitals if they have a college degree. Some schools of nursing admit only college graduates.

Preference is usually given to students who have had good training in the sciences; including chemistry, botany, zoology, psychology, and sociology. Other recommended courses are: social science, public health, economics (household), dietetics, English, and modern languages.

A college degree is desirable training for staff positions.

The usual basic course in nursing is three years in length.

COURSES OF INSTRUCTION

ART

All art courses may be taken by students in the College of Arts and Sciences for credit, with the exception of Art 338.

See courses recommended for a major in Art in the College of Arts and Sciences on page III-11. For a description of courses see Teachers College Bulletin.

BIBLE AND RELIGION (DIVISION OF HUMANITIES)

Assistant Professor Jennings

The Department of Bible and Religion offers work with four classes of students in mind: (1) the student who desires to know something of the place of religion in our culture and its development; (2) the student who is interested in religion as a factor in his own personal and social experiences; (3) the student who desires to equip himself as a lay leader in a religious or semi-religious institution; (4) the student who plans to enter some area of religion to do his life's work. The courses are designed to give the first three groups an introduction to and an understanding of religion in its basic nature and function and to introduce the fourth group to materials which will be studied more intensively in professional schools.

A minimum of 26 hours is required for a major in the Department of Bible and Religion.

206. History and Literature of The New Testament. 2 hrs. II.

The Jewish and Gentile background and the beginnings of Christianity with an introduction to the writings of the New Testament.

210. Old Testament History. 2 hrs. I.

The growth and development of the Hebrew people, religion, and literature, to the Greek period.

300. Introduction to the Study of Religion: Nature of Religion. 3 hrs. I. S.

An analysis of the nature of religious personalities, institutions, literatures, philosophies, experiences, and education.

301. Introduction to the Study of Religion: Function of Religion. 3 hrs. II. S.

A correlation of religion with the different areas of life: natural science, humanities, social science, philosophy, ethics, education.

302. Outlines of Church History. 2 hrs. I.

The historical development of Christianity from the first century to the present.

304. The Teachings of Jesus. 2 hrs. I.

An analysis of the Gospels and a systematic study of the message of Jesus.

310. The Hebrew Prophets. 2 hrs. II.

The rise of the office of prophet and the contributions of prophecy to religion.

315. Psychology of Religion. 3 hrs. II.

An examination of the factors in individual and group religious experiences.

323. History of Religious Thought in America. 3 hrs. I.

The rise and development of religion and of religious thinking in America.

418. Development of Religious Ideas. 3 hrs. I. S.

A study of the sources of religious thought of western culture.

BOTANY

(DIVISION OF SCIENCES)

Associate Professor Plymale

Assistant Professor Mills

Requirement for the Botany Major: 26 semester hours.

Botany 203, 316	8 hrs.
Botany, additional courses 300, 499	18 hrs.

(See page III-11 for major in Biological Science)

COURSES OF INSTRUCTION**203. General Botany. 4 hrs. I, II, S.**

Two hours lecture and 4 hours laboratory a week. A general study of the plant kingdom with special emphasis on the structure, function, and classification of the seed plant. Lab. fee \$2.00.

301. Trees and Shrubs. 2 hrs. S

Recognition of our native trees and shrubs. Lecture and field study.

302. General Bacteriology. 4 hrs. I, II, S

Two hours lecture and 4 hours laboratory a week. Basic microbiological techniques, fundamental principles of; microbial action, physiological processes, immunology, serology, disease process.

Prerequisites: Botany 203 (or equivalent) or one year chemistry.

Lab. fee \$4.00.

304. Plant Physiology. 4 hrs.

Two hours lecture and 4 hours laboratory a week. Experimental study of growth, nutrition and responses of plants.

Prerequisite: Botany 203 or equivalent. Lab. fee \$2.00.

305. Economic Botany. 3 hrs. I

Plants used by man for food, ornamental purposes, building materials, textiles and other industrial purposes: economic importance of conservation. No laboratory.

315. Plant Morphology. 4 hrs. I

Two hours lecture and 4 hours laboratory a week. Characteristics of the great plant groups. Discussion of important steps in the development of plants.

Prerequisite: Botany 203 or equivalent. Lab. fee \$2.00.

316. Local Plants. 4 hrs. II

Two hours lecture and 4 hours laboratory a week. Recognition of our native seed plants and ferns.

Prerequisite: Botany 203 or equivalent. Lab. fee \$2.00.

402. Bacteriology: Special Topics. 1-3 hrs.

Prerequisite: Botany 302. Lab. fee \$4.00.

403. Plant Pathology. 4 hrs.

Two hours lecture and 4 hours laboratory a week. Nature, cause, and control of plant diseases.

Prerequisite: Botany 203 or equivalent. Lab. fee \$2.00.

410. Special Topics. 1-4 hrs. I, II, S.

By permission of Department Head.

BUSINESS ADMINISTRATION

Professor Jolley

Associate Professor C. Miller

Assistant Professors Dwight, Evans, Owen, Seaberg, Gill

Instructor E. Miller

Specialization in this department leads to the B. B. A. degree. Areas of concentration within the department are: accounting, banking and finance, business management, marketing-retailing, and secretarial science.

ALL CURRICULA

First Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
English 101	3	English 102	3
Speech 101	2	Speech 102	2
Math. 120, 150, or 223	3	Language	3
Language	3	Physical Education 114	1
Physical Education 113	1	Bus. Adm. 104	2
Bus. Adm. 103	2	Political Science 201	2
Political Science 101	2	Psychology 201	1
Orientation 100	1		

Second Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Bus. Adm. 215	3	Bus. Adm. 216	3
or		or	
Bus. Adm. 201	4	Bus. Adm. 202	4
Economics 241	3	Economics 242	3
English 221	2	English 222	2
Language	3	Language	3
Science	4	Science	3-4
		Bus. Adm. 227	2
		Bus. Adm. 231	2

1. Twelve hours of one foreign language are required unless the student presents 2 units of one foreign language from high school.

2. Not open to students who have had one year of typewriting in high school or the equivalent.

3. Required only of students following the secretarial curriculum.

4. Required for secretarial curriculum unless the student presents one unit (one year) of shorthand from high school or the equivalent. Students following the secretarial curriculum should postpone Bus. Adm. 215-216 until the third year. Bus. Adm. 201-202 not required in other curricula.

5. The science requirement may be met by taking one of the following options in Arts and Science laboratory courses: physics, 8 hours; chemistry, 8 hours; botany, 4 hours and zoology, 4 hours; or geology, 7 hours.

6. Required only in the Marketing-Retailing curriculum.

7. Not required in the Marketing-Retailing curriculum.

ACCOUNTING CURRICULUM

Third Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Business Administration 307	3	Business Administration 306	3
Business Administration 311	3	Business Administration 308	3
Business Administration 320	3	Business Administration 312	3
Economics 310	3	Business Administration 313	2
Geography 203	3	Business Administration 412	3
		Economics 342	3

Fourth Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Business Administration 318	3	Business Administration 324	3
Business Administration 323	3	Business Administration 413	3
Business Administration 340	3	Business Administration 415	3
Business Administration 411	3		

Electives should include courses in Psychology, Sociology or Philosophy.

ADVERTISING CURRICULUM

The complete curriculum in advertising may be found on page III-10.

BANKING AND FINANCE CURRICULUM

Third Year

<i>First Semester</i>		<i>Hrs.</i>	<i>Second Semester</i>		<i>Hrs.</i>
Business Administration 307	.....	3	Business Administration 308	.....	3
Business Administration 311	.....	3	Business Administration 312	.....	3
Business Administration 320	.....	3	Business Administration 318	.....	3
Economics 310	.....	3	Political Science 202	.....	3
Geography 203	.....	3	Economics 342	.....	3

Fourth Year

<i>First Semester</i>		<i>Hrs.</i>	<i>Second Semester</i>		<i>Hrs.</i>
Business Administration 323	.....	3	Business Administration 324	.....	3
Business Administration 340	.....	3	Business Administration 350	.....	3
Business Administration 434	.....	3	Economics 320	.....	3
			Political Science 333	.....	3

Electives should include courses in History, Psychology, Sociology, or Philosophy.

BUSINESS MANAGEMENT CURRICULUM*

Third Year

<i>First Semester</i>		<i>Hrs.</i>	<i>Second Semester</i>		<i>Hrs.</i>
Business Administration 307	.....	3	Business Administration 308	.....	3
Business Administration 311	.....	3	Business Administration 312	.....	3
Business Administration 320	.....	3	Business Administration 318	.....	3
Economics 310	.....	3	Business Administration 340	.....	3
Geography 203	.....	3	Economics 346	.....	3

Fourth Year

<i>First Semester</i>		<i>Hrs.</i>	<i>Second Semester</i>		<i>Hrs.</i>
Business Administration 323	.....	3	Business Administration 324	.....	3
Business Administration 330	.....	3	Business Administration 420	.....	3
Business Administration 350	.....	3	Business Administration 434	.....	3
			Psychology 418	.....	3

Electives should include courses in History, Psychology, Sociology, or Philosophy.

MARKETING-RETAILING CURRICULUM

Third Year

<i>First Semester</i>		<i>Hrs.</i>	<i>Second Semester</i>		<i>Hrs.</i>
Business Administration 307	.....	3	Business Administration 308	.....	3
Business Administration 340	.....	3	Business Administration 318	.....	3
Business Administration 343	.....	3	Business Administration 330	.....	3
Business Administration 345	.....	3	Business Administration 344	.....	3
Geography 203	.....	3	Business Administration 346	.....	3

Fourth Year

<i>First Semester</i>		<i>Hrs.</i>	<i>Second Semester</i>		<i>Hrs.</i>
Business Administration 350	.....	3	Business Administration 412	.....	3
Business Administration 422	.....	3	Business Administration 443	.....	2
Business Administration 423	.....	2	Psychology 418	.....	3

Electives should include courses in History, Psychology, Sociology, or Philosophy.

4
3
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3

SECRETARIAL CURRICULUM

Third Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Business Administration 215	3	Business Administration 216	3
Business Administration 301	3	Business Administration 302	3
Business Administration 304	2	Business Administration 305	3
Business Administration 313	2	Business Administration 318	3
Geography 203	3		

Fourth Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Business Administration 307	3	Business Administration 308	3
Business Administration 404	3	Business Administration 405	3
Psychology 418	3	Business Administration 421	3

Electives should include courses in History, Psychology, Sociology, or Philosophy.

BUSINESS ADMINISTRATION

COURSES OF INSTRUCTION

103. Typewriting. 2 hrs. I, II

Development of proper technique in the operation of a typewriter. Elementary business letter typing and adaptation of typing skill to personal use.

No credit if student has had one year or more of typing in high school.

104. Typewriting. 2 hrs. I, II

Development of typing speed and accuracy. The typing of business letters, manuscripts, office forms, legal documents and statistical tables.

Prerequisite: Business Administration 103 or one year of high school typewriting.

201. Shorthand. 4 hrs. I, II

Beginning course. Fundamental principles of Gregg Shorthand; simplified functional method. Development of ability to take dictation of new material at a minimum rate of sixty words per minute for three minutes, and to transcribe with ninety-eight per cent accuracy, or better. Development of pretranscription skills.

No credit if student has had one year or more of shorthand in high school.

Prerequisite or corequisite: Business Administration 104.

202. Shorthand-Transcription. 4 hrs. I, II

Business letter dictation and transcription on the typewriter.

Development of a minimum speed of eighty words per minute for five minutes, with ninety-eight per cent accuracy on new material.

Prerequisite: Business Administration 201, or one year of shorthand in high school, and Business Administration 104.

215-216. Principles of Accounting. 3 hrs. each. I, II.

Introduction to principles and procedures of double entry accounting records and reports.

227. Retail Salesmanship. 2 hrs. I, II

Phases of salesmanship in retailing. Attitudes: necessary knowledge of store, merchandise, and customer; techniques that stimulate buying; building of permanent business.

231. Principles of Selling. 2 hrs. I, II

Elements in successful selling; knowledge, personality, preapproach standardized canvass, relationships to management.

301. Intermediate Dictation. 3 hrs. I

Development of speed in taking dictation and speed and accuracy of transcription. Minimum speed of 100 words per minute for five minutes with ninety-eight per cent accuracy, or better, on new material.

Prerequisite: Business Administration 202.

302. Advanced Dictation. 3 hrs. II

Development of a minimum dictation speed of 120 words per minute for five minutes. Emphasis on taking dictation and transcription of variety of material of increasing difficulty.

Prerequisite: Business Administration 301.

304. Filing. 2 hrs. II

Basic principles of indexing and filing. Practice in operation of common filing systems.

305. Secretarial Office Machines. 3 hrs. I, II

Hectograph and stencil duplicating, voice writing, key-driven calculating, adding-listing, and small desk machines.

Prerequisite: Business Administration 104.

306. Accounting Office Machines. 3 hrs. I, II.

Calculators, posting, specialized accounting, and adding-listing machines.

Prerequisite: Business Administration 215.

307-308. Principles of Business Law. 3 hrs. each. I, II.

Survey of common law and recent legislation relating to contracts, agency, employment, sales, bailments, common carriers, personal and real property, insurance, negotiable and other credit instruments, partnerships, corporations, and bankruptcy.

311-312. Advanced Accounting. 3 hrs. each. I, II.

Principles and problems of valuation, analysis, and formal presentation of accounting data.

Prerequisite: Business Administration 216.

313. Mathematics of Business and Finance. 2 hrs. I, II

Review of arithmetic as a tool of business; simple and compound interest; discount; partial payments; business insurance; finance; annuities; bond and interest valuation.

318. Business Statistics. 3 hrs. II

Survey of methods of analysis and presentation of business and economic data; sampling, measures of central tendency and dispersion; index numbers; time series.

320. Business Organization and Management. 3 hrs. I

Principles of organization; types of business organization; internal control; records and statistics as related to control; specific management techniques.

323-324. Principles of Business Finance. 3 hrs. each. I, II.

Principles, instruments, and procedures involved in the procurement and maintenance of financial capital; social aspects of business finance.

Prerequisites: Economics 242 and Business Administration 216.

330. Principles of Advertising. 3 hrs. II

Copy, layout, production, media, copy research, techniques.

340. Principles of Marketing. 3 hrs. I

Institutions, channels of distribution, functions, federal regulation, and economics of marketing.

342. Markets and Media. 2 hrs. I.

Choice of media in advertising, magazine and newspaper position, media circulation measurement, cooperative advertising, and the advertising appropriation.

Prerequisites: Business Administration 330 and 340.

343. Principles of Retailing. 3 hrs. I

Principles and mechanics of successful retail merchandising covering merchandise and stock control, buying, marking, pricing, advertising, credits, and personnel management.

Prerequisite: Business Administration 227 or permission of instructor.

344. Store Organization and Management. 3 hrs. II

Questions of store organization in various types of retail stores. Layout and location, planning and controlling store expenses, budgets; non-selling departments.

Prerequisite: Business Administration 343 or permission of instructor.

345-346. Cooperative Store Service. 3 hrs. each. I, II.

Work in cooperating retail establishments to gain practical experience in the principles and techniques covered in classroom courses in retailing. Working-time minimum, 200 hours per semester under supervision of coordinator.

350. Transportation. 3 hrs. I, II

History, organization, operation, regulation and management of railway, waterway, highway, and air transportation. Principles of rate-making, shipping practices, train movements, terminals, ports and docks, and traffic expediting services.

Prerequisite: Business Administration 340.

355. Accounting for Engineers. 3 hrs. II

Introduction to accounting with particular emphasis on Industrial applications.

Open only to students majoring in Engineering.

404. Secretarial Training. 3 hrs. I.

Development of a knowledge of business procedures, techniques, and customs with which a secretary should be familiar. Secretarial skills integrated through problem-type assignments.

Prerequisite or corequisite: Business Administration 301 and 305.

405. Office Practice and Management. 3 hrs. II.

Work in cooperating business offices for approximately fifteen hours per week with weekly conferences.

Prerequisite: Business Administration 404.

407. Problems of Business Law. 3 hrs. I, S.

Readings and case reports on current legal problems relating to business.

Prerequisites: Business Administration 307 and 308 or graduate standing.

411. Cost Accounting. 3 hrs. I.

Principles of industrial cost accounting; job order, departmental, and process costs.

Prerequisite: Business Administration 311 or permission of instructor.

412. Retail Accounting. 3 hrs. I.

Principles and problems relating to sales transactions; purchases; inventory valuation and control; expense classification, distribution, and control; and the preparation and analysis of operating statements for retail establishments.

Prerequisite: Business Administration 216.

413. Auditing. 3 hrs. II.

Theory and procedures; legal and social responsibilities of the auditor.
Prerequisite: Business Administration 312 or permission of instructor.

414. Advanced Accounting Problems. 3 hrs. S.

Selected problems in advanced accounting principles and procedures.
Prerequisite: Business Administration 312 or permission of instructor.

415. Federal Taxation. 3 hrs. I, II.

Problems and procedures of income tax accounting.
Prerequisites: Business Administration 312 or permission of instructor.

420. Production Management. 3 hrs. II.

Managerial organization for production; plant design and layout; problems of procurement; control of plant; investment, working capital, and labor costs. Production operations, including scheduling and routing.

421. Office Management. 3 hrs. II.

Principles and practices, approached from the viewpoint of the office manager, through oral and written problems.

422. Retail Merchandising Problems. 3 hrs. I. (Formerly 445 & 446).

Managerial problems pertaining to sales inventory and purchases; retail method of inventory; sales expense and pricing; mark-up and mark-down planning; stock planning.

Corequisite: Business Administration 443.

423. Retail Personnel Management. 2 hrs. II (Formerly 444).

Methods of testing for retail employment; retail personnel records; periodic personnel review; the development of a training program; sources of training material; training for junior executives; the development and maintenance of good employer-employee relationships.

Prerequisite: Business Administration 343, 344, or permission of instructor.

434. Investments. 3 hrs. II.

The nature, forms, and principles of investment; institutions for facilitating investment.

442. Techniques of Market Research. 3 hrs. II.

Scope and importance of marketing and distribution research; product, package, and brand analysis; consumer, industrial and institutional surveys; quantitative and qualitative analysis of market data, situation analysis, sampling; tabulation and presentation techniques.

Prerequisites: Business Administration 318, 330, and 340.

443. Retail Buying. 2 hrs. I.

Scientific planning and selection of merchandise for retail stores; buyer's responsibilities; the determination of what and how much to buy, where and how to buy; brands and labeling; trade relations.

Prerequisites: Business Administration 344 or permission of instructor.

450. Business Research. 2 hrs.

The student will make a study of a topic related to his field of specialization under the direction of an adviser and submit a written report.

495H-496H. Readings for Honors in Business Administration. 4 hrs. each. I, II.

Open only to business administration majors of outstanding ability. Both courses must be taken to receive Honors credit.

Refer to page III-3 for rules and general information.

CHEMISTRY

Professors Scholl, Bartlett, Rumble
Associate Professors Whelpley, Hoback
Instructors Little, Mays

The purposes of this department are:

To offer the student adequate training in the field of chemistry in order to enable him to gain employment as a professional chemist or to enter a school that offers graduate training in chemistry.

To offer preparatory work to students who may wish to enter professional schools of medicine, dentistry, pharmacy, medical technology, veterinary medicine, nursing, dietetics, engineering, etc.

To offer elementary courses to students who have had no previous training in chemistry and may need a limited knowledge of the subject to satisfy the requirements of other departments or to satisfy their own desire for some acquaintance with the subject.

The curricula:

The requirements for the five curricula offered by the department are outlined below. The purpose of each is given with the program.

I—B. S. IN CHEMISTRY

The professional program leading to the Bachelor of Science Degree in Chemistry (B. S. in CHEM), should be elected by all students planning to make chemistry their life work. Placement is usually in the more responsible industrial positions (control, development or research), with government agencies or in graduate schools as Assistants or Fellows.

First Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Chemistry 101 or 201	4	Chemistry 102 or 202	4
English 101	3	English 102	3
German 101*	3	German 102	3
Mathematics 120	3	Mathematics 122	3
Physical Education 113	1	Physical Education 114	1
Engineering 150	2	Business Administration 103**	2
Orientation 100	1		
	17		16

Second Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Chemistry 203	4	Chemistry 204	4
Mathematics 223	3	Mathematics 224	4
German 223	3	German 224	3
Physics 201	3	Physics 203	3
Physics 202	1	Physics 204	1
Economics 241	3	Economics 242	3
	17		18

*If credits in High School German are presented upon entrance then the student may elect French. A reading knowledge of scientific German is required for this degree.

**Not required of students who have had one year of typing in high school.

Third Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Chemistry 355	5	Chemistry 356	5
Chemistry 453	3	Chemistry 454	3
History	3	Philosophy 304	3
Mathematics 325	4	Mathematics 326	4
	15		15

Fourth Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Chemistry 457	5	Chemistry 458	5
Chemistry 405	2	Chemistry 466	4
Psychology 318	2	Speech 305	2
Physics Lab. Elective	5	Elective	3
Electives	3		
	<u>17</u>		<u>14</u>

II—A. B. CHEMISTRY MAJOR

The Liberal Arts program leading to the Bachelor of Arts Degree, (AB), with a major in chemistry, may be elected by pre-professional students (medicine, dentistry, pharmacy, veterinary medicine) planning to complete a degree before entering a professional school.

First Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Chemistry 101 or 201	4	Chemistry 102 or 202	4
English 101	3	English 102	3
Zoology 211	4	Zoology 212	4
Mathematics 120	3	Mathematics 122	3
Speech 101	2	Speech 102	2
Orientation 100	1		
	<u>17</u>		<u>16</u>

Second Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Chemistry 203	4	Chemistry 204	4
English 221	2	English 222	2
Physics 201	3	Physics 203	3
Physics 202	1	Physics 204	1
Foreign Language	3	Foreign Language	3
Sociology 200	3	Economics 241	3
Physical Ed. 113	1	Physical Ed. 114	1
	<u>17</u>		<u>17</u>

Third Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Chemistry 355	5	Chemistry 356	5
Zoology 301*	4	Zoology 302*	4
Foreign Language	3	Foreign Language	3
Botany 302	4	History 312	3
	<u>16</u>		<u>15</u>

Fourth Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Chemistry 453	3	Chemistry 454	3
English 341 or 342	3	Philosophy 304	3
Psychology 318	2	Electives	9
History 313	3		
Chemistry 405	2		
Electives	3		
	<u>16</u>		<u>15</u>

**Zoology 301 and 302 may be replaced by other science or mathematics when approved by the head of the chemistry department.

III—B. S. TECHNICAL SECRETARIAL COURSE

The Technical Secretarial Course, leading to the Bachelor of Science Degree, (B.S.), should be elected by students planning to seek secretarial employment in a chemical or allied industry.

First Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Chemistry 101	4	Chemistry 102	4
English 101	3	English 102	3
Mathematics 120	3	Mathematics 122	3
German 101	3	German 102	3
Bus. Adm. 103*	2	Bus. Adm. 104	2
Physical Ed. 113	1	Physical Ed. 114	1
Orientation 100	1		
	<hr/>		<hr/>
	17		16

Second Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Chemistry 203	4	Chemistry 204	4
English 221	2	English 222	2
Bus. Adm. 201	4	Bus. Adm. 202	4
Physics 201	2	Physics 203	2
Physics 202	2	Physics 204	2
German 223	3	German 224	3
	<hr/>		<hr/>
	17		17

Third Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Chemistry 317	5	Chemistry 318	5
Bus. Adm. 215	3	Bus. Adm. 216	3
Bus. Adm. 301	3	Bus. Adm. 302	3
Sociology 200	3	Philosophy 304	3
History 311 or 308	3	History 312 or 313	3
	<hr/>		<hr/>
	17		17

Fourth Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Chemistry 405	2	Chemistry Elective	4-3
Bus. Adm. 305	2	Bus. Adm. 304	1
Bus. Adm. 307	3	Bus. Adm. 308	3
Bus. Adm. 404	3	Speech 306	3
Speech 305	2	Elective Econ. or Pol. Sci.	3
Psychology 318	2		
	<hr/>		<hr/>
	14		14 or 13

Bus Adm. 103 is not open to students who have had one year of typing in high school.

IV—TECHNICAL SALES

(A. B.—Chemistry Major—Bus. Adm. Minor)

The Technical Sales Course, leading to the Bachelor of Arts Degree (A. B.), with a chemistry major and business administration minor, should be elected by students planning to seek employment as technical sales representatives for manufacturers of chemicals, technical equipment and instruments, and for companies affiliated with the various technical fields.

First Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Chemistry 101 or 201	4	Chemistry 102 or 202	4
English 101	3	English 102	3
Foreign Language	3	Foreign Language	3
Engineering 150	2	Business Administration 103*	2
Mathematics 120	3	Mathematics 122	3
Physical Education 113	1	Physical Education 114	1
Orientation 100	1		
	<u>17</u>		<u>16</u>

Second Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Chemistry 203	4	Chemistry 204	4
Business Administration 231	2	Business Administration 330	3
Economics 241	3	Economics 242	3
Foreign Language	3	Foreign Language	3
Mathematics 223	3	Mathematics 224	4
	<u>15</u>		<u>17</u>

Third Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Chemistry 355	5	Chemistry 356	5
Business Administration 340	3	Business Administration 355	3
English 221	2	English 222	2
Physics 201-202	4	Physics 203-204	4
Psychology 318	2	Sociology 301	3
	<u>16</u>		<u>17</u>

Fourth Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Chemistry 453	3	Chemistry 454	3
Chemistry 405	2	Speech 306	3
History	3	English 341 or 342	3
Philosophy 304	3	Business Administration elective	3
Speech 305	2	Electives	3
Electives	2		
	<u>15</u>		<u>15</u>

V—LABORATORY TECHNICIAN

The Laboratory Technologist course leading to the degree of Associate in Science, (A.S.) should be elected by students interested in entering a professional school in Medical Technology or in securing employment as a technician in an industrial or health laboratory.

The detailed program is outlined on page III-9 of this catalogue.

CHEMISTRY
COURSES OF INSTRUCTION

Note: All laboratory courses in chemistry require a laboratory fee and a laboratory deposit. Three (3) clock hours of laboratory work are considered equivalent to one credit hour.

- ✓ 101. **General.** 4 hrs. I, II, S.
Fee \$8.00, deposit \$5.00.
Open to all students who have not had high school chemistry.
Prerequisite: one unit of high school mathematics or Mathematics 50.
- ✓ 102. **General.** 4 hrs. I, II, S.
Fee \$8.00, deposit \$5.00.
Prerequisite: Chemistry 101.
- ✓ 201. **General.** 4 hrs. I.
Fee \$8.00, deposit \$5.00.
Prerequisite: high school chemistry; high school algebra or mathematics 50.
202. **General.** 4 hrs. II.
Fee \$8.00, deposit \$5.00.
Prerequisite: Chemistry 201.
- ✓ 203. **Qualitative Analysis.** 4 hrs. I, S.
Fee \$8.00, deposit \$5.00.
Prerequisite: Chemistry 102 or 202 and algebra.
- ✓ 204. **Quantitative Analysis.** 4 hrs. II, S.
Fee \$8.00, deposit \$10.00.
Prerequisite: Chemistry 203 and Mathematics 122.
205. **Quantitative Analysis.** 2 hrs. II.
Fee \$8.00, deposit \$10.00.
Open to all engineering students except those with chemistry major.
Prerequisite: Chemistry 102 or 202.
307. **Elementary Physical.** 3 hrs. II.
Fee \$8.00, deposit \$5.00.
Prerequisite: Chemistry 318 or 356.
317. **Organic.** 5 hrs. I.
Fee \$10.00, deposit \$10.00.
An elementary study of aromatic and aliphatic organic compounds.
Open to students in home economics, dietetics, medical technology, and technical secretarial courses.
Prerequisite: Chemistry 102 or 202.
318. **Physiological.** 5 hrs. II.
Fee \$10.00, deposit \$10.00.
Open to all students in home economics, dietetics, medical technology and technical secretarial courses.
Prerequisite: Chemistry 317.
- ✓ 355. **Organic.** 5 hrs. I, S.
Fee \$10.00, deposit \$10.00.
A study of aliphatic organic compounds.
Prerequisite: Chemistry 204.
- ✓ 356. **Organic.** 5 hrs. II, S.
Fee \$10.00, deposit \$10.00.
A study of aromatic organic compounds.
Prerequisite: Chemistry 355.

- 401-402. **Special Topics.** 1 to 4 hrs. I, II.
Fee \$2.50 per hour, deposit \$10.00.
Work to consist of a special laboratory problem in one field of chemistry.
By permission of department head.
403. **Inorganic.** 2 hrs.
Prerequisite: Chemistry 356.
404. **Colloids.** 3 hrs. I.
Fee \$8.00, deposit \$5.00.
Prerequisite: Chemistry 318 or 356.
405. **Report Writing.** 2 hrs. I.
Fee \$8.00, deposit \$10.00.
Prerequisite: physical science major, junior or senior standing.
453. **Water and Gas Analysis.** 3 hrs. I.
Fee \$10.00, deposit \$10.00.
Prerequisite: Chemistry 204.
454. **Liquid and Solid Fuels.** 3 hrs. II.
Fee \$10.00, deposit \$10.00.
Prerequisite: Chemistry 355.
457. **Physical.** 5 hrs. I.
Fee \$10.00, deposit \$15.00.
Prerequisite: Chemistry 356, 10 hrs. Physics, Mathematics 326.
458. **Physical.** 5 hrs. II.
Fee \$10.00, deposit \$15.00.
Prerequisite: Chemistry 457.
466. **Organic Qualitative.** 4 hrs. II.
Fee \$8.00, deposit \$10.00.
Prerequisite: Chemistry 356.
467. **Chemical Principles.** 3 hrs. I.
Prerequisite: Chemistry 458.
468. **Chemical Principles.** 3 hrs. II.
Prerequisite: Chemistry 467.

DEPARTMENT OF CLASSICAL LANGUAGES

(DIVISION OF HUMANITIES)

Professor Whitsel

The Department of Classical Languages has cultural as well as practical aims. Classes in Greek serve the student who wishes a knowledge of Greek for purely cultural purposes and also those who intend to use it as a tool in science and theology.

Through a study of the Latin language and its literature, the student is enabled to understand the life, history, government and art of these people whose civilization has so largely influenced ours. Latin also provides a foundation for the comprehension of English grammar, an opportunity to enlarge the English vocabulary through study of Latin stems which form our words, increased facility in expression through practice in translation into clear and idiomatic English. In addition, Latin is of great assistance as a background for modern Romance languages. There are courses in English for those who wish to know something of this civilization without studying the language.

A major in Latin consists of at least 26 hours Latin. Courses given in English are advised as valuable, but cannot be counted in fulfilling the minimum major requirement.

In case of new students, prerequisites may be affected by results of placement tests. (See page I-35 of this catalogue.)

GREEK

201-202. First Year Greek. 3-3 hrs. I, II.

No credit for 201 without 202.

301-302. Selections from Homer. 3-3 hrs. I, II.

Review grammar and reading of Greek literature. The epic as a literary form; readings from Homer; the dialogues of Plato; selections from the New Testament.

Prerequisite: Greek 202 or equivalent.

303-304. Selections from Greek Tragedy. 3-3 hrs. I, II.

LATIN

101-102 First Year Latin. 3-3 hrs. I, II. (Formerly 111-112).

For students who begin Latin in college. Essentials of grammar, translation, derivative study, relation of Latin to English and Romance languages, Roman life, the Roman civilization as background of our own modern life.

No credit for 101 without 102.

203-204. Intermediate Latin. 3-3 hrs. I, II. (204 formerly 214).

An introduction to Latin literature, both prose and poetry, with especial emphasis on the work of Cicero and Vergil. Grammar review.

Prerequisite: Latin 102 or two units high school Latin.

306. Selections from Horace. 3 hrs. I.

An Augustan poet with a universally appealing philosophy of life.

Prerequisite: Latin 204 or three units high school Latin.

307. Cicero: Letters. 3 hrs. II.

The first century B. C. seen through the letters of its most famous statesman.

Prerequisite: Latin 204 or three units of high school Latin.

309. Livy; History. 3 hrs. I.

Rome from its foundation presented by a great historian.

Prerequisite: Latin 204 or three units of high school Latin.

312. Tacitus: Annals. 3 hrs. I.

Rome of the first century; general breakdown of the Republic and establishment of Empire.

327. Advanced Prose Composition. 3 hrs. I.

Review of grammar and syntax; practice in writing Latin; study of stylistic writing of Latin authors.

401. Roman Life: Pliny, Martial, Juvenal. 3 hrs. II.

Social life in the first century. Development of satire as a literary form.

402. Vergil: Aeneid VII-XII. 3 hrs. II.

Experiences of Aeneas in Italy. The Augustan's conception of Rome's world mission. Study of epic as a literary form.

403. The Roman Stage. 3 hrs. II.

Comedies of Plautus and Terence. Study of dramatic form and relation to later comedy. Colloquial Latin as a basis for modern Romance languages.

450-451. Special Topics in Latin. 1-4 hrs. I, II.

A course designed for majors who have need of subject matter not covered in regular course offerings, and to fit requirements of individual students. Directed reading, special research, topics, weekly conferences.

Prerequisite: Ten hours of Latin.

495H-496H. Honors in Latin. 4-4 hrs. I, II.

Open only to Latin majors of outstanding ability. Both courses must be taken in order to receive Honors credit. Refer to page III-3 for rules and general information.

CLASSICAL CIVILIZATION

These courses are given in English and require no knowledge of the languages. They are cultural, for the student who wishes to broaden his knowledge of civilization. They do not fulfill the foreign language requirement.

GREEK**319. Mythology. 2 hrs. I. (Formerly Latin 319).**

Greek mythology as a background for appreciation of art and literature. Lectures illustrated with slides of places of mythological interest, and of sculpture illustrating themes of mythology.

335. Greek Civilization. 3 hrs. I.

Greek life and thought from earliest times to the Roman conquest of Greece; history, literature, archaeology. Illustrated lectures.

LATIN**322. Latin Literature in Translation. 2 hrs. II.**

Reading of the most important and significant literature in translation, particularly many works not included in regular courses.

336. Roman Civilization. 3 hrs. II.

Roman life and thought from earliest times until the fall of Rome. Illustrated lectures on archaeology.

ECONOMICS**(DIVISION OF SOCIAL SCIENCES)**

Associate Professors Munn and Corrie

Assistant Professor Land

Economics deals with the problems of how groups make their living. It explains how the wealth and income of localities, regions, and nations is produced, exchanged, consumed, and shared.

Prices, taxation, money and credit, capitalism and socialism, government regulation of business, employment and international trade are typical subjects of economic study.

For intelligent citizenship for all students, and especially for students interested in medicine, law, labor relations, personnel work, government service, business management, science, or engineering, economics is a valuable and often indispensable field of study.

A major in economics must fulfill the general requirements for the A. B. or B. S. degree and in addition must complete 26 hours in courses in economics (sophomore level or above) chosen with the advice of the department head.

The following courses outside the department are suggested for majors in economics: Botany 305; Business Administration *215 and *216, 307 and 308, *311 and *312, *318, 323, 324, 340, 350, 434; French and German for those planning advanced study; Geography 203, 205, 320 and 410; Geology 422; History courses stressing economic implications: Political Science 323, 333, 420; Philosophy 304, 410; Psychology 201 and 418; Sociology 200, 311, 401 and 404.

A minor in economics may be earned by taking Economics 241-242 and six additional hours.

*Especially recommended.

ECONOMICS
COURSES OF INSTRUCTION

- 109-110. Introduction to Economics.** 2-2 hrs. I, II.
Introductory economics course for freshmen in the two-year college curriculum. Open to other freshmen but not recommended for those required to take 241, 242 for degree.
- 241-242. Principles of Economics.** 3-3 hrs. I, II.
Principles and practices associated with the production, exchange, and distribution of wealth and income.
Prerequisite: sophomore standing.
- 255. Economics for Engineers.** 3 hrs. II.
One semester principles course in economics for engineers who expect to transfer to other schools.
Prerequisite: sophomore standing. Engineers only.
- 260. Current Economic Problems.** 3 hrs.
Application of economic principles to current problems of taxation, inflation, foreign aid, labor relations, etc.
Prerequisite: Economics 241.
- 310. Money and Banking.** 3 hrs. I, II.
Money and banking principles and institutions with special attention to the Federal Reserve System.
Prerequisite Economics 242, 340 or 255.
- 312. Public Utilities Economics.** 3 hrs.
The economic, institutional, and legal background of business practice for firms in the utility field excluding transportation.
Prerequisite: Economics 242, 340 or 255.
- 318. American Industries.** 3 hrs. II.
Practical application of economic principles to representative American industries. Organization, markets, pricing, personnel policies, competition, etc., as applied to these industries.
Prerequisites: Economics 241, or 340, or 255 and sophomore standing.
- 320. Public Finance.** 3 hrs. II.
The theory and policy of financing local, state, and federal governments.
Prerequisite: Economics 242, 340 or 255.
No credit if Economics 403 has been taken.
- 323. National Income Analysis and Employment.** 3 hrs. II.
Make-up and analysis of national income figures. Methods of stabilizing income and employment in the American economy.
Prerequisites: Economics 241, or 255, or 340 and junior standing.
- 330. Managerial Economics.** 3 hrs. I.
Principles of economics applied to pricing, sales policies, inter-firm and inter-industry relations and other practical problems facing modern management.
Prerequisites: Economics 242, or 255, or 340 and junior standing.
- 342. Economic Development of the United States.** 3 hrs. II.
Economic and institutional factors and trends in the history of the United States.
Prerequisite: Economics 242, 340 or 255.
- 346. Labor Problems.** 3 hrs. I, II.
Labor and industrial relations problems from the standpoint of employees, employers, and the public.
Prerequisite: Economics 242, 340 or 255.

348. Labor and Government. 3 hrs. II.

A historical and analytical study of contemporary laws and court decisions having to do with labor, including the laws of collective bargaining, minimum wage, injunction, railway labor, arbitration, etc.

Prerequisite: Economics 242, 340, or 255.

351. Government and Business. 3 hrs.

Government as an aid, or as a regulator, or actual competitor in private business, including agriculture, banking insurance, transportation, etc.

Prerequisite: Economics 242, 255, or 340.

356. Collective Bargaining Problems. 3 hrs.

Questions at issue (and their legal, economic, and political background) in the negotiation and administration of a union contract, including hours, wages, work speeds, safety matters, pensions, etc.

Prerequisite: Economics 346 or consent of instructor.

402. Business Cycle. 3 hrs. II.

Theories of cause, and proposed solutions of the problem of economic fluctuations (inflation and depression).

Prerequisite: Economics 310 and junior standing or consent of instructor.

No credit if Economics 308 has been taken.

408. Contemporary Economic Systems. 3 hrs. I.

The theories and policies of capitalism, socialism, and fascism. (Also recommended for non-majors.)

Prerequisite: Economics 242 or 340 and junior standing or consent of instructor.

No credit if Economics 350 has been taken.

412. American Economic Thought. 3 hrs. II.

Deals with the theory of value, welfare, and progress—largely the product of American scholars.

Prerequisite: 6 hours of advanced economics and senior standing.

420. International Economics. 3 hrs. I.

Problems connected with world resources, international trade, and the economic reconstruction of under-developed countries.

Prerequisites: Economics 241, or 255, or 340 and junior standing.

425. The Economy of West Virginia. 3 hrs. II.

Resources, labor, supplies, industries, markets, transportation facilities, etc., of West Virginia and the regional economy. The economics of the coal industry is a significant part of the study.

Prerequisite: Economics 241, or 255, or 340 and junior standing.

440. Classical Economics. 3 hrs. I.

Classical economic theory from the Physiocrats to John Stuart Mill.

Prerequisite: Economics 242 or 340 and junior standing.

No credit if Economics 443 has been taken.

444. Contemporary Economic Theory. 3 hrs. I.

Economic thought from Marshall to Keynes.

Prerequisite: Economics 242 or 340 and junior standing.

461. Economic Education Workshop. 3 hrs. S.

Intensive review of content and methods of teaching economics designed for elementary and high school teachers who teach in economics or related fields.

Prerequisite: Consent of instructor or grant of scholarship.

462-465. Seminar in Special Topics. 2 to 4 hrs. each. I, II.

To teach, as the occasion arises, any standard economics topic not listed among the usual course offerings.

Prerequisite: Economics 242 or 340, junior standing or consent of instructor.

491-495. Research Problems. 2 to 4 hrs. I, II.

A particular problem or problems may be assigned a student who needs work beyond the courses scheduled if such student is judged competent to carry on supervised research.

Prerequisite: 6 hours advanced work in economics and consent of instructor, head of department of economics, and dean of the college in which the student is taking his major.

ENGINEERING

Professor McCaskey

Assistant Professor Stinson

Instructors Urian, Hoke

The Engineering Department offers two programs: first, a four-year General Engineering course leading to the degree of Bachelor of Engineering Science; second, the first two years of college engineering work leading to the professional degree. The curriculum has been so arranged that it can be made to conform, in general, to the curricula of leading engineering colleges. A student who has satisfactorily completed the two years offered here may enter as a junior in any engineering college and obtain an engineering degree after two additional years there. For the student to gain entry as a junior in other schools, the engineering adviser must know the selected college so that the curriculum here can be planned to fit the individual case.

CLASSIFICATION OF ENGINEERING STUDENTS

Students who have completed 106 hours of college work are classified as **seniors**.

Students who have completed 68 hours and less than 106 hours of college work are classified as **juniors**.

Students who have completed 30 hours and less than 68 hours of college work are classified as **sophomores**.

Students who have completed the high school or secondary course and less than 30 hours of college work are classified as **freshmen**.

ENGINEERING AWARDS

D-Rho D-Theta, honorary engineering fraternity, annually awards an engraved cup to the sophomore engineering student who makes the highest scholastic average during his freshman year.

The Huntington Engineers' Club, annually awards a prize and certificate of award to the engineering student whom they judge to be outstanding in the upper quarter of the sophomore class.

Huntington Chapter, West Virginia Society of Professional Engineers, awards a prize and certificate of award to the student whom they judge to be outstanding in the upper quarter of the junior class.

Ohio Valley Section of the American Institute of Electrical Engineers, annually award a prize and certificate of award to the student whom they judge to be outstanding in the senior class.

ENGINEERING CURRICULUM**Freshman and Sophomore years of the Specialist Curriculum.****First Year**

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
English 101	3	English 102	3
Mathematics 190	5	Mathematics 191	5
Chemistry 101	4	Chemistry 102	4
Engineering 110	3	Engineering 201 or 210	2
Phys. Education 113 or (Mil. Serv.)	1	Engineering 208	3
Engineering 100	½	Phys. Education 114 or (Mil. Serv.)	1
Orientation 100	1		
			19
	18½		

Summer Session Following First Year

	<i>Hrs.</i>		<i>Hrs.</i>
Engineering 201	2	Engineering 207 or 215	2

Second Year**Required in All Curricula**

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Mathematics 325	4	Mathematics 326	4
Physics 201	4	Physics 203	4
Physics 202	1	Physics 204	1
Economics 255	3	Engineering 306	3
	12		12

Required in Civil Engineering

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Engineering 320	4	Engineering 353	3
Elective	2	Chemistry 205	2
	6	Elective	2
			7

Required in Chemical Engineering

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Chemistry 203	4	Chemistry 204	4
Engineering 210	2	Speech 101	2
	6		6

Required in Electrical Engineering

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Engineering 213	2	Engineering 340	3
Elective	3	Elective	3
	5		6

Required in Mechanical Engineering

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Business Administration 355	3	Engineering 209	4
Speech 101	2	Chemistry 205	2
Engineering 210	2		
	7		6

Required in Mining Engineering

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Geology 200	4	Chemistry 205	2
Electives	4	Geology 300	3
	—	Elective	2
	8		—
			7

GENERAL ENGINEERING CURRICULUM**For the Degree of Bachelor of Engineering Science**

The purpose of this curriculum is to provide a foundation of scientific and basic engineering knowledge, to train in the engineering method of attacking problems, and at the same time to give the student a well rounded knowledge of the various phases of the engineering profession. The primary objectives are: (1) to provide a basic training in fundamentals common to the specialized branches of engineering, in preparation for industrial employment in positions where intense specialization is neither required nor desirable; (2) to permit advanced studies along lines of individual aptitude or interest differing from the requirements of specialized engineering curricula, in preparation for technical employment in such subjects as economics and business administration, in preparation for employment in industrial or governmental positions not classified as engineering but where basic engineering training is desirable.

By the end of the sophomore year students must elect one of the optional curricula offered and they should make this selection earlier if possible. The choice of electives in each of these programs is subject to the approval of the engineering adviser. Certain substitutions may be made in the curricula with the permission and approval of the head of the department of engineering and the Dean of the College of Arts and Sciences.

FIRST YEAR**FOR ALL ENGINEERING STUDENTS**

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Chemistry 101	4	Chemistry 102	4
English 101	3	English 102	3
Engineering 100	½	Engineering 200	2
Engineering 110	3	Engineering 208	3
Mathematics 190	5	Mathematics 191	5
Physical Education 113	1	Physical Education 114	1
Orientation 100	1		—
	—		18
	17½		

BUSINESS ADMINISTRATION OPTION**Summer Session Following First Year**

<i>Hrs.</i>	<i>Hrs.</i>		
Engineering 201	2	Engineering 215	2

Second Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Business Administration 355	3	Economics 242	3
Economics 241	3	Engineering 306	3
Engineering 321	2	Mathematics 326	4
Mathematics 325	4	Physics 203	4
Physics 201	4	Physics 204	1
Physics 202	1	Elective	3
	—		—
	17		18

Third Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Business Administration 231	2	Business Administration 411	3
Business Administration 414	3	Chemistry 205	2
Business Administration 323	3	Economics 346	3
Economics 310	3	Engineering 322	3
Engineering 307	4	Engineering 350	½
Speech 305	2	Engineering 400	3
	—	Elective	3
	17		17½

Summer Work

Construction or Industrial Experience and Report

Fourth Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Business Administration 307	3	Business Administration 308	3
Business Administration 340	3	Business Administration 420	3
Engineering 402	2	Engineering 401	4
Engineering 403	4	Engineering 421	0
Engineering 404	4	Inspection Trip	0
Engineering 420	0	Engineering 330	3
Elective	3	Elective	4
	19		17

Suggested Electives

	<i>Hrs.</i>		<i>Hrs.</i>
Business Administration 324	3	Engineering 210	2
Business Administration 330	3	Engineering 213	2
Chemistry 401	1-4	Engineering 320	4
Chemistry 402	1-4	Engineering 340	2
English 221	2	Engineering 351	2
English 222	2	Philosophy 304	3
Engineering 207	2	Political Science 301	3
Engineering 209	4		

Engineering students electing the four-year R.O.T.C. program may offer a maximum of 14 hours of Military Science and Tactics toward the B. E. S. Degree in this option in lieu of electives and Physical Education 113 and 114.

CHEMISTRY OPTION**First Year**

See Page III-38 for Uniform First Year

Summer Session Following First Year

	<i>Hrs.</i>		<i>Hrs.</i>
Engineering 201	2	Engineering 215	2

Second Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Chemistry 203	4	Chemistry 204	4
Engineering 210	2	Engineering 306	3
Engineering 321	2	Mathematics 326	4
Mathematics 325	4	Physics 203	4
Physics 201	4	Physics 204	1
Physics 202	1	Elective	2
	17		18

Third Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Chemistry 355	5	Business Administration 307	3
Economics 255	3	Chemistry 356	5
Engineering 213	2	Engineering 322	3
Engineering 307	4	Engineering 340	2
Engineering 403	4	Engineering 350	½
	—	Engineering 400	3
	18		16½

Summer Work

Construction or Industrial Experience and Report

Fourth Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Chemistry 454	3	Chemistry 458	5
Chemistry 457	5	Engineering 401	4
Engineering 351	2	Business Administration 355	3
Engineering 402	2	Engineering 421	0
Engineering 404	4	Inspection Trip	0
Engineering 420	0	Speech 305	2
Engineering 411	3	Engineering 412	3
	19		16

Suggested Electives

	<i>Hrs.</i>		<i>Hrs.</i>
History 313	3	Mathematics 435	3
Political Science 201	3	Philosophy 304	3
Political Science 202	3	Psychology 318	2
Sociology 433	3	Economics 346	3

Engineering students electing the four-year R.O.T.C. program may offer a maximum of 4 hours of Military Science and Tactics toward the B. E. S. Degree in this option in lieu of electives and Physical Education 113 and 114.

CIVIL OPTION

First Year

See Page III-38 for Uniform First Year

Summer Session Following First Year

	<i>Hrs.</i>		<i>Hrs.</i>
Engineering 201	2	Engineering 207	2

Second Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Engineering 210	2	Chemistry 205	2
Engineering 320	4	Engineering 306	3
Engineering 321	2	Engineering 353	3
Mathematics 325	4	Mathematics 326	4
Physics 201	4	Physics 203	4
Physics 202	1	Physics 204	1
	17		17

Third Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Botany 302	4	Economics 346	3
Economics 255	3	Engineering 322	3
Engineering 213	2	Engineering 350	1/2
Engineering 307	4	Engineering 340	3
Geology 200	4	Engineering 400	3
Speech 305	2	Business Administration 307	3
		Elective	2
	19		
			17 1/2

Fourth Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Engineering 351	2	Engineering 352	2
Engineering 403	4	Engineering 401	4
Engineering 404	4	Engineering 405	3
Engineering 420	0	Engineering 421	0
Engineering 411	3	Engineering 413	3
Engineering 402	2	Engineering 406	3
Elective	2	Bus. Adm. 355	3
		Inspection Trip	0
	17		
			18

Suggested Electives

	<i>Hrs.</i>		<i>Hrs.</i>
History 313	3	Sociology 433	3
Political Science 201	3	Philosophy 304	3
Political Science 202	3	Psychology 318	2

Engineering students electing the four-year R.O.T.C. program may offer a maximum of 6 hours of Military Science and Tactics toward the B. E. S. Degree in this option in lieu of electives and Physical Education 113 and 114.

GENERAL OPTION**First Year**

See Page III-38 for Uniform First Year

Summer Session Following First Year

	<i>Hrs.</i>		<i>Hrs.</i>
Engineering 201	2	Engineering 215	2

Second Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Engineering 210	2	Chemistry 205	2
Engineering 320	4	Engineering 306	3
Engineering 321	2	Engineering 209	4
Mathematics 325	4	Mathematics 326	4
Physics 201	4	Physics 203	4
Physics 202	1	Physics 204	1
	17		
			18

Third Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Economics 255	3	Economics 346	3
Engineering 213	2	Engineering 322	3
Engineering 307	4	Engineering 340	3
Geology 200	4	Engineering 350	½
Elective	4	Engineering 400	3
	—	Business Administration 307	3
	17	Speech 305	2
			17½

Summer Work

Construction or Industrial Experience and Report

Fourth Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Engineering 330	3	Engineering 352	2
Engineering 351	2	Engineering 401	3
Engineering 402	2	Engineering 411	3
Engineering 403	4	Engineering 421	0
Engineering 404	4	Inspection Trip	0
Engineering 420	0	Bus. Adm. 355	3
Psychology 318	2	Electives	5
Electives	2		16
	19		

Suggested Electives

	<i>Hrs.</i>		<i>Hrs.</i>
Business Administration 420	3	Physics 314	3
Sociology 200	3	Physics 315	2
Sociology 433	3	History 313	3
Political Science 201	3	Mathematics 435	4
Political Science 202	3		

Engineering students electing the four-year R.O.T.C. program may offer a maximum of 13 hours of Military Science and Tactics toward the B. E. S. Degree in this option in lieu of electives and Physical Education 113 and 114.

GEOLOGY OPTION**First Year**

See Page III-38 for Uniform First Year

Summer Session Following First Year

	<i>Hrs.</i>		<i>Hrs.</i>
Engineering 201	2	Engineering 207	2

Second Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Economics 255	3	Engineering 306	3
Engineering 321	2	Chemistry 205	2
Geology 200	4	Geology 300	3
Mathematics 325	4	Mathematics 326	4
Physics 201	4	Physics 203	4
Physics 202	1	Physics 204	1
	18		17

Third Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Engineering 307	4	Engineering 322	3
Engineering 320	4	Engineering 340	3
Geology 310	3	Engineering 350	½
Geology 314	3	Engineering 353	3
Speech 305	2	Engineering 400	3
Physics 314	3	Geology 313	3
	—	Geology 321	3
	19		<u>18½</u>

Summer Work

Construction or Industrial Experience and Report

Fourth Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Engineering 402	2	Business Administration 307	3
Engineering 403	4	Engineering 352	2
Engineering 404	4	Engineering 401	4
Engineering 420	0	Engineering 421	0
Engineering 413	3	Inspection Trip	0
Geology 418	3	Geology 401	2
	—	Geology 422	3
	16	Engineering 405	3
			<u>17</u>

Suggested Electives

<i>Hrs.</i>	<i>Hrs.</i>		
Botany 203	4	History 313	3
Geology 303	3	Geology 402	2
Geology 315	3	Geology 415	3
Geology 350	3	Psychology 318	2
Geology 400	1 or 2	Economics 346	3
Political Science 201 or 202	3	Geography 320	3
		Sociology	3

Engineering students electing the four-year R.O.T.C. program may offer a maximum of 6 hours of Military Science and Tactics toward the B. E. S. Degree in this option in lieu of electives and Physical Education 113 and 114.

Junior and senior courses in Geology may be offered in semester other than shown.

MECHANICAL DESIGN**First Year**

See page III-38 for Uniform First Year.

Summer Session Following First Semester

<i>Hrs.</i>	<i>Hrs.</i>		
Engineering 201	2	Engineering 215	2

Second Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Engineering 210	2	Engineering 209	4
Engineering 321	2	Engineering 306	3
Mathematics 325	4	Mathematics 326	4
Physics 201	4	Physics 203	4
Physics 202	1	Physics 204	1
Speech 101	2	Elective	2
Electives	2		—
	17		18

Third Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Economics 255	3	Economics 346	3
Engineering 213	2	Engineering 322	3
Engineering 307	4	Engineering 340	3
Engineering 411	3	Engineering 350	½
Mathematics 435	3	Engineering 400	3
Psychology 318	3	Engineering 412	3
	—	Chemistry 205	2
	18		—
			17½

Summer Work

Construction or Industrial Experience and Report

Fourth Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Engineering 330	3	Engineering 401	4
Engineering 404	4	Engineering 410	3
Engineering 402	2	Business Administration 355	3
Engineering 403	4	Engineering 421	0
Engineering 351	2	Inspection Trip	0
Engineering 420	0	Electives	7
Business Administration 307	3		—
	18		17

Suggested Electives

<i>Hrs.</i>	<i>Hrs.</i>		
Engineering 352	2	Political Science 201	3
Philosophy 304	3	Political Science 202	3
Business Administration 420	3	Sociology 433	3

Engineering students electing the four-year R. O. T. C. program may offer a maximum of 16 hours of Military Science and Tactics toward the B. E. S. Degree in this option in lieu of electives and Physical Education 113 and 114.

ENGINEERING PHYSICS**First Year**

See page III-38 for Uniform First Year.

Summer Session Following First Year

<i>Hrs.</i>	<i>Hrs.</i>		
Engineering 201	2	Engineering 215	2

Second Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Engineering 210	2	Engineering 306	3
Engineering 321	2	Mathematics 326	4
Mathematics 325	4	Physics 203	4
Physics 201	4	Physics 204	1
Physics 202	1	Chemistry 205	2
Speech 101	2	Electives	3
Electives	3		
	18		17

Third Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
↖ Economics 255	3	↗ Economics 346	3
Engineering 307	4	↗ Engineering 322	3
↖ Engineering 411	3	↗ Engineering 350	½
↖ Mathematics 435	3	↗ Engineering 400	3
Physics 300	3	↗ Physics 302	3
Physics 301	2	↗ Physics 303	2
		Electives	4
	18		18½

Summer Work

Construction or Industrial Experience and Report

Fourth Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Engineering 330	3	Engineering 401	4
Engineering 402	2	Engineering 421	0
Engineering 403	4	Inspection Trip	0
Engineering 420	0	Business Administration 307	3
Physics 314	3	Physics 402	3
Physics 315	2	Physics 403	2
Physics 401	3	Elective	4
	17		16

Suggested Electives

<i>Hrs.</i>	<i>Hrs.</i>		
History 313	3	Physics 304	3
Psychology 318	2	Physics 305	2
Physics 412	3	Philosophy 304	3
Physics 413	2	Political Science 201	3

Engineering students electing the four-year R.O.T.C. program may offer a maximum of 4 hours of Military Science and Tactics toward the B. E. S. Degree in this option in lieu of electives and Physical Education 113 and 114.

ENGINEERING**Courses of Instruction****100. Engineering Orientation.** ½ hr. I.

Lectures to acquaint students with engineering profession.

Required of all engineering freshmen.

110. Mechanical Drawing. 3 hrs. I, II.

Orthographic projection, lettering, technical sketching. Three 3 hr. laboratories.

Prerequisite: entrance mathematics requirements.

- 150. Charts, Graphs and Diagrams.** 2 hrs. I.
Free hand lettering, use of drawing instruments, graphical presentation of technical data. (Open to students other than engineers).
- 200. Machine Work.** 2 hrs. I, II.
Use of metal lathe, drill press, shaper, milling machine, foundry practice.
Prerequisite: Engineering 110.
- 201. Plane Surveying.** 2 hrs. I, S.
Elementary theory of measurement of distance, direction and difference in elevation. Field work with transit, level, tape, and stadia. Office computations and plotting. One hour recitation, 3 hrs. laboratory.
Prerequisite: Engineering 110 and Mathematics 122.
- 207. Structural Drafting.** 2 hrs. I, S.
Lettering, symbols, detail drawings, pencil and ink tracings of steel, wood, and concrete structures. Two 3 hr. laboratories.
Prerequisite: Engineering 110.
- 208. Descriptive Geometry.** 3 hrs. I, II, S.
Theory of orthographic projection. One hour recitation, two 3 hr. laboratories.
Prerequisite: Engineering 110.
- 209. Mechanism.** 4 hrs. II.
Graphical and analytical kinematics of machines. Two hrs. recitation, two 3 hr. laboratories.
Prerequisites: Engineering 215 and Mathematics 326, or concurrently.
- 210. Welding and Heat Treatment.** 2 hrs. I, II.
Cutting, Oxy-acetylene and arc welding, tempering and heat treatment. Formerly Engineering 210 and 211.
- 213. Electrical Equipment.** 2 hrs. I, II.
Introduction to electrical laboratory equipment and procedure.
Prerequisites: Physics 203 and 204, or concurrently.
- 215. Elements of Machine Design.** 2 hrs. I, S.
Empirical Design, standard commercial parts, machine drawing. Two 3 hr. laboratories.
Prerequisites: Engineering 110 and 200.
- 306. Statics.** 3 hrs. I, II.
Static equilibrium by algebraic and graphic methods, chains and cords, friction, centers of gravity, moments of inertia. Three hrs. recitation.
Prerequisites: Mathematics 326, or concurrently, and Physics 201.
- 307. Mechanics of Materials.** 4 hrs. I, II.
Strength of materials, shear and moment diagrams, stresses in riveted joints, shafts, beams and columns, combined stresses, deflection. Four hours recitation.
Prerequisite: Engineering 306.
- 320. Advanced Surveying.** 4 hrs. I.
City and topographic surveys, field astronomy, triangulation, office computations and plotting. Three hrs. recitation, 3 hrs. laboratory.
Prerequisite: Engineering 201.
- 321. Engineering Problems.** 2 hrs. I.
Elementary engineering problems, recording engineering computations. Two hrs. recitation.
Prerequisite: Mathematics 122 and 223 or equivalent.

- 322. Engineering Economy.** 3 hrs. II.
Problems in engineering economy. Three hours recitation.
- 330. Elementary Machine Design.** 3 hrs. I.
Design of machine elements by rational and empirical methods. Two hours recitation, 3 hrs. laboratory.
Prerequisites: Engineering 215, 307, 400, or concurrently.
- 340. Elements of Electrical Engineering.** 3 hrs. II.
Three hrs. recitation.
Prerequisites: Mathematics 326 or concurrently, Engineering 212, or concurrently.
- 350. Engineering Seminar.** $\frac{1}{2}$ hr. II.
Special problems in advanced mechanics of materials. One hr. recitation.
Prerequisite: Engineering 307.
- 351. Special Topics in Engineering.** 2 hrs. I.
Elements of Sanitary Engineering including a design project.
Prerequisite: Botany 302.
- 352. Special Topics in Engineering.** 2 hrs. II.
Problems in foundations. Two hrs. recitation.
Prerequisite: Engineering 307.
- 353. Route Surveying.** 3 hrs. II.
Simple, compound, spiral and vertical curves, earthwork. Two hrs. recitation, 3 hrs. laboratory.
Prerequisite: Engineering 201.
- 400. Kinetics.** 3 hrs. I, II.
Laws of moving bodies, work and energy, relative motion, rotating masses. Three hrs. recitation.
Prerequisite: Engineering 306.
- 401. Hydraulics.** 4 hrs. II.
Mechanics of fluids, three hrs. recitation. Three hrs. laboratory.
Prerequisite: Engineering 306.
- 402. Materials of Construction.** 2 hrs. I.
Properties of building materials and materials testing. One hr. recitation, 3 hrs. laboratory.
Prerequisite: Engineering 307.
- 403. Engineering Report Writing.** 4 hrs. I.
Technical reports, business letters. Four hrs. recitation.
Prerequisite: English 102 and junior standing.
- 404. Structural Engineering.** 4 hrs. I, II.
Stress analysis and structural design. Steel, timber, concrete. Three hrs. recitation, 3 hrs. laboratory.
Prerequisite: Engineering 307.
- 405. Reinforced Concrete Design.** 3 hrs. II.
Stress analysis and design of reinforced concrete structures and structural elements. Two hrs. recitation, 3 hrs. laboratory.
Prerequisite: Engineering 307.
- 406. Structural Engineering.** 3 hrs. II.
Continuation of Engineering 404. Two hrs. recitation, 3 hrs. laboratory.
Prerequisite: Engineering 404.
- 410. Machine Design.** 3 hrs. II.
Continuation of Engineering 330, including dynamical and vibrational analysis of machines and advanced stress analysis. Two hrs. recitation, 3 hrs. laboratory.
Prerequisites: Engineering 209, 330, and Mathematics 435.

411. **Thermodynamics.** 3 hrs. I.
3 hrs. recitation.
Prerequisites: Physics 203 and 204. Registration in Mathematics 326.
412. **Heat Power.** 3 hrs. II.
3 hrs. recitation.
Prerequisite: Engineering 411.
413. **Highway Construction and Design.** 3 hrs. I.
Two hours recitation, 3 hrs. laboratory.
Prerequisite: Engineering 353.
420. **Engineering Society.** 0 hrs. I.
Discussion of Industrial Safety. Presentation of reports and technical papers. Required of all candidates for the B. E. S. degree.
421. **Engineering Society.** 0 hrs. II.
History of the engineering profession. Study of the lives of scientists and engineers. Presentation of reports and technical papers. Required of all candidates for the B. E. S. degree.

Summer Work. Students will be required to secure at least eight weeks' practical construction or industrial experience by employment. A brief report will be required. Attendance at advanced R.O.T.C. summer camp will satisfy this requirement. Required of all candidates for the B. E. S. degree.

Inspection Trip. Visits will be made to engineering projects and industrial plants in the tri-state area during the senior year. Required of all candidates for the B. E. S. degree.

ENGLISH

(Division of Humanities)

Professors Sechler, Brown

Associate Professors Baxter, Flower, Pollitt, Rice, Stender, White

Assistant Professors Harvey, Hepburn, Washington

Instructors Jones, Mitchell, Starkey

The Department of English aims first, to train students to express themselves completely and accurately in writing and, secondly, to teach them to appreciate literature as a fine art and as the expression of the genius of a people. English 101-102 are required of all freshmen and are prerequisites for all subsequent courses for students taking the A. B. and B. S. degrees. English 221-222 are required of all candidates for the A. B. and B. S. degrees and are prerequisites of all subsequent English literature courses except English 341 and 342.

Requirements for the English Major: 32 semester hours.
(Effective for students entering on or after September 1, 1950)

English 101-102, English Composition	6 hours
English 221-222, English Literature	4 hours
English 341 or 342, American Literature	3 hours
English 402, World Literature	3 hours
English 377, Creative Writing or	
English 405, The English Language or	
English 455, Literary Criticism	3 hours
English 325, Shakespeare or	
English 411, Chaucer or	
English 409, Milton	3 hours
Electives in English	10 hours

32 hours

English majors should take work in allied fields at the suggestion of their advisers.

COURSES OF INSTRUCTION

- 101-102. English Composition.** 3-3 hrs. I, II.
English 101 prerequisite to 102.
- 221-222. English Literature.** 2-2 hrs. I, II.
Appreciation of literary forms from major authors.
- 302. Elizabethan Drama.** 3 hrs.
Non-Shakespearean drama from middle of the 16th to middle of 17th centuries.
- 307. Modern Drama.** 3 hrs.
Modern British and American dramatists.
- 316. Contemporary English and American Poets.** 2 hrs.
Twentieth Century English and American Poets.
- 317. The Development of the English Novel.** 3 hrs.
A general history of the English novel to the contemporary period.
- 325. Shakespeare.** 3 hrs.
An appreciation of the plays of Shakespeare.
- 329. Modern Novel.** 3 hrs.
A survey of modern British and American novels.
- 331. The Short Story.** 3 hrs.
Types of short stories with emphasis on modern American writers.
- 335. Literature of the Renaissance and Reformation.** 3 hrs.
Non-dramatic literature from early Renaissance to the Reformation.
No credit if English 315 has been taken.
- 341. American Literature to 1870.** 3 hrs.
Prerequisites: English 102 or 104. Not open to freshmen.
- 342. American Literature from 1870.** 3 hrs.
Prerequisites: English 102 or 104.
- 351. Development of the English and American Drama.** 3 hrs.
From the Elizabethan Age to the present.
- 377. Creative Composition.** 3 hrs.
Practice in literary forms for those interested in creative writing.
Prerequisites: English 102 or 104 and consent of the instructor.
- 402. World Literature.** 3 hrs.
Selections from the literature of great nations, ancient and modern, excluding British and American.
- 405. Study of the English Language.** 3 hrs.
The growth, structure, and present usages of the English language.
- 408. Advanced Expository Writing.** 3 hrs.
Instruction in the preparation of reports, theses, briefs, abstracts and other expository types. Material adapted to the needs of the individual student.
- 409. Milton and His Contemporaries.** 3 hrs.
Milton, Donne, Browne and others related to the intellectual background of the century.
- 411. Chaucer.** 3 hrs.
The background of and influences on the author and his major works in the original tongue.
- 420. Senior Seminar in English Literature.** 2 hrs. I, II.
An advanced study of the forms and movements in English literature. An individual piece of research will be required.
Prerequisite: Senior standing; major in English and consent of instructor.
- 422. Nineteenth Century American Poetry.** 3 hrs. I, S.
Studies in American poets from Bryant to Moody.

- 436. Early and Medieval Literature.** 3 hrs.
First ten centuries of English literature exclusive of Chaucer.
- 446. Drama of the Restoration and Eighteenth Century.** 3 hrs.
- 447. Studies in the Romantic Poets.** 3 hrs.
No credit if English 321 or 344 has been taken.
- 455. Literary Criticism.** 3 hrs.
History of literary criticism with application of principles.
Open only to seniors, or juniors with the consent of the instructor.
- 460. Studies in English Literature from 1660 to 1745.** 3 hrs.
Dryden, Swift, Pope and their contemporaries. Open only to seniors, or juniors with the consent of the instructor.
- 461. Studies in English Literature from 1745 to 1800.** 3 hrs.
Major figures of the Age of Johnson. Open only to seniors, or juniors with the consent of the instructor.
- 470. Twentieth Century Literature.** 3 hrs.
A study of the twentieth century mind through representative genres of literature.
- 495H-496H. Readings for Honors in English.** 4-4 hrs. I, II.
Open only to English majors of outstanding ability. Both courses must be taken in order to receive credit.
Refer to page III-3 for rules and general information.

FRENCH

(DIVISION OF HUMANITIES)

Associate Professors Noble, Parrish

The Department of French is organized to serve the interests of those who are studying French as a means to a liberal education and of those who desire a more intensive training in the language. With mastery of the French language comes the ability to use it as a tool in various fields of activity, as well as a deeper appreciation of the genius of the French people whose history, literature, and art have made such great contributions to our own civilization.

REQUIREMENTS FOR THE FRENCH MAJOR

(Effective for students entering September, 1947, and thereafter.)

26 semester hours

A student with no previous training in French must complete the following requirements:

1. Beginning French, 121-1226 hours
2. Intermediate French, 223, 2246 hours
3. Oral French and Composition
Choose a or b
 - a. One semester of Oral French2 hours
 - b. One semester of Composition3 hours
4. Literature and Civilization
Choose a or b
 - a. Literature6 hours
 - b. Literature and Civilization.7 hours
5. Electives from groups 3 and 4 above, 5 or 6 hours.

In the case of students with previous training in French, prerequisites may be affected by results of placement tests. See Page I-35 of this catalogue.

In general, however, students having one unit of high school French should take French 122, those having two units should take French 223, and those having three should take French 224, each group having proportionately more time for the advanced courses listed under 3 and 4 above.

COURSES OF INSTRUCTION

- 121-122. First Year French.** 3-3 hrs. I, II.
Study of pronunciation, grammar, verbs, vocabulary, and French civilization with emphasis on the oral approach.
Prerequisite for 122: French 121 or one unit of high school French.
- 223-224. Intermediate French.** 3-3 hrs. I, II.
Intensive and extensive reading, composition, grammar review, irregular verbs, dictées, and conversation. Modern novels, short stories, and plays afford suggestive materials for conversational practice.
Prerequisite for 223: French 122 or two units of high school French.
Prerequisite for 224: French 223 or three units of high school French.
- 241-242. Intermediate Oral French.** 2-2 hrs. I, II.
Study of principles of French pronunciation and phonetics and practice in their application with use of tape recorder and phonograph records, vocabulary building, and conversational practice.
Prerequisite for 241: French 122 or two units of high school French.
Prerequisite for 242: French 241 or consent of instructor.
- 315-316. Advanced Composition and Reading.** 3-3 hrs. I, II.
Study of vocabulary, idioms, and difficult constructions. Idiomatic translation and free composition together with intensive reading. Recommended for majors and those wishing to increase their power of expression in writing.
Prerequisite for 315: French 224.
Prerequisite for 316: French 315 or consent of instructor.
- *327. Seventeenth Century Literature.** 3 hrs.
A presentation of the development, spirit, and characteristics of French classicism through a study of the great comedies of Moliere and the theatre of Corneille.
Prerequisite: French 224.
- *328. Seventeenth Century Literature.** 3 hrs.
Study of the theatre of Racine and of selected works of Descartes, Pascal, and other prose classicists together with those of La Fontaine, Boileau, and others of the Golden Age of French literature.
Prerequisite: French 224.
- 355-356. French Civilization and Culture.** 2-2 hrs. I, II.
A survey of the origins and main aspects of French culture from pre-historic to modern times. As far as possible, this course will be conducted in French and full language credit will be given.
Prerequisite for 355 and 356: French 224.
- 361-362. Advanced Oral French.** 2-2 hrs. I, II.
Advanced problems of French pronunciation and advanced conversation on selected topics. Recommended for majors.
Prerequisite for 361: French 224 or consent of instructor.
Prerequisite for 362: French 361 or consent of instructor.
- 435. Nineteenth Century Literature.** 3 hrs.
A presentation of the French romantic movement as exemplified in the poetry, drama, and the novel of the period. Representative works of Chateaubriand, Lamartine, de Vigny, Victor Hugo, de Musset, and others are studied.
Prerequisite: French 224 and consent of instructor.

436. Nineteenth Century Literature. 3 hrs.

A presentation of realistic and naturalistic fiction from Balzac to Flaubert, Maupassant, and Zola and of realism in the theatre. Selected poems of Baudelaire, the Parnassians, and the Symbolists are also studied.

Prerequisite: French 224 and consent of instructor.

455.-456. Special Topics. 2 to 4 hrs. I, II.

A course for advanced students sufficiently prepared to do constructive work in phases of the language of literature of interest to them. Readings, conferences, and reports.

Prerequisite: consent of instructor.

495H-496H. Readings for Honors in French. 4-4 hrs. I, II.

Open only to French majors of outstanding ability. Both courses must be taken in order to receive Honors credit.

Refer to Page III-3 for rules and general information.

GEOLOGY

(DIVISION OF SCIENCES)

Professor Janssen

Assistant Professor Stewart

Geology acquaints the student with the nature of the earth, the physical forces which operate upon it, the age-long development of life, and provides an understanding of the rocks and minerals. As a profession, training in geology may lead to educational or industrial pursuits of wide variety.

Geology majors must complete at least 26 semester hours of credit within the department. Thirty hours are recommended, however, to meet civil service requirements or fulfill entrance requirements to most graduate schools.

A major in geology may be obtained under either the A. B. or B. S. degree. The latter is usually preferred because the curriculum provides wider study in related fields of science. A combined geology-engineering major is also obtainable (see Engineering Department, Geology Option). In addition to meeting the "General and Specific" requirements of the degree as outlined on foregoing pages, the curriculum of geology majors must include the following courses.

Curriculum for Geology Majors

Geology 200, 300, and 310	10 hours
Geology, minimum additional courses	16 hours
Botany 203	4 hours
Chemistry	8 hours
English 377 or 408	3 hours
Foreign language (German or French recommended. Spanish is acceptable for petroleum geologists, but may not meet eventual Ph. D. requirements.)	12 hours
Geography 320	3 hours
History 312 or 313	3 hours
Zoology 211	4 hours

In addition to the above requirements, the following are recommended as electives, particularly if future graduate study is anticipated:

Botany 316	4 hours
Economics 241	3 hours
Engineering 110, 201, and 320	2-9 hours
Geography 203, 205, and 325	2-8 hours
German 223 and 224	3-6 hours
Journalism 402	3 hours

Physics (required for B. S. degree)	8 hours
Political Science 201 and 202	3-6 hours
Speech 207 and 306	3-6 hours
Zoology 212, 402, and 409	3-10 hours

COURSES OF INSTRUCTION

A \$2.00 science fee, payable to the Financial Secretary, is charged for each laboratory course taken.

- 200. General Introductory Geology.** 4 hrs. I, II.
Origin and nature of the earth, geological processes, common rocks and minerals. Lecture 3 hrs.; laboratory 2 hrs.; field trips.
- 300. Historical Geology.** 3 hrs. I, II.
Chronological development of the earth, sequence of geologic ages, rock formations, and evolution of life as revealed by fossils.
Prerequisite: Geology 200.
- 303. Introductory Meteorology.** 3 hrs. I.
Weather and climate, phenomena of the atmosphere, elementary principles of weather forecasting. Lecture 2 hrs.; laboratory 2 hrs.
- 310. Map Reading & Interpretation.** 3 hrs. I.
History and theory of map projections; practice in use of topographic contour maps and aerial photographs.
- 313. Structural Geology.** 3 hrs. II.
Analysis and classification of secondary structures common to all classes of rocks; their relationships and stresses which caused them.
Prerequisite: Geology 200.
- 314. Mineralogy.** 3 hrs. I.
Identification, classification, origin, occurrence, and economic uses of minerals. Lecture 2 hrs.; laboratory 2 hrs.
Prerequisite: Geology 200 or consent of instructor.
- 315. Geology of West Virginia.** 3 hrs. I.
Geologic history, rock formations, fossils, land features, and mineral resources of the state.
Prerequisite: Geology 200 or consent of instructor.
- 321. Petrology.** 3 hrs. II.
Identification and classification of igneous, sedimentary, and metamorphic rocks; origin, occurrence, economic and geologic uses. Lecture 2 hrs.; laboratory 2 hrs.
Prerequisite: Geology 314.
- 350. Physiography of North America.** 3 hrs. II.
Surface features of the continent as resulting from their structural, orogenic, and erosional origins.
Prerequisite: Geology 200.
- 400. Special Topics in Geology.** 1 or 2 hrs. I, II.
Independent study or a project in some phase of geology, with results embodied in a written report or term paper. Majors and minors only. Science fee \$2.00 if laboratory facilities are required.
Prerequisite: 10 hrs. of geology.
- 401. Field Problems in Geology.** 2 hrs. I, II.
Independent field work in local geology; field methods and practice; results embodied in a written field report. Majors and minors only. Science fee \$2.00 if laboratory facilities are required.
Prerequisite: 10 hrs. of geology.

402. Research Problems in Geology. 2 hrs. I, II.

Independent research in a selected phase of geology; research methods and practice; results embodied in a written report. Majors and minors only. Science fee \$2.00 if laboratory facilities are required.

Prerequisite: 10 hrs. of geology.

418. Paleontology. 3 hrs. I. (Formerly 318)

Fossil animal and plant life; its development, evolution, and dominance through the geologic ages. Recommended for biological science majors.

Prerequisite: Geology 300 or graduate status.

422. Economic Geology. 3 hrs. II. (Formerly 322)

Nature, origin, distribution, and uses of the world's commercially valuable mineral and rock resources.

Prerequisite: Geology 300 (and 314 recommended) or graduate status.

451. Geomorphology. 3 hrs. II.

Geologic nature and origins of the world's land forms.

Prerequisite: Geology 200 (and 350 recommended) or graduate status.

GERMAN**(DIVISION OF HUMANITIES)**

Assistant Professors Lieberman, Perl

An intimate acquaintance and appreciation of the German language, history, literature, philosophy, art, music, and science are essential to students who desire a liberal or professional education. The department recommends a minimum of 12 hours of German for majors in physical and social sciences, engineering and music.

Requirements for a major in German: 26 hrs., including 101, 102, 203, 204, 309, 310, 317, 318, 301 or their equivalent.

NOTE: Prerequisites for students with previous training in German may be affected by results of placement tests.

101-102. First year German. 3-3 hrs. I, II.

Grammar, pronunciation, syntax, conversation and translation of easy text from a graded German reader on the cultural history of Germany. No credit for 101 without 102.

Prerequisite for 102: German 101 or one unit of high school German.

203.-204. Intermediate German. 3-3 hrs. I, II.

Review of important grammatical constructions, reading and translation of moderately difficult text from short stories, selections from Goethe's "Faust" and Schiller's "Wilhelm Tell." Lectures on the literary and cultural movements of Germany from Humanism to the present time.

Prerequisite for 203: German 102 or 2 years of high school German or equivalent.

Prerequisite for 204: German 203 or 3 units of high school German or equivalent.

223. Elementary Scientific German. 3 hrs. I.

Reading of easy scientific texts in the fields of chemistry, physics, zoology, botany and geology.

Prerequisite: German 102 or equivalent.

224. Intermediate Scientific German. 3 hrs. II.

Reading of moderately difficult text from the above mentioned fields and discussion of translation difficulties.

Prerequisite: German 223.

301. Drama of the 18th, 19th, and 20th Centuries. 3 hrs. I, II.

Important dramas of Lessing, Goethe, Schiller, Kleist, Grillparzer, Hebbel and Hauptmann. Lectures on the movements of Classicism, Romanticism, Realism and Naturalism.

Prerequisite: German 204 or equivalent.

302. Novels of the 18th, 19th and 20th Centuries. 3 hrs. I, II.

Novels and short stories of Goethe, Schiller, Kleist, Grillparzer, Raabe, Stifter, Auerbach, Keller, Meyer, Storm, Hauptmann, Thomas Mann and Werfel. Lectures surveying the development of the German novel.

Prerequisite: German 204 or equivalent.

309. Conversation. 2 hrs. I.

Discussion of simple topics.

Prerequisite: German 102 or 2 years of high school German.

310. Conversation. 2 hrs. II.

Discussion of contemporary incidents based on the reading of German newspapers and periodicals.

Prerequisite: German 309 or equivalent.

313. Scientific German. 3 hrs. I, II.

Translation of difficult scientific articles from periodicals and textbooks. Training in the use of scientific German dictionaries.

Prerequisite: German 204 or equivalent.

317. Survey of German Literature. 3 hrs. I.

Important literary documents of the old, middle and new High German periods up to Klopstock with stress on the Nibelungen, Gudrun, Walter von der Vogelweide, Wolfram von Eschenbach, and Gottfried von Strassburg. Lectures tracing Richard Wagner's "Nibelungen," "Parzival," and "Tristan und Isolde" to the Middle High German period.

Prerequisite: German 204 or equivalent.

318. Survey of German Literature. 3 hrs. II.

From 1750 to the present. Important literary movements represented by Herder, Wieland, Lessing, Schiller, Kleist, Grillparzer, Hebbel, Heine, Raabe, Stifter, Meyer, Gerhart Hauptmann, Wassermann, Thomas Mann and Werfel.

Prerequisite: German 204 or equivalent.

407-408. Goethe's Faust. 3-3 hrs. I, II.

Reading of "Faust" Parts I. and II. Historical background and Faust legend, Goethe's life and works as related to Faust, supplemented by lectures on the philosophical views of the poem and its influence on contemporary and subsequent authors.

Prerequisite for 407: German 204 or equivalent.

Prerequisite for 408: 407. Open to juniors.

HISTORY

(DIVISION OF SOCIAL SCIENCES)

Professors Toole, Heath, Moffat, Cometti

Requirement of history major:

Thirty-two semester hours, including History 221-222, and History 311-312-313.

COURSES OF INSTRUCTION

105. English History to 1660. 3 hrs. I, II.
 106. English History Since 1660. 3 hrs. I, II.
 207. History of West Virginia and the Trans-Allegheny Frontier. 3 hrs. I, II.
 219. Early European History: from Earliest Times to the Fifth Century A. D. 3 hrs. I.
 220. European History, 400-1500 A. D. 3 hrs. II.
 221. European History, 1492-1815. 3 hrs. I, II.
 222. Modern Europe Since 1815. 3 hrs. I, II.
 301. Hispanic America. 3 hrs. I.
 308. Social and Economic History of the South. 3 hrs.
 309. Social and Economic History of the West. 3 hrs.
 311. American History, 1492-1789. 3 hrs. I, II.
 312. American History, 1789-1865. 3 hrs. I, II.
 313. American History Since 1865. 3 hrs. I, II.
 402. American Diplomacy. 3 hrs. I.
 420. Makers of European History. 3 hrs.
 421. The Era of the Renaissance and the Reformation. 3 hrs.
 422. The French Revolution and the Napoleonic Era. 3 hrs.
 425. European History, 1814-1914. 3 hrs.
 426. European History, 1914 to the Present. 3 hrs.
 427. Russia in the 19th and 20th Centuries. 3 hrs.
 432. American History Since 1914. 3 hrs.

HOME ECONOMICS**(DIVISION OF SCIENCES)**

See courses recommended for a major in Home Economics in the College of Arts and Sciences on page III-14. For a description of courses see Teachers College bulletin.

JOURNALISM**(DIVISION OF SOCIAL SCIENCES)**

Professor Pitt
 Assistant Professor Lee
 Instructor Herring

The Department of Journalism offers a news-editorial sequence and courses in advertising, radio journalism, industrial publications, and school publications.

Its primary purpose is to train students for employment in the news-editorial departments of daily newspapers but courses may also be elected by students in other fields who wish to increase their understanding of the press, and by prospective teachers of high school journalism and supervisors of high school newspapers.

A major must complete a minimum of 28 hours of journalism plus certain specified courses in the social sciences. No professional courses may be taken before the sophomore year.

On completion of the requirements of the College of Arts and Sciences and the Department of Journalism, the student is awarded the degree of Bachelor of Arts and, on recommendation of the journalism faculty, a Certificate in Journalism.

Course Requirements for Journalism Majors

Journalism courses: 101, 2 hrs.; 201-202, 8 hrs.; 301-302, 8 hrs.; 308-309, 4 hrs. or 406, 3 hrs.; 310-311, 6 hrs.; 402, 3 hrs.

ADVERTISING CURRICULUM

Students interested in journalism who wish to prepare themselves for work in advertising should follow the curriculum given on page III-10.

Complementary courses: Business Administration 103*, 2 hrs.; Economics 241, 3 hrs.; History 313, 3 hrs.; Political Science 201-202, 6 hrs.; Psychology 201, 4 hrs.; Sociology 200, 3 hrs.

Additional specific requirements for Bachelor of Arts degree: English 101-102, 6 hrs.; 221-222, 4 hrs.; 341 or 342, 3 hrs.; Speech 101-102, 4 hrs.; mathematics, 3 hrs.; laboratory science, 7 or 8 hrs.**; foreign language***, 12 hrs.; physical education, 2 hrs.

Radio-Journalism Sequence

In conjunction with the Departments of Speech and Business Administration, majors in journalism may elect to take the following courses leading to certification in Radio-Journalism. This sequence prepares students to enter the fields of radio news casting and radio news editing:

Course Requirements for Radio-Journalism Sequence

Business Administration 231, 2 hrs., 330, 3 hrs.; Journalism 350, 3 hrs., 351, 3 hrs., 381, 4 hrs.; Speech 260, 3 hrs., 261, 3 hrs., 360, 3 hrs., 431, 3 hrs.

COURSES OF INSTRUCTION

NOTE: A laboratory fee of \$3.00 for subscriptions to newspapers used as textbook and laboratory material is required for all courses except 310-311, 335, 336, and 350-351.

101. Survey of Journalism. 2 hrs. I, II.

Elementary principles of journalism as exemplified by representative American newspapers.

For students who have not studied journalism or had newspaper experience.

201-202. Reporting. 4-4 hrs. I, II.

Theory and practice in gathering and writing news. Laboratory work on student newspaper.

301-302. Copy Reading, Editing. 4-4 hrs. I, II.

Theory and practice in writing headlines, editing copy, and make-up. Laboratory work with Associated Press teletype copy and student newspaper.

Prerequisite: Journalism 201-202 or equivalent.

304-305. Editorial Writing. 2-2 hrs. I, II.

Reading of contemporary editorials and practice in writing editorials.

308-309. Feature Writing. 2-2 hrs. I, II.

Practice in writing news features for student and local newspapers.

310-311. History of American Journalism. 3-3 hrs. I, II.

320-321. Book Reviewing. 2-2 hrs. I, II.

Reading of contemporary books and practice in writing reviews.

335-336. Industrial Publications. 3-3 hrs. I, II.

Theory and practice of editing internal and external house publications and trade journals.

350-351. Radio News Editing. 3-3 hrs. I, II.

Theory and practice in compiling and editing news for radio broadcasting.

*Required of students who cannot type efficiently.

**Geology 200 and any 300 course, or Chemistry 101-102, or Botany 203 and Zoology 211.

***Students who present no units of foreign language for entrance must take 18 hours in college; those who present 1 unit must take 15 hours.

- 355-356. News Photography.** 2-2 hrs. I, II.
Methods of taking pictures for newspapers and of picture editing, with practice of photography, developing and printing.
Prerequisite: for 355, Journalism 201-202 or consent of instructor; for 356, Journalism 355 or consent of instructor.
- 381. Newspaper Advertising Practices.** 4 hrs. I.
Organization of newspaper advertising departments, advertising agencies, and newspaper representatives.
A laboratory tour of Cincinnati, Ohio, will be made.
- 382. Advertising Copy and Layout.** 4 hrs. II.
Copy and layouts, especially as applied to newspapers. Laboratory work on student and local newspapers.
- 402. Law of the Press.** 3 hrs. II.
Technical case study of laws pertaining to the press.
- 405. Ethics of Journalism.** 2 hrs. II.
Problems, policies, and practices of the press in a democracy.
- 406. Advanced Reporting.** 3 hrs. I.
Theory of reporting for small city dailies with practice in covering specific assignments and writing for publication.
Prerequisite: Journalism 201-202 or equivalent.
- 410-411. Journalism Seminar.** 1-1 hrs. I, II.
For journalism majors only.

MATHEMATICS

(DIVISION OF SCIENCES)

Professor Barron

Associate Professor Goins

Assistant Professors Bragonier, Hardman, Wright, Baeumler

Mathematics Major—15 hours beyond the Integral Calculus.

Placement Examination — Satisfactory attainment in an examination covering first year high school algebra through simple quadratic equations is a prerequisite for enrollment in Math. 120. Students desiring to start college mathematics with Math. 190, or Math. 223 should be prepared to pass a placement examination on the topics listed under Math. 120 below.

COURSES OF INSTRUCTION

- 50. Algebra.** No credit. I, II.
Meets five days a week. Complete review of first year high school algebra through simple quadratic equations.
- 52. Plane Geometry.** No credit. I.
Meets five days a week. Complete review of high school plane geometry.
- 120. Algebra.** 3 hrs. I, II.
Exponents and radicals, quadratic equations, ratio, proportion and variation, logarithms, binomial theorem, progressions.
Prerequisite: Mathematics 50 or the equivalent as shown by the placement examination.

121. Solid Geometry. 3 hrs. I, II.

Prerequisites: Mathematics 50, or one unit of high school algebra, plane geometry.

122. Plane Trigonometry. 3 hrs. I, II.

Prerequisites: Mathematics 120 or concurrent registration, plane geometry.

150. Introduction to College Mathematics. 3 hrs. I, II.

Offered for those who can devote but three hours to the study of mathematics in college. Fundamentals of algebra, with emphasis on exponents, logarithms, and progressions, for a study of selected topics in the mathematics of investment; the function concept; graphs.

Prerequisites: Satisfactory attainment on an arithmetic placement examination, and one unit of high school algebra.

125-225. Freshman Mathematics. 5-5 hrs. I, II. (Formerly Math. 190 & 191).

A coordinated course in algebra, trigonometry, and analytic geometry meeting five hours per week throughout the year for students who plan to study engineering, or major or minor in mathematics, physics or chemistry. Satisfactory completion of 225 qualifies the student to enroll in the calculus.

Prerequisite: Math. 120 or the equivalent as shown by a placement test.

223. College Algebra. 3 hrs. I, II.

Complex numbers, advanced topics in quadratic equations, theory of equations, mathematical induction, determinants, permutations, combinations, and probability.

Prerequisite: Mathematics 120 or the equivalent as shown by the placement examination.

224. Analytic Geometry. 4 hrs. I, II.

Cartesian coordinates, straight lines, conic sections, higher plane curves, polar coordinates, parametric equations, introduction to solid analytic geometry.

Prerequisites: Mathematics 122 and 223.

310. Elementary Statistical Analysis. 3 hrs. I.

Probability concepts; sampling; confidence limits; significance tests; elementary concepts of statistical quality control.

Prerequisite: Mathematics 223.

325. Differential and Integral Calculus. 4 hrs. I, II.

Variables, functions, limits, differentiation with applications, introduction to integration with applications, indeterminate forms.

Prerequisite: Mathematics 191 or 224.

326. Integral Calculus. 4 hrs. I, II.

Methods of integration, applications of definite integrals, approximate integration, infinite series, expansion of functions, multiple integration.

Prerequisite: Mathematics 325.

327. Selected Topics in Differential and Integral Calculus. 3 hrs. II.

Supplements the usual year course in differential and integral calculus by giving a more extended coverage of such topics as curve tracing, partial differentiation, multiple integrals, hyperbolic functions and infinite series as well as providing an introduction to differential equations.

Prerequisite: Mathematics 326 or concurrent registration.

332. Theory of Equations. 4 hrs.

Complex numbers, polynomials, cubic and quartic equations, ruler and compass constructions, isolation of roots, approximation to real roots, algebraic number fields, determinants and matrices, linear equations, elimination.

Prerequisite: Mathematics 325 or concurrent registration.

420. College Geometry. 3 hrs.

Recent geometry of the triangle and circle studied by Euclidean methods; problems in ruler and compass constructions. A problem course in advanced plane geometry which is of special value to those who are training to teach high school mathematics.

Prerequisite: Mathematics 122.

421. Solid Analytic Geometry. 3 hrs.

The point, plane, straight line, surfaces and curves referred to coordinate systems in space.

Prerequisite: Mathematics 191 or 224.

427. Advanced Calculus. 4 hrs. I.

The number system; theory of limits; infinite sequences; functions of real variables; derivatives; partial differentiation, with applications to differential geometry; maxima and minima of functions of several variables.

Prerequisite: Mathematics 326.

428. Advanced Calculus. 4 hrs. II.

A continuation of 427. Theory of definite integrals, multiple integrals, line and surface integrals, Green's theorem, transformation of multiple integrals, improper integrals, infinite series.

Prerequisite: Mathematics 427.

430. Vector Analysis. 3 hrs. I.

The algebra of vectors; the differential calculus of vectors; applications to geometry, physics, mechanics.

Prerequisite: Mathematics 326.

432. Vector and Tensor Analysis. 3 hrs. II.

A continuation of Mathematics 430. The integral calculus of vectors, introduction to tensor analysis, applications.

Prerequisite: Mathematics 430.

435. Ordinary Differential Equations. 4 hrs.

An exposition of methods used in solving ordinary differential equations, with applications to geometry, physics, and mechanics.

Prerequisite: Mathematics 326.

436. Partial Differential Equations. 3 hrs. II.

An exposition of methods used in solving partial differential equations, with applications to geometry, and boundary value problems in mathematical physics involving Fourier Series, and series of Bessel Functions.

Prerequisite: Mathematics 435.

440. Higher Algebra. 3 hrs.

The number system, theory of numbers, theory of polynomials, theory of equations, determinants and matrices, constructions.

445. Introduction to the Theory of Statistics. 3 hrs.

The theory and application of mathematical statistics, treating such topics as averages, measures of dispersion and skewness, frequency distributions, frequency curves, and correlation. Applications to miscellaneous practical problems.

Prerequisite: Mathematics 310, 325.

450. Fundamental Concepts and History of Mathematics. 3 hrs.

A discussion of the logical foundations of algebra, geometry, and analysis, as an approach to an answer to the question "what is mathematics?" This discussion will be coordinated with the historical development of mathematics from ancient to modern times.

Prerequisite: Senior or graduate standing.

460. Functions of a Complex Variable. 3 hrs.

Complex numbers; analytic functions; properties of elementary functions; integrals; power series; residues and poles; conformal mapping with applications to problems in potential, steady temperatures, and flow of fluids.

Prerequisite: Mathematics 326.

MILITARY SCIENCE AND TACTICS

Major Purdy Phillips
M/Sgt. George W. Tope
SFC Eugene J. Barnum

101-102. Basic Course Military Science. 2-2 hrs.

Organization of the army and ROTC; American military history; individual weapons and marksmanship; school of the soldier and exercise of command. Four hours per week.

201-202. Basic Course Military Science. 2-2 hrs.

Crew-served weapons and gunnery; map and aerial photograph reading; school of the soldier and exercise of command. Four hours per week.

Prerequisite: Military Science 101-102.

301-302. Advanced Course Military Science. 3-3 hrs.

Small unit tactics and communications; organization, function and mission of the arms and services; military teaching methods; leadership; school of the soldier and exercise of command. Six hours per week.

Prerequisite: Military Science 101-102, 201-202 or equivalent military service.

351. Summer Camp. 3 hrs.

A six weeks' (44 hours per week) intensive training program, supplementing the material offered in MS 201-202 and 301-302. Interior guard; chemical warfare training; marksmanship; tactical and technical problems and exercises.

Prerequisite: Military Science 301-302.

401-42. Advanced Course Military Science. 3-3 hrs.

Logistics; operations; military administration and personnel management; service orientation; school of the soldier and exercise of command. Six hours per week.

Prerequisite: Military Science 301-302, 351.

NOTE: The ROTC program is designed to permit completion of the four years' ROTC program simultaneously with receipt of the Baccalaureate Degree in June of the senior year. For this reason students must be in phase, i. e., to enroll in 101, a student must be a first semester freshman; to enroll in 302, a student must be a second semester junior, etc.

The ROTC program can be pursued in conjunction with any curriculum of the college.

MUSIC

(DIVISION OF HUMANITIES)

See courses recommended for a major in Music in the College of Arts and Sciences on pages III-16—III-17. For a description of courses see Teachers College bulletin.

PHILOSOPHY

(DIVISION OF SOCIAL SCIENCES)

Professor Beck

NOTE: No courses open to first semester freshmen.

A minimum of 26 hours is required for a major in philosophy.

- 201. Introduction to Philosophy.** 3 hrs. I, II.
Questions and answers concerning the nature of existence and human values and how we come to know them.
- 303. Ethics.** 3 hrs. I.
The history of moral ideas and a critical study of the different ways of dealing with moral problems.
- 304. Logic and Scientific Methods.** 3 hrs. I, II, S.
The analysis of the correct principles of thinking and observation.
- 306. Esthetics.** 2 hrs. I.
Examination of the qualities involved in the appreciation of beauty which serve as standards of taste.
- 311. Survey of Ancient and Medieval Philosophy.** 3 hrs. I.
- 312. Survey of Modern Philosophy.** 3 hrs. II.
Prerequisite: Philosophy 201, or 311, or 410.
- 315. The Development of American Philosophy.** 2 hrs. I, S.
Great American thinkers from Jonathan Edwards to John Dewey.
- 320. Types of Religious Philosophy (Comparative Religion).** 3 hrs. I, S.
The relation of the world's religions to human culture and the role of religious faith in the establishment of the world community.
- 321. Current Philosophical Trends.** 3 hrs. II, S.
Selected readings in contemporary thought embracing such movements as pragmatism, positivism, realism and idealism.
Prerequisites: Philosophy 201, or 311, or 312.
- 410. The Philosophical Sources of American Culture.** 3 hrs. I, S.
Attention to the thinkers who are most directly influential in determining the basic American beliefs and ideals in the realms of religion, science, morality, politics, economics, and education.
- 411. John Dewey: Philosopher and Educator.** 3 hrs. I, S.
Exposition of Dewey's entire philosophy as background for his views on education.
- 419. Survey of Religious Philosophy in the Western World.** 3 hrs. II, S.
- 495H-496H. Readings for Honors in Philosophy.** 4-4 hrs. I, II.
Open only to philosophy majors of outstanding ability. Both courses must be taken in order to receive Honors credit.
Refer to page III-3 for rules and general information.

PHYSICS

(DIVISION OF SCIENCES)

Professor Martin

Instructor Shafer

The purposes of this department are:

To offer the student adequate training in the field of physics in order to enable him to gain employment as a professional physicist or to enter a school that offers graduate training in physics.

To offer preparatory work to students who may wish to enter professional schools of engineering, medicine, dentistry, pharmacy, medical technology, etc.

To offer elementary courses to students who have had no previous training in physics and may need a limited knowledge of the subject to satisfy the requirements of other departments or to satisfy their own desire for some acquaintance with the subject.

Curriculum for Physics Majors leading to the Bachelor of Science Degree.

First Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
English 101	3	English 102	3
Mathematics 190	5	Mathematics 191	5
Chemistry 251	5	Chemistry 252	5
Physical Education 113	1	Speech 101	2
or Military Science 101*	2	Physical Education 114	1
Orientation 100	1	or Military Science 102*	2
	15 or 16		16 or 17

Second Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
English 221	2	English 222	2
Physics 201	4	Physics 203	4
Physics 202	1	Physics 204	1
Mathematics 325	4	Mathematics 326	4
German 101	3	German 102	3
Speech 102	2	Psychology	3
	16		17

Third Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Physics 300	3	Physics 302	3
Physics 301	2	Physics 303	2
German 223	3	German 224	3
Zoology 211	4	Botany 203	4
Sociology 200	3	Political Science 201	3
	15		15

Fourth Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Physics 304 or 314	3	Physics 306 or	3
Physics 305 or 315	2	Engineering 306	3
Physics 401 or 402	3	Physics 307	2
Mathematics 435	3	Physics 308	3
Philosophy 304	3	Physics 309	2
Economics 241	3	Economics 242	3
	17	Geology 200	4
			17

*Military Science 201 and 202 must be taken following Military Science 101 and 102.

COURSES OF INSTRUCTION

No course open to freshmen except by permission of the Department Head and the Dean of the College.

NOTE: A \$2.00 fee is charged for each laboratory course taken. This is payable to the Financial Secretary following registration.

- 201-203. General Physics.** 3 or 4 hrs.—3 or 4 hrs. I, II.
Either three or four lectures each week.
Students of engineering and majors in mathematics and physics take the 4-hour course. All others take the 3-hour course.
Prerequisites: Mathematics 120 and 122 for the 3-hour course. Mathematics 191 or 224 for the 4-hour course.
- 202-204. General Physics Laboratory.** 1-1 hr. I, II.
Three hours of laboratory each week.
Required of all students taking Physics 201 and 202.
- 300. Electricity and Magnetism.** 3 hrs. I.
Three hours lecture each week. A study of direct current electricity and magnetism.
Prerequisites: Physics 203, 204, and Mathematics 326.
- 301. Electrical Measurements.** 2 hrs. I.
Four hours laboratory each week. Accompanies Physics 300.
Prerequisites: Physics 203, 204, and Mathematics 326.
- 302. Electricity and Magnetism.** 3 hrs. II.
Three hours lecture each week. A study of alternating current electricity and magnetism.
Prerequisites: Physics 300 and Mathematics 326.
- 303. Electrical Measurements.** 2 hrs. II.
Four hours laboratory each week. Accompanies Physics 302.
Prerequisites: Physics 300 and Mathematics 326.
- 304. Light.** 3 hrs.
Three hours lecture each week.
Prerequisites: Physics 203, 204.
- 305. Light Laboratory.** 2 hrs.
Four hours laboratory each week. Accompanies or follows Physics 304.
Prerequisites: Physics 203, 204.
- 306. Elements of Mechanics.** 3 hrs.
Three hours lecture each week.
Prerequisites: Same as for Physics 300.
- 307. Mechanics Laboratory.** 2 hrs.
Four hours of laboratory each week.
Prerequisites: Same as for Physics 300.
- 308. Heat.** 3 hrs.
Three hours lecture each week.
Prerequisites: Same as for Physics 300.
- 309. Heat Measurements.** 2 hrs.
Four hours laboratory each week. Accompanies or follows Physics 308.
Prerequisites: Same as for Physics 300.
- 311. Sound.** 3 hrs.
Three hours lecture each week.
Prerequisites: Physics 203, 204.
- 314. Electronic Physics.** 3 hrs. (Formerly 205)
Three hours of lecture each week. A study of electron tubes and associated circuits.
Prerequisites: Physics 203, 204.
- 315. Electronics Laboratory.** 2 hrs. (Formerly 206)
Four hours of laboratory each week.
Prerequisites: Physics 203, 204.

- 401. Modern Physical Theories.** 3 hrs.
Three hours of lecture each week. A study of atomic theories of matter, optical spectroscopy, X-rays, and introduction of nuclear physics.
Prerequisites: Physics 300, 301, and Mathematics 326.
- 402. Nuclear Physics.** 3 hrs.
Three hours of lecture each week. A more detailed study of nuclear physics than given in Physics 401.
Prerequisites: Physics 300, 301, and Mathematics 326.
- 403. Nuclear Physics Laboratory.** 2 hrs.
Four hours of laboratory each week.
Prerequisites: Same as for Physics 402.
- 412. Radio.** 3 hrs. (Formerly 312)
Three hours of lecture each week.
Prerequisites: Physics 314, 315, or equivalent.
- 413. Radio Laboratory.** 2 hrs. (Formerly 313)
Four hours of laboratory each week.
Prerequisites: Physics 314, 315, or equivalent.

POLITICAL SCIENCE

(DIVISION OF SOCIAL SCIENCES)

Professors Dillon, Harris, Harper
Associate Professors Stewart, Leiden

The political science curriculum has two principal objectives: first, to provide a basic understanding of the functioning of government and prepare students for democratic citizenship and second, to give a specialized foundation to those planning to enter law school, government service (foreign service, public administration), teaching, research or politics.

Suggested Curriculum for Law and Political Science Majors

First Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
English 101	3	English 102	3
Language	3	Language	3
Political Science 101	2	Political Science 102	2
History 105	3	History 106	3
Speech 101	2	Speech 102	2
*Physical Education 113	1	*Physical Education 114	1
Orientation 100	1		
	15		14

Second Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
English 221	2	English 222	2
Language	3	Language	3
Political Science 201	3	Political Science 202	3
Science	4	Science	4
Economics 241	3	Economics 242	3
	15	Mathematics	3
			18

*Military Science may be substituted.

Third Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Political Science	3	Political Science	3
Science	4	English 341 or 342	3
		Science	4

Fourth Year

<i>First Semester</i>	<i>Hrs.</i>	<i>Second Semester</i>	<i>Hrs.</i>
Political Science	6	Political Science	6

Recommended Electives for the Third and Fourth Year:

History 311, 312, 313; Business Administration 215, 216, 415; Economics; Philosophy 201, and others; Psychology 201; Sociology.

COURSES OF INSTRUCTION

- 101. Introductory Course.** 2 hrs. I, II.
Survey of basic theories and principles of the state. To acquaint students with political terminologies and elements of governmental institutions.
- 102. Introductory Course.** 2 hrs. I, II.
Current political problems.
- 200. Current Latin American Problems.** 2 hrs.
Political, economic and social problems of Latin America as they relate to and affect American Foreign Policy.
- 201. American National Government.** 3 hrs. I, II, S.
Survey of principles of American philosophy of government, emphasizing their development in a practical study of the mechanism through which the public will is formulated, expressed and carried out.
- 202. American State Government.** 3 hrs. I, II, S.
General study with special attention to the state government of West Virginia.
- 301. Municipal Government.** 3 hrs. II.
Types of city government, charters, federal and state relations with cities, the legislative or ordinance power, departmental organization, municipal courts.
- 303. American Political Parties.** 3 hrs.
Study of the political process as a living reality, combining structural description with functional analysis.
Prerequisite: Political Science 201 or 202.
- 305. Problems in National Government.** 2 hrs.
A study of the fundamental issues underlying the theory and practice of American National Government.
Prerequisite: Political Science 201.
- 307. Public Opinion and Propaganda.** 3 hrs.
From the point of view of politics and political thinking. Emphasis on the analysis of propaganda and the measurement of public opinion.
- 323. American Constitutional Law.** 3 hrs. I.
Leading cases in the development of American constitutional law. Casebook method supplemented by writing of moot cases, opinions of publicists, and current material.
Prerequisites: Political Science 201, 202.

333. Public Administration. 3 hrs. II.

Basic principles in the organization and functioning of governmental agencies for the execution of government policies.

Prerequisite: Political Science 201 or 202.

400-404. Selected Topics. 3 hrs. each.

To offer a course seminar or workshop on some special topic in the field of Political Science which is not adequately treated in the regular course offerings.

405. International Relations. 3 hrs.

Special consideration given to the rise and development of international institutions, particularly the United Nations.

406. Contemporary World Politics. 3 hrs.

Special emphasis given to problems of American Foreign Policy. The factors, forces and movements abroad which affect our foreign policy.

407. Far Eastern Politics. 3 hrs.

Detailed discussion of the contemporary institutions and politics of China, Japan and other nations of the Far East.

408. Politics of the Middle East. 3 hrs.

Detailed examination of the institutions and politics of such states as Egypt, Turkey, Persia, Afghanistan, Iraq, Jordan, Syria and Israel.

409. Parliamentary Governments. 3 hrs.

Origin, development, structure and current operations of the English, French, Swiss and other selected democratic governments. Emphasis on the English system.

410. Modern Dictatorships. 3 hrs.

Detailed examination of the ideology, structure and operations of the modern totalitarian state. Emphasis on the Soviet Union.

420. State Administration. 3 hrs.

Administrative organization and methods of executing policies in the forty-eight states.

Prerequisite: Political Science 202.

425. Early Political Theory. 3 hrs.

Political thought and philosophy from Plato to the 17th century.

426. Recent Political Theory. 3 hrs.

Political thought and philosophy from the 17th century to the present time.

495H-496H. Readings for Honors in Political Science. 4-4 hrs. I, II.

Open only to Political Science majors of outstanding ability. Both courses must be taken in order to receive Honors credit.

Refer to page III-3 for rules and general information.

PSYCHOLOGY

(DIVISION OF SOCIAL SCIENCES)

Professors Loemker, VanBibber

Associate Professor Feil

Assistant Professors Lichtenstein, Perry

The Psychology Major

The Department of Psychology recognizes two types of major sequence, both of which require the completion of a minimum of twenty-six hours in psychology courses.

Psychology Major—Non-Professional. Only one course is specifically prescribed: Psychology 201, General Psychology. Other psychology courses will be selected in accordance with the interests of the student and with the approval of the adviser. The student with the non-professional major will not be recommended for professional work or for graduate professional study in psychology.

Psychology Major—Pre-professional. Planned to provide the student with the background and skills essential for professional work and training in psychology. It will include the following courses: Psychology 201, 202, 317, 323, 406, 420, 421, and 460. Recommended: Mathematics, Zoology and Physiology, and Philosophy 304.

COURSES OF INSTRUCTION

100. Introduction to Psychology. 3 hrs. I, II.

For students who probably will take no further courses in psychology.

The scientific study of human behavior and experience to enable the student better to evaluate human factors in business, industrial, professional, political, and social life.

200. Personal and Social Adjustment. 3 hrs. I, II.

Basic, general principles of psychology applied to immediate problems of living, both in college and out: understanding oneself, achieving emotional stability, maturity, and self-confidence, developing a well adjusted personality, acquiring effective learning and study techniques, selecting and planning for one's vocation, attaining proficiency in social relations.

201. General Psychology. 3 or 4 hrs. I, II, S.

General principles and methods of psychology with practice in laboratory procedures. Psychological development, learning, memory, thinking and imagination, perceptual processes, intelligence and special abilities, personality.

Three class periods and one two-hour laboratory period each week.

Prerequisite to all psychology courses numbered higher than 201, except Psychology 318.

In Evening School this course is given without the laboratory period and carries 3 hours credit. Evening School students may use the 3-hour course as prerequisite for advanced psychology courses with the approval of the instructors concerned.

302. Social Psychology. 3 hrs. I, II, S.

Psychological study of group behavior: human development in the social environment, role of psychological factors in conventions, customs, morals, propaganda, psychological interrelationships in group behavior.

Prerequisite: Psychology 201.

308. Abnormal Psychology. 3 hrs. I, II, S.

Nature, causes, and prevalence of psychoses, neuroses, psychopathic states, mental deficiency from the standpoint of diagnostics; deviation in sensory and motor activities, memory, emotion, intelligence, personality.

Prerequisite: Psychology 201.

311. Psychological Development: Infancy to Old Age. 3 hrs. II, S.

Psychological characteristics of infancy, childhood, adolescence, adulthood, and old age, and the accompanying personal and social problems.

Prerequisite: Psychology 201.

317. Statistical Methods. 3 hrs. I.

Elementary course to equip the student with essential statistical procedures for research in psychology. Tabulation and graphic presentation of data, analysis of frequency distributions, averages and their uses, measures of dispersion, elementary theory of probability and its application, correlation, sampling techniques.

Prerequisite: Psychology 201.

- 318. Personnel Psychology for Technical Workers.** 2 hrs. I.
The psychology of industrial relations for the supervisor. Open only to juniors and seniors preparing for technical work in industry or related fields.
Prerequisite: Consent of instructor.
- 323. Experimental Psychology.** 4 hrs. II.
Designed to train the student in the use of psychological laboratory equipment and methods. Experiments in sensory and perceptual processes, motivation and emotions, motor activity, learning and memory, thinking.
Two class periods and two two-hour laboratory periods each week.
Prerequisite: Psychology 201.
- 332. Psychology in Advertising.** 2 hrs.
Using psychological principles in the planning, construction, and evaluation of advertising.
Prerequisite: Psychology 201.
- 340. Physiological Psychology.** 3 hrs. I.
The relationship between physiological functions, especially those of the nervous system, and behavior or experience.
Prerequisite: Psychology 201.
- 406. Intelligence: Theories and Development.** 3 hrs. I.
Nature of intelligence, individual differences in intelligence, mental levels; significance and methods of measuring intelligence; relation of intelligence to social efficiency.
Prerequisite: Nine hours of psychology.
- 416. Psychology of Learning.** 3 hrs.
Review and critical evaluation of experimental studies and theories of learning.
Prerequisite: Nine hours of psychology.
- 418. Psychology of Personnel.** 3 hrs. I, II, S.
Techniques in personnel administration, with emphasis on the psychological principles and methods involved. Problems of employment procedures, training programs, personnel records, communication, and human relations in business and industry.
Prerequisite: Psychology 201.
- 420. Mental Measurements.** 3 hrs. I.
Instruction and practice in the use of the Stanford-Binet and Wechsler tests; evaluation of test results.
Prerequisite: Nine hours of psychology.
- 421. Psychological Tests.** 3 hrs. II.
Instruction and practice in the use of group tests of intelligence and abilities, and in tests of interests and personality; evaluation of test results.
Prerequisite: 420.
- 450. Perception.** 3 hrs.
Experimental studies of and theories of perception, and the significance of perception in human behavior.
Prerequisite: Nine hours of psychology.
- 460. History and Systems of Psychology.** 3 hrs. I, S.
Prerequisite: Nine hours of psychology.
- 490. Problems in Psychology.** 1 to 4 hrs.
Research problems of interest to the student.
Prerequisite: Senior standing, twenty hours of psychology, and consent of Department Head.

495II-496II. Reading for Honors in Psychology. 4-4 hrs. I, II.

Open only to psychology majors of outstanding ability. Both courses must be taken in order to receive Honors credit. Refer to page III-3 for rules and general information.

SOCIOLOGY

(DIVISION OF SOCIAL SCIENCES)

Professors Richardson, Hayward
Instructor Corrie

The work of the department of sociology is designed: (1) to lay the foundations for an understanding of the nature and development of social institutions and their influence upon the personality and (2) to prepare for advanced study and research and (3) to provide training for positions in public and private institutions, government service and business enterprise.

Minimum for Major in Sociology: twenty-six hours including Sociology 200, 308, 421, and 428. Additional courses advised: Sociology 320 and 408.

COURSES OF INSTRUCTION

Sociology majors and minors are required to have Sociology 200 as a prerequisite to all advanced work except Sociology 231 and 232. Other students may elect undergraduate courses in sociology without having had Sociology 200.

200. Introductory Sociology. 3 hrs. I, II.

The origin and structure of society.

Not open to freshmen.

231. Rural Sociology. 2 hrs. I, II.

Development of rural society, town and country relationships.

Open to freshmen.

232. Urban Sociology. 2 hrs. I, II.

The growth and structure of the modern city with the effect of urbanization on social institutions.

Open to freshmen.

300. Principles of Sociology. 3 hrs. I, II.

The principles and fundamental concepts of sociology most useful to the teacher as he works in the school and community.

Open only to teachers.

301. Cultural Anthropology. 3 hrs. II.

Analysis of the culture of various primitive groups.

305. Community Organization. 3 hrs. I.

The Community and its significance in modern social life.

Prerequisites: Sociology 200 or 232.

308. Marriage and Family Life. 3 hrs. I, II.

Early family life and its relation to social organization, forms of marriage, changing family conditions, successful and unsuccessful marriages.

Prerequisite: Sociology 200.

311. Problems of Poverty. 3 hrs. I.

Problems arising out of illness, old age, dependency, unemployment, and homelessness.

Prerequisite: Sociology 200.

315. Juvenile Delinquency. 2 hrs. I.

Social and physical backgrounds of juvenile delinquency. Methods of institutional treatment.

Prerequisite: Sociology 200.

- 320. Criminology.** 3 hrs. II.
Analysis of crime and criminals with theories and statistics pertaining to individual and social factors.
Prerequisites: Sociology 200 and 311.
- 342. Social Institutions.** 3 hrs. II.
Critical appraisal of the origin, development, and purpose of the basic institutions of society.
Prerequisite: Sociology 200.
- 401. Population Problems.** 3 hrs. I.
The growth and distribution of population in relation to natural resources, commerce, and social relationships.
Prerequisites: Sociology 200 and junior or senior standing.
- 402. Special Topics.** 1 to 3 hrs. I, II.
Special problems in fields where the student has sufficient background to do constructive research and study.
Admission by staff approval.
- 403. Techniques and Methods of Social Investigation.** 3 hrs. II.
Methods of investigation and research in the social sciences. Sources of data, their evaluation, organization, and presentation. A special research project will be required of each student.
Prerequisite: Eight hours in sociology with senior or graduate standing.
- 404. Public Welfare.** 3 hrs. I.
The development and organization of local, state and federal agencies and programs for persons in need of assistance, care and protection.
- 406. Family Living.** 3 hrs. II.
Seminar in the basic structure and function of the modern American family.
Prerequisite: Junior or senior standing.
- 408. The Family.** 2 hrs. II.
The family as an institution, its structure, functions, and relation to social organization.
Prerequisites: Sociology 200 with senior or graduate standing.
- 412. Principles and Techniques of Group Relations.** 3 hrs. II.
Analysis of the group, participation, intergroup relationships, group tensions and group control.
Prerequisites: Sociology 200 and senior or graduate standing.
- 421. History of Social Thought.** 3 hrs. II.
A survey of sociological literature and thought from earliest times through the contemporary period.
Prerequisites: Sociology 200 with senior or graduate standing.
- 426. The American Negro.** 3 hrs. II.
Historical background, accomplishments in American cultural spheres, social and economic problems of the Negro.
Prerequisite: junior or senior standing.
- 427. Race Problems.** 3 hrs. II.
The nature, criteria, classification, and distribution of races; race differences and contacts.
Prerequisites: junior, senior, or graduate standing.

- 428. Medicine in Modern Society.** 3 hrs. I.
Changing patterns in medicine, government participation in the field, group practice, research and foundations, and international aspects.
Prerequisites: junior, senior, or graduate standing.
- 429. Social Legislation.** 3 hrs. II.
Social insurance as a device to meet the hazards of old age, illness, retirement, unemployment and physical handicaps. Special emphasis is placed on the Social Security Act.
- 430. The American Indian.** 3 hrs. I.
The physical and cultural study of the American Indian. Special emphasis on his contributions to our own culture.
Prerequisites: Sociology 200, with junior, senior, or graduate standing.
- 431. Classroom and Field Studies.** 3 hrs.
- 432. Classroom and Field Studies.** 3 hrs.
- 433. Industrial Sociology.** 3 hrs. II.
A study of the relationships existing between industry and the institutional phases of our society.

SPANISH

(DIVISION OF HUMANITIES)

Associate Professors Fors, Martin
Assistant Professor Stais

The Spanish department prepares students in practical conversation and in the cultural aspects of the literature and the people. The majors in this field should be able to speak Spanish with good intonation and pronunciation, use social correspondence with reasonable facility, and be well acquainted with the literary works produced in Spain and Latin America.

A Spanish major consists of 26 semester hours in the field as language requirements and Spanish 306.

NOTE: In the case of new students, prerequisites may be affected by the results of placement tests. See page I-35 of this catalogue.

COURSES OF INSTRUCTION

- 101-102. Elementary Course.** 3-3 hrs. I, II.
Pronunciation, intonation, conversation, composition, and reading, with added emphasis on self-expression in Spanish.
No credit is given for 101 without 102.
- 203-204. Intermediate Course.** 3-3 hrs. I, II.
Composition, conversation, and readings. Emphasis on idiomatic expressions and their use, designed to prepare the student to use the language for both cultural and practical purposes.
Prerequisite: Spanish 102.
- 306. Hispanic Civilization.** 3 hrs. II.
Study of the development of Spanish civilization and of the contributions of the Spanish-speaking nations to world culture.
No knowledge of Spanish required.
- 310-311. Advanced Conversation.** 2-2 hrs. I, II.
Class conducted strictly in Spanish; conversation on current events, literature, industries, commerce and travel.
Prerequisite: Spanish 204 or placement test.
- 312-313. Spanish-American Literature.** 2-2 hrs. I, II.
Readings from representative authors. Reports and class discussions in Spanish.
Prerequisite: Spanish 204 or aptitude test.

- 320. Prose Readings of the 19th and 20th Centuries.** 3 hrs. I.
Formerly "The Regional Novel." Readings, lectures, discussions, and reports of the works of representative authors.
Prerequisite: Spanish 204 or test.
- 330. Modern Drama.** 3 hrs. II.
Readings, lectures, discussions, and reports on the representative dramatists from the Romantic period to the present. Class conducted strictly in Spanish.
Prerequisite: Spanish 204 or test.
- 410. Cervantes.** 3 hrs. I.
Readings, lectures, discussions, and reports of the *Novelas Ejemplares* and *Don Quixote*. Class conducted strictly in Spanish.
Prerequisite: Spanish 204.
- 420. Drama of the Golden Age.** 3 hrs. II.
Readings, lectures, discussions, and reports of the representative authors of the Golden Period. Class conducted in Spanish.
Prerequisite: Spanish 204.
- 495H-496H. Readings for Honors in Spanish.** 4-4 hrs. I, II.
Open only to Spanish majors of outstanding ability. Refer to page III-3 for rules and information. Both courses must be taken to receive Honors credit.

SPEECH

(DIVISION OF HUMANITIES)

Professor Ranson

Associate Professor Page

Assistant Professors Robertson, Harbøld, Hope, Coffman, McCubbin

Instructors Cheydeur, Skelton

The Department of Speech aims to promote intelligent and intelligible talking in various phases of human endeavor. All classwork and extra-curricular activities are organized to accomplish this. The courses include work in public speaking, drama, radio, interpretation, and corrective speech. Extra-curricular activities include College Theatre plays, forensics, interpretation contests, and radio contests.

Speech majors take the courses listed below. They may elect courses in addition to these.

	<i>Hrs.</i>		<i>Hrs.</i>
Speech 101	2	Speech 260	3
Speech 102	2	Speech 306	3
Speech 205	3	Speech 312	2
Speech 210	3	Speech 313	2
Speech 240	3	Speech 320	3

Select one of the following: Speech 403, 418, 431.

ADVERTISING CURRICULUM

Students who are interested in speech and who wish to prepare themselves for work in advertising should follow the curriculum given on page III-10.

COURSES OF INSTRUCTION

- 101-102. Practical Public Speaking.** 2-2 hrs. I, II.
Beginning course. Required of all entering freshmen.
- 205. Argumentation and Debate.** 3 hrs. I, II.
Emphasizes practical applications.
- 207. Business and Professional Speaking.** 3 hrs. I, II.
Public and Conference speaking. Includes parliamentary law.
Prerequisite: Speech 102.
- 210. Acting.** 3 hrs. I. (Not open to those who have had Speech 209).
The formation of a working theory concerning the playing of a dramatic role in the theatre. Practice in developing technical skills through exercises in body and voice control, including pantomimic sketches, monologues, and short dramatic scenes.
- 239. Phonetics.** 2 hrs.
Introduction to the science of speech sounds.
Prerequisite: Speech 102.
- 240. Voice Training.** 3 hrs. I, II.
Theory and practice of speech production and improvement.
Prerequisite: Speech 102.
- 250. Story Telling and Dramatization.** 3 hrs. I, II.
For those who plan to work in nursery schools, kindergartens, or grade schools.
- 260. Fundamentals of Radio and Television.** (Formerly Radio Speech). 3 hrs. I, II.
Fundamentals of announcing, acting, and news-casting as required by the radio and television industry. Emphasis on delivery of advertising copy. Special arrangements for students majoring in Home Economics and Journalism.
- 261. Radio Announcing.** 3 hrs. II.
Editing and announcing spot announcements, commercial copy, on-the-spot-news, and special-events programs.
- 305. Principles of Public Address.** 2 hrs. I, II.
Beginning course, open to juniors and seniors who have not had Speech 101 or 102. This course alone does not meet the degree requirement in speech.
- 306. Extempore Speech.** 3 hrs. I, II.
Advanced public speaking. Promotes proficiency in preparation and delivery under a variety of conditions.
Prerequisite: Speech 102.
- 312-313. Play Production.** 2 hrs. each. I, II.
Deals with scene design and construction, scene painting, lighting, make-up, and other technical problems. Work coordinated with College Theatre plays.
- 320. Oral Interpretation of Literature.** 3 hrs. I, II.
The fundamentals of reading, analyzing, and interpreting literature.
Prerequisite: Speech 102.
- 321. Dramatic Reading and Platform Art.** 3 hrs. II.
Oral interpretation with emphasis on public performance.
Prerequisite: Speech 320.
- 360. Radio, Television, and Society.** (Formerly Radio and Society) 2 hrs.
The unusual effects of radio and television upon society, and their place in the field of modern communications. Students in Business Administration will be permitted to study the effects of this billion dollar industry in relation to other advertising mediums.

361. Radio News-Casting. 2 hrs. I.

Fundamentals of radio news-casting. Microphone work consists of straight news reports, commentaries, and on-the-spot-news.

403. Play Direction. 3 hrs. I.

Problems in directing plays. Laboratory practice. Primarily for students who expect to produce plays in schools or community groups.

405. Advanced Acting. 3 hrs. (Not open to those who have had Speech 404)

The various styles of acting. Includes the interpretation of roles from classical, romantic, and modern dramas.

Prerequisite: Speech 210.

418. Speech Correction. 3 hrs. I, II.

Deals with the causes, symptoms, and treatment of speech problems with special attention to classroom application.

419. Speech Correction. 3 hrs. I, II.

Introduction to clinical methods in speech correction. Theory and clinical practice.

Prerequisite: Speech 418.

431. Radio Production. 3 hrs. II.

Individual and group instruction in the techniques of radio and television programming, announcing, and acting. For interested students, special emphasis will be placed on sports-casting and in building women's programs.

432. Use of Radio in the Classroom. 3 hrs.

For students who plan to enter the fields of public administration, public relations, or elementary or high school teaching. The individual will learn the best methods of using radio and television as a "tool" in these fields.

440. Play Writing. 3 hrs.

Principles of dramatic construction. Includes finding dramatic materials, building the play, characterization, and dialogue. Writing one-act plays and sketches for experimental and public production.

445. Children's Theatre. 3 hrs.

The theory, directing, and staging of various types of plays for children. Particular attention to problems encountered in the elementary school.

450. The Direction of Speech Activities. 3 hrs.

For the teacher who is responsible for conducting the extra-curricular speech program. Includes coaching and evaluating group discussion, debate, oratory, oral reading, extemporaneous speaking

460. Audiometry and Speech Problems of the Deaf and Hard of Hearing. 3 hrs.

Survey of the area of audiology as related to speech correction.

Prerequisite: Speech 418.

ZOOLOGY

(DIVISION OF SCIENCES)

Professor's Green, Edeburn
Assistant Professor Fisher

The courses in zoology are intended to meet the needs of students who desire to obtain some knowledge of zoology as part of their general education, those who need work in zoology to satisfy the requirements of other departments, and those who propose to specialize in zoology. A major in zoology serves those who plan to enter medicine, dentistry, veterinary medicine, game management, fisheries biologist, entomology or other related fields. Zoology majors may pursue advanced degrees leading to teaching or research in applied zoology.

A zoology major is required to complete 26 semester hours of zoology which will include Zoology 211, 212 and either 301 or 302. The additional 14 hours should be selected after consulting the Department Head. The curriculum for a zoology major is listed on page III-15. In addition to the requirements for a Bachelors Degree the following courses are recommended: Botany 304 and 316, Geology 300, Philosophy 304 and a course in Statistics.

(See page III-11 for a major in Biological Science.)

COURSES OF INSTRUCTION

- 211. General Zoology.** 4 hrs. I, II, S.
Two hours lecture and four hours laboratory a week. Important biological principles of structure, function, growth, development and inheritance applied to man and the higher animals. Lab. fee \$2.00.
- 212. Advanced General Zoology.** 4 hrs. I, II.
Two hours lecture and four hours laboratory a week. Classification, structure and relationships of the important animal phyla.
Prerequisite: Zoology 211. Lab. fee \$2.00.
- 300. Histology.** 4 hrs.
Two hours lecture and four hours laboratory a week. Microscopic study of vertebrate tissues.
Prerequisite: Zoology 212. Lab. Fee \$2.00.
- 301. Vertebrate Embryology.** 4 hrs. I.
Two hours lecture and four hours laboratory a week. Vertebrate development based chiefly on frog, chick and pig embryos.
Prerequisite: Zoology 212. Lab. Fee \$2.00.
- 302. Comparative Vertebrate Anatomy.** 4 hrs. II.
Two hours lecture and four hours laboratory a week. Principles of structure, function and relationships of vertebrate systems with emphasis on the dogfish and cat.
Prerequisite: Zoology 212. Lab. fee \$5.00.
- 307. Genetics.** 4 hrs. I, S.
Three hours lecture and two hours laboratory a week. The fundamental principles and mechanisms of inheritance including their human applications.
Prerequisite: four hours of biological science. Lab. fee \$2.00.
- 315. Human Anatomy and Physiology.** 4 hrs. II.
Three hours lecture and two hours laboratory a week. The structure and functions of the human body.
Prerequisite: Zoology 211 or equivalent. Lab. fee \$2.00.
- 401. Laboratory Methods.** 2 hrs.
One hour lecture and two hours laboratory a week. Basic principles of collecting, culturing, and preparation of laboratory specimens and materials.
Prerequisite: Zoology 211 or equivalent.
- 402. Vertebrate Natural History.** 3 hrs.
One hour lecture and four hours laboratory a week. The origin, classification, life histories, habits and distribution of fishes, amphibians, reptiles and mammals.
Prerequisite: Zoology 212. Lab. Fee \$2.00.
- 403. Entomology.** 3 hrs.
Two hours lecture and two hours laboratory a week. Anatomy, classification, life histories and economic importance of representative insects.
Lab. fee \$2.00.

404. Animal Parasitology. 4 hrs.

Two hours lecture and four hours laboratory a week. Morphology, life histories, classification and host relationships of common parasites.

Prerequisite: Zoology 212. Lab. Fee \$2.00.

408. Ornithology. 3 hrs. II, S.

Two hours lecture and two hours laboratory a week. Identification, distribution, migration and breeding activities of birds. Lab. fee \$2.00.

409. Animal Ecology. 3 hrs.

One hour lecture and four hours laboratory a week. The distribution of animals in relation to the common types of habitats including the factors that determine such distribution.

Prerequisite: Zoology 211. Lab. fee \$2.00.

411-412. Seminar. 1-1 hr. I, II.

By permission of department head.

413. Principles of Organic Evolution. 2 hrs.

The progress of animal life through time with a discussion of known causes. No laboratory.

Prerequisite: Zoology 212.

414. Wildlife Conservation. 3 hrs.

The natural history, economic importance and control of wildlife. Lecture and field study.

Prerequisite: Eight hours of biological science or consent of instructor.

450-451-452. Special Problems. 1 to 3 hrs. each. I, II, S.

By permission of the department head.

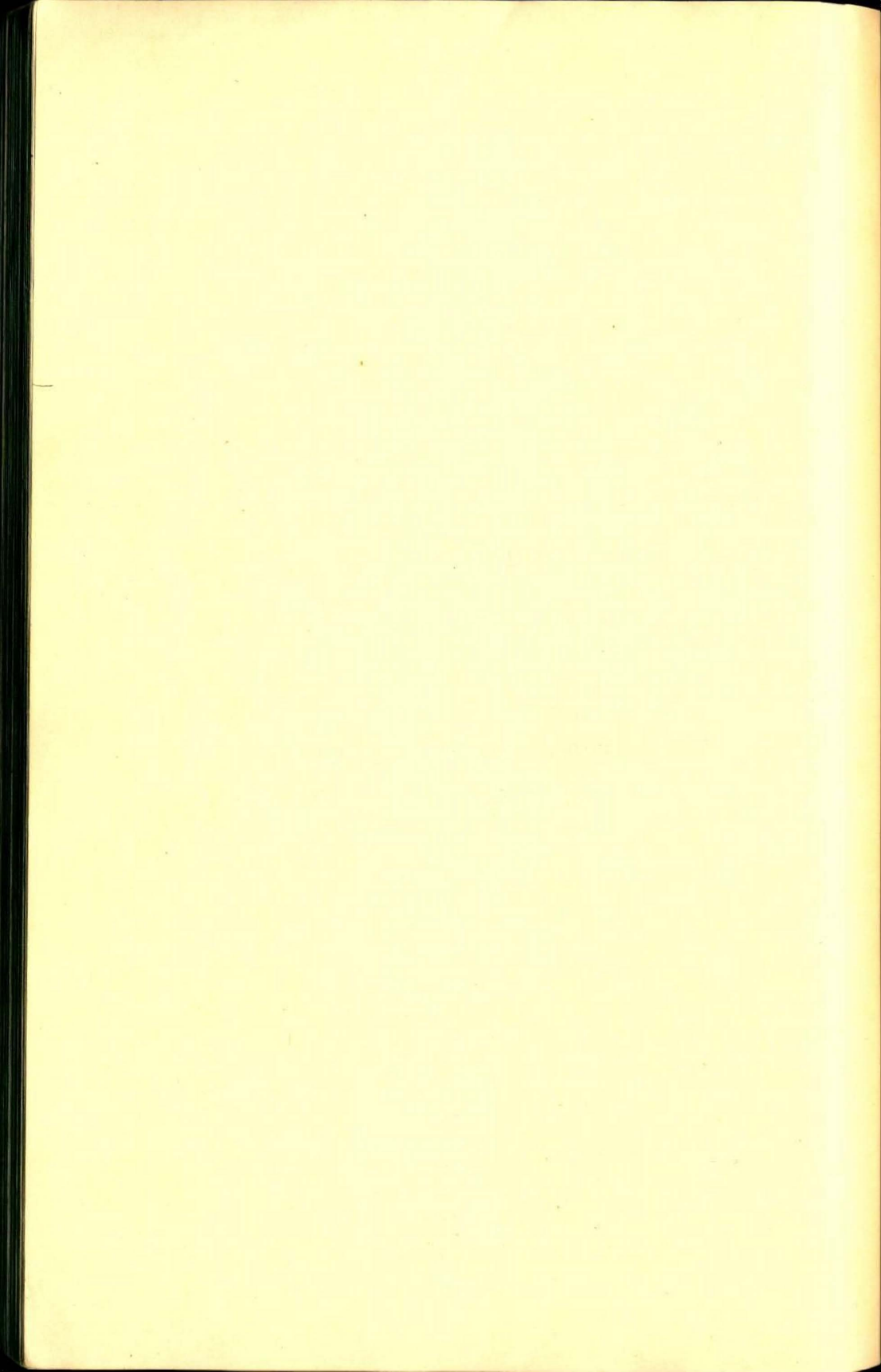
GRADUATE SCHOOL

★

FACULTY

GENERAL INFORMATION

COURSES OF INSTRUCTION



THE GRADUATE FACULTY

- JAMES J. BARRON, *Professor of Mathematics*, 1946*.
Ph.D. 1934, University of Wisconsin; post-doctorate study, Yale University, Brown University.
- JOHN FRANK BARTLETT, *Dean of the College of Arts and Sciences and Professor of Chemistry*, 1932.
Ph.D. 1932, West Virginia University; post-doctorate study, University of Zurich, University of Edinburgh, and Technische Hochschule in Munich.
- ROBERT LLOYD BECK, *Professor of Philosophy*, 1934.
Ph.D. 1931, Cornell University.
- ROBERT LEE VEERN BRITTON, *Professor of Geography*, 1930.
M. S. 1930, University of Chicago; graduate study, University of Chicago, Ohio State University.
- JACK RICHARD BROWN, *Professor of English*, 1948.
Ph.D. 1937, Northwestern University.
- SAM E. CLAGG, *Associate Professor of Geography*, 1948
M. A. 1947, Marshall College; graduate study, University of Kentucky.
- PAUL H. COLLINS, *Assistant Professor of Education and Director Adult Education*, 1949
M. A. 1943, West Virginia University; graduate study, Harvard University, University of Virginia.
- ELIZABETH COMETTI, *Professor of History*, 1948.
Ph.D. 1939, University of Virginia; post-doctorate study, Columbia University.
- JOHN W. CREIGHTON, *Assistant Professor of Music*, 1945.
M. A. 1942, Northwestern University; graduate study, St. Louis University, Juilliard School of Music.
- HOLLIE CLAYTON DARLINGTON, *Professor of Biology*, 1930.
Ph.D. 1942, University of Chicago.
- LESLIE MARTZ DAVIS, *Professor of Geography*, 1939.
Ph.D. 1935, University of Chicago.
- CONLEY HALL DILLON, *Professor of Political Science*, 1934.
Ph.D. 1936, Duke University.
- EDWIN A. CURBY, *Associate Professor of Social Studies*, 1949.
M. A. 1941, Syracuse University; graduate study, Syracuse University.
- CAROLYN FORE DWIGHT, *Assistant Professor of Business Administration*, 1938.
M. B. A. 1938, The Ohio State University; graduate study, University of Chicago.
- RALPH M. EDEBURN, *Professor of Zoology*, 1945
Ph.D. 1938, Cornell University.
- IRENE CLARK EVANS, *Assistant Professor of Business Administration*, 1939.
M. A. 1940, Columbia University; graduate study, University of Chicago.
- MADELEINE HOFFMAN FEIL, *Associate Professor of Psychology*, 1946.
Ph.D. 1948, The Ohio State University.
- WALTER C. FELTY, *Assistant Professor in Education and Social Studies and Director of Audio-Visual Aids*, 1950.
M. A. 1950, Marshall College; graduate study, University of Kentucky, Indiana University.

* Date following name indicates first appointment to a staff position at Marshall College.

- DOROTHY A. FISHER, *Associate Professor of Zoology*, 1946.
Ph.D. 1942, Cornell University; post-doctorate study, University of North Carolina, Cornell University.
- FREDERICK A. FITCH, *Associate Professor of Physical Education*, 1930.
M. A. 1932, New York University; graduate study, New York University, Florida State University.
- RUBY CALVERT FOOSE, *Assistant Professor of Home Economics*, 1946.
M. A. 1940, The Ohio State University; graduate study, University of Tennessee.
- MIRIAM PEARL GELVIN, *Professor of Music*, 1940.
M. Ed. 1930, University of Cincinnati; M. Mus. 1940, Cincinnati Conservatory of Music; graduate study, Columbia University, Northwestern University.
- MARY ALICE GOINS, *Associate Professor of Mathematics*, 1946.
M. A. 1933, University of Michigan; graduate study, University of Chicago, University of Kentucky, Purdue University, University of Michigan.
- CLEO MARGARET GRAY, *Associate Professor of Home Economics*, 1947.
M. S. 1927, University of Wisconsin; graduate study, University of Wisconsin, Iowa State College; Columbia University, University of Southern California.
- REX C. GRAY, *Assistant Professor of Education and Director of Student Teaching in Elementary Education and Principal of Elementary Laboratory School*, 1948.
M. A. 1941, West Virginia University; graduate study, University of Minnesota.
- NORMAN BAYARD GREEN, *Professor of Zoology*, 1938.
Ph.D. 1952, The Ohio State University.
- MARGARET THELMA HAMPEL, *Professor of Education*, 1953.
Ed. D. 1938, Columbia University.
- GEORGE JAMES HAROLD, *Assistant Professor of Speech*, 1947.
M. A. 1947, University of Florida; graduate study, University of Missouri, The Ohio State University.
- HUNTER S. HARDMAN, *Assistant Professor of Mathematics*, 1946.
M. S. 1940, University of Chicago; graduate study, The Ohio State University, University of Pittsburgh.
- CHARLES PRICE HARPER, *Professor of Political Science*, 1946.
Ph.D. 1937, The Johns Hopkins University.
- ARVIL E. HARRIS, *Dean of the Graduate School and Professor of Political Science*, 1936.
Ph.D. 1936, State University of Iowa.
- HAROLD M. HAYWARD, *Professor of Sociology*, 1938.
Ph.D. 1937, Clark University.
- HERSCHEL HEATH, *Professor of History*, 1947.
Ph.D. 1933, Clark University.
- CLARKE FREAS HESS, *Assistant Professor of Education*, 1951.
M. A. 1947, Clark University; graduate study, University of Pennsylvania.
- WILLIAM ANTHONY HUEBNER, *Assistant Professor of Business Administration*, 1951.
M. A. 1949, New York University; graduate study, New York University.
- JOHN HOLLAND HOBACK, *Associate Professor of Chemistry*, 1945.
Ph.D. 1945, West Virginia University.

- RAY WAYNE HUGOBOOM, *Associate Professor of Music*, 1950.
M. A. 1941, University of Wisconsin; graduate study, Indiana University, Fontainebleau Conservatory, Conservatoire de Paris, France.
- JOSEPH S. JABLONSKI, *Professor of Art*, 1929.
M. A. 1925, Harvard University; graduate study, University of Cincinnati.
- RAYMOND ELLSWORTH JANSSEN, *Professor of Geology*, 1942.
Ph.D. 1939, University of Chicago.
- LOUIS B. JENNINGS, *Assistant Professor of Bible and Religion*, 1948.
B. D. 1945, Crozer Theological Seminary; graduate study, University of Chicago, University of Pennsylvania.
- VERNON DAKE JOLLEY, *Professor of Business Administration*, 1949.
M. B. A. 1935, University of Michigan; graduate study, University of Chicago.
- CHARLES LAWRENCE KINGSBURY, *Professor of Music*, 1950.
Ed.D. 1945, Indiana University.
- COLONEL RUFUS L. LAND, *Assistant Professor of Economics*, 1946.
M. A. 1948, Marshall College; graduate study, University of Virginia; The Ohio State University.
- ALFRED P. LANEGGER, *Assistant Professor of Music*, 1947.
M. M. 1947, Syracuse University; diploma, State Academy of Music, Munich.
- CARL LEIDEN, *Associate Professor of Political Science*, 1949.
Ph.D. 1949, State University of Iowa.
- KENNETH KARL LOEMKER, *Professor of Psychology*, 1930.
Ph.D. 1941, University of Chicago.
- DONALD C. MARTIN, *Professor of Physics*, 1943.
Ph.D. 1936, Cornell University.
- CARL BARTH MILLER, *Associate Professor of Business Administration*, 1946.
M. A. 1942, Northwestern University; graduate study, University of Kentucky, University of Colorado.
- HOWARD LEONARD MILLS, *Assistant Professor of Botany*, 1951.
Ph.D. 1951, State University of Iowa.
- CHARLES HILL MOFFAT, *Professor of History*, 1946
Ph.D. 1946, Vanderbilt University.
- WOODROW MORRIS, *Assistant Professor of Education*, 1950.
Ph.D. 1954, The Ohio State University.
- GEORGE EDWARD MUNN, *Associate Professor of Economics*, 1950.
M. A. 1939, University of Wisconsin; graduate study, University of Wisconsin.
- PAUL N. MUSGRAVE, *Professor of Education and Director of Student Teaching in Secondary Education*, 1938.
Ph.D. 1936, West Virginia University.
- REVA BELLE NEELY, *Assistant Professor of Home Economics*, 1946.
M. E. 1946, Colorado Agricultural and Mechanical College.
- LAWRENCE HOWARD NUZUM, *Assistant Professor of Education, High School Mathematics, and Principal of Laboratory High School*, 1947.
M. A. 1939, West Virginia University; graduate study, University of Tennessee.
- THOMAS S. O'CONNELL, *Assistant Professor of Music*, 1948.
M. Mus. 1947, University of Michigan.

- CLAYTON R. PAGE, JR., *Associate Professor of Speech*, 1946.
M. A. 1939, The Pennsylvania State College; M. A. 1940, Baylor University; graduate study, University of Southern California, State University of Iowa.
- GERALD R. PHILLIPS, *Assistant Professor of Social Studies*, 1948.
M. A. 1947, University of Minnesota; graduate study, University of Minnesota.
- EDWARD LEWIS PLYMALE, *Associate Professor of Botany*, 1946.
Ph.D. 1942, State University of Iowa.
- RALPH DAVID PURDY, *Associate Professor of Education*, 1950.
Ph.D. 1949, The Ohio State University.
- WILBUB PURSLEY, JR., *Instructor in Music*, 1950.
M. Mus. 1950, Eastman School of Music.
- ALLEN OTIS RANSON, *Professor of Speech*, 1931.
M. A. 1935, University of Wisconsin.
- JAMES TULL RICHARDSON, *Professor of Sociology*, 1949.
Ph.D. 1943, University of Missouri.
- VIRGINIA RIDER, *Assistant Professor of Education, High School English*, 1937.
M. A. 1933, University of Michigan.
- MYRTLE MACDANNAID ROUSE, *Associate Professor of Home Economics*, 1936.
M. A. 1934, Columbia University; graduate study, Columbia University.
- ORA E. RUMPLE, *Professor of Chemistry*, 1947.
Ph.D. 1937, Indiana University.
- CHARLES S. RUNYAN, *Associate Professor of Education*, 1953.
Ed. D. 1953, University of Missouri.
- ALLEN W. SCHOLL, *Professor of Chemistry*, 1948.
Ph.D., 1934, The Pennsylvania State College.
- DOROTHY WILHELMINA SEABERG, *Assistant Professor of Business Administration*, 1947.
M. S. 1947, University of North Carolina; graduate study, University of Colorado, University of Minnesota.
- ROBERT PORTER SECHLER, *Professor of English*, 1946.
Ph.D. 1931, University of Pennsylvania.
- RUSSELL B. SMITH, *Professor of Education*, 1949.
Ph.D. 1939, The Ohio State University.
- DAVID PERRY STEWART, *Assistant Professor of Geology*, 1949.
Ph.D. 1954, Syracuse University.
- PAUL D. STEWART, *Associate Professor of Political Science*, 1948.
Ph.D. 1948, Duke University.
- HORACE GRESHAM TOOLE, *Professor of History*, 1925.
Ph.D. 1932, University of Pennsylvania.
- FLORENCE H. VANBIBBER, *Professor of Psychology*, 1937.
Ph.D. 1935, University of Arizona; post-doctorate study, University of Chicago.
- FRANCES W. WHELPLEY, *Associate Professor of Chemistry*, 1946.
Ph. D. 1931, Columbia University.
- DANIEL BANKS WILBURN, *Dean of the Teachers College and Professor of Education*, 1947.
Ed.D. 1945, The George Washington University.
- ROY CLEO WOODS, *Professor of Education*, 1927.
Ph.D. 1927, State University of Iowa.

GENERAL INFORMATION

In October, 1938, The West Virginia Board of Education approved regulations under which Marshall College is authorized to conduct graduate instruction leading to the Master of Arts and the Master of Science degrees. Graduate work was first offered during the summer session of 1939. The first master's degrees were conferred at the spring commencement of 1940.

Degrees

The degree of Master of Arts or Master of Science may be earned with a major in the following fields: biological sciences, chemistry, education, English, geography, history, political science, psychology, and sociology. Special programs for teachers leading to the Master of Arts degree are: elementary education, English-education, social studies-education, music-education, physical science-education, home economics-education, and business administration-education.

Fields that offer work for a minor only are art, Bible, economics, geology, mathematics, philosophy, and speech.

Ordinarily the Master of Arts degree will follow the Bachelor of Arts degree, and the Master of Science degree will follow the Bachelor of Science degree; however, in case a Bachelor of Arts degree has been received on qualifications which meet present requirements for the Bachelor of Science degree, either the Master of Arts or the Master of Science degree may follow at the option of the candidate.

Objectives of Graduate Work

1. To meet a regional need for an opportunity for graduate study.
2. To aid in the development of a corps of master teachers, administrators, and counselors for the public schools of West Virginia.
3. To prepare students to use and evaluate the better known techniques of research and to appreciate their contribution to knowledge.

Admission to Graduate Study

Admission to graduate courses is open to qualified graduates of Marshall College and of other accredited colleges and universities provided their undergraduate records are satisfactory. Admission to graduate courses is based on official transcripts of college credits, the information provided on the application for admission form, and on whatever examinations and conditions the Graduate School may require in any given case. An average of 2.5 (C plus) is required for unconditional admission. Grades in certain non-academic activity courses outside the field in which the student wishes a graduate major may be ignored in computing the average for admission.

Seniors in Marshall College and all other persons planning to apply for admission to the Graduate School are urged to take the Graduate Record Examination which is given at regular intervals under the direction of the Director of Admissions. Information concerning the time of these examinations may be had through that office. Special preparation is not required for taking the Graduate Record Examination. The profile score on this examination is a valuable aid in planning the student's program and in determining his capacity to do a satisfactory quality of graduate work. Applicants for admission may be required to take the Graduate Record Examination or any other special or standard college ability or achievement test as a condition of admission. The major department may require the applicant to make a satisfactory showing on a special written or oral examination.

Application for admission should be filed in the Graduate School office at least one month prior to the opening of the semester or term in which the student plans to begin graduate work. Two official copies of the appli-

cant's undergraduate transcript should be mailed directly from the student's undergraduate college to the Graduate School office at the time of filing the application. Students who hold undergraduate degrees from Marshall College must furnish a transcript for the Graduate School Office at the time that they submit the application for admission. All graduates of standard four-year colleges must register in the Graduate School.

Students who have not been admitted to the Graduate School and who wish to begin graduate work in extension courses must furnish transcripts and file application for admission as a part of the registration procedure. If these are not furnished immediately, it is the prerogative of the Dean of the Graduate School to withdraw the student from the course by administrative action, or, to direct that the student shall not receive credit that may be counted toward an advanced degree in any institution.

Seniors with outstanding academic records who, in their last term or semester, do not require full time to complete the requirements for the baccalaureate degree may be permitted to register for a limited amount of graduate work with the approval of the student's undergraduate dean, the Dean of the Graduate School, and the instructor with whom the work is taken. This practice is not encouraged.

The Adviser

The Dean assigns the student to an adviser from his major department. The adviser will assist the student in planning his program for the master's degree. If the student writes a thesis, the adviser will direct the student in that work. The adviser serves as chairman of the committee to conduct the student's oral examination, assembles questions for the comprehensive written examination and reports the results of these examinations to the Graduate School Office. Admission to candidacy for the master's degree and admission to the comprehensive examination must carry the approval of the adviser. The student should keep in close touch with his adviser during the progress of his work.

General Requirements for Master's Degree

Requirements in Course. A minimum of thirty-two hours of graduate credit shall be earned for the master's degree. Of this thirty-two hours, credit not to exceed six semester hours may be earned by writing a thesis or problem report. Those who do not write a thesis or problem report must complete thirty-six hours in course work for the degree.

A minimum of eighteen hours must be earned in one subject known as a major and a minimum of six hours in another subject known as a minor. Courses may be taken in a third closely related field if approved by the adviser. In special teacher-education curriculums courses may be scattered among several fields with the approval of the adviser.

In departments which offer specialized professional curricula, the requirement of a minor may be eliminated, thus permitting the student to concentrate or to diversify his graduate work toward the attainment of professional competence. Permission to eliminate the minor will be granted only in certain curricula previously approved by the dean and only when recommended by the adviser. This option will be granted sparingly.

As a general rule, at least twelve hours is the undergraduate prerequisite for a graduate major. Six hours is the prerequisite for the minor. A few departments require more than the minimum for admission to graduate courses. The undergraduate prerequisite may be waived with the consent of the dean and department concerned.

At least one half of the work counted for the master's degree must be taken in courses numbered 600 to 699. These courses are open to graduate students only. Courses numbered 500 to 599 are the same courses that carry a 400 series number accompanied by the asterisk (400*) for graduate students

in earlier college announcements. Only persons wishing to work toward a master's degree may register for a 500 series course and they must register in the Graduate School to receive graduate credit.

Those who are not working toward a master's degree must use the 400 series numbers. Credit earned under a 400 series registration number after September 1, 1954, cannot be converted to graduate credit.

Requirements in Scholarship and Personal Qualities. At least one half of the work attempted for credit toward the master's degree shall carry a grade of B or above, and no work on which a grade lower than C is earned may be applied in meeting the requirements for the degree.

Graduate students are expected to be able to write simple, clear, correct composition with reasonable effectiveness. Deficiency in this skill may be regarded as sufficient grounds for delaying recommendation for admission to candidacy or recommendation for graduation until a reasonable standard of excellence is demonstrated by examination.

A clinic in English composition for graduate students is conducted by the English Department, and students needing formal instruction are strongly urged to make use of its facilities.

It must be understood that the mere meeting of minimum requirements in hours of credit earned may fall short of what is considered eligibility for the degree. The work taken must constitute a unified program in the field. It must be completed at a level of competence befitting graduate work. To correct obvious weaknesses in the student's program for the degree, additional courses or other work may be required beyond the minimum as a condition of being admitted to candidacy or recommended for the degree.

Persons possessing personal qualities which may render them unacceptable among those with whom they may work or which may reflect discredit on the profession, on the master's degree, and on Marshall College will not be recommended for the degree. The College has the final right to determine whether the candidate has such qualities.

Thesis

Regulations Governing Thesis Requirement. A thesis or problem report of a research character on a subject in the major field of interest completed to the satisfaction of the major department may be submitted for credit not to exceed six semester hours. The amount of credit allowed will be determined by the quality and character of the paper submitted. Students who will profit more by doing additional course work in lieu of a thesis or problem report must earn thirty-six course hours. The adviser and student will be guided by the student's needs and interests in determining whether he is to write a thesis.

Students writing theses register for Thesis or Problem Report 680, 681 in the major field. Chemistry majors register for Research 682 to 691 inclusive. The student will continue to register and pay tuition until the thesis is accepted and a final grade submitted by the adviser to the Registrar's Office. The adviser will report a mark of Pr. (Progress) for satisfactory work at the end of each term or semester until the thesis is accepted, at which time a final grade will be reported. The adviser may report a final grade of F on a research course for thesis credit at the end of any semester or term when in his opinion because of irregular reports of progress or poor work the student should not be permitted to continue to register for research.

The thesis must be sufficiently advanced one month before the time of graduation to assure the adviser of its acceptability. Three unbound copies of the thesis or problem report must be filed with the Dean of the Graduate School not later than two weeks before the date of graduation. The thesis or problem report must be prepared according to the form furnished by the Graduate School Office.

Value and Nature of Thesis. The experience of collecting, assembling, and interpreting a body of information for a thesis is essential in developing the

capacity to do independent work. This is a primary difference between graduate and undergraduate work. For capable graduate students, preparation of the thesis may be of great value. To be urged to write a thesis is a compliment to one's ability.

The thesis may consist of a written interpretation of a body of facts and opinions gained through critical reading and independent study. It may be a report of the results of a research project which may or may not be a contribution to knowledge. For teachers, it may be a presentation of a directed learning activity showing the purpose, problems involved, procedure, and effectiveness of the project.

Admission to Candidacy

It should be remembered that admission to graduate courses does not imply admission to candidacy for the master's degree. The student may be admitted to candidacy only after he has proved his ability and fitness to do graduate work in a chosen field. Immediately after the completion of twelve semester hours of work with satisfactory grades, the student should apply for admission to candidacy for the degree. The application, bearing a proposed program for the rest of the work for the degree and a record of the work already completed must be made on a form secured from the office of the Dean. Examinations may be required for admission to candidacy for the degree.

Residence

A year's work in residence is required for the master's degree. At least thirty-six weeks must elapse between matriculation and graduation. This period may be shortened for those holding the bachelor's degree from Marshall College upon recommendation of the student's adviser.

All requirements for the master's degree must be met within five years from date of matriculation unless an extension in time is granted by the dean. A student whose time is extended for completion of the degree must meet the requirements carried in the catalogue in the year of the conferring of the degree. A student who does work in extension courses for graduate credit must be in residence one semester and one summer term, or four six-week summer terms.

Part-Time Graduate Students

Teachers in service who are doing graduate work will be limited in the amount of credit that may be earned by the regulations of the State Board of Education of West Virginia, or of corresponding regulations of other states in which they may be employed.

Graduate students in other employment will be required to limit their schedules in proportion to the time available for graduate study. As a general practice, the maximum graduate load of a student in full-time employment shall not exceed six hours in a semester or three hours in a six-week summer term. This limit may be exceeded only by permission granted by the student's adviser and the dean after the student has given satisfactory evidence that he can do more than an average quality of work on his total schedule.

Transfer of Credit and Extension Credit

The Dean may, upon the student's petition, grant to a student the privilege of transferring to Marshall College, for application on the master's degree, a maximum of six graduate hours earned in another institution when, in the judgment of the Dean and the major department, such credit is to the advantage of the student's program. Occasionally it may be recommended that a student earn six hours in another institution in work not offered by Marshall College.

Work done in extension and work transferred from another institution shall not total more than twelve semester hours. Graduate credits transferred

from other institutions may be accepted so long as they are not superannuated for graduate credit toward meeting the requirements for a degree in the institution from which the transfer of credit is requested. The total credit that may be earned by extension and transferred from another institution shall not exceed nine semester hours in any one field.

Comprehensive Examinations

A comprehensive examination covering the work of the major field must be taken under the direction of the Dean after it appears that the course work in progress will be successfully completed. The examination may be either oral or written, or both. The examination is not to rest primarily upon the specific courses pursued but is to test the student's maturity of thought in his field of specialization. The questions for the written examination will be prepared by the student's adviser in consultation with other instructors in the major field. The oral examination will be conducted by a committee of three appointed by the Dean so as to include the student's adviser and the head of the major department.

A candidate who fails on either the written or oral comprehensive examination may take a second examination at the discretion of the student's major department and the Dean of the Graduate School.

COURSES OF INSTRUCTION BY DEPARTMENTS

ART

MR. JABLONSKI

501-502. History of Art. 3-3 hrs. I II, S. (Formerly 401*-402*)

A survey of the development of architecture, sculpture, painting, and the minor arts to ca. 1400 A. D. and from 1400 A. D. to the present.

601. Methods in Elementary Art Education. 3 hrs. S. (Formerly 501)

For graduate students with limited experience in the arts and crafts, wishing to familiarize themselves with methods and materials used in art education in the elementary school. Laboratory fee: \$3.00

603. Experiencing Art in Everyday Life. 3 hrs. S. (Formerly 503)

Appreciation of architecture, painting, sculpture, community planning, home designs, furniture design, and use of color.

650-653. Special Topics or Projects in Art. 3; 3; 3; 3 hrs.

Special studies in art education or art history for those who wish to carry out selected creative projects in drawing and painting, ceramics, clay modeling, the graphic arts, or applied design.

BIBLE AND RELIGION

MR. JENNINGS

518. Development of Religious Ideas. I. S.

A study of the sources of religious thought of western culture.

BIOLOGICAL SCIENCES

DR. DARLINGTON, DR. EDEBURN, DR. FISHER, DR. GREEN, DR. MILLS,
AND DR. PLYMALE

A minimum of eighteen hours in graduate courses in the biological sciences must be completed. At least fifteen hours must be selected from the following courses: Biological Science 502, 601, 602, 604, 606, 607, 615 and 616. Candidates for the master's degree are expected to have a knowledge of both the plant and animal life sciences. Students who enter the graduate school with a concentration in one of these fields and with little work in the other will be expected to diversify their studies in the biological sciences.

Students who do not have all the twelve hours of undergraduate work required for admission to full graduate standing may be permitted to make up this work while taking graduate courses. Deficiencies in undergraduate preparation must be made up before admission to candidacy for the degree. For the master's degree in the biological sciences the combined graduate and undergraduate courses must total at least forty semester hours.

The courses offered for majors in this field are planned to meet the needs of teachers and of those who may wish to do further graduate and research work. Persons wishing to work as conservationists, game technicians, public park naturalists, geneticists or to do pest control work will find graduate courses in the biological sciences helpful.

A comprehensive oral examination covering the work in the major field is required. It will test the student's knowledge of the fundamentals, as well as his maturity of thought, in his major field.

Laboratory courses require a laboratory fee of \$2.00 with the exception of Biological Science 611 which is \$4.00 and Biological Science 602 which is \$5.00.

501. **Laboratory Methods.** 2 hrs. (Formerly 401*)
One hour lecture and two hours laboratory a week. Basic principles of collecting, culturing and preparation of laboratory specimens and materials.
502. **Vertebrate Natural History.** 3 hrs. (Formerly 402*)
One hour lecture and four hours laboratory a week. The origin, classification, life histories, habits and distribution of fishes, amphibians, reptiles and mammals.
508. **Ornithology.** 3 hrs. II, S. (Formerly 408*)
Two hours lecture and two hours laboratory a week. Identification, distribution, migration and breeding activities of birds.
513. **Principles of Organic Evolution.** 2 hrs. (Formerly 413*)
The progress of animal life through time with a discussion of known causes. No laboratory.
514. **Wildlife Conservation.** 3 hrs. (Formerly 414*)
The natural history, economic importance and control of wildlife. Lecture and field study.
582. **Conservation of Soil, Forests, and Wild Life.** 3 hrs. (Formerly 482*)
Primarily for teachers in the biological sciences, general and applied sciences; field work, seminars, and demonstrations on phases of conservation.
601. **Vertebrate Embryology.** 4 hrs. I. (Formerly 501)
Two hours lecture and four hours laboratory a week. Vertebrate development based chiefly on frog, chick and pig embryos.
602. **Comparative Vertebrate Anatomy.** 4 hrs. II. (Formerly 502)
Two hours lecture and four hours laboratory a week. Principles of structure, function, and relationships of vertebrate systems with emphasis on the dogfish and cat.
604. **Plant Physiology.** 4 hrs. (Formerly 504)
Two hours lecture and four hours laboratory a week. Experimental study of growth, nutrition and correlative phenomena in plants. Emphasis on food synthesis, translocation, and physio-chemical changes in growth and development including correlative functions of plant growth substances. Laboratory experiments planned to develop technique and independence in investigation.
605. **Advanced Economic Botany.** 3 hrs. (Formerly 505)
A study of the origin and development of economic plants with special emphasis upon problems in relation to possible use of many plants not widely known.
606. **Problems in Ecology.** 4 hrs. (Formerly 506)
Problems dealing with environmental factors and their control of the development and distribution of animal and plant communities.
Prerequisite: Ten hours biological science or consent of instructor.
607. **Genetics.** 4 hrs. I, S. (Formerly 507)
Three hours lecture and two hours laboratory a week. The fundamental principles and mechanisms of inheritance including their human applications.
610. **History of Biological Science.** 2 hrs. (Formerly 510)
A study of the development of biology as a science, including biographies of the great scientists from Aristotle to the present.
611. **Bacteriology.** 4 hrs. I, II, S. (Formerly 511)
Two hours lecture and four hours laboratory a week. The more important techniques of culture, isolation and identification of microbes.

Consideration of serological procedures, current concepts of immunology, fundamental aspects of physiological processes including chemistry and physiology of microbial cells, growth, effects of physical and chemical agents on bacteria, enzymes, nutrition and microbial fermentations.

613-614. General Entomology. 2-2 hrs. (Formerly 513-514)

Collection, identification, classification and mounting of insects.

615. Advanced Plant Morphology. 4 hrs. (Formerly 515)

Two hours lecture and four hours laboratory a week. Characteristics of the great plant groups. Discussion of the important steps in the development of plants.

616. Plant Taxonomy. 4 hrs. (Formerly 516)

Two hours lecture and four hours laboratory a week. Identification and classification of seed plants and ferns of eastern United States. Readings in history and principles of taxonomy, rules of nomenclature and related topics.

625. Human Anatomy and Physiology. 4 hrs. II. (Formerly 525)

Three hours lecture and two hours laboratory a week.

The structure and functions of the human body.

642. Investigations in Conservation. 2 hrs. (Formerly 542.)

Sponsored by cooperating colleges at Jackson's Mill. Individual work on problems of conservation under the direction of staff members. Evening seminars, operation and sources of audio-visual equipment in conservation.

650-651-652. Special Problems. 1-3; 1-3; 1-3 hrs. (Formerly 550-551-552)

By permission of adviser.

660-661-662. Seminar. 1; 1; 1 hr. (Formerly 560)

680-681. Thesis or Problem Report. I and II. 1-3; 1-3 hrs. (Formerly 580-581)

By permission of adviser.

BUSINESS ADMINISTRATION

MR. JOLLEY, MRS. DWIGHT, MRS. EVANS, MR. HUERNER, MR. MILLER
AND MISS SEABERG

504. Secretarial Training. 3 hrs. I. (Formerly 404*)

Development of a knowledge of business procedures, techniques, and customs with which a secretary should be familiar. Secretarial skills integrated through problem-type assignments.

Prerequisite or corequisite: Business Administration 301 and 305.

505. Office Practice. 3 hrs. II. (Formerly 405*)

Work in cooperating business offices for approximately fifteen hours per week and weekly conferences.

Prerequisite: Business Administration 404 or 504.

507. Problems of Business Law. 3 hrs. I, S.

Readings and case reports on current legal problems relating to business.

Prerequisites: Business Administration 307 and 308 or Business Administration 307 and graduate standing.

511. Cost Accounting. 3 hrs. I. (Formerly 411*)

Principles of industrial cost accounting; job order, departmental, and process costs.

Prerequisite: Business Administration 311 or permission of instructor.

512. Retail Accounting. 3 hrs. I. (Formerly 412*)

Principles and problems relating to sales transactions; purchases; inventory valuation and control; expense classification, distribution, and control; and the preparation and analysis of operating statements for retail establishments.

Prerequisite: Business Administration 216.

513. Auditing. 3 hrs. II. (Formerly 413*)

Theory and procedures; legal and social responsibilities of the auditor.

Prerequisite: Business Administration 312 or permission of instructor.

514. Advanced Accounting Problems. 3 hrs. S, II.

Selected problems in advanced accounting principles and procedures.

Prerequisite: Business Administration 312 or permission of instructor.

515. Federal Taxation. 3 hrs. I, II. (Formerly 415*)

Problems and procedures of income tax accounting.

Prerequisite: Business Administration 312 or permission of instructor.

521. Office Management. 3 hrs. II.

Principles and practices, approached from the viewpoint of the office manager, through oral and written problems.

522. Retail Merchandising Problems. 3 hrs. I. (Formerly 445* and 446*)

Managerial problems pertaining to sales inventory and purchases; retail method of inventory; sales expense and pricing; mark-up and mark-down planning; stock planning.

Corequisite: Business Administration 543.

523. Retail Personnel Management. 2 hrs. II. (Formerly 444*)

Methods of testing for retail employment; retail personnel records; periodic personnel review; the development of a training program; sources of training material; training for junior executives; the development and maintenance of good employer-employee relationships.

Prerequisite: Business Administration 343, 344, or permission of instructor.

534. Investments. 3 hrs. II. (Formerly 434*)

Nature, forms and principles of investment; institutions for facilitating investment.

542. Techniques of Market Research. 3 hrs. II.

Scope and importance of marketing and distribution research; product, package, and brand analysis; consumer, industrial and institutional surveys; quantitative and qualitative analysis of market data, situation analysis, sampling; tabulation and presentation techniques.

Prerequisites: Business Administration 318, 330, and 340.

543. Retail Buying. 2 hrs. I. (Formerly 443*)

Scientific planning and selection of merchandise for retail stores; buyer's responsibilities; the determination of what and how much to buy, where and how to buy; brands and labeling; trade relations.

Prerequisite: Business Administration 344 or permission of instructor.

640. American Markets and Marketing. 3 hrs. I, S.

Specialization and integrations; buying and selling; policies pertaining to pricing; marketing within and between regions; marketing efficiency and control.

Not open to students who have had Business Administration 340 or its equivalent.

CHEMISTRY

DR. SCHOLL, DR. HOBACK, DR. RUMPLE, AND DR. WHELPLEY

Prerequisites for Graduate Work in Chemistry

Graduate students majoring in chemistry must present credits in four one-year undergraduate courses as follows: General (plus qualitative) analytical, organic, and physical chemistry. The completion of mathematics courses through calculus, one year of physics, and two years of either French or German are required for admission. Undergraduate deficiencies may be made up by taking appropriate courses without credit.

An entrance examination is required in the four fields of chemistry, the results of which are used by the student's graduate committee in advising a course of study.

Requirements for Master of Science Degree in Chemistry

Chemistry 567, 568, 600, 631, 632, and six to eight hours of research are required. Twenty hours in the major field of chemistry are required. Students must pass comprehensive examinations in analytical, general, organic and physical chemistry and either German or French before they are recommended for candidacy for the degree. Graduate courses in mathematics are recommended especially for students doing research in physical chemistry. Graduate credit for the degree shall total not fewer than thirty-two semester hours including a thesis. The Chemistry Department considers a grade of B as the minimum satisfactory grade in graduate courses; however, an occasional grade of C would not bar the candidate from graduation. Students must present seven copies of an acceptable thesis (three to be delivered to the Graduate School Office) three weeks before graduation and defend their work in an oral examination given by the Chemistry staff.

All laboratory courses require a fee and deposit payable before laboratory work is started.

503. **Inorganic Chemistry.** 2 hrs. I. (Formerly 403*)
Prerequisite: Chemistry 356.
504. **Colloid Chemistry.** 3 hrs. I.
Fee \$8.00, deposit \$5.00.
Prerequisite: Chemistry 318 or 356.
566. **Organic Qualitative.** 4 hrs. II. (Formerly 466*)
Fee \$8.00; Deposit \$10.00.
Prerequisite: Chemistry 356.
567. **Chemical Principles.** 3 hrs. I. (Formerly 467*)
Prerequisite: Chemistry 458.
568. **Chemical Principles.** 3 hrs. II. (Formerly 468*)
Prerequisite: Chemistry 467 or 567.
600. **Introduction to Research.** 1 hr. I, II. (Formerly 500)
Required of the Master of Science candidates.
601. **Organic.** 4 hrs. I. (Formerly 501)
Fee \$10.00; Deposit \$10.00.
Prerequisite: Chemistry 356.
602. **Organic Qualitative.** 3 hrs. (Formerly 502)
Fee \$8.00; Deposit \$10.00.
Elemental analysis by micro and semi-micro techniques.
Prerequisite: Chemistry 356.
603. **Theories of Analytical Chemistry.** 4 hrs. I. (Formerly 503)
Fee \$8.00; Deposit \$10.00.

605. **Methods in Biological Assay.** 4 hrs. (Formerly 505)
 Fee \$8.00; Deposit \$10.00.
 Given on demand.
 Prerequisite: Chemistry 318.
613. **Absorption Spectroscopy.** 3 hrs. I. (Formerly 513)
 Fee \$10.00; Deposit \$15.00.
 Prerequisite: Chemistry 458.
614. **Emission Spectroscopy.** 3 hrs. II. (Formerly 514)
 Fee \$10.00; Deposit \$15.00.
 Prerequisite: Chemistry 458.
615. **Polarography.** 2 hrs. I. (Formerly 515)
 Fee \$10.00; Deposit \$15.00.
 Prerequisite: Chemistry 458.
616. **X-Ray Diffraction.** 2 hrs. II. (Formerly 516)
 Fee \$10.00; Deposit \$15.00.
 Prerequisite: Chemistry 458.
- 631-632. **Seminar.** 1-1 hr. I-II. (Formerly 531-532)
 Required of all Master of Science candidates.
- 680-681. **Thesis or Problem Report, I and II.** 1-3; 1-3 hrs. I, II, S. (Formerly 580-581)
 In lieu of a laboratory research problem, a problem elected in library research on some phase of chemistry. (See note below.)
- 682-683. **Research (Biochemistry).** 1-4; 1-4 hrs. I, II, S (Formerly 582-583)
 Fee \$2.50 per hour; Deposit \$10.00. (See note below.)
- 684-685. **Research (Inorganic, Analytical or Assay).** 1-4; 1-4 hrs. I, II, S. (Formerly 584-585)
 Fee \$2.50 per hour; Deposit \$10.00. (See note below.)
- 686-687. **Research. (Organic).** 1-4; 1-4 hrs. I, II, S. (Formerly 586-587)
 Fee \$2.50 per hour; Deposit \$10.00. (See note below.)
- 688-689. **Research (Physical Measurements).** 1-4; 1-4 hrs. I, II, S. (Formerly 588-589)
 Fee \$2.50 per hour; Deposit \$10.00. (See note below.)
- 690-691. **Research (Physical).** 1-4; 1-4 hrs. I, II, S. (Formerly 590-591)
 Fee \$2.50 per hour; Deposit \$10.00. (See note below.)

Note: A student may receive credit for Chemistry 680-81 or 682-83 or 684-85 or 686-87 or 688-89 or 690-91, but not in combinations of the above.

ECONOMICS

MR. LAND AND MR. MUNN

Courses may be taken with approval of the student's adviser and instructor in the course.

502. **Business Cycles.** 3 hrs. II (Formerly 402*)
 Theories of cause, and proposed solutions of the problem of economic fluctuations (inflation and depression).
 Prerequisite: Economics 310 or consent of instructor.
 No credit if Economics 308 has been taken.
508. **Contemporary Economic Systems.** 3 hrs. I. (Formerly 408*)
 The theories and policies of capitalism, socialism, and fascism.
 Prerequisite: Economics 242 or 340.
 No credit if Economics 350 has been taken.

- 512. The American Contribution to Economic Thought.** 3 hrs. II. (Formerly 412*)
Deals with the theory of value, welfare, and progress—largely the product of American scholars.
Prerequisite: Six hours of advanced economics.
- 520. International Economics.** 3 hrs. I.
Economic problems connected with world resources, world trade and economic reconstruction of under-developed countries.
Prerequisite: Economics 241 or 255 or 340.
- 525. The Economy of West Virginia.** 3 hrs. II.
Resources, labor, industry, agriculture, transportation of the West Virginia and regional area. The economics of the coal industry receives special attention.
Prerequisite: Economics 242 or 255 or 340.
- 540. Classical Economics.** 3 hrs. I. (Formerly 440*)
Classical economic theory from the Physiocrats to John Stuart Mill.
Prerequisite: Economics 242 or 340.
- 544. Contemporary Economic Theory.** 3 hrs. I. (Formerly 444*)
Economic thought from Marshall to Keynes.
Prerequisite: Economics 242 or 340.
- 561. Economic Education Workshop.** 3 hrs. S. (Formerly 461*)
Intensive review of content and methods of teaching economics designed for elementary and high school teachers who teach in economics or related field.
Prerequisite: Consent of instructor or grant of scholarship.
- 562-565. Seminar in Special Topics.** 2-4 hrs. I, II. (Formerly 462*-465*)
To teach, as the occasion arises, any standard economics topic not listed among the usual course offerings.
Prerequisite: Economics 242 or 340 and consent of instructor.
- 591-595* Research Problems.** 2-4 hrs. I, II. (Formerly 491*-495*)
A particular problem or problems may be assigned a student who needs work beyond the courses scheduled if such student is judged competent to carry on supervised research.
Prerequisite: Six hours of advanced work in economics and consent of instructor, head of department of economics, and dean of the college in which the student is taking his major.

EDUCATION

DEAN WILBURN, MR. CUBBY, MR. FELTY, MR. GRAY, DR. HAMPEL, MR. HESS, DR. MORRIS, DR. MUSGRAVE, MR. NUZUM, MR. PHILLIPS, DR. PURDY, MISS RIDER, DR. RUNYAN, DR. RUSSELL SMITH, AND DR. WOODS.

The undergraduate prerequisites for a major in education are fifteen semester hours in education and eligibility for the issuance of a First Class Certificate valid in elementary or secondary schools of West Virginia, or the equivalent thereof. Elementary school teachers must follow Option A or B or work for a principal's certificate unless special exception is granted by the Dean of Teachers College.

Courses in education completed in meeting the requirements for the issuance of a First Class Certificate may not be counted toward meeting the requirements for the master's degree.

Students working toward an administrative certificate, the teacher-counselor certificate, and the counselor certificate should plan their programs so as to include from six to twelve hours in courses not listed as education.

Students admitted to administrative, counseling, or teacher-education programs must before being admitted to candidacy for the Master's Degree fulfill the following requirements:

1. Complete twelve semester hours of graduate work with satisfactory grades.
 - a. At least six semester hours must be completed in residence.
 - b. Education 621, Educational Research and Writing must be completed as a part of the first twelve semester hours.
2. Submit to the following tests on or before the completion of twelve semester hours:
 - a. A test in which the student shall demonstrate his ability to write simple, clear, correct English. (If the results on this test are unsatisfactory, admission to candidacy will be denied until the student has removed the deficiency.)
 - b. A test of scholastic aptitude.

The tests described above will be administered early in every semester and term. It is the responsibility of the student to inform himself concerning the time and place of the administration of these tests.

When these requirements have been met, a committee composed of the student's adviser, the Dean of the Teachers College, and the Dean of the Graduate School will, upon consideration of the student's graduate record and the results from tests, decide whether or not the student shall be admitted to candidacy.

At any time either in the process of admitting a student to the Graduate School or in admitting a student to candidacy for the Master's degree the Dean of the Teachers College and/or the Dean of the Graduate School may require the applicant to submit to additional tests if it is felt that the results from these tests will provide a fairer basis upon which to judge the student's possible success in graduate work.

No student may enroll in the following courses until after having had one year of full-time teaching experience: Education 601, 602, 603, 604, 606, 607, 614, 646, 649, and 650.

Courses for persons minoring in education shall be chosen from the following: Education 560, 590, 616 or 648, 609, 610, 515 or 615, 641, 535, 545, 614, 635, 646, 667.

Courses in Educational Research

Education 679, Problem Report.

This course may be taken for one to three hours credit by those who wish to submit a finished written report on a research problem, experiment, or field project in education. This report is not a thesis. Those who submit it must do thirty-six hours for the master's degree unless Education 681, Thesis, is completed satisfactorily for three hours credit.

Education, 680, Thesis.

This course may be taken for three hours credit by those whose reports in Education 680 are excellent in quality, have been accepted for three hours credit, and are of such a character as warrant further research worth three semester hours. Students completing Education 679 and 680 for six hours credit by submitting acceptable theses may qualify for the master's degree by earning twenty-six additional semester hours, making a total of thirty-two for the degree.

Students completing Education 680 may choose between an oral examination involving the thesis and the comprehensive written examination.

The course requirements for the several curriculums follow:

I. Administrative Certificates

A. COUNTY SUPERINTENDENT'S CERTIFICATE

Minimum Requirements 32-36 hours

1. Education 601, 602, 603, 604, 606, 607, 621..... 19 hrs.

2. From Education 517, 535, 560, 565, 610, 615, 616, 635, 648, 680, 681..... 3 hrs.
3. Not fewer than six hours in student's teaching field or field of interest (courses listed as education excluded) 6 hrs.
4. Electives4-8 hrs.

B. ELEMENTARY PRINCIPAL'S CERTIFICATE

- Minimum Requirements32-36 hours
1. Education 601, 604, 606, 607, 610, 621..... 18 hrs.
 2. From Education 543, 595, 616, 635, 656, 657, 670, 671, 680, 681..... 3-6 hrs.
 3. Not fewer than six hours in student's field of interest (courses listed as education excluded)6-12 hrs.
 4. Electives0-9 hrs.

NOTE: Students doing 36 hours for the degree are urged to exceed the six hour minimum in work outside field of education.

C. SECONDARY PRINCIPAL'S CERTIFICATE

- Minimum Requirements32-36 hours
1. Education 601, 604, 606, 607, 610, 621..... 18 hrs.
 2. From Education 515, 517, 535, 541, 545, 560, 565, 590, 613, 614, 615, 635, 646, 647, 648, 680, 681, 3-6 hrs.
 3. Not fewer than six hours in student's field of interest, or teaching field (courses listed as education excluded)6-12 hrs.
 4. Electives0-9 hrs.

NOTE: Students doing 36 hours for the degree are urged to exceed the six hour minimum in work outside field of education.

D. CERTIFICATE IN GENERAL SUPERVISION

- Minimum Requirements32-36 hours
1. General requirements
Education 606, 616, 621..... 9 hrs.
 2. *Practice in Supervision
Education 672, 673, 674.....9 hrs.
 3. Requirements in problems of teaching education
Education 543 or 545, 656, 657, 667 or 670, 671..... 15 hrs.
 4. Electives (must be outside field of education)0-3 hrs.

*Courses to be acquired through not less than two years of field experience on a county-wide basis, supervised jointly by college, State Department of Education, and county superintendent.

II. Teacher-Education Curricula

PROGRAMS IN COUNSELING AND GUIDANCE

There are two types of certificates granted by the State Board of Education in counseling. The first is a teacher-counselor certificate based on meeting the requirement for the first-class teaching certificate at the level at which guidance is to be done, two years of successful teaching experience at that level, and completion of twelve semester hours of graduate work in guidance distributed among five required courses (all of which must be taken regardless of hours' credit). The second type is the counselor or permanent certificate based on meeting the requirements for a first class teaching certificate at the level at which guidance is to be done, two years of successful teaching at that level, cumulative wage earning experience to a total of 1400 clock hours of regular paid employment (cooperative work experience programs may count), and a master's degree which includes the completion of thirty-two to thirty-six semester hours of graduate work distributed among required and elective courses.

While it is possible to qualify for the first type of certificate without doing the equivalent of a master's degree, most students prefer to qualify while working toward a degree. Therefore, the following programs are designed to enable the student to complete courses which will help him reach both goals.

A. TEACHER-COUNSELOR CERTIFICATE

- Minimum Requirements32-36 hours
1. Education 590, 614, 621, 646, 647, and either 649 or 650. 18 hrs.
 2. Electives in Education.....6-12 hrs.
(May not enroll in Education 602, 603, 604, 607)
 3. Six to twelve hours in student's teaching field or field of interest (must be outside field of education)6-12 hrs.

B. COUNSELOR CERTIFICATE

- Minimum Requirements32-36 hours
1. Education 535, or 635, 590, 614, 616, or 648, 621, 646, 647, 649 or 650..... 24 hrs.
 2. From Education 517, 610, 613, 640 or 641, 649 or 650, 680 and 6813-6 hrs.
 3. Two to nine hours in student's teaching field or field of interest (must be outside field of education)2-9 hrs.
- NOTE: For the Counselor Certificate, at least 25 semester hours must be completed in guidance courses.

C. PROGRAMS FOR TEACHERS IN ELEMENTARY SCHOOLS

The two programs of study outlined below are intended for students in elementary education. Option A is designed particularly for students who wish to become better prepared as teachers in elementary schools. The field of study includes courses in child development, the curriculum, and investigations in teaching in the several areas in the elementary school.

Option B provides opportunities for studying the problems involved in teaching atypical children. The emphasis in the program of study is upon those aspects of professional education usually referred to as special education. Students wishing to prepare themselves for positions such as general supervisors of elementary education or as teachers of atypical children should consider the offerings of Option B.

Students under this program may take not more than six hours in Educational Guidance to be chosen from Education 590, 648, 614, and 646.

The courses in education and other fields for Options A and B are as follows:

Option A

- Minimum Requirements32-36 hours
1. Education 609, 616, 621..... 9 hrs.
 2. From Education 515, 535, 543, 560, 565, 595, 610, 635, 640 or 641, 656, 657, 670, 671, 678 9 hrs.
 3. Electives14-18 hrs.
Courses in the several fields listed below are to be selected by students with approval of the adviser: art, education, science, English, geography, geology, history, home economics, music, philosophy, political science, psychology, sociology and speech.

Option B

Minimum Requirements	32-36 hours
1. Education 609, 616, 621	9 hrs.
2. Electives in education and speech	12 hrs.
Two of the three combinations of courses listed below must be completed:	
Education 543 and 595	6 hrs.
Education 657 and 658	6 hrs.
Speech 518 and 519	6 hrs.
3. Electives	11-15 hrs.
Courses in the several fields listed below are to be selected by students with approval of the adviser: art, education, science, English, geography, geology, history, home economics, music, philosophy, political science, psychology, sociology, and speech.	

D. PROGRAM FOR TEACHERS OF BUSINESS ADMINISTRATION

This program is intended to promote the development of master teachers of business administration in secondary schools. It provides an opportunity for students to distribute their study between courses in business subjects and education. The programs of study are planned to meet the needs of the students.

Minimum Requirements	32-36 hours
1. From Education 569, 609, 610, 621, 640 or 641, 648, 661, 662, 663	15 hrs.
Note: Students electing to write theses must include Education 621.	
2. From Business Administration 504, 505, 507, 511, 512, 513, 514, 515, 521, 522, 523, 534, 543, 640.....	12 hrs.
3. Electives	5-9 hrs.
(Selected by student with approval of adviser)	

E. PROGRAM FOR TEACHERS OF ENGLISH IN SECONDARY SCHOOLS

This program is intended to promote the development of master teachers of English in junior and senior high schools. It provides an opportunity for students to distribute their study between courses in English and education. The programs of study are to be planned so as to meet the needs of the students.

Minimum Requirements	32-36 hours
1. From Education 541, 545, 609, 648, 652.....	15 hrs.
2. English 555, 612, 630, 631	9 hrs.
(Education 621 or English 630 may be completed but not both courses)	
3. Electives in English and education	8-12 hrs.
(Students are expected to do at least one half of their work in English)	

F. PROGRAM FOR TEACHERS OF HOME ECONOMICS

This program is designed for teachers who wish to work for the master's degree in home economics and education. From six to twelve hours in home economics must be taken in courses approved by the adviser in a recognized graduate school and transferred to Marshall College.

Minimum Requirements	32-36 hours
1. Education 606, 609	6 hrs.
2. From Home Economics 500, 501, 505, 506, 507, 520, 540	6 hrs.
3. Graduate work in home economics or home economics-education completed with the adviser's approval at an approved college or university	6-12 hrs.

- 4. From Education 535, 545, 560, 565, 590, 610, 616, 621, 635, 640 or 641, 648, 6786-9 hrs.

NOTE: Students electing to write theses must include Education 621.

- 5. Electives (selected by student with approval of adviser)3-12 hrs.

Suggested Electives:

- Art 603, Experiencing Art in Everyday Life.
- Biology 607, Problems in Genetics.
- Economics 505, The Nature and Significance of Economics.
- Economics 508, Contemporary Economic Systems.
- English 601, Folk and Popular Literature.
- English 621, Contemporary Novel.
- English 644, The American Novel.
- Geography 603, Problems in the Geography of North America.
- Geography 605, Geography in World Political Affairs.
- Geography 607, Problems in World Economic Geography.
- Philosophy 510, The Philosophical Sources of American Culture.
- Sociology 602, Contemporary Social Change.
- Speech 518, Speech Correction.
- Speech 550, Direction of Speech Activities.

G. PROGRAM FOR TEACHERS OF PHYSICAL SCIENCE IN SECONDARY SCHOOLS

The purpose of this program is to meet the needs of teachers who wish additional training in chemistry and physics. Teachers with sixteen hours of chemistry, eight hours of physics, and ten hours of mathematics on the undergraduate level are eligible for this program.

Deficiencies in mathematics may be taken concurrently with this program. The writing of a thesis is optional.

Minimum Requirements32-36 hours

- 1. From Education 560, 590, 609, 610, 621, 640 or 641, 64812 hrs.

NOTE: Students electing to write theses must include Education 621.

- 2. Chemistry and physics18 hrs.

Option A

- From Chemistry 620, 621, 622, 623 and 624 or 625.....12 hrs.
- Physics 640 and 641 6 hrs.

Option B

- From Physics 640, 641, 642, 643 and 644 or 64512 hrs.
- Chemistry 620 and 621 6 hrs.

- 3. Electives in science or education2-6 hrs.

H. PROGRAM FOR TEACHERS OF SOCIAL STUDIES IN SECONDARY SCHOOLS

For the purpose of this program social studies includes economics, geography, history, political science, and sociology. This program is designed to meet the needs of teachers who wish to distribute the work for the master's degree over the general area of the social studies. Only teachers with at least twenty-four hours of undergraduate work in this general area are eligible to pursue this program.

The general pattern is as follows:

- 1. Professional and specialized courses 9 hours
- Education 667, Teaching Social Studies in Secondary Schools 3 hours

Education 648, Advanced Studies of Human Adjustment	3 hours
or	
Education 616, Advanced Studies in Child Development	3 hours
Education 640, Literature of Education	3 hours

(The work done in Education 640 will generally be in the literature of the social studies and social sciences. The adviser may vary the requirements in this course to meet the needs of the student.)

2. Social Studies and electives23-27 hours
 - a. Twelve hours shall be distributed equally in two of the following fields: economics, geography, history, political science, and sociology.
 - b. The rest of the work may be distributed among the five fields in accordance with the needs and interests of the student, provided: First, that not more than fifteen hours may be counted in any one of the social studies for credit; and, second, at least six hours must be earned in each of the social studies in undergraduate and graduate work combined for graduation.
 - c. After the minimum requirements in social studies are met, electives may be chosen from the following:
 - Art 501, History of Art to 1400 A. D.
 - Art 502, History of Art from 1400 to the Present.
 - Philosophy 510, The Philosophical Sources of American Culture.
 - Philosophy 519, Survey of Religious Thought in the Western World.
 - Education 541, Literary Materials for English and Social Studies in the Secondary School.

EDUCATION

515. **History of Modern Education.** 2-3 hrs. I, II, S. (Formerly 415*)
Our debt to the ancient Hebrews, Greeks, and Romans. Emphasis on movements since the beginning of the Renaissance.
Prerequisite: Enrollment in Education 350 or 450.
517. **Statistical Methods.** 3 hrs. S. (Formerly 417*)
Elementary statistics for students in economics, education, political science, and sociology.
Prerequisites: Consent of instructor. Enrollment in Education 350 or 450.
535. **Tests and Measurements.** 3 hrs. I, II, S. (Formerly 435*)
History, basic philosophy, and elementary statistical devices for evaluating pupil progress; new type tests constructed and standardized tests for elementary and secondary schools examined and administered.
Prerequisites: Consent of instructor. Enrollment in Education 350 or 450.
541. **Literary Materials for English and Social Studies in Secondary Schools.** 3 hrs. I, S. (Formerly 441*)
Reading and evaluation of a variety of literary selections suitable for Grades VII through XII.
Prerequisite: Enrollment in Education 450.
543. **Teaching of Reading in Elementary Schools.** 3 hrs. I, II, S. (Formerly 443*)
Modern techniques and practices in the teaching of reading.
Prerequisite: Enrollment in Education 350.

- 545. Teaching Reading in Secondary Schools.** 3 hrs. I, II, S. (Formerly 445*)
Principles underlying teaching of reading in secondary schools.
Prerequisite: Enrollment in Education 450.
- 560. Philosophy of Education.** 2-3 hrs. I, II, S. (Formerly 460*)
Basic philosophic schools and concepts and application to educational practice.
Prerequisite: Enrollment in Education 350 or 450.
- 565. Audio-Visual Aids in Learning.** 2-3 hrs. I, II, S. (Formerly 465*)
Utilization of audio-visual materials, equipment, and techniques.
Prerequisites: Enrollment in Education 350, 410, or 450.
- 566. Production of Audio-Visual Aids.** 3 hrs. I, S.
Basic techniques in making slides, photographs, dry and wet mountings, felt board materials, movies, tape recordings, and similar teaching aids. Laboratory fee \$3.00.
- 569. Materials and Methods in Teaching Business Education.** 2-3 hrs. I, II, S. (Formerly 469*)
Materials and methods of teaching business subjects in secondary schools.
Prerequisite: Enrollment in Education 450.
- 582-585. Special Topics.** 1-4 hrs. I, II, S.
- 590. Basic Course in Principles and Practices of Guidance.** 2-3 hrs. I, II, S. (Formerly 490*)
Objectives, principles, and practices of guidance.
Prerequisite: Enrollment in Education 450.
- 595. Clinical Practice in Reading Instruction.** 2-3 hrs. S. (Formerly 495*)
Diagnosis of difficulties; plans for corrective treatment; actual work with pupils.
Prerequisite: Education 443 or 543 or consent of instructor.
- 601. General School Administration: Basic Course.** 3 hrs. I, S. (Formerly 501)
Federal and state participation in school administration; place of state and county boards of education; relation of school to other community agencies; organization of staff and selection of personnel.
- 602. General School Administration: Financial Aspects.** 2 hrs. I or II, S. (Formerly 502)
Basic principles of school finance; taxation for school support; budgeting; accounting and auditing; insurance; extra levies and bond issues.
Prerequisite: Education 501 or 601.
- 603. General School Administration: Plant and Equipment.** 2 hrs. I or II, S. (Formerly 503)
Planning buildings; architectural service; maintenance and replacement of equipment; transportation equipment and its maintenance and use.
Prerequisite: Education 501 or 601.
- 604. The School Principal.** 3 hrs. I or II, S. (Formerly 504)
Duties and responsibilities of elementary and secondary school principals; problems in organizing and directing the school program.
Prerequisite: Education 501 or 601.
- 606. Supervision of Instruction: Basic Course.** 3 hrs. I or II, S. (Formerly 506)
Principles; procedures used in improving instructional program in schools.
- 607. Problems in Supervision of Instruction.** 3 hrs. I or II, S. (Formerly 507)
Investigation of specific problems in improving instruction in the several areas of the curriculum in elementary and secondary schools.
Prerequisite: Education 506 or 606.

- 609. The Teacher and School Administration.** 3 hrs. I or II, S. (Formerly 509)
Technical background of the fundamentals of school administration for the classroom teacher; West Virginia School System emphasized; teacher participation in administration with attention to ethics, retirement, salary, and tenure. Not acceptable in administrative programs and not open to students who have completed Education 501 or 601.
- 610. The Curriculum in the Modern School.** 3 hrs. I or II, S. (Formerly 510)
Curricular development in elementary and secondary schools; attention given to procedures for examining, evaluating, and revising existing curricular programs.
- 613. Organization and Administration of Guidance Programs.** 2-3 hrs. I or II, S. (Formerly 513)
Problems in planning and administering a guidance program in elementary and secondary schools.
- 614. Counseling Techniques.** 2-3 hrs. I or II, S. (Formerly 514)
Techniques employed by the counselor, with emphasis on the place of the interview.
- 615. History of Education in the United States.** 2 hrs. (Formerly 515)
Development of public and private educational systems in the United States.
- 616. Advanced Studies in Child Development.** 3 hrs. I or II, S. (Formerly 516)
Nature of growth and environmental factors affecting it.
- 617-618. Field Course in Current School Problems.** 3-3 hrs. (Formerly 517-518)
Investigations in current problems confronting local schools; content determined by needs of students.
- 621. Educational Research and Writing.** 3 hrs. I, II, S.
Investigative methods and techniques and their application to individual problems.
- 635. Evaluation in Elementary and Secondary Schools.** 3 hrs. (Formerly 535)
Procedures for evaluating effectiveness of a school program, with emphasis on procedures other than formal tests.
- 640. Literature of Education.** 1-3 hrs. I, II, S. (Formerly 540)
A program of reading, either extensive or intensive, to meet needs of the student; readings and reports on a group of outstanding contributions to education; readings selected with guidance of adviser. Only one registration for Education 540 permitted.
- 641. Seminar in Education.** 2-3 hrs. (Formerly 541)
A guided program of readings, reports, and discussions. No student may register for this course a second time.
- 646. Individual Inventory Techniques.** 2-3 hrs. (Formerly 546)
Techniques used in collecting data, including test results, recording of data, and interpretation of tests and other data.
- 647. Occupational Information Techniques.** 2-3 hrs. (Formerly 547)
Techniques used in selecting, filing, and using materials pertaining to various occupations and professions.
- 648. Advanced Studies of Human Adjustment.** 2-3 hrs. (Formerly 548)
Psychological foundations of personality development with emphasis on principles of mental hygiene as related to problems of everyday life.
- 649-650. Seminar in Counseling.** 3-3 hrs. (Formerly 549-550)
Counseling tools and techniques, with emphasis on problem categories and patterns as related to the psychology of individual differences.
- 652. Investigations in Teaching of English in Secondary Schools.** 3 hrs. (Formerly 552)
Emphasis on particular problems in teaching of English rather than general techniques.

- 656. Teaching of the Language Arts.** 3 hrs. (Formerly 556)
Current methods and available materials for teaching handwriting, spelling, and oral and written expression.
- 657. Teaching of Arithmetic.** 3 hrs. (Formerly 557)
Acquainting students with available materials and giving knowledge of the most widely accepted methods of instruction.
- 658. Clinical Practice in Arithmetic Instruction.** 3 hrs. (Formerly 558)
Working with pupils under guidance; diagnosing, planning and putting into effect an instructional program for a limited number of pupils.
Prerequisite: Education 557.
- 661. Teaching Shorthand and Typewriting.** 2-3 hrs. S. (Formerly 561)
Emphasis on recent research and experimentation in teaching, testing, and evaluating students' achievements in shorthand and typewriting; the psychology of skill development; evaluation of teaching materials.
- 662. Teaching General Business (Basic Business) and Bookkeeping.** 2-3 hrs. S. (Formerly 562)
Emphasis on recent research and experimentation in teaching, testing, and evaluating students' achievements in general business and bookkeeping; evaluation of teaching materials.
- 663. Teaching Office Machines and Filing.** 2-3 hrs. S.
Formulation of individual school programs; ways and means of inaugurating courses in the high school; evaluation of teaching materials and sources, and emphasis on improvement of operating proficiency.
- 667. Teaching Social Studies in Secondary Schools.** 2-3 hrs. S. (Formerly 567)
Various techniques for teaching social studies with suggestions for procurement and use of pertinent materials.
- 670. Teaching Social Studies in Elementary Schools.** 3 hrs. (Formerly 570)
Materials and procedures for teaching social studies with emphasis on a survey of successful programs of instruction.
- 671. Teaching Science in Elementary Schools.** 3 hrs. II. (Formerly 571)
Problems and methods of teaching science. Laboratory fee: \$2.00.
- 672-673-674. Practice in Supervision, Course I, II, and III.** 3-3-3 hrs. (Formerly 572, 573, 574)
Practice of supervisory techniques presented in theory courses; sharing the responsibility for carrying forward a supervisory program in a school system.
- 675. School Law.** 3 hrs.
The legal basis of education in the United States as revealed in constitutions, statutes, court decisions, and in administrative rulings and practices with some emphasis on West Virginia.
- 678. The Critic Teacher.** 3 hrs. (Formerly 578)
Duties and responsibilities of the teacher who directs learning experiences of student teachers.
- 679. Problem Report.** 1-3 hrs.
- 680. Thesis.** 3 hrs. (Formerly 580)

SAFETY EDUCATION

MR. FITCH

- 585. Driver Education and Training.** 2 hrs. (Formerly 485*)
Materials and methods in teaching driver education and training to students preparing to teach in high schools. Two periods of classroom instruction and one hour laboratory per week.

Prerequisite: Ability to drive an automobile and possession of a West Virginia driver's license. Non-drivers with the instructor's permission may enroll without credit for the laboratory section of this course in order to learn to drive an automobile.

PHYSICAL EDUCATION

560. Education for Personal and Family Life. 2-3 hrs. (Formerly 460*)

Development of programs concerned with sex-character education in schools and other community agencies.

ENGLISH

DR. BROWN AND DR. SECHLER

Graduate courses in English give students detailed consideration of various periods in literary history, types, and authors. Students are expected to select an area as a specialty and concentrate on it as a part of their work. They may elect to write a thesis in their area or demonstrate their knowledge by answering questions concerning it in the comprehensive examination. Students are also expected to be familiar with the forms of literature, critical standards, and the materials and methods of research.

At the conclusion of the required number of hours of work for a master's degree students are expected to pass a comprehensive examination. Students doing a graduate major in English must have an undergraduate background of at least twelve hours in English or American literature. Students taking English as a minor must have six hours credit in literature on the undergraduate level. Students with deficiencies may enroll for graduate work but must take undergraduate courses suggested by the department before becoming candidates for degrees. English 630, Materials and Methods of Research, is required for a major in English and will be offered twice during the year, once in the regular session, usually during the fall semester, and once in the summer school. Students should take this course as early as possible in their graduate work. Graduate students in English should discuss their backgrounds and programs frequently with their advisers.

508. Advanced Expository Writing. 3 hrs. (Formerly 408*)

Preparation of reports, theses, briefs, abstracts, and other expository types. Material adapted to the needs of the individual student.

511. Chaucer. 3 hrs. (Formerly 411*)

546. Drama of the Restoration and Eighteenth Century. 3 hrs. (Formerly 446*)

547. Studies in the Romantic Poets. 3 hrs. (Formerly 447*)

555. Literary Criticism. 3 hrs. (Formerly 455*)

History of literary criticism with application of principles

560. Studies in English Literature from 1660 to 1745. 3 hrs.

Dryden, Swift, Pope, and their contemporaries.

561. Studies in English Literature from 1745 to 1800. 3 hrs.

Major figures of the Age of Johnson.

570. Twentieth Century Literature. 2-3 hrs.

A study of the twentieth century mind through representative genres of literature.

600. Shakespeare. 3 hrs. (Formerly 500)

Intensive reading of Shakespeare's plays. Problems of Shakespearean scholarship.

601. Folk and Popular Literature. 3 hrs. (Formerly 501)

Relation of types to their ages and subsequent literature.

603. Children's Literature. 3 hrs. (Formerly 503)

Intensive reading of recent works in the field. Evaluation of recent trends.

- 610. Readings in English and American Literature.** 2-3 hrs. (Formerly 510)
Opportunity for independent reading in a field not covered by regular lecture courses. To be taken toward the end of work for a master's degree under supervision of a graduate instructor.
- 612. The Study of Poetry.** 3 hrs. (Formerly 512)
The development of principal types, forms, themes and prosody.
- 613. Milton.** 3 hrs. (Formerly 513)
- 614. The Victorian Novel.** 3 hrs. (Formerly 514)
The chief novelists of the age.
- 615. Studies in Victorian Poetry.** 3 hrs. (Formerly 515)
Chief poets of the age.
- 616. Essayists of the Nineteenth Century.** 3 hrs. (Formerly 516)
Chief non-fictional prose writers of the century.
- 620. Contemporary Drama.** 3 hrs. (Formerly 520)
Major English and American dramatists.
- 621. Contemporary Novel.** 3 hrs. (Formerly 521)
Works of a few major twentieth century novelists.
- 630. Materials and Methods of Research.** 3 hrs. (Formerly 530)
Training in scholarly research. Required of all candidates for a master's degree in English.
- 631. Historical English Grammar.** 3 hrs. (Formerly 531)
Present-day constructions in the light of historical evolution.
- 632. History of English Words.** 3 hrs. (Formerly 532)
Historical development of modern vocabulary.
- 644. The American Novel.** 3 hrs. (Formerly 544)
From the eighteenth to the early part of the twentieth century.
- 680-681. Thesis or Problem Report.** I and II. 1-3; 1-3 hrs.

GEOGRAPHY

DR. DAVIS, MR. BRITTON AND MR. CLAGG

- The undergraduate prerequisite for a major in geography is twelve hours; the undergraduate prerequisite for a minor in geography is six hours.
- Students who major in geography must complete not fewer than twenty-four hours in the major field, with at least half of the hours in the 600 series. A major in geography must include Geography 505 or 605, 602 or 608, 603, and 620, as well as two or three hours in 609.
- 501. Historical Geography of the United States.** 3 hrs. (Formerly 401*)
Study of coastal settlements, the population spread through Appalachia and the Mississippi Valley, and the development of inter-mountain and Pacific Coast centers.
- 503. Economic Geography of Asia.** 3 hrs. (Formerly 312, 403*)
Special attention given activities and environment in continental countries and nearby islands.
- 505. World Political Geography.** 3 hrs. (Formerly 405*)
Survey of international relations showing influence of economic-environmental adjustments, stressing studies of the United States, Russia, the British Empire, and Germany.
- 506. Geography of Brazil.** 2 hrs. (Formerly 406*)
Regional study of relation of man's activities to natural environment.

- 507. Geography of Argentina.** 2 hrs. (Formerly 407*)
Regional study of relation of man's activities to natural environment.
- 508. Geography of Mexico.** 2 hrs. (Formerly 408*)
Regional study of relation of man's activities to natural environment.
- 509. Geography of Canada.** 2 hrs. (Formerly 409*)
Regional study of relation of man's activities to natural environment.
- 510. Urban Geography.** 3 hrs. (Formerly 410*)
Study of numerous cities of the world, with local field survey made.
- 512. Geography of Soviet Lands.** 2 hrs. (Formerly 412*)
Russian agriculture, grazing, mining, industry, and transportation explained in environmental terms.
- 513. Geography of British Isles.** 2 hrs. (Formerly 413*)
Climate, minerals, and land forms checked in explaining economic activities.
- 515. Geography of India.** 2 hrs. (Formerly 415*)
India, Pakistan, Ceylon, and Burma studied to show cultural-environmental relationships.
- 520. Field Geography of West Virginia.** 3 hrs. (Formerly 420*)
Type areas in lumbering, mining, agriculture, and industry checked through field methods.
- 525. Climatology.** 3 hrs.
Causes and results of regional weather of the world studied under modified Koppen's classification.
- 529. Map Intelligence and Projections.** 3 hrs.
Principles and practice in construction of map grill, use of drafting equipment, and understanding of earth features as shown on a map.
- 530. Applied Cartography.** 3 hrs.
Map making with regard to projection selection, source materials, compilation, restitution, and photo revision.
- 601. Problems in Geography of the Far East.** 3 hrs. (Formerly 501)
Agriculture, industry, transportation, and trade of selected regions in eastern Asia and the islands of the western Pacific Ocean.
- 602. Problems in Geography of Europe.** 3 hrs. (Formerly 502)
Consideration of problems in selected countries following a geographical review.
- 603. Problems in Geography of North America.** 3 hrs. (Formerly 503)
Relationship of human activities to natural environment in selected regions.
- 604. Problems in Geography of Latin America.** 3 hrs. (Formerly 504)
Problems studied in each country following geographical review.
- 605. Geography in World Political Affairs.** 3 hrs. (Formerly 505)
Key nations of world studied in light of significance of geographic items and their effects on international relations.
- 606. Field Problems in Geography of the Tri-State Area.** 3 hrs. (Formerly 506)
- 607. Problems in World Economic Geography.** 3 hrs. (Formerly 507)
Problems of world exchange of outstanding trade items.
- 608. Problems in Geography of Africa and Australia.** 3 hrs. (Formerly 508)
Selected regions studied in both continents.

609. Geographical Research. 1-3 hrs. (Formerly 509)

Research methods stressed with special attention given to a consideration of the literature of the field.

620. Problems in Conservation of Natural Resources. 3 hrs.

Presents elements of conservation education in the specific areas of soil, water, and human conservation.

680-681. Thesis or Problem Report, I and II. 1-3; 1-3 hrs.**GEOLOGY**

DR. JANSSEN AND DR. STEWART

518. Paleontology. 3 hrs. I. (Formerly 318, 418*)

Fossil animal and plant life; its development, evolution and dominance through the geologic ages. Recommended for biological science majors. Prerequisite: Geology 300 or graduate status.

522. Economic Geology. 3 hrs. II. (Formerly 322, 422*)

Nature, origin, distribution, and uses of the world's commercially valuable mineral and rock resources.

Prerequisite: Geology 300 (and 314 recommended) or graduate status.

551. Geomorphology. 3 hrs. II. (Formerly 451*)

Geologic nature and origins of the world's land forms.

Prerequisite: Geology 200 (and 350 recommended) or graduate status.

HISTORY

DR. TOOLE, DR. HEATH, DR. MOFFAT AND DR. COMETTI

Courses may be taken with the approval of the student's adviser and the instructor in the course.

All candidates for the master's degree with a major in history must take one of the following courses which emphasizes the use of materials and methods of research: 525, 526, 606, 609, 611, 627, 628, and 678.

502. American Diplomacy. 3 hrs. (Formerly 402*)**521. The Era of the Renaissance and the Reformation.** 3 hrs. (Formerly 421*)**522. The French Revolution and the Napoleonic Era.** 3 hrs. (Formerly 422*)**525. European History, 1814-1914.** 3 hrs. (Formerly 425*)**526. European History, 1914 to the Present.** 3 hrs. (Formerly 426*)**527. Russia in the 19th and 20th Centuries.** 3 hrs. (Formerly 427*)**532. American History since 1914.** 3 hrs. (Formerly 432*)**602. Constitutional History of the United States.** 3 hrs. (Formerly 502)**605. Social and Economic Problems of American Colonies.** 3 hrs. (Formerly 505)**606. Social and Economic Problems of Early National Period in America.** 3 hrs. (Formerly 506)**607. Old Northwest.** 3 hrs. (Formerly 507)**608. Civil War and Reconstruction, 1850-1877.** 3 hrs. (Formerly 508)**609. Problems of Recent American History, 1877 to Present.** 3 hrs. (Formerly 509)**610. Readings in History.** 2-3 hrs. (Formerly 510)**611. Methods and Problems of Research in West Virginia History.** 3 hrs. (Formerly 511)

612. **American Leaders to 1865.** 3 hrs. (Formerly 512)
613. **Hispanic American History.** 3 hrs. (Formerly 513)
614. **American Revolutionary Period, 1760-1789.** 3 hrs. (Formerly 514).
615. **American Leaders since 1865.** 3 hrs. (Formerly 515)
617. **Trans-Allegheny Frontier.** 3 hrs. (Formerly 517)
621. **Nineteenth Century England.** 3 hrs. (Formerly 521)
622. **Far East in Twentieth Century.** 3 hrs. (Formerly 522)
627. **Problems in Early Modern European History. 1500-1650.** 3 hrs. (Formerly 527)
628. **Problems in Recent European History, 1871-1914.** 3 hrs. (Formerly 528)
678. **Historical Research.** 2-3 hrs. (Formerly 578)
680. **Thesis or Problem Report I.** 1-3 hrs. (Formerly 580)
681. **Thesis or Problem Report II.** 1-3 hrs. (Formerly 581)

HOME ECONOMICS

MRS. ROUSE, MRS. FOOSE, MISS GRAY AND MISS NEELY

Courses may be taken with approval of student's adviser and instructor in the course. See Home Economics-Education Program listed under Education.

500. **Consumer Buying.** 3 hrs. (Formerly 400*)
Opportunities and responsibilities of the consumer; problems in purchasing specific household commodities.
501. **Special Topics.** 1-4 hrs. (Formerly 401*)
Special problems in the fields of home economics.
Prerequisite: Permission of instructor.
505. **Quantity Cookery.** 3 hrs. (Formerly 405*)
Practice in large-quantity food purchasing, preparation and serving.
- 506 **Methods in Adult Home Economics Education.** 3 hrs. (Formerly 406*)
Philosophy, promotion, organization, methods and techniques of working with out-of-school groups.
507. **Institutional Management.** 3 hrs. (Formerly 407*)
Organization and administrative problems of food in institutions such as the school lunch, residence halls, hospitals, and cafeterias.
520. **Household Equipment.** 3 hrs. (Formerly 420*)
Household equipment, its selection, care and use.
540. **Nutrition in the Home and School.** 3 hrs. II, S. (Formerly 440*)
(Formerly Home Economics 340)
For teachers and any person interested in the home and school. A study of the fundamental principles of human nutrition and their applications to the school lunch program.
554. **Problems in Home Furnishings.** 3 hrs.
Problems relating to modern decorating. Considering the selection and using of suitable fabrics for making curtains, draperies, and slip-covers.

MATHEMATICS

DR. BARRON, MISS GOINS, MR. HARDMAN

Courses may be taken with approval of student's adviser and instructor in the course.

520. College Geometry. 3 hrs. (Formerly 420*)

Recent geometry of triangle and circle studied by Euclidean methods; problems in ruler and compass constructions. A problem course in advanced plane geometry of special value to those training to teach high school mathematics.

Prerequisite: Mathematics 122.

521. Solid Analytic Geometry. 3 hrs. (Formerly Math 255 and 421*)

The point, plane, straight line, surfaces and curves referred to coordinate systems in space.

Prerequisites: Mathematics 223 and 224.

527. Advanced Calculus. 4 hrs. I. (Formerly 427*)

The number system; theory of limits; infinite sequences; functions of real variables; derivatives; partial differentiation, with applications to differential geometry; maxima and minima of functions of several variables.

Prerequisite: Mathematics 326.

528. Advanced Calculus. 4 hrs. II. (Formerly 428*)

A continuation of 527. Theory of definite integrals, multiple integrals, line and surface integrals, Green's theorem, transformation of multiple integrals, improper integrals, infinite series.

Prerequisite: Mathematics 427.

530. Vector Analysis. 3 hrs. I. (Formerly 430*)

The algebra of vectors; the differential calculus of vectors; applications to geometry, physics, mechanics.

Prerequisite: Mathematics 326.

532. Vector Analysis. 3 hrs. II. (Formerly 432*)

A continuation of Mathematics 530*. The integral calculus of vectors, introduction to tensor analysis, applications.

Prerequisite: Mathematics 430 or 530.

535. Ordinary Differential Equations. 4 hrs. I, S. (Formerly 435*)

An exposition of methods used in solving ordinary differential equations, with applications to geometry, physics, and mechanics.

Prerequisite: Mathematics 326.

536. Partial Differential Equations. 3 hrs. II. (Formerly 436*)

An exposition of methods used in solving partial differential equations, with applications to geometry and boundary value problems of ordinary occurrence in mathematical physics involving Fourier Series and Series of Bessel Functions.

Prerequisite: Mathematics 435 or 535.

545. Introduction to the Theory of Statistics. 3 hrs. (Formerly 445*)

The theory and application of mathematical statistics, treating such topics as averages, measures of dispersion and skewness, frequency distributions, frequency curves, and correlation. Applications to miscellaneous practical problems.

Prerequisites: Mathematics 310, 325.

540. Higher Algebra. 3 hrs.

Development of complex number system and elementary theories of numbers, polynomials, and equations using concepts and terminology of modern algebra; of special value to secondary teachers.

Prerequisite: College Algebra.

550. Fundamental Concepts and History of Mathematics. 3 hrs. (Formerly 450*)

A discussion of the logical foundations of geometry, algebra, and analysis as an approach to an answer to the question, "what is mathematics?". Discussion correlated with the historical development of mathematics from ancient to modern times.

Prerequisite: Senior or graduate standing.

560. Functions of a Complex Variable with Applications. 3 hrs. (Formerly 460*)

Complex numbers; analytic functions; properties of elementary functions; integrals; power series; residues of poles, conformal mapping with applications to problems in potential, steady temperatures, and flow of fluids.

Prerequisite: Mathematics 326.

MUSIC-EDUCATION

DR. KINGSBURY, MISS GELVIN, MR. HUGBOOM, MR. LANEGGER,
MR. O'CONNELL, AND MR. PURSLEY

Admission

Students in music-education must hold a bachelor's degree from a recognized institution with a major in music or the equivalent. Two official transcripts of all previous college work and other evidence of special training in music must be sent to the Dean of Graduate School. Application for admission forms may be secured from the Graduate School Office. A conference should be arranged with the head of the Music Department as a part of the admission procedure. At this conference the conditions of admission will be defined.

General Requirements

The requirements for the degree of Master of Arts in music-education may be met by completing a minimum of thirty-two semester hours of graduate work of which not more than six hours may be earned by submitting a thesis. The thesis may be in the form of a problem report, graduate recital, or music composition of merit. If a thesis is not submitted, a minimum of thirty-six hours of course work must be completed. All candidates for the master's degree must participate in a major music ensemble.

The program completed for the degree must include eighteen hours of music education of which six hours may be in instrumental techniques, six hours of music history and literature, six hours of education, and six hours from other fields of music. Six hours may be taken in applied music.

Majors in music-education are given a comprehensive written examination in music as well as an audition in applied music covering piano and the major instrument or voice not later than the time of completion of twelve semester hours of graduate work. Applicants are encouraged to take this examination prior to registering for graduate courses.

MUSIC-EDUCATION—INSTRUMENTAL EMPHASIS

Education	6 hours
Education 648, Advanced Studies in Human Adjustment	3 hrs.
Education 606, Educational Supervision	3 hrs.

Music history and literature	6 hours
Music 601, Survey of Music Literature	3 hrs.
Music History Electives	3 hrs.
Music Education	18 hours
Music 610, Philosophy of Music Education	3 hrs.
Music 611, Psychology of Music	3 hrs.
Music 630, Instrumental Conducting and Interpretation	2 hrs.
Music 615, Band Maneuvers and Pageantry	2 hrs.
Music Education Electives	8 hrs.
Electives in music	6 hours

MUSIC-EDUCATION—VOCAL EMPHASIS

Education	6 hours
Education 648, Advanced Studies in Human Adjustment	3 hrs.
Education 606, Educational Supervision	3 hrs.
Music history and literature	6 hours
Music 601, Survey of Music Literature	3 hrs.
Music History Electives	3 hrs.
Music Education	18 hours
Music 610, Philosophy of Music Education	3 hrs.
Music 611, Psychology of Music	3 hrs.
Music 629, Choral Conducting and Interpretation	2 hrs.
Music Education Electives	10 hrs.
Electives in Music	6 hours

MUSIC-EDUCATION—SUPERVISION OF PUBLIC SCHOOL MUSIC

(Special Supervisor's Certificate)

A student wishing to earn a master's degree in music-education and meet the requirements for the Special Supervisor's Certificate may complete either of the programs outlined above. However, nine semester hours of electives in music must be reserved for field courses in practice in supervision.

Music History and Literature**601-a. Survey of Music Literature. 3 hrs. (Formerly 501-a)**

Comprehensive survey of solo, chamber, symphonic, and choral literature; special emphasis given to analysis of style.

601-b. Symphonic Literature. 3 hrs. (Formerly 501-b)

A survey of orchestra literature beginning with the sixteenth century: the Mannheim composers, Viennese classics, the Romanticists, the national schools, and late European, South American and American developments.

602-a. Ancient, Medieval, and Renaissance Music. 3 hrs. (Formerly 502-a)

Oriental and Greek music, Gregorian Chant, Troubadours and ars antiqua, ars nova, Flemish school; development of notation and styles. Renaissance: ecclesiastical and secular forms of composition.

602-b. Seventeenth and Eighteenth Century Music. 3 hrs. (Formerly 502-b)

Development of opera, oratorio, and cantata; beginnings of instrumental music. Baroque music, Bach, Handel, their forerunners and contemporaries. The "gallant" style. The development of sonata form, symphony, and cantata. Haydn and Mozart.

603-a. Beethoven and the Romantic Movement. 3 hrs. (Formerly 503-a)

A study and evaluation of Beethoven's principal works and the life and works of Schubert, Mendelssohn, Chopin, Schumann, Brahms, and their contemporaries.

603-b. Contemporary Music. 3 hrs. (Formerly 503-b)

Musical developments since Wagner. Debussy, Ravel, Stravinsky, Schoenberg, Bartok and their contemporaries. Particular emphasis given to contemporary American music.

604-a. Keyboard Literature. 2 hrs. (Formerly 504-a)

Survey and study of literature for harpsichord, clavichord and piano, covering their history, structure, interpretation, and aesthetic values.

604-b. Chamber Music Literature. 2 hrs. (Formerly 504-b)

A survey of chamber music literature from the Baroque Era to the 20th Century. Analysis of form emphasized in the study of string quartet, trio, quintet, and various other combinations.

604-c. Song Literature. 2 hrs. (Formerly 504-c)

The song literature of Germany, France, Italy, England, and America, as well as contemporary material from other countries; interpretation, song study, program building, and languages.

604-d. Choral Literature. 2 hrs. (Formerly 504-d)

A comprehensive study of choral composition beginning with sixteenth century, with special emphasis on music for school organizations.

605. Aesthetics of Music. 2 hrs. (Formerly 505)

The principles of the aesthetics of music and related arts and the nature of musical experience. Studies in analysis and criticism.

Music Education

610. Philosophy of Music Education. 3 hrs. (Formerly 510)

Basic concepts of music education and their application to problems of music teaching, supervision, and administration.

611. Psychology of Music. 3 hrs. (Formerly 511)

A study of reactions to musical stimuli and the factors involved in the development of musical skills.

612. Projects and Problems in Music Education. 3 hrs. (Formerly 512)

Special problems and projects chosen by the student for investigation. Extensive study of a single problem or project in detail for use in schools.

613. Tests and Measurements in Music. 3 hrs. (Formerly 513)

Principles and techniques of measurement in music.

614. The Teaching of Music Appreciation. 2 hrs. (Formerly 514)

Advanced methods and materials for teaching appreciation of music in Grades I through XII.

615. Band Maneuvers and Pageantry. 2 hrs. (Formerly 515)

The marching band. The marching and musical problems which are encountered in training and operating a band for football games and other events involving marching and playing.

616. Curriculum Construction and Revision. 3 hrs. (Formerly 516)

Survey of recent developments in curriculum and their effect on music courses; consideration of various methods of determining and stating curriculum content. Preparation of a detailed course of study in a specific area of music education by each student.

617. Seminar in Music Education. 2 hrs. (Formerly 517)

An advanced study of basic concepts of current problems in music education.

618-a. Administration of Instrumental Music. 3 hrs. (Formerly 518-a)

The planning and operation of the instrumental program and the details of programming the work in a school system.

618-b. Administration of Choral Music. 3 hrs. (Formerly 518-b)

Organization for tryouts and selection of members, rehearsal schedules, and all detailed arrangements for school, public, and radio rehearsals and concerts as well as other problems of rehearsals and performances.

619-a. Seminar in Vocal Pedagogy. 2 hrs. (Formerly 519-a)

Problems in the teaching of voice production: diagnosis, breath control, resonance, diction, repertory and interpretation. For teachers of voice, supervisors of school music, and choir directors.

619-b. Seminar in Piano Pedagogy. 2 hrs. (Formerly 519-b)

A comparative study of several pedagogical methods and open discussions on various facets of piano teaching, including papers covering important phases of teaching as well as demonstrations in class and private teaching. Materials and repertoire included.

620-a. Instrumental Workshop. 2 hrs. (Formerly 520-a)

Problems of the instrumental teacher at all levels; practical work in the techniques of handling beginning classes and ensembles of all types.

620-b. Choral Workshop. 2 hrs. (Formerly 520-b)

Review of available materials for high school and junior high school levels and actual performance of chosen selections to give each student opportunity at singing, conducting, and discussion; also music for church and radio.

625-a. Woodwind Techniques. 1 hr. (Formerly 525-a)

Advanced instrumental techniques courses designed to strengthen the student's playing—teaching knowledge of the various band and orchestra instruments, with the main emphasis on the teaching problems, including private lessons, class lessons, seminars, and a term paper on teaching problems. Not more than two semester hours on any one instrument nor more than a total of six in this area apply toward a degree.

625-b. Woodwind Techniques. 1 hr. (Formerly 525-b)**626-a. Brass Techniques.** 1 hr. (Formerly 526-a)**626-b. Brass Techniques.** 1 hr. (Formerly 526-b)**627-a. String Techniques.** 1 hr. (Formerly 527-a)**627-b. String Techniques.** 1 hr. (Formerly 527-b)**628. Percussion Techniques.** 1 hr. (Formerly 528)**629-a. Choral Conducting and Interpretation.** 2 hrs. (Formerly 529-a)

A thorough study and analysis of choral works chosen from the Renaissance, classical, Baroque and Romantic periods with direct application of choral techniques to actual performance. Mainly a cappella music with some emphasis on the Madrigal. Rehearsal of performing groups included in assignment.

629-b. Choral Conducting and Interpretation. 2 hrs. (Formerly 529-b)

Continuation of 629-a covering late Romantic and Modern choral works for the cappella and accompanied choir as well as major choral works with orchestra. Experience gained as assistant conductors with the performing choirs.

630-a. Instrumental Conducting and Interpretation. 2 hrs. (Formerly 530-a)

The special problems involved in conducting and training instrumental groups at all levels.

630-b. Instrumental Conducting and Interpretation. 2 hrs. (Formerly 530-b)

A continuation of 630-a.

- 670. Advanced Materials and Methods (Grades I-VI).** 3 hrs. (Formerly 570)
A comprehensive survey of available materials in singing, reading, listening, rhythm, and creating program of school music for the elementary grades; use of such materials in the methodology of teaching.
- 675. Creative Activity for Children.** 3 hrs. (Formerly 575)
Ways of using creative activity in the music program, methods of presenting creative song writing, rhythms, instrument construction, instrumental expression, dramatization, program building.
- 676. Research in Music-Education.** 1-3 hrs. (Formerly 576)
- 680-681. Thesis or Problem Report, I and II.** 1-3; 1-3 hrs. (Formerly 580-581)

Theory and Composition

- 640-a. Music Theory.** 3 hrs. (Formerly 540-a)
Advanced study and drill in correlated theory including ear training, melodic dictation, harmonic dictation, sight singing, and part writing with application for school music teachers.
- 640-b. Music Theory.** 3 hrs. (Formerly 540-b)
Continuation of Music 640-a.
- 645-a. Original Composition.** 2 hrs. (Formerly 545-a)
- 645-b. Original Composition.** 2 hrs. (Formerly 545-b)
- 646-a. Advanced Choral Arranging.** 2 hrs. (Formerly 546-a)
Techniques of choral composition and arranging with emphasis on the mixed choir. Arrangements and original works sung by choral groups and conducted by students.
- 646-b. Advanced Choral Arranging.** 2 hrs. (Formerly 546-b)
Continuation of 646-a with emphasis on arranging for male and female voices and usual combinations with final work including original or arrangement for choir and band, orchestra, or organ, to be rehearsed and conducted by student either in performance or workshop.
- 647-a. Advanced Band Arranging.** 2 hrs. (Formerly 547-a)
A study of the scoring for modern concert band, the transcription of works for other media as well as original works; analysis of band literature, harmonic and formal.
- 647-B. Advanced Band Arranging.** 2 hrs. (Formerly 547-b)
A continuation of 647-a.
- 648-a. Advanced Orchestra Arranging.** 2 hrs. (Formerly 548-a)
- 648-b. Advanced Orchestra Arranging.** 2 hrs. (Formerly 548-b)
- 649. Dance Band Arranging.** 2 hrs. (Formerly 549)
A study of the special techniques involved in scoring for the contemporary dance band, including harmony used, voicing of the various instruments, and a study of current practices.
- 650. Acoustics of Music.** 2 hrs. (Formerly 550).
Review of physical laws underlying music. The physical basis of musical tones; objective causes of harmony and dissonance; design and operation of musical instruments; theory of intervals and scales; acoustical problems of music rooms and concert halls; problems of amplifying, reproducing, and recording music.

Applied Music

- 682-a, b, c, d. Flute.** 1-2 hrs. (Formerly 582-a, b, c, d)
- 683-a, b, c, d. Oboe.** 1-2 hrs. (Formerly 583-a, b, c, d)
- 684-a, b, c, d. Clarinet.** 1-2 hrs. (Formerly 584-a, b, c, d)
- 685-a, b, c, d. Bassoon.** 1-2 hrs. (Formerly 585-a, b, c, d)

- 686-a, b, c, d. **French Horn.** 1-2 hrs. (Formerly 586-a, b, c, d)
 687-a, b, c, d. **Trumpet.** 1-2 hrs. (Formerly 587-a, b, c, d)
 688-a, b, c, d. **Trombone.** 1-2 hrs. (Formerly 588-a, b, c, d)
 689-a, b, c, d. **Baritone.** 1-2 hrs. (Formerly 589-a, b, c, d)
 690-a, b, c, d. **Tuba.** 1-2 hrs. (Formerly 590-a, b, c, d)
 691-a, b, c, d. **Violin.** 1-2 hrs. (Formerly 591-a, b, c, d)
 692-a, b, c, d. **Viola.** 1-2 hrs. (Formerly 592-a, b, c, d)
 693-a, b, c, d. **Cello.** 1-2 hrs. (Formerly 593-a, b, c, d)
 694-a, b, c, d. **String Bass.** 1-2 hrs. (Formerly 594-a, b, c, d)
 695-a, b, c, d. **Piano.** 1-2 hrs. (Formerly 595-a, b, c, d)
 696-a, b, c, d. **Voice.** 1-2 hrs. (Formerly 596-a, b, c, d)
 697-a, b, c, d. **Organ.** 1-2 hrs.

Miscellaneous

597. **Piano Tuning and Repair.** 2 hrs. (Formerly 497*)
 598. **Piano Tuning and Repair.** 2 hrs. (Formerly 498*)

PHILOSOPHY

DR. BECK AND MR. JENNINGS

Courses may be taken without prerequisites with approval of student's adviser and instructor in the course.

510. **Philosophical Sources of American Culture.** 3 hrs. (Formerly 410*)
 Study of a select group of ancient, medieval, and modern thinkers directly influential in determining the basic American beliefs and ideals in the realms of religion, science, morality, politics, economics, and education.
511. **John Dewey: Philosopher and Educator.** 3 hrs. I, S. (Formerly 411*)
 Exposition of Dewey's entire philosophy as a background for his views on education.
519. **Religious Thought in Western World.** 3 hrs. (Formerly 419*)
 A study of the many directions which the philosophy of religion has taken in the western world, including an analysis of the principal religious philosophies of the present.

POLITICAL SCIENCE

DR. DILLON, DR. HARPER, DR. HARRIS, DR. LEIDEN, AND DR. STEWART

Graduate work in political science is planned to satisfy the needs of persons engaged in public school work, those who wish to prepare for government service, and those who wish to begin advanced study in this field.

A candidate for the master's degree in political science must present a minimum of twelve hours undergraduate work in the field. Courses in economics, geography, history, philosophy, and sociology are recommended for students who are preparing to do graduate work in political science. If a deficiency exists in basic courses in political science, these must be taken without graduate credit before admission to full graduate standing.

- 500, 501, 502, 503, 504. **Special Topics.** 3; 3; 3; 3; 3 hrs.
 505. **International Relations.** 3 hrs. (Formerly 405*)

Special consideration given to the rise and development of international institutions, particularly the United Nations.

506. **Contemporary World Politics.** 3 hrs. (Formerly 406*)

Special emphasis given to problems of American Foreign Policy; the factors, forces and movements abroad which affect our foreign policy.

507. **Far Eastern Politics.** 3 hrs. (Formerly 407*)
Detailed discussion of the contemporary institutions and politics of China, Japan and other nations of the Far East.
508. **Politics of the Middle East.** 3 hrs. (Formerly 408*)
Detailed examination of the institutions and politics of such states as Egypt, Turkey, Persia, Afghanistan, Iraq, Jordan, Syria and Israel.
509. **Parliamentary Governments.** 3 hrs. (Formerly 409*)
Origin, development, structure and current operations of the English, French, Swiss and other selected democratic governments; emphasis on the English system.
510. **Modern Dictatorships.** 3 hrs. (Formerly 410*)
Detailed examination of the ideology, structure and operations of the modern totalitarian state; emphasis on the Soviet Union.
520. **State Administration.** 3 hrs. (Formerly 420*)
Administrative organization and methods of executing policies in the forty-eight states.
Prerequisite: Political Science 202.
525. **Early Political Theory.** 3 hrs. (Formerly 425*)
Political thought and philosophy from Plato to the 17th century.
526. **Recent Political Theory.** 3 hrs. (Formerly 426*)
Political thought and philosophy from the 17th century to the present time.
600. **Trends in American Civilization.** 3 hrs. (Formerly 500)
Political, economic, social, educational, and spiritual trends in American civilization. For teachers not interested in specialized courses.
601. **Readings in Political Science.** 2-3 hrs. (Formerly 501)
Readings to meet the needs and interests of individual students.
603. **Problems in American National Government.** 3 hrs. (Formerly 503).
Contemporary problems, procedures, and trends in American National Government. Recommended for teachers.
604. **American Political Ideas.** 3 hrs. (Formerly 504)
Political ideas of representative American thinkers.
605. **International Law.** 3 hrs. (Formerly 505)
Legal aspects of the relations between states.
606. **American Constitutional Law.** 3 hrs. (Formerly 506)
Case study of constitutional law giving some attention to the conflict of political, social, and economic forces.
611. **Legislative Process and Legislative Procedure.** 3 hrs. (Formerly 511)
Principles, procedures, and problems of statute lawmaking in the United States at all levels of government.
615. **Labor Legislation.** 3 hrs. (Formerly 515)
Theory, organizations, procedure, content, and effect of labor legislation in the state, national, and international sphere.
617. **National Administration.** 3 hrs. (Formerly 517)
Organization and function of national administrative departments, boards and commissions in their relation to other branches of the government.
621. **Municipal Administration.** 3 hrs. (Formerly 521)
Principles and methods of municipal administration in the United States.

- 623. Administrative Law.** 3 hrs. (Formerly 523)
Law of administrative tribunals.
- 624. Administration of Justice.** 3 hrs. (Formerly 524)
Organization of courts in the United States, trends in the reorganization of judicial machinery, improvement of judicial procedure, socialization of the law, and professional ideals of the bar.
- 648. Problems in West Virginia Government.** 3 hrs. (Formerly 548)
Readings, lectures, and reports on contemporary governmental problems in West Virginia.
- 650-651. Seminar.** Credit to be arranged. (Formerly 550-551)
To be offered in connection with courses listed above.
- 680-681. Thesis or Problem Report I and II.** 1-3; 1-3 hrs. (Formerly 580-581)

PSYCHOLOGY

DR. LOEMKER, DR. FEEL AND DR. VANBIBBER

Graduate students majoring in psychology will observe the following requirements:

1. Before recommending the student for admission to candidacy for the master's degree, the department may require a qualifying examination.
 2. The final comprehensive examination in part will be uniform for all candidates, and in part will vary according to the area in which the student has done most of his work. All candidates will be held responsible for information covering the following fields:
Historical orientation and contemporary systems of psychology.
General methods of psychology: Experimental, Differential (including Statistical), Clinical.
Psychological testing: theory and methods.
 3. Only four courses are specifically required: Psychology 680, 681, 690 and 691. The rest of the work is planned, with the approval of the adviser, to meet the needs and interests of the student.
 4. During regular semesters every graduate student will enroll for Psychology 690 or 691, Seminar, one (1) hour credit. Additional credit for these courses may be earned with approval of the instructor and adviser.
 5. A thesis is a requirement for the master's degree in psychology. Early in graduate study the student should enroll for 680, Thesis I, one to three (1-3) hours credit. During that term or semester the student will select his thesis problem, plan his research in detail, submit it to his adviser for approval, and do extensive reading in related literature. Credit for Psychology 680 will be determined by the adviser on the basis of accomplishment at the end of the semester. It will not exceed three (3) hours. During the next term or semester the student will enroll for Psychology 681, one to three (1-3) hours, and will work toward completion of his research and the thesis. No credit for this course will be given or grade assigned until the thesis is presented in final form.
 6. Under certain conditions a minor may not be required.
- 506. Intelligence: Theories and Development.** 3 hrs. I. (Formerly 406*)
Nature of intelligence, individual differences in intelligence, mental levels; significance and methods of measuring intelligence; relation of intelligence to social efficiency.
Prerequisite; Nine hours of psychology.

- 516. Psychology of Learning.** 3 hrs. (Formerly 416*)
Review and critical evaluation of experimental studies and theories in the field of learning.
Prerequisite: Nine hours of psychology.
- 518. Psychology of Personnel Techniques.** 3 hrs. I, II, S. (Formerly 418*)
Techniques in personnel administration, with emphasis on the psychological principles and methods involved; problems of employment procedures, training programs, personnel records, communication, and human relations in business and industry.
Prerequisite: Psychology 201 (or 101).
- 520. Mental Measurements.** 3 hrs. I. (Formerly 420*)
Instruction and practice in the use of the Stanford-Binet and the Wechsler-Bellevue Tests; evaluation of test results.
Prerequisite: Nine hours of psychology.
- 521. Psychological Tests.** 3 hrs. II. (Formerly 421*)
Instruction and practice in the use of group tests of intelligence and abilities, and in tests of interests and personality; evaluation of test results.
Prerequisite: Psychology 420 or 520.
- 550. Perception.** 3 hrs.
Experimental studies of and theories of perception and the significance of perception in human behavior.
Prerequisite: Nine hours of psychology.
- 560. History and Systems of Psychology.** 3 hrs. I, S. (Formerly 460*)
Prerequisite: Nine hours of psychology.
- 603. Psychology of Exceptional Children.** 3 hrs. (Formerly 503)
Child nature, innate tendencies, causes of maladjustment, behavior problems in home, school, and society. Consideration given to individual differences, motivation, speech disorders, delinquency, lefthandedness, psychopathy, and other deviations; remedial measures emphasized.
Prerequisite: Consent of instructor.
- 606. Psychology of Mental Deficiency.** 3 hrs. (Formerly 506)
Classes and levels of mental deficiency; causes, prevention, training, adjustment, and institutional care. Clinics at institutions.
Prerequisite: Nine hours of psychology.
- 608. Psychopathology.** 3 hrs. (Formerly 508)
Minor and major mental disorders and related phenomena with special attention to causes and prevention of development of disorders. Clinics at institutions.
Prerequisite: Nine hours of psychology.
- 614. Psychology of Personality.** 3 hrs. (Formerly 514)
Factors involved in the development of the mature personality, with an analysis of the structure and dynamics of personality; a critical review of the methods used in the psychological evaluation of personality.
Prerequisite: Nine hours of psychology.
- 620. Clinical Psychology. Institutional Case Techniques.** 3 hrs. (Formerly 520)
A practical laboratory study of mental and behavior cases in the mental hospital. Intensive study and training in administration and interpretation of clinical tests, psychological diagnosis, and preparation of clinical reports.
Prerequisite: Psychology 520 or 420, 521 or 421, and 608.

621. Clinical Psychology; Non-Institutional Case Techniques. 3 hrs. (Formerly 521)

Intensive study and practice of psychological clinic procedures in dealing with mental and behavior problems of children and non-institutionalized adults; administration and interpretation of clinical tests, obtaining pertinent personal and family history data, preparation of clinical report.

Prerequisite: Psychology 520 or 420, 521 or 421, 606 and 608.

623. Advanced Experimental Psychology. 3 hrs. (Formerly 523)

Study and evaluation of methods of psychology. Laboratory research on special problems.

Prerequisite: Nine hours of psychology.

680-681. Thesis I and II. 1-3; 1-3 hrs. (Formerly 580 and 581)**690-691. Seminar.** 1-3; 1-3 hrs. (Formerly 590 and 591)

Research and reports on current problems and literature in psychology and related fields. Ordinarily, two hours credit may be earned in seminars; not more than four hours may be earned in seminars.

SCIENCE EDUCATION (ASTRONOMY)

DR. DARLINGTON

500. Science-Astronomy. 3 hrs.

A course in astronomy (science of the stars and planets) for teachers designed to enable the student to identify what he sees and to stimulate interest in the physical universe.

SCIENCE EDUCATION (CHEMISTRY)

DR. SCHOLL, DR. HOBACK, DR. RUMPLE AND DR. WHELPLEY

NOTE: The following courses are open to students working for the master's degree in Education. See Program G under Education.

620-621. Chemical Education. 3-3 hrs. S. (Formerly 520-521)

Fee \$8.00; Deposit \$5.00.

Prerequisite: Chemistry 204 or equivalent.

622-623. Organic. 2-2 hrs. S. (Formerly 522-523)

Fee \$8.00; Deposit \$5.00.

Prerequisite: Chemistry 520-521 or 620-621.

624-625. Physical. 2-2 hrs. S. (Formerly 524-525)

Fee \$8.00; Deposit \$5.00.

Prerequisite: Chemistry 520-521 or 620-621.

SCIENCE EDUCATION (PHYSICS)

DR. MARTIN

Note: The following courses are open to students working for the master's degree in Education. See Program G under Education.

640-641. Physics Education. 3-3 hrs. (Formerly 540-541)

A review and extension of basic principles of physics with particular stress on materials and methods of demonstration.

642-643. Electronics. 2-2 hrs. (Formerly 542-543)

Basic principles of electron tubes and their applications in industry, medicine, and communications, with accompanying laboratory work.

Fee \$2.00 per each course.

644. Atomic Physics. 2 hrs. (Formerly 544).

A historical development of the modern theories concerning the structure of matter, electricity, and light, including applications of optical spectra and X-Rays.

645. Physics of the Nucleus. 2 hrs. (Formerly 545)

Structure and properties of the nucleus of the atom, radioactivity, atomic transmutations, the basic principles of atom smashing machines, and atomic energy.

Fee \$2.00.

646. Seminar on Recent Developments in the Physical Sciences. 2 hrs. (Formerly 546)

Reports from current issues from various periodicals in the field of physical science.

SOCIOLOGY

DR. RICHARDSON AND DR. HAYWARD

Candidates for the master's degree in sociology will be expected to fulfill the following requirements:

1. Complete eighteen hours of sociology on the graduate level including Sociology 521, 601, 670, 671.
 2. Complete a minimum of six hours or a maximum of twelve hours in the following fields: economics, geography, history, psychology, philosophy, political science, or education.
 3. Write a thesis under the direction of the adviser. The final acceptance of this work is subject to the approval of the Department of Sociology and of the Dean of the Graduate School.
 4. Pass a comprehensive written examination covering the field of concentration in sociology.
 5. Pass an oral examination in defense of the thesis conducted by the staff of the Department of Sociology.
- 501. Population.** 3 hrs. I. (Formerly 401*)
Growth and distribution of population in relation to natural resources, commerce, and social relationships.
- 503. Social Investigation.** 3 hrs. II. (Formerly 403*)
Methods of investigation and research in the social sciences; sources of data, their evaluation, organization, and presentation.
- 506. Family Living.** 3 hrs. II.
Seminar in the basic structure and function of the modern American family.
- 508. The Family.** 3 hrs. I, II. (Formerly 408*)
The family as an institution, its structure, functions, and relation to social organization.
- 512. Group Relations.** 3 hrs. II. (Formerly 412*)
Analysis of the group, participation, intergroup relationships, group tensions, and group control.
- 521. History of Social Thought.** 3 hrs. II. (Formerly 421*)
A survey of sociological literature and thought from the earliest times to the contemporary period.
- 526. The American Negro.** 2 hrs. II. (Formerly 426*)
Historical background, accomplishments in American cultural spheres, social and economic problems of the Negro.

- 527. Race Problems.** 3 hrs. II. (Formerly 427*)
The nature, criteria, classification and distribution of races; race differences and contacts.
- 528. Medicine in Modern Society.** 3 hrs. I. (Formerly 428*)
Changing patterns in medicine, government participation in the field, group practice, research and foundations, and international aspects.
- 529. Social Legislation.** 3 hrs. II. (Formerly 429*)
Social insurance as a device to meet the hazards of old age, illness, retirement, unemployment and physical handicaps. Special emphasis is placed on the Social Security Act.
- 530. The American Indian.** 3 hrs. I. (Formerly 430*)
The physical and cultural study of the American Indian; special emphasis on his contributions to our culture.
- 531-532. Classroom and Field Studies.** 3-3 hrs.
- 533. Industrial Sociology.** 3 hrs. II.
A study of the relationships existing between industry and the institutional phases of our society.
- 534. Tri-State Area.** 3 hrs.
A study of human and natural resources of West Virginia, southern Ohio and eastern Kentucky.
- 601. Sociological Theory.** 3 hrs. (Formerly 501)
Systematic survey of sociology from the early Greek school to modern times.
- 602. Contemporary Social Change.** 3 hrs. (Formerly 502)
The development of social movements, the effect of discovery, invention, disaster, and rapid shifts in social interests.
- 611. Seminar in Social Pathology.** 3 hrs. (Formerly 511)
A research course dealing with the basic ills of society.
- 620. Seminar in Delinquency and Criminology.** 3 hrs. (Formerly 520).
Physical, social, economic, and geographical factors concerning crime and criminals discussed in round table style; outside readings required.
- 625. Social Control.** 3 hrs. (Formerly 525)
Formal and informal means of social control such as legal processes, institutional control, propaganda, and public opinion.
- 632. Rural Social Organization.** 3 hrs. (Formerly 532)
The different forms of human association in rural life, their relation, and organization.
- 668. Seminar.** 1-3 hrs. (Formerly 568)
- 670-671. Research.** 2-2 hrs. (Formerly 570-571)
Special problems selected by the student with the approval of the staff. Readings in the literature of research techniques.
- 680-681. Thesis or Problem Report.** 1-3; 1-3 hrs. I and II. (Formerly 580-581)

SPEECH

MR. RANSON, MR. PAGE AND MR. HARBOLD

Courses may be taken with approval of student's adviser and instructor in the course.

- 503. Play Direction.** 3 hrs. I. (Formerly 403*)
Problems in directing plays; laboratory practice. Primarily for students who expect to produce plays in schools and/or community groups.

518. **Speech Correction.** 3 hrs. I and II. (Formerly 418*)
Causes, symptoms, and treatment of speech problems with special attention to classroom application.
519. **Speech Correction.** 3 hrs. II. (Formerly 419*)
Introduction of clinical methods in speech correction; theory and clinical practice.
Prerequisite: Speech 418 or 518.
540. **Play Writing.** 3 hrs. (Formerly 440*)
Principles of dramatic construction, including finding dramatic materials, building the play, characterization, and dialogue; writing one-act plays and short sketches for experimental and public production.
545. **Children's Theatre.** 3 hrs. (Formerly 445*)
The theory, directing, and staging of various types of plays for children with particular attention to problems encountered in the elementary school.
550. **The Direction of Speech Activities.** 3 hrs. (Formerly 450*)
For teachers conducting the extra-curricular speech program, including coaching and evaluating group discussion, debate, oratory, oral reading, extemporaneous speaking.
560. **Audiology.** 3 hrs. (Formerly 460*)
Survey of the area of audiology as related to speech correction.
Prerequisite: Speech 418 or 518.

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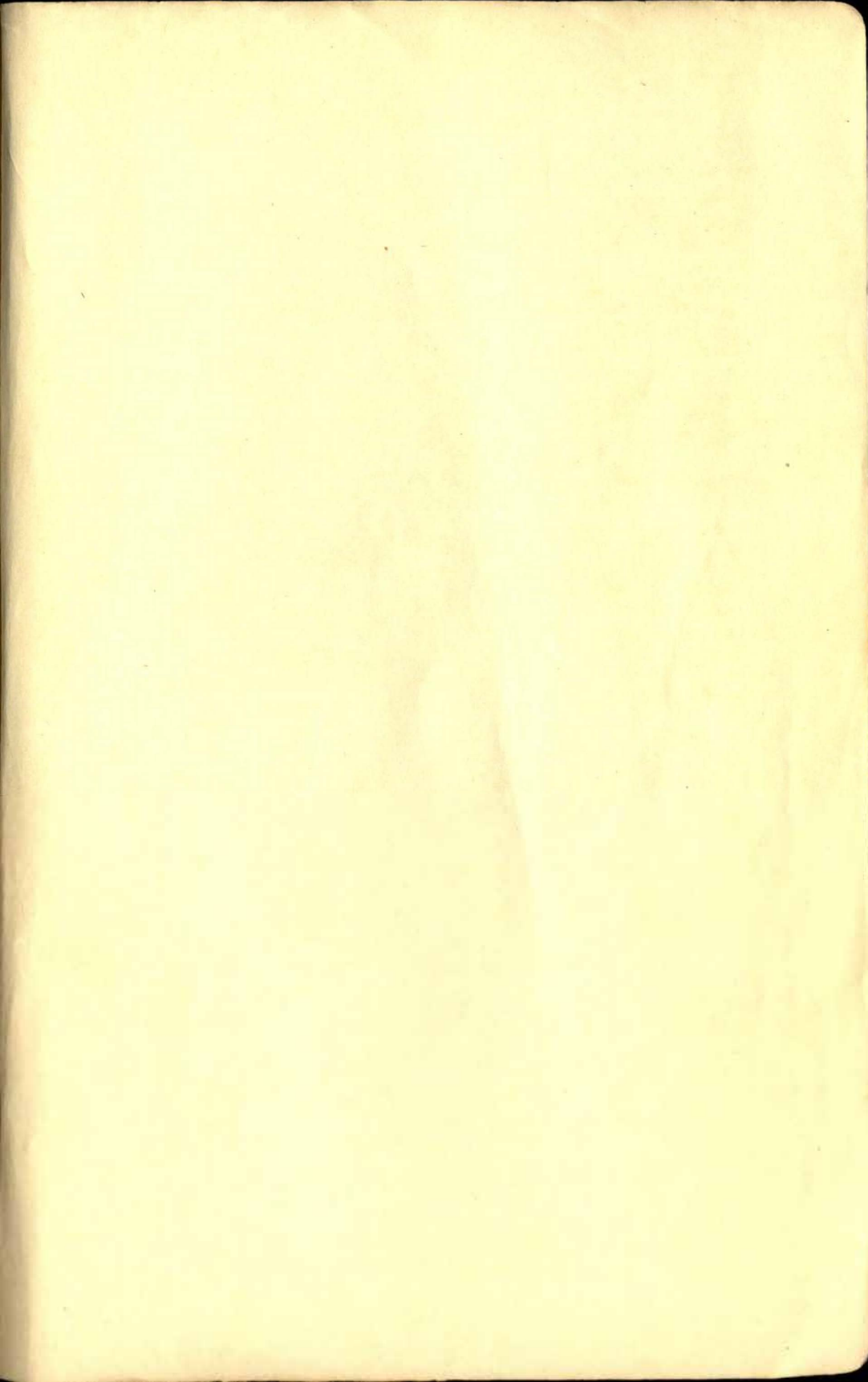
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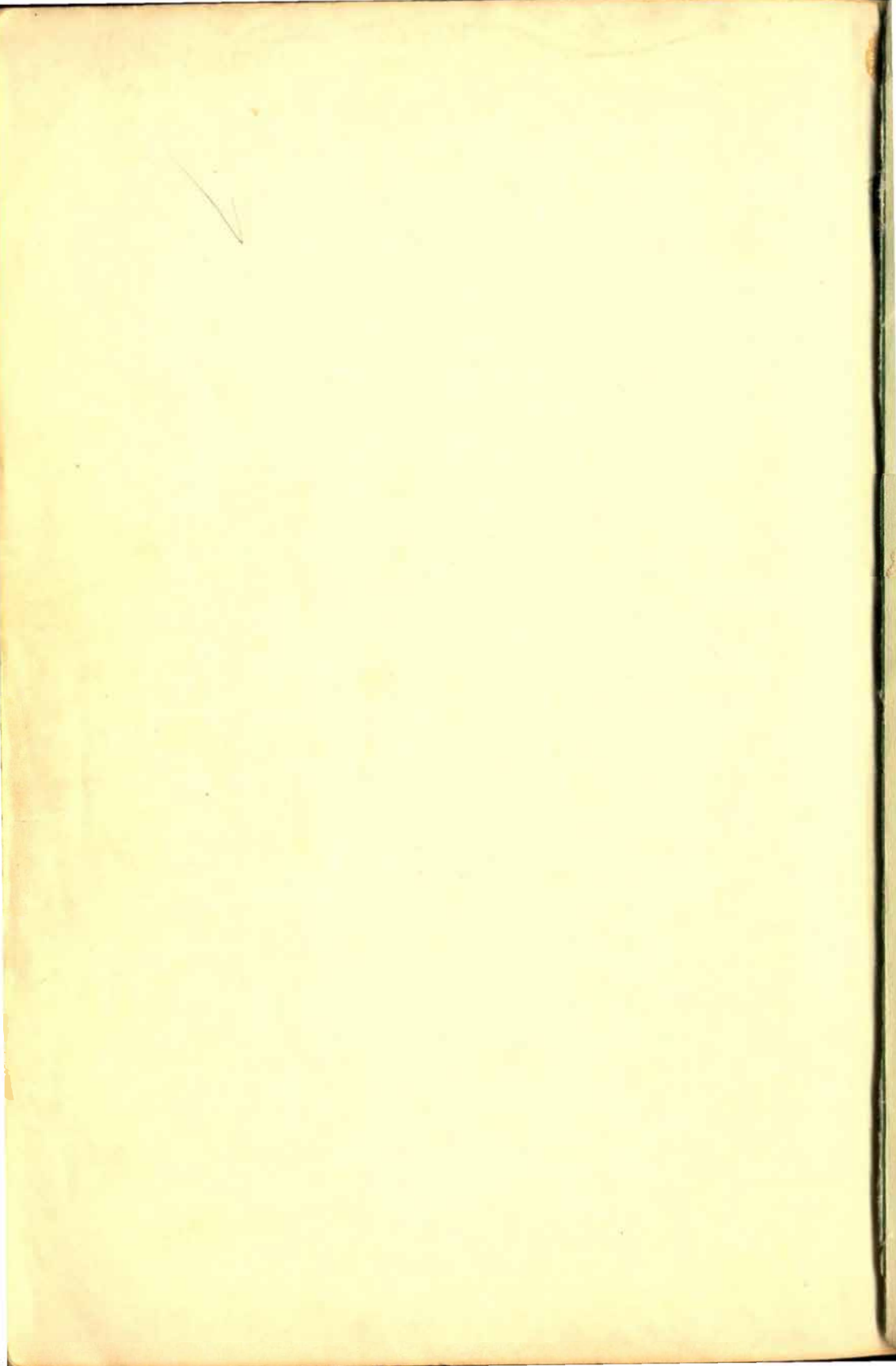
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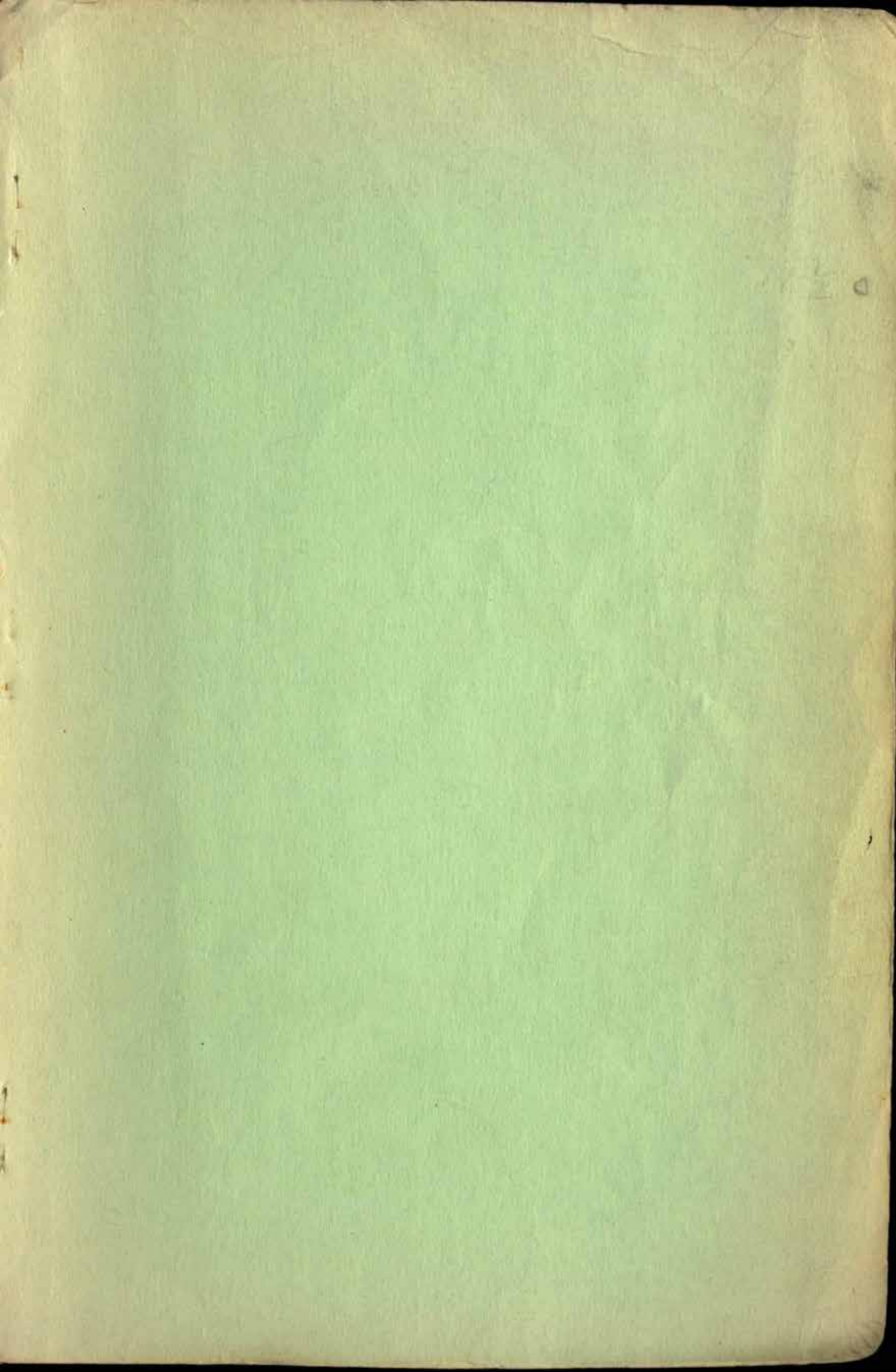
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