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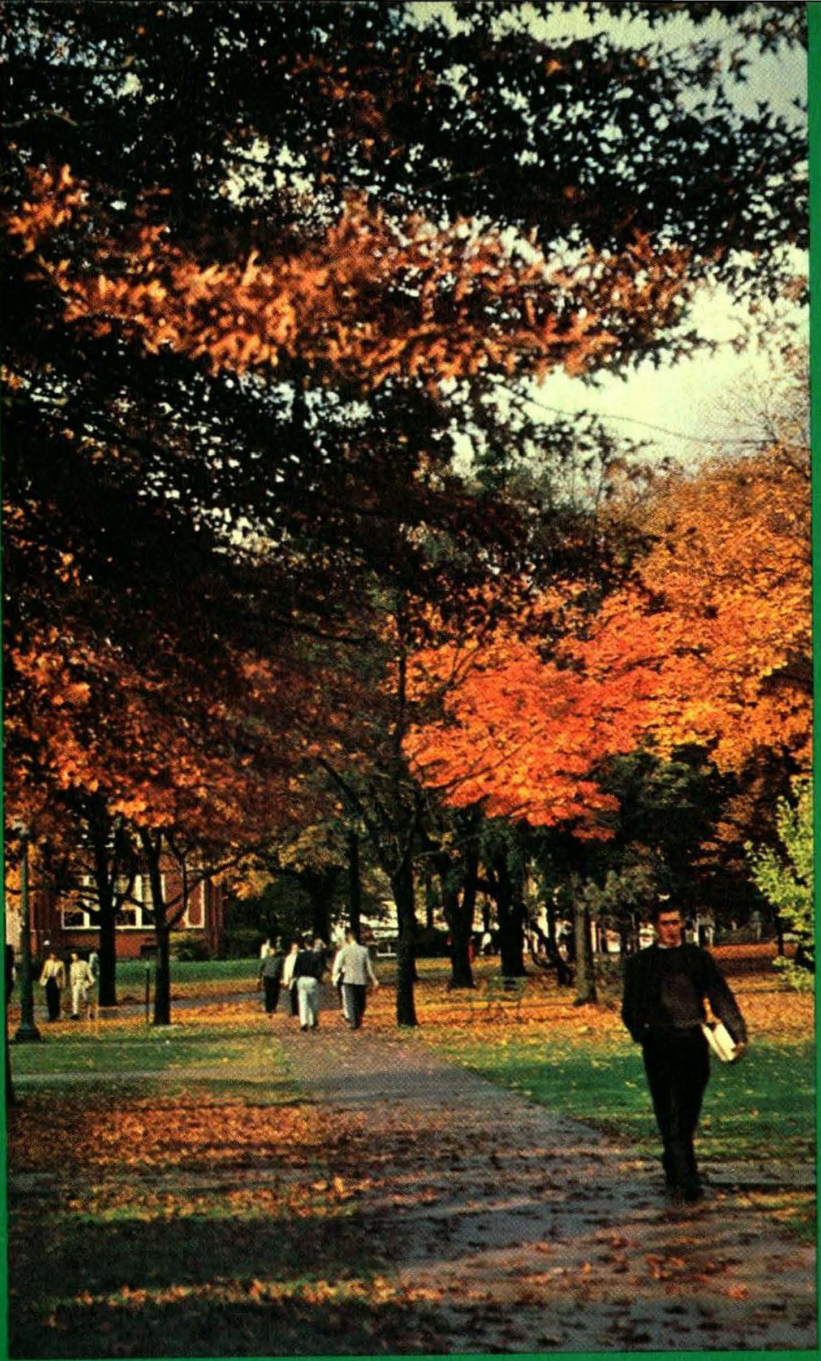


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BULLETIN
1962
1964

MARSHALL UNIVERSITY

GRADUATE CATALOG

This Bulletin contains information of general value to high school graduates, other prospective students, parents, and students enrolled in Marshall University. Complete information as to entrance requirements, fees and expenses, living accommodations, requirements for graduation, and a brief statement of courses of study are given.

The University reserves, for itself and its departments, the right to withdraw or change the announcements made in this Bulletin.

Marshall University is accredited by the North Central Association of Colleges and Secondary Schools, and by the National Council for Accrediting of Teacher Education; is approved for attendance of nonimmigrant students under the Federal Immigration and Nationality Act, and is approved by the American Association of University Women. The University holds membership in the American Council on Education, the Association of American Colleges, and the American Association of Colleges for Teacher Education.

For further information address the Director of Admissions, Marshall University, Huntington 1, W. Va.

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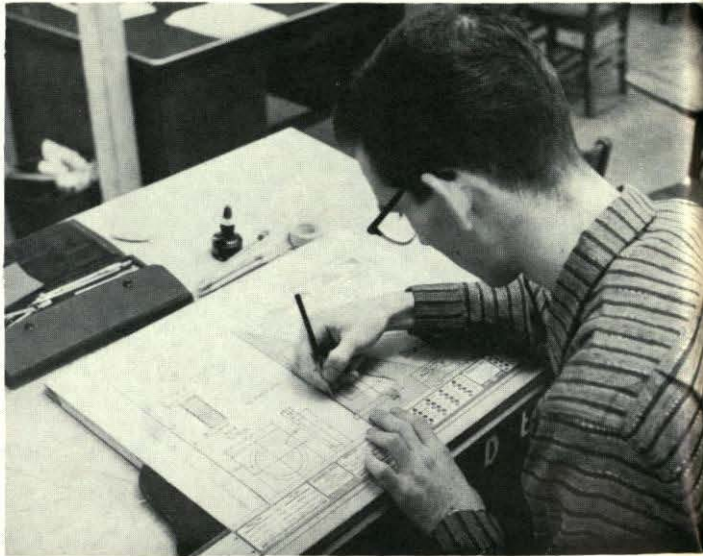
*A look at
Marshall University*





Prospective teachers gain valuable experience in the classroom.

Mechanical drawing is preliminary to other courses in Engineering.



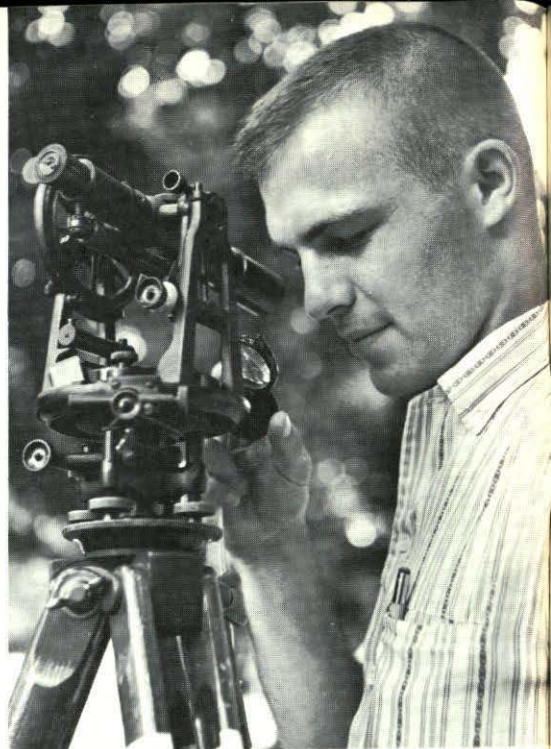
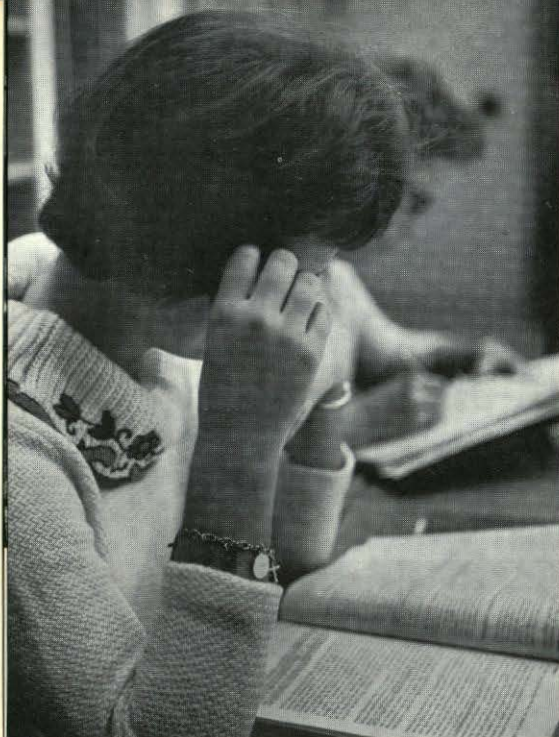
There's time for fun as well as study!



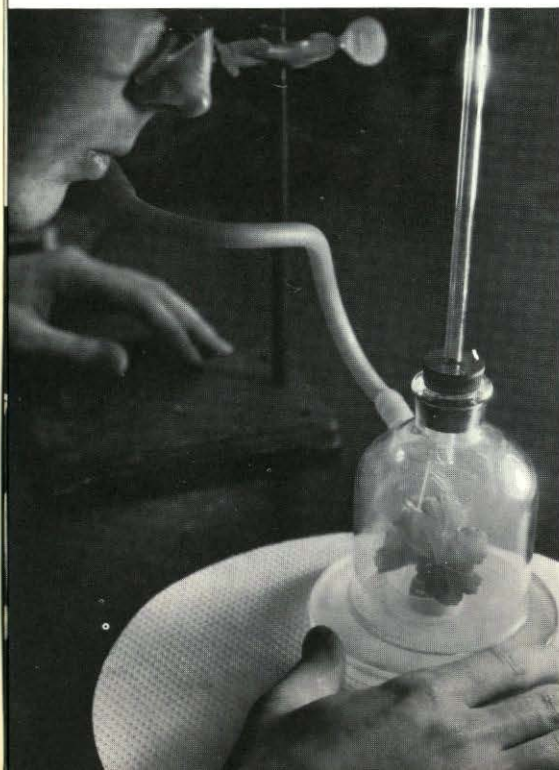
Science Building

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The University's many departments require widely varied types of study.



MARSHALL UNIVERSITY
BULLETIN



GRADUATE
CATALOG
1962 - 1964

HUNTINGTON, WEST VIRGINIA

MARSHALL UNIVERSITY BULLETIN

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Huntington 1, West Virginia

Table Of Contents

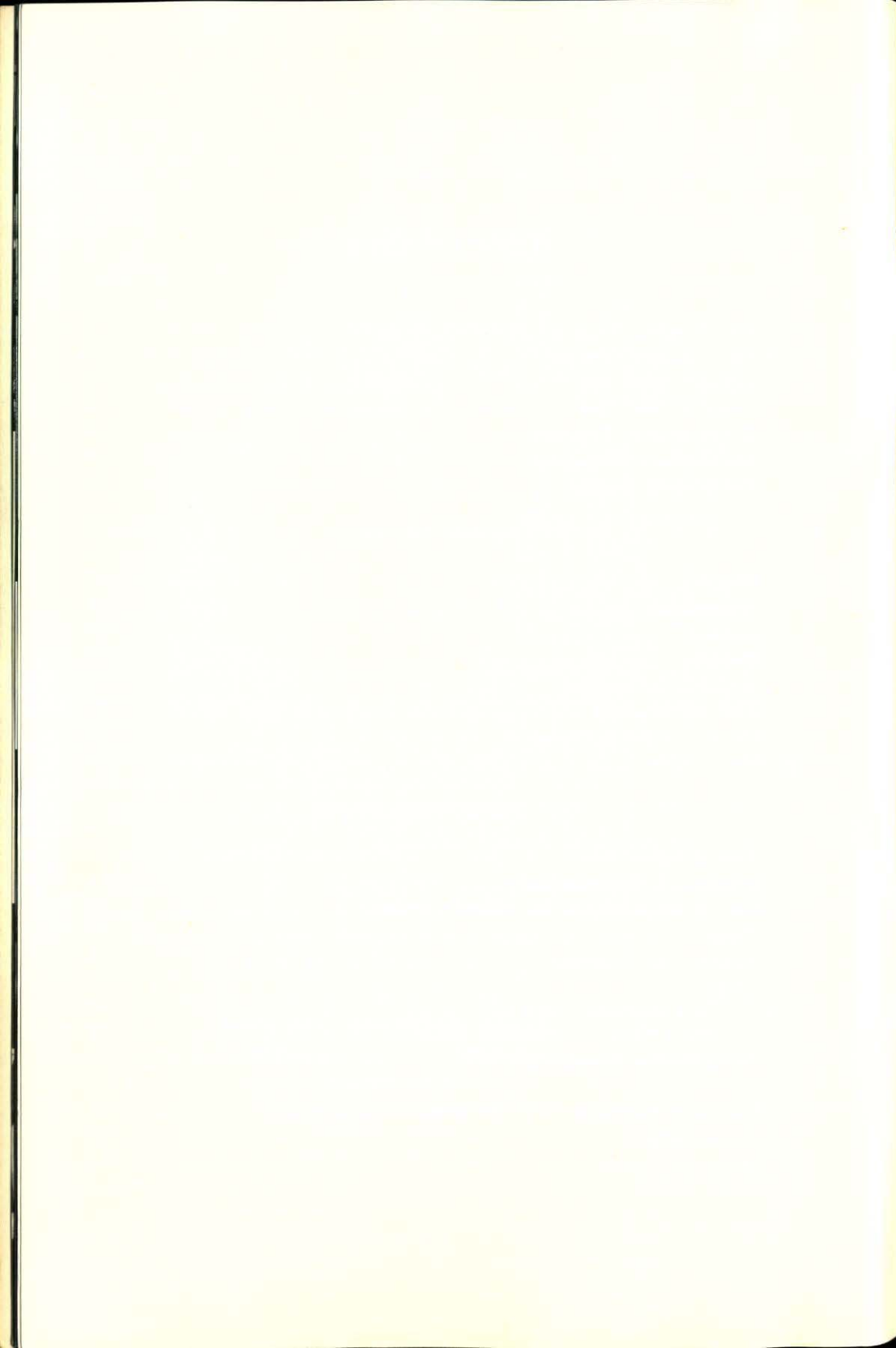
	Page
West Virginia Board of Education	5
Administrative Officers	5
Calendar, 1962-1963	6
Calendar, 1963-1964	7
Correspondence Directory	8
The Graduate Faculty	9
The Graduate Council	16

General Information

History	17
Accreditation	18
Location	19
Divisions	19
Academic Information	21
Fees and Expenses	27
Division of Adult Education	33
Student Life	35

The Graduate School

General Information	41
Admission to Graduate Study	41
General Requirements for Master's Degree	42
Thesis	44
Admission to Candidacy	45
Residence	45
Part-Time Graduate Students	45
Transfer of Credit and Extension Credit	45
Comprehensive Examinations	46
Courses of Instruction by Departments	47
Campus Map	102
Index	103



WEST VIRGINIA BOARD OF EDUCATION
Charleston, West Virginia

Term Expires

KATHRYN DAVISSON, <i>President</i> , Weston	1963
A. H. SPANGLER, <i>Vice President</i> , Bluefield.....	1966
ANAGENE P. BARTRAM, Kenova.....	1970
S. J. BASKERVILLE, Charleston.....	1962
CHARLES H. BROWN, Kingwood.....	1969
J. C. JEFFERDS, JR., Charleston	1965
LACY I. RICE, Martinsburg.....	1967
PERCE J. ROSS, Buckhannon.....	1968
STEPHEN J. RUSSEK, Wheeling.....	1964
REX M. SMITH, <i>State Superintendent</i> , Ex-Officio	
H. K. BAER, <i>Secretary</i> , Charleston	

OFFICERS OF ADMINISTRATION

STEWART HAROLD SMITH, B.S., M.A., Ph.D., Litt.D., LL.D., L.H.D. <i>President</i>	
HAROLD E. WALKER, A.B., B.D., Ph.D. <i>Vice President of Academic Affairs</i>	
JOSEPH S. SOTO, A.B., B.S. <i>Vice President of Business and Finance</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>	
AMBROSE EVERETT McCASKEY, JR., B.S.C.E., M.S.C.E., Ph.D. <i>Dean, College of Applied Science</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>	
STANLEY A. SHAW, A.B., M.A. <i>Dean of Men</i>	
LUTHER E. BLEDSOE, A.B., M.A. <i>Registrar and Director of Admissions</i>	
FRED R. SMITH, A.B. <i>Comptroller</i>	
PAUL H. COLLINS, A.B., M.A. <i>Administrative Assistant and Director of Adult Education</i>	
HAROLD WILLIAM APEL, A.B., M.S. in L.S. <i>Librarian</i>	
FRANK EVANS SPEAR, B.A., M.A. <i>Director of Information and Publications</i>	
ROBERT P. ALEXANDER, A.B., M.A. <i>Director of Placement</i>	

University Calendar: 1962-1963

FIRST SEMESTER

September 14-15	Registration
September 17	Classwork Begins
September 22, 12:00 noon	Last Day of Registration
September 29, 9:00 a.m.	Ohio State Psychological Examination
November 20	Academic Progress Reports Due
November 21, 12:00 noon	Thanksgiving Recess
November 26, 8:00 a.m.	Classwork Begins
November 27-January 18	Counseling for Second Semester
December 19, 9:00 p.m.	Christmas Recess
January 3, 8:00 a.m.	Classwork Begins
January 5	Theses Due in Graduate School Office
January 7-15	Oral Examination for Master's Degree
January 12	Written Examination for Master's Degree
January 17, 9:00 p.m.	Last Class Session of Semester
January 18-19	Advance Registration
January 21-26	Semester Examination Period
January 25	Semester Ends

SECOND SEMESTER

January 30	Registration
January 31	Classwork Begins
February 1, 7:00-9:00 p.m.	Registration of Evening Students
February 6	Last Day of Registration
April 6, 9:00 a.m.	Ohio State Psychological Examination
April 9	Academic Progress Reports Due
April 11, 12:00 noon	Easter Recess
April 16, 8:00 a.m.	Classwork Begins
April 17-May 18	Counseling for First Summer Term
May 4	Theses Due in Graduate School Office
May 4, 11, and 18	Advance Registration for Summer Term
May 11-18	Oral Examination for Master's Degree
May 18	Written Examination for Master's Degree
May 20-25	Counseling for Fall Semester
May 23, 9:00 p.m.	Last Class Session of Semester
May 24-25	Advance Registration for Fall Semester
May 27-June 1	Semester Examination Period
June 2	Commencement

SUMMER SESSION 1963

FIRST TERM

June 10, Monday	First Term Begins
June 12, 4:00 p.m.	Last Day of Registration
June 15, 8:00 a.m.	Ohio State Psychological Examination
June 22	Theses Due in Graduate School Office
June 29-July 10	Oral Examination for Master's Degree
July 6	Written Examination for Master's Degree
July 12	First Term Ends

SECOND TERM

July 15	Second Term Begins
July 17, 4:00 p.m.	Last Day of Registration
July 27	Theses Due in Graduate School Office
August 3-14	Oral Examination for Master's Degree
August 10	Written Examination for Master's Degree
August 16	Second Term Ends

University Calendar: 1963-1964

FIRST SEMESTER

September 13 - 14	Registration
September 16	Classwork Begins
September 21, 12:00 noon	Last Day of Registration
September 28, 9:00 a.m.	Ohio State Psychological Examination
November 19	Academic Progress Reports Due
November 27, 12:00 noon	Thanksgiving Recess
December 2, 8:00 a.m.	Classwork Begins
December 3 - January 16	Counseling for Second Semester
December 19, 9:00 p.m.	Christmas Recess
January 3, 8:00 a.m.	Classwork Begins
January 6	Theses Due in Graduate School Office
January 6 - 14	Oral Examination for Master's Degree
January 11	Written Examination for Master's Degree
January 16, 9:00 p.m.	Last Class Session of Semester
January 17 - 18	Advance Registration
January 20 - 25	Semester Examination Period
January 25	Semester Ends

SECOND SEMESTER

January 29	Registration
January 30	Classwork Begins
January 31, 7:00 - 9:00 p.m.	Registration of Evening Students
February 5	Last Day of Registration
March 26, 12:00 noon	Easter Recess
March 31, 8:00 a.m.	Classwork Begins
April 4, 9:00 a.m.	Ohio State Psychological Examination
April 7	Academic Progress Reports Due
April 11 - May 16	Counseling for First Summer Term
May 2	Theses Due in Graduate School Office
May 2, 9 and 16	Advance Registration for Summer Term
May 9 - 16	Oral Examination for Master's Degree
May 16	Written Examination for Master's Degree
May 18 - 23	Counseling for Fall Semester
May 21, 9:00 p.m.	Last Class Session of Semester
May 22 - 23	Advance Registration for Fall Semester
May 25 - 30	Semester Examination Period
May 31	Commencement

SUMMER SESSION 1964

FIRST TERM

June 8, Monday	First Term Begins
June 10, 4:00 p.m.	Last Day of Registration
June 13, 8:00 a.m.	Ohio State Psychological Examination
June 20	Theses Due in Graduate School Office
June 27	Written Examination for Master's Degree
June 27 - July 8	Oral Examination for Master's Degree
July 10	First Term Ends

SECOND TERM

July 13	Second Term Begins
July 15, 4:00 p.m.	Last Day of Registration
July 25	Theses Due in Graduate School Office
August 1 - 12	Oral Examination for Master's Degree
August 8	Written Examination for Master's Degree
August 15	Second Terms Ends

Correspondence regarding various phases of the University program should be directed as follows:

Admission

Director of Admissions

Adult Education

Director of Adult Education

Alumni Affairs

Director of Development and Alumni Affairs

Business Matters, Expenses

Vice President of Business and Finance

Employment, Placement

Director of Placement

Graduate Study

Dean of the Graduate School

Men's Affairs and Housing

Dean of Men

Scholarships and Loans

Dean of Men

Transcripts, Records

Office of the Registrar

Veterans' Affairs

Veterans' Adviser

Women's Affairs and Housing

Dean of Women

The Graduate Faculty

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

- JAMES J. BARRON, *Professor of Mathematics*, 1946
Ph.D. 1934, University of Wisconsin; postdoctorate 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; postdoctorate study, University
of Zurich, University of Edinburgh, and Technische Hochschule in Munich
- THOMAS BAUSERMAN, *Professor of Mathematics*, 1955
Ph.D. 1961, University of Pittsburgh
- ROBERT LLOYD BECK, *Professor of Philosophy*, 1934
Ph.D. 1931, Cornell University
- ALLEN BLUMBERG, *Associate Professor of Education*, 1958
M.Ed. 1952, Wayne University; graduate study, Syracuse University
- ROBERT LEE VERN BRITTON, *Professor of Geography*, 1930
M.S. 1930, University of Chicago; graduate study, University of
Chicago, The Ohio State University
- ALLEN BROWN, *Associate Professor of English*, 1960
Ph.D. 1953, State University of Iowa
- JACK RICHARD BROWN, *Professor of English*, 1948
Ph.D. 1937, Northwestern University
- MAHLON C. BROWN, *Assistant Professor of Social Studies*, 1955
D.S.S. 1959, Syracuse University
- STEPHEN D. BUELL, *Associate Professor of Speech*, 1955
Ph.D. 1962, The Ohio State University
- LOUISE BURNETTE, *Associate Professor of Home Economics*, 1961
M.S. Ed. 1950, Cornell University; graduate study, Michigan State
University
- ARTHUR SIDNER CARPENTER, *Professor of Art*, 1951
Ed.D. 1958, Pennsylvania State University
- DANA RAY CARTWRIGHT, *Assistant Professor of Chemistry*, 1958
Ph.D. 1958, The Ohio State University
- SAM E. CLAGG, *Professor of Geography*, 1948
Ed.D. 1955, University of Kentucky
- PAUL H. COLLINS, *Associate Professor of Education and Administrative
Assistant to the President*, 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; postdoctorate study, Columbia University
- ERIC VANE CORE, *Associate Professor of Education*, 1957
M.A. 1937, West Virginia University; graduate study, University of Virginia
- DONALD D. COX, *Professor of Science*, 1950
Ph.D. 1958, Syracuse University
- JOHN W. CREIGHTON, *Associate Professor of Music*, 1945
M.A. 1942, Northwestern University; graduate study, St. Louis University, Juilliard School of Music, Ohio University, Northwestern University
- TAYLOR V. CREMEANS, *Principal of Elementary and High Schools and Assistant Professor of Education*, 1959
M.S. 1946, Marshall University
- EDWIN A. CUBBY, *Associate Professor of Social Studies*, 1949
Ph.D. 1962, Syracuse University
- ALEX DARBES, *Professor of Psychology*, 1957
Ph.D. 1951, Western Reserve University
- WILLIAM ROGER DAVIDSON, *Assistant Professor of Music*, 1955
M.Mus. 1947, University of Illinois; graduate study, University of Illinois, Columbia University
- LESLIE MARTZ DAVIS, *Professor of Geography*, 1939
Ph.D. 1935, University of Chicago
- ROBERT V. DIGMAN, *Assistant Professor of Chemistry*, 1959
M.S. 1953, University of Maine; graduate study, Pennsylvania State University
- JOANNE DRESCHER, *Associate Professor of Music*, 1950
M.M. 1948, Indiana University; graduate study, Florida State University, University of Colorado
- BRUCE E. DUNN, *Assistant Professor of Psychology*, 1960
Ph.D. 1960, University of Wisconsin
- CAROLYN FORE DWIGHT, *Associate Professor of Business Administration*, 1938
M.B.A. 1938, The Ohio State University; graduate study, University of Chicago, University of Colorado
- RALPH M. EDEBURN, *Professor of Zoology*, 1945
Ph.D. 1938, Cornell University
- IRENE CLARK EVANS, *Associate Professor of Business Administration*, 1939
M.A. 1940, Columbia University; graduate study, University of Chicago, University of Kentucky

- WALTER C. FELTY, *Associate Professor of Social Studies and Director of Audio-Visual Aids*, 1950
M.A. 1950, Marshall University; graduate study, Indiana University
Pennsylvania State University
- LEE WILSON FISER, *Associate Professor of Music*, 1959
M.A. 1946, Columbia University; graduate study, University of Texas
- DOROTHY A. FISHER, *Professor of Zoology*, 1946
Ph.D. 1942, Cornell University; postdoctorate study, University of North Carolina, University of Michigan
- FREDERICK A. FITCH, *Professor of Physical Education*, 1930
M.A. 1932, New York University; graduate study, New York University, Florida State University
- RUBY CALVERT FOOSE, *Associate Professor of Home Economics*, 1946
M.A. 1940, The Ohio State University; graduate study, University of Tennessee, Marshall University
- JUAN C. FORS, *Professor of Spanish*, 1931
Ph.B. 1921, Colegio Nacional; A.B. 1927, Valparaiso University; graduate study, Washington State College, University of Chicago
- RUTH ELIZABETH COFFMAN GARRETT, *Associate Professor of Speech*, 1953
M.A. 1946, Ohio University; graduate study, Northwestern University, Ohio University
- MIRIAM PEARL GELVIN, *Professor of Music*, 1940
Ph.D. 1956, 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
- REX C. GRAY, *Associate Professor of Education*, 1948
M.A. 1941, West Virginia University; graduate study, University of Minnesota, George Washington University
- 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
- HUNTER S. HARDMAN, *Associate 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

- HERSCHEL HEATH, *Professor of History*, 1947
Ph.D. 1933, Clark University
- CLARKE FREAS HESS, *Professor of Education*, 1951
Ed.D. 1958, University of Pennsylvania
- EUGENE Q. HOAK, *Professor of Speech*, 1960
Ph.D. 1954, The Ohio State University
- JOHN HOLLAND HOBACK, *Associate Professor of Chemistry*, 1945
Ph.D. 1947, West Virginia University
- EEN WALTER HOPE, *Professor of Speech*, 1947
Ph.D. 1960, The Ohio State University
- HELEN SCOTT HUNTER, *Assistant Professor of Education*, 1957
M.A. 1956, Marshall University; graduate study, University of Michigan
- JAMES EDWARD IRVIN, *Associate Professor of Education*, 1959
Ph.D. 1958, The Ohio State 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
- LOUIS B. JENNINGS, *Associate 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
- LAVELLE THOMPSON JONES, *Assistant Professor of Music*, 1947
M.A. 1942, George Peabody College
- MICHAEL B. JOSEPHS, *Professor of Physical Education*, 1953
Ph.D. 1950, University of Pittsburgh
- CHARLES LAWRENCE KINGSBURY, *Professor of Music*, 1950
Ed.D. 1945, Indiana University
- RUFUS L. LAND, *Associate Professor of Economics*, 1946
M.A. 1948, Marshall University; graduate study, University of Virginia, The Ohio State University
- ALFRED P. LANEGGER, *Associate Professor of Music*, 1947
M.M. 1947, Syracuse University; diploma, State Academy of Music, Munich
- JOSEPH M. LICHTENSTEIN, *Associate Professor of Education*, 1946
M.A. 1940, Fordham University; graduate study, Columbia University, Rutgers University, University of Cincinnati, New York University

- JULIUS LIEBERMAN, *Associate Professor of German*, 1946
Ph.D. 1943, University of Cincinnati
- ANNA V. REGINIA LOCKE, *Associate Professor of Library Science and Librarian*, 1953
M.A. 1948, Western Reserve University; M.S. in L.S. 1955, Western Reserve University
- KENNETH KARL LOEMKER, *Professor of Psychology*, 1930
Ph.D. 1941, University of Chicago
- LOUISE McDONOUGH, *Professor of Physical Education*, 1929
M.A. 1929, Columbia University; graduate study, Columbia University, State University of Iowa
- DONALD C. MARTIN, *Professor of Physics*, 1943
Ph.D. 1936, Cornell University
- JOHN LEWIS MARTIN, *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, Boston University
- HOWARD LEONARD MILLS, *Professor of Botany*, 1951
Ph.D. 1951, State University of Iowa
- JOHN B. MINICK, *Associate Professor of Economics*, 1960
Ph.D. 1959, University of Southern California
- MARVIN O'NEILL MITCHELL, *Professor of English*, 1952
Ph.D. 1953, University of North Carolina
- CHARLES HILL MOFFAT, *Professor of History*, 1946
Ph.D. 1946, Vanderbilt University
- WOODROW MORRIS, *Professor of Education*, 1950
Ph.D. 1955, The Ohio State University
- REVA BELLE NEELY, *Associate Professor of Home Economics*, 1946
M.Ed. 1946, Colorado Agricultural and Mechanical College; graduate study, The Ohio State University, Michigan State University
- ALMA NEASE NOBLE, *Associate Professor of French*, 1941
Ph.D. 1938, The Ohio State University
- LAWRENCE HOWARD NUZUM, *Associate Professor of Education*, 1947
Ed.D. 1959, University of Tennessee
- THOMAS S. O'CONNELL, *Associate Professor of Music*, 1948
M.M. 1947, University of Michigan
- ANDREW PAESANI, JR., *Assistant Professor of Speech*, 1959
M.A. 1958, State University of Iowa

- CLAYTON R. PAGE, *Associate Professor of Speech*, 1946
M.A. 1939, The Pennsylvania State College; M.A. 1940, Baylor University; graduate study, State University of Iowa
- WALTER H. PERL, *Associate Professor of German*, 1948
Ph.D. 1936, University of Zurich
- GERALD R. PHILLIPS, *Associate Professor of Social Studies*, 1948
M.A. 1947, University of Minnesota; graduate study, University of Minnesota
- WILLIAM PAGE PITT, *Professor of Journalism*, 1926
M.S.J. 1930, Columbia University
- EDWARD LEWIS PLYMALE, *Professor of Botany*, 1946
Ph.D. 1942, State University of Iowa
- WILBUR PURSLEY, JR., *Associate Professor of Music*, 1950
Ph.D. 1962, Eastman School of Music
- 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
- CHARLES C. RITCHIE, JR., *Assistant Professor of Education*, 1959
M.A. 1941, West Virginia University; graduate study, West Virginia University
- RONALD GENE ROLLINS, *Assistant Professor of English*, 1960
Ph.D. 1960, University of Cincinnati
- ORA E. RUMPLE, *Professor of Chemistry*, 1947
Ph.D. 1937, Indiana University; postdoctorate study, Indiana University
- CHARLES S. RUNYAN, *Professor of Education*, 1953
Ed.D. 1953, University of Missouri
- JANE B. SHEPHERD, *Associate Professor of Music*, 1958
M.M. 1942, Cincinnati Conservatory; graduate study, Juilliard School of Music
- O. NORMAN SIMPKINS, *Professor of Sociology*, 1960
Ph.D. 1953, University of North Carolina
- PAUL D. STEWART, *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, The Ohio State University, University of Tennessee, Cornell University
- HORACE GRESHAM TOOLE, *Professor of History*, 1925
Ph.D. 1932, University of Pennsylvania
- A. MERVIN TYSON, *Professor of English*, 1959
Ph.D. 1952, University of Pennsylvania

- LEWIS ALFRED WALKER, *Assistant Professor of Chemistry*, 1957
M.S. 1956, Marshall University; graduate study, Indiana University
- HAROLD EUGENE WARD, *Associate Professor of Science*, 1950
M.A. 1951, Marshall University; graduate study, Michigan State University, The Ohio State University
- FRANCES W. WHELPLEY, *Professor of Chemistry*, 1946
Ph.D. 1931, Columbia University
- LUCY ADELE WHITSEL, *Professor of Classical Languages*, 1929
Ph.D. 1929, University of Wisconsin; postdoctorate study, American Academy at Rome, University of Wisconsin, American School of Classical Studies in Athens, Vergilian School at Cumae, Italy
- DANIEL BANKS WILBURN, *Dean of the Teachers College and Professor of Education*, 1947
Ed.D. 1945, The George Washington University
- HAROLD L. WILLEY, *Associate Professor of Education*, 1946
Ed.D. 1958, University of Tennessee
- ELIZAEETH BAKER WOLF, *Associate Professor of Psychology*, 1960
Ph.D. 1946, Western Reserve University
- ROY CLEO WOODS, *Professor of Education*, 1927
Ph.D. 1927, State University of Iowa
- JOHN H. WOTIZ, *Professor of Chemistry*, 1962
Ph.D. 1948, The Ohio State University
- BERNICE F. WRIGHT, *Associate Professor of Mathematics*, 1946
M.A. 1929, University of Michigan; graduate study, University of Washington, Marshall University

THE GRADUATE COUNCIL

Term Expires

A. E. Harris, Ph.D., <i>Dean of the Graduate School</i>	Chairman
Thomas Bauserman, Ph.D., <i>Professor of Mathematics</i>	1964
Sam E. Clagg, Ed.D., <i>Chairman, Department of Geography</i>	1963
Alex Darbes, Ph.D., <i>Professor of Psychology</i>	1964
Miriam Pearl Gelvin, Ph.D., <i>Professor of Music</i>	1964
C. Lawrence Kingsbury, Ed.D., <i>Chairman, Department of Music</i>	1963
Charles Hill Moffat, Ph.D., <i>Professor of History</i>	1965
Lawrence Howard Nuzum, Ed.D., <i>Associate Professor of Education</i>	1965
A. Mervin Tyson, Ph.D., <i>Chairman, Department of English</i>	1963
John H. Wotiz, Ph.D., <i>Professor of Chemistry</i>	1965

General Information

MARSHALL UNIVERSITY

Marshall University, 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 University recognizes an obligation to contribute to the cultural growth of its community.

The University 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 University 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 University 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 conducted a private school to satisfy the clause in the deed which limited use of the property to school purposes. 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. The Bachelor of Business Administration was approved in 1954. In 1945 two-year programs leading to the degrees of Associate in Arts and Associate in Science were approved in ten fields.

The College of Applied Science was established in 1960 and granted its first degrees in 1961.

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.

Marshall was granted University status by an Act of the 55th West Virginia Legislature in March 1961.

ACCREDITATION

Marshall University is accredited by the North Central Association of Colleges and Secondary Schools and by the National Council for Accrediting of Teacher Education. Academic credits earned at Marshall University are fully standardized, and are accepted by all other colleges and universities.

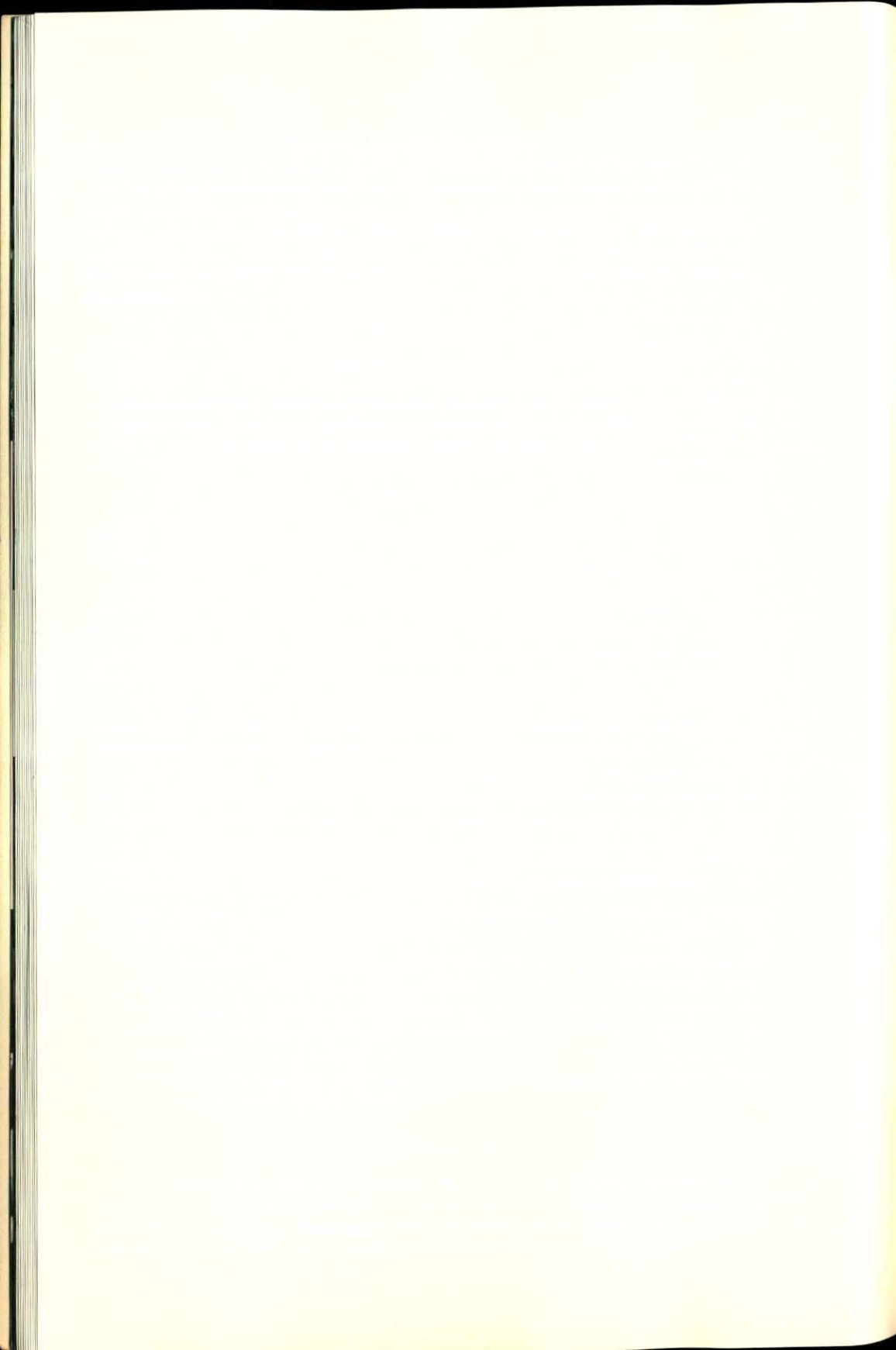
The University is approved for attendance of nonimmigrant students under the Federal Immigration and Nationality Act, and is approved by the American Association of University Women. Marshall holds membership in the American Council on Education, the Association of American Colleges, and the American Association of Colleges for Teacher Education.

LOCATION

Huntington, West Virginia's second largest city with a population of 83,627, is located on the Ohio River a few miles from the boundary of Kentucky, Ohio, and West Virginia. Transportation to all points is afforded by rail, air, bus, and highway. The industrial growth of the area means constant growth in business and professional opportunities for students.

DIVISIONS

The University functions through five divisions: Teachers College, College of Arts and Sciences, College of Applied Science, Graduate School, and Division of Adult Education.



Academic Information

FACULTY-STUDENT ADVISORY PROGRAM

Under this program each student who is admitted to Marshall University 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

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 or 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 the next semester or summer in residence and if the make-up work is unsatisfactory, the grade will become an **F**. No (0) quality points for an **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 and/or certification shall have a quality point ratio of 2.00 (average of **C**) or higher on all work attempted.

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 THE UNIVERSITY

Official Withdrawal from Courses or from the University:

A student desiring to withdraw from one or more courses must apply to the Dean of his College for permission. The Dean will inform the Registrar who in turn will inform the instructors concerned.

A student desiring to withdraw from college must apply to the Dean of his College for permission. If permission is granted the student will secure the approval of the appropriate Personnel Dean and the University Librarian. The student will deposit his Identification Card with the Librarian and take his withdrawal permission to the Registrar for final approval. If a student finds it necessary to withdraw by mail or telephone, he must send his Identification Card to the Librarian or Registrar before the withdrawal becomes official.

In all cases of withdrawal from one or more courses or from the University the instructors will report grades for the student 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 through 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 the University:

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. (See "Incomplete" under Grades and Quality Points, page 21.)

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 University 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.

5. Any student who has been absent from a class for two or more weeks prior to the final examination will be denied the privilege of taking the final examination in that class except when it can be shown that the absences were beyond the student's control.

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 subcollege 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 equivalent to certain 400 series courses, but are open only to graduate students. (Note: 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.

AUDIT AND NONCREDIT 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.

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 University 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 University, student identification number, 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 UNIVERSITY

The University issues three bulletins biannually: the General Catalog, the Graduate Bulletin, and the Admission Bulletin. The Schedule of Courses and the Summer Session Bulletin are issued annually. Other special publications are issued from time to time.



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 University.

TUITION, REGISTRATION, AND ACTIVITY FEES

FULL-TIME STUDENTS (twelve or more semester hours) PER SEMESTER:

	Resident of West Virginia	Non- resident ¹
Tuition Fee	\$25.00	\$175.00
Registration Fee	50.00	50.00
Student Activity Fee	22.15 ²	22.15 ²
Health Service Fee	1.75	1.75
	<hr/>	<hr/>
Total Registration Fee	\$98.90	\$248.90

PART-TIME STUDENTS (less than twelve semester hours)

In addition to the following tuition fees, a registration fee of \$4 per semester hour is charged.

Fee per semester hour³:

First hour	\$ 5.00	\$15.00
Second hour	3.00	15.00
Third hour	2.00	15.00
Each hour above three semester hours	3.00	15.00
Extension classes	7.50	15.00
Identification Card Fee (all students who are enrolled for one or more courses for residence credit)25	.25

¹NONRESIDENT 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. (See page 31).

²THE STUDENT ACTIVITY FEES are allocated as follows: Assemblies and Forums \$1.50; Athletics \$7.50; Artists Series \$3.00; Chief Justice \$2.25; University Theatre \$.50; Parthenon \$2.00; Student Government \$.50; Student Union \$4.00; University Band \$.25; Radio Station WMUL \$.25; Debate \$.15; Identification Card \$.25.

³A special activity card for the use of the spouse of a full-time student costs \$19.25 and covers: Athletics (\$11.75), Assemblies and Forums (\$1.50), Artists Series (\$5.00), and ID card (\$1.00).

⁴TOTAL FEE PER CREDIT HOURS (This fee does not include a student activity card. Part-time students may purchase the card for \$21.90.)

Semester Hours	W. Va. Resident	Non- resident	Semester Hours	W. Va. Resident	Non- resident
1	\$ 9.25	\$ 19.25	7	\$50.25	\$133.25
2	16.25	38.25	8	57.25	152.25
3	22.25	57.25	9	61.25	171.25
4	29.25	76.25	10	65.25	190.25
5	36.25	95.25	11	69.25	209.25
6	43.25	114.25	12 or more	Full Time	

SPECIAL FEES**Late Registration Fee**

Charge for first day after close of regular registration	\$10.00
Second day	12.00
Third day	13.00
Fourth day	14.00
Fifth day	15.00

Graduation Fees

Graduate Degree	10.00
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Cap and Gown Fee

Graduate Degree	5.40
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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 (per credit hour)	\$ 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.)

ROOM RENT

(Per Semester of 18 Weeks)

HODGES HALL, LAIDLEY HALL, & UNIVERSITY HALL	
All rooms, per student	\$99.00

PRICHARD HALL & RESIDENCE HALL FOR MEN	
All rooms, per student	\$117.00

(Per Summer Term of 5 Weeks)

ALL DORMITORIES:	
All rooms, per student	\$35.00

(Summer Workshops)

Three weeks to six weeks	Entire six-weeks rate
More than six days but less than twenty-one days	80% of six-weeks rate
Less than seven days	\$2.00 per day

(Additional charge of \$1.00 per day for linens).

See STUDENT HOUSING (page 35) for room deposit fee and reservations.

BOARD

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

The cost of board is \$198.00 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.

Since freshmen are required to be on the campus prior to registration to participate in Freshman Orientation, those freshmen residing in the dormitories must purchase a meal book upon their arrival. This book identifies and entitles the freshman purchaser to meals in the cafeteria during the orientation periods at no additional charge.

The effective date for use of tickets in the meal book for all students (upperclassmen and freshmen) will be the first day of regular registration.

Three per cent (3%) consumer's 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.

Effective date for refunds and reductions will be from the first day of regular registration for the semester or summer term.

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 University-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 University 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 University.

	Minimum	Average
Tuition	\$ 25.00	\$ 25.00
Registration Fee	50.00	50.00
Student Activity Fee	22.15	22.15
Health Service	1.75	1.75
Board	198.00	198.00
Room	99.00	104.00
Books, gym outfit	30.00	35.00
Supplies, laboratory fees, etc.	10.00	15.00
	\$435.90 plus tax	\$450.90 plus tax
Out-of-state students pay an additional fee of	\$150.00	\$150.00

REFUND OF FEES

I. Withdrawal from the University

Students who withdraw regularly from the University* 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 regular 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.

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 for resident students and fifteen dollars (\$15.00) per semester hour for nonresident students.

IV. Fees for auditing courses

a. Full-time staff members may audit courses without charge. All full-time staff 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 staff 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.

*See Withdrawal, page 22.

Regulations Governing Classification of Students for the Purpose of Assessing Tuition Fees

As a state institution, Marshall University offers a low rate of tuition to all students entering from West Virginia. Eligibility for admission under the low residential rate is determined in accordance with the following policy established by the Board of Education in July, 1959.

The term "resident" as hereinafter used refers to classification for fee purposes only.

All students not classified as resident students shall be classified as non-residents for fee purposes.

A student classified as a nonresident at the time of first registration in a state college, is considered a nonresident for fee purposes throughout his years as a student in a state college, unless his parents move to and establish a home, permanent abode and legal domicile in the state for twelve (12) consecutive months immediately prior to his registration in a state college. If the status of a student is thus properly changed from a non-West Virginia to a West Virginia student, his classification may not be changed until the next registration period.

Students who are minors: The residence of a minor shall follow that of the parents at all times. The residence of the father during his life, and after the father's death, the residence of the mother is the residence of the minor, but if the father and mother have separate places of residence, the minor takes the residence of the parent with whom he lives or to whom he has been assigned by court order. The parents of a minor will be considered residents of West Virginia if they have had a home, permanent abode and legal domicile within the state for twelve (12) months immediately prior to registration.

A student who is 21 years of age or over may be classified as a resident if (1) his parents were residents of the state at the time he reached his majority or (2) who, while an adult, has established a bona fide home, permanent abode and legal domicile for at least twelve (12) consecutive months immediately preceding his initial registration, it being understood, however, that no non-resident student may establish residence in this State for fee purposes, merely by his attendance as a full or part-time student at any institution of learning in the State. There must be evidence that he has come to the State primarily for other purposes than college attendance.

Marriage, alone, to a West Virginia resident will not change the status of a nonresident student in a West Virginia state college. Employment of his spouse does not change his status.

A West Virginia student whose parents or guardian move out of the State of West Virginia after his original enrollment, will automatically become liable for nonresident fee at the next registration period after twelve (12) months following removal of parents or guardian.

The residence of a minor student assigned to a guardian shall be considered affected by such assignment, beginning twelve (12) months after the appointment of the guardian; the provisions stated above with respect to parents' residence shall then apply to the guardian's residence.

An alien who has taken out his citizenship papers and has had a home, permanent abode and legal domicile in West Virginia for twelve (12) months immediately preceding the date of his enrollment in a state college shall be regarded as eligible for registration as a West Virginia student.

Neither registration as a voter in the State of West Virginia nor the purchase of a West Virginia automobile license will constitute residency for fee purposes.

Persons who are moved into the state as the result of military orders from the government, or the minor children of such persons, are entitled to admission as in-state students beginning twelve (12) months after establishing domicile or abode in the state.

A student who willfully gives wrong information to evade payment of the nonresident fees shall be subject to serious disciplinary action, and must also pay the nonresident fee for each session attended.

The above regulations shall not be retroactive nor penalize a student or students previously classified.

Division of Adult Education

EVENING SCHOOL

The method of meeting community needs is expressed primarily in the Evening School. Here, noncredit 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 University 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 noncredit 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 noncredit 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 9 semester hours within one year. (This applies to public school teachers under contract in the state).

The tuition fee for extension work is \$7.50 per semester hour, plus a registration fee of \$4.00 per semester hour, both 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:

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 University or 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 University 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 University 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 Information Service Office will be glad to receive requests for speakers to appear before school, civic and community organizations, scientific societies, service clubs.

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

SCHOOL SURVEYS AND CONSULTANT SERVICES—The University 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 University will be made available to industrial, educational and other groups for conducting special conferences and workshops.

Student Life

HOUSING

Residence Halls

There are three residence halls for women. The residence units are Laidley Hall, University Hall and Prichard Hall.

Men students are housed in Hodges Hall and in the Residence Hall for Men.

Applications and Deposits

Applications for rooms in either the women's or men's residence halls should be made to the Dean of Women or Dean of Men. An application is considered only if accompanied by a \$25.00 deposit.

All women students making reservations for the fall term will remain in the dormitory residence for an entire academic year except for the reason of graduation or circumstances entirely beyond their control.

Deposits are credited to the semester room rent.

Rooms in Private Homes

Rooms in private homes are listed in the offices of the Dean of Men and Dean of Women. A personal inspection and approval of the residence by the student and his parents is urged. Men and women may not rent rooms in the same rooming house.

Housing for Married Students

The University has sixty-two temporary housing units, located at Donald Court two miles south of the campus, which are rented to married students and their families at rents ranging from \$33.50 to \$38.50. Applications may be procured from the Office of the Dean of Men. A refundable fee of \$10 is charged for family dwellings.

Board for Dormitory Residents

All dormitory residents are required to purchase their meals through the University Dining Halls. Cost of meal books for each semester is \$198.00 plus tax (June, 1962). The University Dining Halls serve all meals during the regular academic year, with the exception of the Sunday evening meal. During holiday periods the University Dining Halls are closed.

STUDENT HEALTH SERVICES

The Health Service is organized to provide medical service to students of the University, 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 University 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.

All new students must submit the University's medical examination form completed by the family physician.

HOSPITALIZATION INSURANCE

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

The Student Government of Marshall University offers a specially formulated student accident and sickness group insurance plan providing coverage for hospital and medical expenses. The plan protects students at home, at the University, or while traveling for the entire regular term, including vacations. Special arrangements may be made for coverage during the Summer Session if desired. All full-time students and their dependents are eligible for participation in the plan. *Participation in the plan is not compulsory.*

THE PSYCHOLOGY CLINIC

The Psychology Clinic is open to full time students for consultation on scholastic, vocational, social, and personal problems. Students are invited to make use of the Clinic.

The Psychology Clinic is located in Old Main, Room 307.

THE 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.

MARSHALL UNIVERSITY LIBRARY

The Marshall University Library is housed in the James E. Morrow Library Building. The full facilities of the library are open to all who are enrolled as students and to the faculty and staff of the University. Permission for use of its facilities is also extended to others in the Huntington area when

such use does not specifically interfere with use by those in the University community. Arrangements have been made with the Huntington Public Library to provide for cooperation in making the facilities of both collections available when necessary.

The Library contains approximately 120,000 volumes. Over 500 current periodicals are received regularly. The Library is a designated depository for U. S. government documents. Several special collections are available for reference use.

AUDIO-VISUAL CENTER

The Audio-Visual program at Marshall University is planned to accomplish two broad purposes: to aid the University 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 University and in extension centers throughout the state.

OFFICE OF PLACEMENT

Marshall University operates a free placement service. Graduating students will have the opportunity to meet prospective employers from the public schools, business, industry, governmental agencies and others. Alumni may use the service at no cost.

The Office of Placement assists undergraduate students in securing employment while they are in college.

The Office is located in Room 114 on the first floor of Old Main.

STUDENT CONDUCT

The University assumes that each student is a mature, responsible individual who has entered the institution for the purpose of educational advancement. On that assumption the University expects the student to direct his energy toward the highest scholastic achievement possible for the individual.

While attaining these high educational purposes the University requires that the student maintain a pattern of social behavior that is in keeping with good taste and high moral standards. The student is charged with the responsibility for regular class attendance, reasonable study hours, and a sane social program.

The University believes that the use of liquor by a student is detrimental to his welfare. Therefore, students entering their rooming places, either residence halls or private houses, under the influence of liquor, and students who introduce liquor into any rooming place or college building will be subject to dismissal from the University. Any function sponsored by or held in the name of a recognized student organization must abide by all University regulations whether that function be held on or off campus.

ARTISTS SERIES, FORUMS, CONVOCATIONS

The Marshall University 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. A fee is included in the Student Activity Fee and no further admission charge is collected for any of the above programs.

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 University. Recreational facilities are also provided.

UNIVERSITY THEATRE

University Theatre, an all-university activity, is under the general direction of the Department of Speech. Normally three full-length plays and several studio and experimental dramas are produced each year.

University 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.

RADIO STATION WMUL

WMUL, Marshall's 10-watt educational-FM radio station, began broadcasting in 1961. It is a University-wide activity, operated by a staff of volunteer students selected from among those interested in broadcasting. The radio station is under the supervision of the Director of Educational Radio-TV, and is the first educational-FM station to operate in West Virginia. WMUL broadcasts on 88.1 mc seven days a week.

BAND, ORCHESTRA, AND CHORAL GROUPS

All students at Marshall University 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 Capella 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 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.

STUDENT PUBLICATIONS

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

THE STUDENT HANDBOOK is published annually in September by the Student Senate and contains general information for all students with particular emphasis on information for freshmen.

THE CHIEF JUSTICE, the University annual, is published by the Student Government under the supervision of the Chief Justice Board.

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.

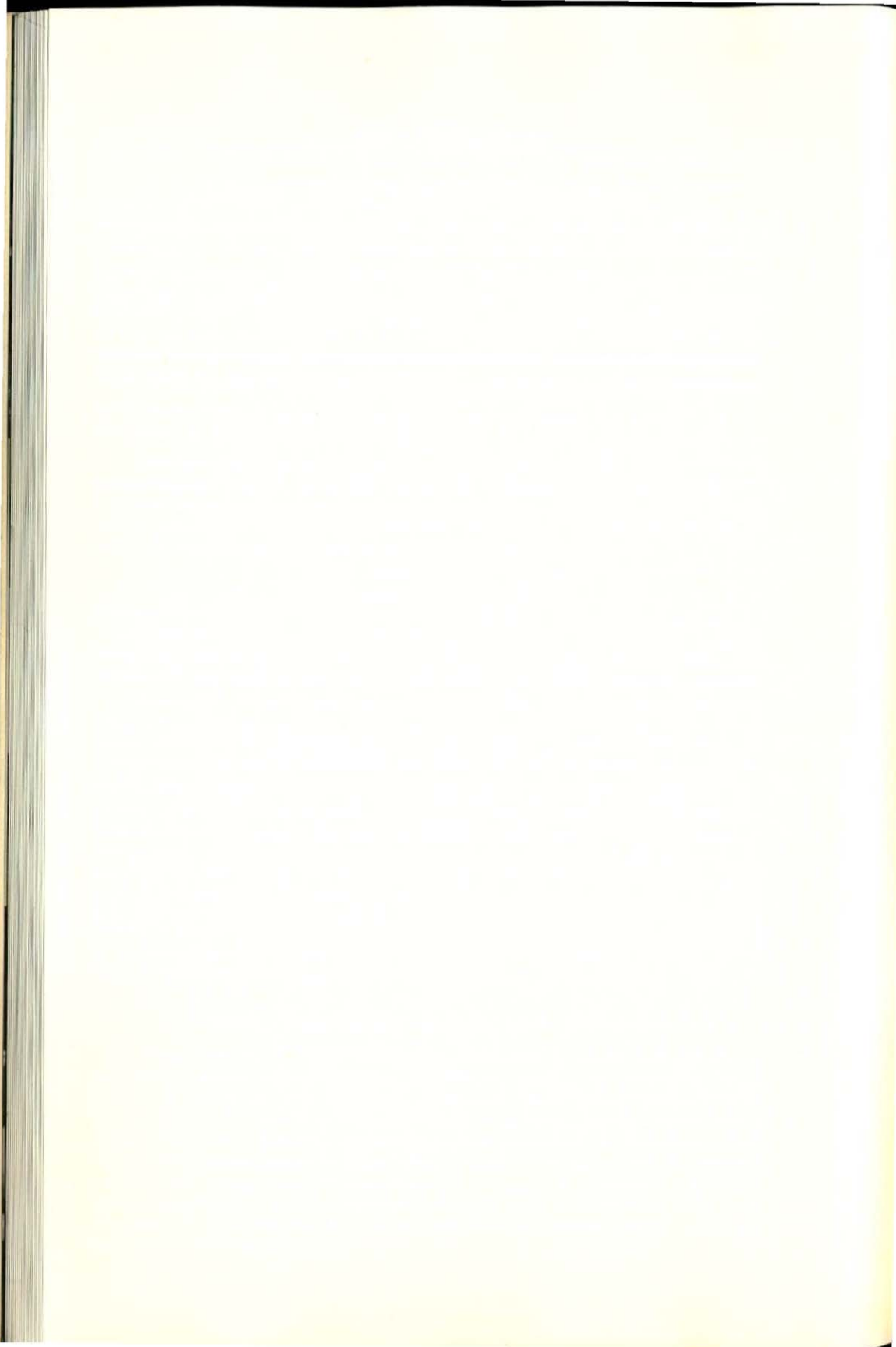
SHAVETAIL is the monthly newspaper published by the cadets of the Marshall University Battle Group, Department of Military Science.

INTRAMURAL

Intramural athletics at Marshall University 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 University conducts a comprehensive program attempting to promote activities in every field of athletic interest.

INTERCOLLEGIATE ATHLETICS

Marshall University is a member of the Mid-American Conference, which is composed of Bowling Green University, Kent State University, Miami University, Ohio University, Toledo University, Western Michigan University and Marshall, and as such, schedules contests in all sports with each of its members whenever possible. It is the policy of the Athletic Board to schedule non-Conference games with institutions of similar academic and athletic standards. Marshall University is also a member of the National Collegiate Athletic Association and conforms to its standards.



The Graduate School

GENERAL INFORMATION

In October, 1938, the West Virginia Board of Education approved regulations under which Marshall University 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, sociology, speech, and communication arts. Special programs for teachers leading to the Master of Arts degree are: elementary education, biological science-education, English-education, social studies-education, music-education, physical science-education, home economics-education, library science-education, and business administration-education.

Fields that offer work for a minor only are art, Bible, economics, French, geology, German, journalism, Latin, mathematics, philosophy, physical education, and Spanish.

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 competent 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.
4. To prepare students for further graduate study.

Admission to Graduate Study

Admission to graduate courses is open to qualified graduates of Marshall University and of other accredited colleges and universities provided their undergraduate records are satisfactory. The holding of a college degree does not automatically make one eligible for admission to the Graduate School. 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.

Applicants for admission may be required to take any special or standard ability or achievement tests in determining their eligibility for admission. The major department may require an applicant to make a satisfactory showing on a special written or oral examination before accepting him as a major.

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 applicant'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 University must furnish a transcript for the Graduate School Office at the time they submit the application for admission. All graduates of standard four-year colleges must register in the Graduate School.

Registrations for 500 series courses may be changed by administrative action to the 400 series course numbers if two transcripts of work for the baccalaureate degree and an application for admission to the Graduate School are not received within thirty days after registration.

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.

On recommendation of the department and with the concurrence of the Dean, the requirement of a minor may be eliminated to permit the student to concentrate his graduate work toward attainment of mastery in his special field. 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.

Courses carrying graduate credit are numbered 500 to 699. Selected courses in various departments with 400 series numbers for undergraduate credit have 500 series numbers for graduate credit. A few courses that carry 300 series numbers for undergraduate credit have 600 series numbers for graduate credit.

At least one-half of the work counted for the master's degree must be taken in courses numbered 600 to 699. Only persons wishing to work toward a master's degree may register for a 500 or 600 series course, and they must register in the Graduate School to receive graduate credit. In courses open to both graduate and undergraduate students, the graduate students are required to do more work than the undergraduates. This will include more extensive reading, research papers, and other individual work.

College graduates who are not working toward a master's degree must use the 300 or 400 series numbers. Credit earned under a 300 or 400 series registration number 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. An average of 2.5 on all work attempted is required for recommendation for the master's degree. This is a minimum requirement only. A higher average may be required in any individual case.

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.

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.

Persons possessing personal qualities which may render them unacceptable among those with whom they may work or which may reflect discredit on a profession, on the master's degree, and on Marshall University will not be recommended for the degree. The University 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 for credit to be counted toward the Master of Science degree. Education majors use Problem Report 679 and Thesis 680 and 681 as research numbers. 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. The Graduate School Office will have three copies of the thesis bound. Two copies of the bound thesis will be deposited in the Library. The third bound copy will be in the files of the major department.

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 in Marshall University 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 University 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 catalog 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 five-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 West Virginia Board of Education 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 five-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 University, for application on the master's degree, 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 more than six hours in another institution in work not offered by Marshall University.

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.

Six semester hours of extension credit may be accepted from West Virginia University. No extension credit may be transferred from any other graduate school.

Graduate credit accepted from other graduate schools must carry term grades of "B" or above.

Those 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 University or 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 University 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 fail to comply with these regulations within a reasonable time (dates to be announced each semester) may be withdrawn from courses by administrative action.

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

Professors Jablonski, Carpenter

- 501-502. HISTORY OF ART. 3-3 hrs. 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.
503. ORIENTAL ART. 3 hrs.
A historical survey of the architecture, painting, and sculpture of China, India, Indonesia, and Japan.
601. METHODS IN ELEMENTARY ART EDUCATION. 3 hrs. S.
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.
Appreciation of architecture, painting, sculpture, community planning, home design, 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. Laboratory fee: \$5.00. Fee waived for students selecting academic research projects.

BIBLE AND RELIGION

Associate Professor Jennings

518. DEVELOPMENT OF RELIGIOUS IDEAS. 3 hrs. I, S.
A study of the sources of religious thought of western culture.

BIOLOGICAL SCIENCES

Professors Cox, Edeburn, Fisher, Green, Mills, Plymale

Coursework leading to the Master of Arts and the Master of Science degrees in the biological sciences is designed to give preparation for teaching and research and for positions in Public Health, Food Sanitation, Governmental and Industrial Biology, Biological Technical Sales, Conservation, Game and Wildlife Management, Park Naturalist, Genetics, Pest Control, and Microbiology. Students desiring academic training in the above fields should pursue the biological science major.

Master's degree candidates are expected to have an adequate knowledge in 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 graduate studies in the biological sciences. 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, 607, 615, 616 and 630.

Selection of the individual's graduate program is determined by a committee composed of the chairmen of the three departments administering the biological sciences graduate degrees. The minor field chosen for all biological science majors may be selected by the student.

Students who do not have 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. A combined graduate and undergraduate program must present a total of at least forty semester hours in the life sciences for the master's degree.

The graduate seminar furnishes the student with the opportunity to develop oral and written competency, to become familiar with current literature and its use in the mechanics of scientific writing, and to review basic principles in the biological sciences. The graduate student is expected to include the seminar in his course of study each registration that he is enrolled as a student on the campus. A student is expected to present at least two hours credit in seminar toward graduation requirements for the master's degree in the biological sciences.

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 the biological sciences.

Students interested in the special program for biology teachers should see page 63.

501. 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. Laboratory fee: \$2.00.

502. 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. Laboratory fee: \$5.00.

508. ORNITHOLOGY. 3 hrs. II. S.

Two hours lecture and two hours laboratory a week. Identification, distribution, migration and breeding activities of birds. Laboratory fee: \$2.00.

513. PRINCIPLES OF ORGANIC EVOLUTION. 2 hrs.

The progress of animal life through time with a discussion of known causes. No laboratory.

514. WILDLIFE CONSERVATION. 3 hrs.

The natural history, economic importance and control of wildlife. Lecture and field study.

582. CONSERVATION OF SOIL, FORESTS, AND WILD LIFE. 3 hrs.

Primarily for teachers in the biological sciences, general and applied sciences; field work, seminars, and demonstrations on phases of conservation. Laboratory fee: \$3.00.

601. VERTEBRATE EMBRYOLOGY. 4 hrs. I.
Two hours lecture and four hours laboratory a week. Vertebrate development based chiefly on frog, chick and pig embryos. Laboratory fee: \$5.00.
602. 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. Laboratory fee: \$5.00.
603. BIOLOGICAL MICROTECHNIC. 3 hrs. I.
Principles and methods of fixing, imbedding, sectioning and staining of plant and animal preparations. Methods for identification and localization of cellular components. Introductory photomicrography. 1 lec.-4 lab. Laboratory fee: \$2.00.
604. PLANT PHYSIOLOGY. 4 hrs.
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. Laboratory fee: \$2.00.
605. ADVANCED ECONOMIC BOTANY. 3 hrs.
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. FIELD BIOLOGY. 4 hrs.
Identification and classification of plants and animals in relation to life cycles and to habitat. Laboratory fee: \$3.00.
607. 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. Laboratory fee: \$2.00.
610. HISTORY OF BIOLOGICAL SCIENCE. 2 hrs.
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.
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. Laboratory fee: \$4.00.
- 613-614. GENERAL ENTOMOLOGY. 2-2 hrs.
Collection, identification, classification and mounting of insects. Laboratory fee: \$2.00.

615. **ADVANCED PLANT MORPHOLOGY.** 4 hrs.
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. Laboratory fee: \$2.00.
616. **PLANT TAXONOMY.** 4 hrs.
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. Laboratory fee: \$2.00.
618. **PLANT PATHOLOGY.** 4 hrs. II.
Nature, cause and control of plant diseases. Laboratory fee: \$2.00.
619. **CELLULAR METABOLISM.** 4 hrs. II.
The chemistry of cell functions, including cellular organization, with special emphasis on intermediary metabolism. Laboratory fee: \$2.00.
625. **HUMAN ANATOMY AND PHYSIOLOGY.** 4 hrs. II.
Three hours lecture and two hours laboratory a week. The structure and functions of the human body. Laboratory fee: \$5.00.
630. **ECOLOGY.** 4 hrs. I, S.
The interrelationship of plants, animals, and environment. Local and world distribution of biotic communities. Laboratory fee: \$3.00.
Prerequisite: Botany 316, or Biological Science 616, or consent of instructor.
642. **INVESTIGATIONS IN CONSERVATION.** 2 hrs.
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.
By permission of adviser.
- 660-661-662. **SEMINAR.** 1; 1; 1 hr.
- 680-681. **THESIS OR PROBLEM REPORT.** I AND II. 1-3; 1-3 hrs.
By permission of adviser.

BUSINESS ADMINISTRATION

Professor Jolley

Associate Professors Dwight, Evans, C. B. Miller

504. **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.

505. OFFICE PRACTICE. 3 hrs. II.
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.
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.
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.
Theory and procedures; legal and social responsibilities of the auditor.
Prerequisite: Business Administration 312 or permission of instructor.
514. ADVANCED ACCOUNTING PROBLEMS. 3 hrs. II, S.
Selected problems in advanced accounting principles and procedures.
Prerequisite: Business Administration 312 or permission of instructor.
515. FEDERAL TAXATION. 3 hrs. I, II.
Problems and procedures of income tax accounting.
Prerequisite: Business Administration 312 or permission of instructor.
520. 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.
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.
Managerial problems pertaining to sales inventory and purchases; retail method of inventory; sales expense and pricing; mark-up and mark-down planning; stock planning.
Prerequisite: Business Administration 340.

524. **PERSONNEL MANAGEMENT.** 3 hrs. II.
Principles and procedures involved in the recruitment, selection, training, placement, and maintenance of an effective working force.
534. **INVESTMENTS.** 3 hrs. II.
Nature, forms and principles of investment; institutions for facilitating investment.
540. **SALES MANAGEMENT.** 3 hrs. II.
Policies and procedures pertaining to product planning and pricing, choice of market, planning sales effort, and the control of sales operations.
Prerequisite: Business Administration 340.
541. **WHOLESALEING.** 3 hrs. II.
Nature and importance of wholesaling; managerial aspects and problems; governmental regulation.
Prerequisite: Business Administration 340.
542. **TECHNIQUES OF MARKET RESEARCH.** 3 hrs. II.
Prerequisites: Business Administration 318, 330, and 340.
640. **AMERICAN MARKETS AND MARKETING.** 3 hrs. I, S.
Not open to students who have had Business Administration 340 or its equivalent.

CHEMISTRY

Professors Wotiz, Bartlett, Rumble, Whelpley
Associate Professor Hoback
Assistant Professors Cartwright, Digman, Walker

PREREQUISITES FOR GRADUATE WORK IN CHEMISTRY:

Entering students seeking a Master of Science degree in Chemistry must have earned at least the bachelor's degree in Chemistry as described in the Marshall University Bulletin, or its equivalent. Deficiencies must be removed by taking the appropriate undergraduate courses for no credit.

An entrance examination is required of all students seeking graduate credits. This examination covers the field of General, Organic, Analytical, and Physical Chemistry. The results of these examinations are used to guide the student in his course of study.

REQUIREMENTS FOR A MASTER OF SCIENCE DEGREE IN CHEMISTRY:

In addition to the general requirements of the Graduate School, candidates for the Master of Science degree in Chemistry must fulfill the following departmental requirements.

The minimum of thirty-two semester hours will be distributed as outlined below:

- 1) All graduate students will be required to take or present transfer credit for Chemistry 548, 607, 609, 631, and a minimum of two hours credit in a chemistry laboratory course (Chemistry 556, 566, 602, 616, 617).
- 2) A minimum of six and a maximum of twelve semester hours of research (Chemistry 682) must be applied toward the degree requirements.

A reading knowledge of one foreign language is required.

Students must present seven copies of an acceptable thesis (three unbound copies to be delivered to the Graduate School) three weeks before graduation, and must defend their work in an oral examination before a committee. The Chemistry Department considers a grade of "B" as the minimum satisfactory grade in graduate courses. However, an occasional grade of "C" will be accepted provided that the student maintains a "B" grade average.

All laboratory courses in Chemistry require a laboratory fee and a laboratory breakage deposit. Students should consult the University fee list before registering, because changes are made according to current prices of equipment and chemicals. Three laboratory clock hours of work are considered equivalent to one academic credit hour.

548. ADVANCED INORGANIC. 2 hrs. (Formerly 503, 507)

Two lectures.

Prerequisite: Chemistry 445.

556. INSTRUMENTAL ANALYSIS. 3 hrs. II.

A study of use and application of modern analytical instruments and techniques. Two hours lecture and three hours laboratory per week.

Prerequisite: Chemistry 445.

566. ORGANIC QUALITATIVE ANALYSIS. 3 hrs. II.

The separation and identification of organic compounds through the reaction of their characteristic functional groups and with the aid of modern instruments. One lecture and six hours laboratory per week.

Prerequisite: Chemistry 357.

582. ADVANCED ORGANIC. 2 hrs. I. (Formerly 581.)

Prerequisite: Chemistry 445.

602. ORGANIC QUANTITATIVE ANALYSIS. 3 hrs.
Elemental analysis by micro and semi-micro techniques. The quantitative analysis via functional groups. One lecture and six hours laboratory per week.
Prerequisite: Chemistry 445.
604. THEORIES OF ANALYTICAL CHEMISTRY. 2 hrs. I. (Formerly 603.)
Prerequisite: Chemistry 445.
607. THEORETICAL ORGANIC. 2 hrs.
A study of the mechanisms of organic reactions. (Formerly 607-608.)
Prerequisite: Chemistry 582.
609. CHEMICAL THERMODYNAMICS I. 2 hrs.
Prerequisite: Chemistry 445.
610. CHEMICAL THERMODYNAMICS II. 2 hrs.
Prerequisite: Chemistry 609.
616. X-RAY DIFFRACTION. 3 hrs. II.
Two lectures and three hours laboratory per week.
Prerequisite: Chemistry 445.
617. SPECTROSCOPY. 4 hrs.
A study of emission and absorption spectroscopy. Two lectures and six hours laboratory per week.
Prerequisite: Chemistry 445.
618. KINETICS. 3 hrs.
An advanced study of reaction rates and mechanisms.
Prerequisite: Chemistry 445.
619. PHASE RULE. 2 hrs.
A study of the phase diagrams of multiple component systems.
Prerequisite: Chemistry 445.
- 620-621. FUNDAMENTALS OF CHEMISTRY. 3-3 hrs. S.
Two credits lecture and one credit laboratory. Open only to M.A. candidates.
Prerequisite: Analytical Chemistry or equivalent.
- 622-623. ORGANIC. 3-3 hrs. S.
Two credits lecture and one credit laboratory. Open only to M.A. candidates.
Prerequisite: Chemistry 621 or equivalent.
- 624-625. PHYSICAL. 3-3 hrs. S.
Two credits lecture and one credit laboratory. Open only to M.A. candidates.
Prerequisite: Chemistry 621 or equivalent.

628. SPECIAL TOPICS (ANALYTICAL). 1-3 hrs.
 629. SPECIAL TOPICS (ORGANIC). 1-3 hrs.
 630. SPECIAL TOPICS (PHYSICAL). 1-3 hrs.
 631-632. SEMINAR. 1-1 hr. I, II.
 682. RESEARCH. 6-12 hrs.

Prerequisite: Approval of Department Chairman.

Credit in the course is earned by pursuing a directed original investigation in a field of chemistry. A minimum of six and a maximum of twelve semester hours credit in research may be applied toward the M.S. degree. Students may sign for one or more credit hours per semester depending on the time to be spent on research. A grade will be reported at the close of each term or semester.

COMMUNICATION ARTS

An interdepartmental program planned to provide training in several related communication areas, the Master of Arts degree in Communication Arts is a flexible one adaptable to the needs of persons in such areas as public relations, journalism, advertising, broadcasting, school library services, school supervision and administration, and similar fields where a wide knowledge of related communication skills is required.

A scholarship average of 2.5 (C+) is required for admission to this program. The Dean of the Graduate School and/or the departments working jointly with the program may require any special or general aptitude or achievement examinations for admission.

Students lacking sufficient undergraduate preparation for the program may be required to take additional work. A committee from the cooperating departments will guide the student with a member designated by the committee as the faculty adviser.

Students lacking the undergraduate equivalent for any course in Group 1 must take this course for graduate credit. Work taken under Group 2 must be distributed so that at least nine hours is outside any area of emphasis. Only one course in research methods may be taken for credit. For description of courses consult the appropriate departmental listings.

MINIMUM REQUIREMENTS 36 hours

GROUP 1 3-9 hours

LIBRARY SCIENCE 510
 SPEECH 532
 EDUCATION 565

GROUP 2	18-27 hours
LIBRARY SCIENCE	501, 504, 505, 550, 582 - 585, 604, 607, 610, 615, 620, 621, 625, 630, 635, 640
SPEECH	507, 508, 531, 533, 540, 545, 550, 601, 631, 634, 680 - 681
EDUCATION	566, 610, 612, 621, 640, 641, 679
ENGLISH	508, 580-590, 603, 610, 630, 631, 632
GROUP 3	3-9 hours
ART	650
EDUCATION	543, 545, 601, 606
GEOGRAPHY	530
JOURNALISM	527, 528
SOCIOLOGY	625
Other courses with consent of adviser	

Education 601, 606, and 612 are open only to students who hold valid teacher's certificates based on courses completed in a teacher training institution.

ECONOMICS

Associate Professors Minick, Land

Courses may be taken with approval of the student's adviser and instructor in the course.

502. BUSINESS CYCLES. 3 hrs. II.
Description and history of the business cycle; theories of the cycle; forecasting; monetary and fiscal policies for stabilization.
Prerequisite: Economics 242, 300, or the equivalent.
508. COMPARATIVE ECONOMIC SYSTEMS. 3 hrs.
Marxism, capitalism, communism, fascism, and socialism considered as theories, movements, and actual political economics.
Prerequisite: Economics 242, 300, or the equivalent.
510. THE SOVIET ECONOMIC SYSTEM. 3 hrs.
Resources and institutions of the U.S.S.R.; ideological and historical background; central planning; economic development.
Prerequisite: Economics 242, 300, or the equivalent.
520. INTERNATIONAL TRADE AND EXCHANGE. 3 hrs. I.
Movement of goods and balance of payments among nations; exchange rates; exchange controls and tariffs; problems and policies.
Prerequisite: Economics 242, 300, or the equivalent.
525. THE ECONOMY OF WEST VIRGINIA. 3 hrs.
Resources, labor, industries, institutions, markets, transportation facilities, etc., in West Virginia and the regional economy.
Prerequisite: Economics 242, 300, or the equivalent.
540. HISTORY OF ECONOMIC THOUGHT. 3 hrs. I.
Economic theories and ideas from the earliest contributions to the 1880's.
Prerequisite: Economics 242, 300, or the equivalent.

544. CONTEMPORARY ECONOMIC THEORY. 3 hrs. II.
Economic theories and ideas from Marshall to Keynes.
Prerequisite: Economics 242, 300, or the equivalent.
548. AMERICAN ECONOMIC THOUGHT. 3 hrs. II.
Contributions of American scholars to economic doctrines; emphasis on the Institutional and Neo-Classical Schools.
Prerequisite: Economics 242, 300, or the equivalent.
561. ECONOMIC EDUCATION WORKSHOP. 3 hrs. S.
Intensive review of subject matter and teaching methods in economics designed for elementary and high school teachers.
Prerequisite: Consent of instructor or grant of scholarship.
- 571-572. SEMINAR IN SPECIAL TOPICS. 2 to 4 hrs. I, II.
Members of the department may teach, when necessary, any economics subject not listed among the current course offerings.
Prerequisite: 9 hrs. of economics, senior standing, and consent of the instructor.
- 581-582. DIRECTED RESEARCH. 2 to 4 hrs. I, II.
A research project conducted by a qualified student under guidance of a member of the department; involves gathering of data, interpretation, and presentation of findings in a written report.
Prerequisite: 12 hrs. of economics, senior standing, and consent of the instructor, department chairman, and the student's academic dean.

EDUCATION

Professors Morris, Clagg, Hampel, Hess, Runyan, Wilburn, Woods
Associate Professors Blumberg, Core, Cubby, Felty, R. Gray, Irvin,
Lichtenstein, Nuzum, Phillips, Willey, Wright
Assistant Professors Cremeans, Hunter, Ritchie

The undergraduate prerequisites for a major in education are fifteen semester hours in the field. College graduates who did not follow teacher education programs for the baccalaureate degree may carry a limited number of graduate courses in education concurrently with the undergraduate courses required for certification. The total of undergraduate and graduate education required for the master's degree is forty-five semester hours. Registration for graduate courses in education to meet certificate requirements does not automatically admit the student to the Graduate School as a candidate for a master's degree. The required undergraduate scholarship average for admission to the Graduate School as a degree candidate is 2.5 (C+). Earning credit in the graduate courses for certification does not excuse the student from the necessity of raising his undergraduate average to 2.5 before completing the requirements for the master's degree. Final determination that the student will be permitted to count graduate courses in education toward a master's degree will be made after completion of the requirements for a valid certificate. Passing the National Teachers Examination does not exempt the applicant from the undergraduate requirement in education.

Students earning a master's degree in education should show competence in the following areas: Audio-visual aids, Curriculum, Guidance, History or

Philosophy of Education, Human Growth and Development or Psychology of Learning, Research in Education, School Administration or Supervision, Teaching Methods, and Testing and Evaluation. It is the responsibility of the student to work out with the adviser at the beginning of his graduate work a program of studies which will provide a broad professional background.

The student's adviser may require that specific courses be completed to satisfy the requirement of competence in the above areas or to correct weaknesses that may become apparent during his progress toward the master's degree.

Students working toward an administrative certificate or counselor certificate should plan their programs so as to include from six to twelve hours in courses not listed as education.

Elementary teachers should follow Option A or B or work for a principal's certificate.

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 fifteen semester hours of graduate courses 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 fifteen hours. This course is optional in certain teacher-education programs.
2. Submit to a test of scholastic aptitude.
3. Hold a first class teaching certificate valid in West Virginia or the equivalent thereof.

The test mentioned 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 the test.

When these requirements have been met, a committee composed of the student's adviser, the chairman of the department, 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 chairman of the department 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.

Students may not enroll in the following courses until after having had one year of full-time teaching experience: Education 601, 602, 603, 604, 606, 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-three additional hours for the master's degree unless Education 680, Thesis, is completed satisfactorily for three hours credit.

Education 679 will apply on administrative certificates only for those students who have completed a master's degree prior to June, 1960, or for those students who have completed the master's degree in programs other than school administration and are attempting to qualify for an administrative certificate.

EDUCATION 680-681, THESIS.

Education 680 may be taken for three hours credit by those whose reports in Education 679 are excellent in quality, have been accepted for three hours credit, and are of such character to 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.

Students who are seeking the master's degree in any phase of school administration must enroll and complete satisfactorily Education 680 and 681.

Students completing 680 and 681 must take an oral examination involving the thesis.

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, 613, 621, 680, 681 27 hrs.
2. With the approval of the adviser select from Education 517, 528, 535, 545, 560, 565, 590, 610, 615, 616, 635, 648, 675, 679, 680 3 hrs.
3. Electives selected with the approval of the adviser . . . 2-6 hrs.

B. ELEMENTARY PRINCIPAL'S CERTIFICATE

MINIMUM REQUIREMENTS 32-36 hours

1. Education 601, 604, 606, 610, 613, 621, 680, 681 24 hrs.
2. With the approval of the adviser select from Education 528, 543, 590, 595, 616, 635, 656, 657, 670, 671, 675, 679, 680 3-6 hrs.

3. With the approval of the adviser select not fewer than six hours in student's field of interest (courses listed as education excluded) 6-12 hrs.
4. Electives selected with the approval of the adviser .. 0-9 hrs.

C. SECONDARY PRINCIPAL'S CERTIFICATE

MINIMUM REQUIREMENTS 32-36 hours

1. Education 601, 604, 606, 613, 610, 621, 680, 681 24 hrs.
2. With the approval of the adviser select from Education 515, 517, 528, 535, 541, 545, 560, 565, 590, 613, 614, 615, 635, 646, 647, 648, 675, 679, 680 3-6 hrs.
3. With the approval of the adviser select not fewer than six hours in student's field of interest (courses listed as education excluded) 6-12 hrs.
4. Electives selected with the approval of the adviser .. 0-9 hrs.

D. CERTIFICATE IN GENERAL SUPERVISION

MINIMUM REQUIREMENTS 36 hours

1. General requirements
Education 606, 616, 621, 680, 681 15 hrs.
2. *Practice in Supervision
Education 672, 673, 674 9 hrs.
3. Requirements in problems of teaching education
Education 543 or 545, 657, 667 or 670, 671 12 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 University, State Department of Education, and County Superintendent.

II. Two-Year Graduate Program Leading to the Certificate in Advanced Study in School Administration

The Certificate in Advanced Study in School Administration may be earned by completing a minimum of two years of graduate work in residence including such courses, field experiences, research, and examinations as may be required by the student's advisory committee. The mere completion of any prescribed list of courses and other experiences will not necessarily lead to the certificate. It can be earned only by demonstrated capacity to carry on original investigation, scholarly attainment in the area of school administration, and a comprehensive grasp of the basic concepts and problems in the entire field of education.

Students may apply for admission to this program after completing twenty-four hours of graduate work with a minimum scholastic average of 3.00 (B) included in which must be Education 601, General School Administration: Basic Course; Education 604, The School Principal; Education 606, Supervision of Instruction: Basic Course; Education 613, Organization and Administration of Guidance Programs; and Education 621, Educational Research and Writing. The rest of the work required for the certificate will be chosen from the total offerings of the Graduate School with a view toward satisfying the needs of the individual student.

Selective retention in the program will be based on the previous scholarly record of the student, personal references, and certain prescribed diagnostic tests. Holders of the master's degree with superior qualifications may seek admission to the program. They must participate in all diagnostic procedures required for admission. Eligibility for admission will be determined by the Admissions Committee.

The student's work in the Two-Year Program is directed by an advisory committee of three members of the Education faculty. He will choose an adviser who will serve as chairman of his committee and with whom he will consult in the choice of two additional members subject to the approval of the Dean of the Graduate School. The committee may include a member from another department, if it will be helpful to the student in the attainment of his professional objectives.

A student entering the Two-Year Program shall take certain diagnostic-type examinations. These are given under the direction of the student's advisory committee, and they will bear a close relationship to his objective. All courses and field experiences must be approved by the advisory committee. If courses that are needed to satisfy the objectives are not available in Marshall University, the advisory committee may direct the student to take appropriate courses in another graduate school which will be accepted as transfer credit. Research ability demonstrated by papers submitted is one of the important requisites of this program. The advisory committee determines the extent and nature of the research required and is sole judge of its quality and acceptability.

A written examination followed by a general oral examination based on the student's planned objectives must be passed by each candidate. These examinations will be given under the supervision of the advisory committee as the final step in completing the Two-Year Program. A scholastic average of 3.00 (B) is required on all courses attempted for the certificate.

Application for admission shall be made to the Dean of the Graduate School.

III. Counselor Certificate

PROGRAM FOR SCHOOL COUNSELORS

In order to qualify for the Master of Arts Degree in Counseling and Guidance, the candidate must successfully complete the following program:

MINIMUM REQUIREMENTS 32-36 hours

1. Education 517, 590, 614, 621, 646, 647, 616 or 648,
649 or 650 24 hrs.

2. Electives in Education selected with the approval of the adviser (Guidance Majors may not enroll in Education 602, 603, 604) 6-12 hrs.
 3. Electives outside of Education selected with the approval of the adviser 3-9 hrs.
- Following courses recommended:
- Psychology 506, 518, 611, 612
 - Sociology 512, 527, 529, 531, 533, 535, 620, 625.

Students may qualify for recommendation for the Teacher-Counselor endorsement of their first-class teaching certificates in the State of West Virginia upon completion of the following courses:

Education 490 or 590, 614, 621, 646, 647, 649 or 650.

IV. Teacher-Education Curriculum

A. PROGRAMS FOR TEACHERS IN ELEMENTARY SCHOOLS

The three 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.

Students under this program may take not more than six hours in Educational Guidance to be chosen from Education 590, 648, 614, and 646.

Option B provides a sequence of courses designed to qualify teachers for positions where they will be teaching mentally retarded children.

The courses in education and other fields for Options A and B follow:

OPTION A

- MINIMUM REQUIREMENTS 32-36 hours
1. Education 609, 616, 621 9 hrs.
 2. With the approval of the adviser select from Education 515, 535, 543, 560, 565, 595, 610, 635, 640 or 641, 656, 657, 670, 671, 678 9 hrs.
 3. Electives 14-18 hrs.
- Courses in the several fields listed below are to be selected with approval of the adviser: art, education, science, English, geography, geology, history, home economics, music, philosophy, political science, psychology, sociology and speech.

OPTION B

Teachers wishing to have Professional Elementary Certificate endorsed for teaching mentally retarded children must complete the courses listed below or the equivalent thereof as partial requirements for the Master of Arts degree.

MINIMUM REQUIREMENTS	32-36 hours
1. Education 609, 616, 621	9 hrs.
2. Education 520, 532, 535, 540, 543 and 552	18 hrs.
3. Psychology 506	3 hrs.
4. Speech 518	3 hrs.
5. Art 601	3 hrs.

To have the Professional Elementary Certificate endorsed for teaching mentally retarded children the teacher must also receive:

1. The recommendation of the county superintendent where he was last employed for two years as a teacher in an elementary school.
2. The recommendation of the State Supervisor of Special Education.
3. The recommendation of the college or university where he completed the course of study in the education of mentally retarded children.

B. PROGRAM FOR HIGH SCHOOL TEACHERS OF BIOLOGY

The purpose of this program is to meet the needs of teachers who desire additional preparation in the biological sciences. Teachers with twelve (12) semester hours of undergraduate biology are eligible for this program.

Deficiencies in undergraduate preparation may be met while taking graduate courses. Students graduating under this program must have a minimum of forty (40) semester hours of graduate and undergraduate biological science.

MINIMUM REQUIREMENTS	36 hours
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1. Education 9 hrs.
 To be selected from the following courses:
 Education 515, 528, 535, 560, 565, 590, 609, 610,
 640 or 641, 648 and 668.
 The student is expected to include Education 668
 in his professional courses.
 Students electing Education 640 or 641 will be
 expected to do readings pertaining to the
 teaching of biology.
2. Biological Science 18 hrs.
 A minimum of 15 hours must be taken from the
 following courses: Biological Science 502, 601, 602,
 604, 607, 615, 616 and 630.
3. Electives 9 hrs.
 (Selected with approval of adviser)

C. 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, 520, 521, 522, 524, 534, 540, 541, 542, 640	12 hrs.
3. Electives	5-9 hrs.
(Selected with approval of adviser)	

D. 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 512, 555, 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)	

E. 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 University.

MINIMUM REQUIREMENTS	32-36 hours
1. Education 606, 609	6 hrs.
2. From Home Economics 500, 505, 506, 507, 520, 540, 554	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, 678 6-9 hrs.
Note: Students electing to write theses must include Education 621.

5. Electives (selected with approval of adviser) 3-12 hrs.
Suggested electives:

Art 603, Experiencing Art in Everyday Life.
Biological Science 607, Genetics.
Economics 508, Comparative 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.

F. 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 REQUIREMENTS 32-36 hours

1. From Education 560, 590, 609, 610, 621, 648 9 hrs.
Six semester hours of education must be done on the campus.
Note: Students electing to write theses must include Education 621.

2. Chemistry and physics 18 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 645 12 hrs.
Chemistry 620 and 621 6 hrs.

3. Electives in science or education 5-9 hrs.

G. PROGRAM FOR SCHOOL LIBRARIANS

This program is designed for teachers desiring to work for a master's degree with a field of specialization in the school librarianship.

Requirements for admission to the program:

1. Graduation from an accredited college or university.
2. Twelve semester hours of library science in areas of school library administration, cataloguing and classification, reference, and orientation in school library service. These requirements will be fulfilled by successful completion of Library Science 301, 310, 315 and 320 or their equivalent. (See Marshall University Bulletin, Teachers College, 1962-64.)
3. Skill in typing.
4. Students who have earned eighteen or more semester hours in library science at the undergraduate level must complete twelve semester hours of library science, with the approval of the adviser, at an accredited school of library science. This credit will be transferred to Marshall University and applied toward the requirements listed below.

MINIMUM REQUIREMENTS 36 hours

1. Education 590, 609, 610, and 543 or 545 12 hrs.
2. Library Science, including Library Science 621 18 hrs.
3. Electives (selected with the approval of adviser) 6 hrs.

Library Science as a minor field may be combined with another field offering a graduate degree. Courses are to be selected with the joint approval of the student's major adviser and the chairman of the Department of Library Science. Prerequisites must be completed and a minimum of six semester hours in library science will be required as a prerequisite to a minor.

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 hrs.
 - Education 667, Teaching Social Studies in
Secondary Schools 3 hrs.
 - Education 648, Advanced Studies of
Human Adjustment 3 hrs.
 - or
 - Education 616, Advanced Studies in
Child Development 3 hrs.

Education 640, Literature of Education 3 hrs.
 (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 electives 23-27 hrs.

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, Religious Thought in the Western World.

Education 541, Literary Materials for English and Social Studies.

I. PROGRAM FOR TEACHERS IN SECONDARY SCHOOLS

This program provides a sequence of professional and nonprofessional courses for those teachers in junior and senior high schools for whom provisions have not been made in the offerings of the Department of Education as outlined in the preceding sections.

MINIMUM REQUIREMENTS 32-36 hours

1. Education 609, 610, 621, 648 12 hrs.
2. Education electives selected with approval of the adviser from Education 515, 517, 535, 545, 560, 590, 606, 614, 615, 616, 675, 679 and 680 6 hrs.
3. In fields of interest outside of Education to be selected with the approval of the adviser 12 hrs.
4. Electives 6 hrs.

515. HISTORY OF MODERN EDUCATION. 3 hrs. I, II, S.
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.
Elementary statistics for students in economics, education, political science and sociology.
Prerequisites: Consent of instructor. Enrollment in Education 350 or 450.
520. INTRODUCTION TO EXCEPTIONAL CHILDREN. 3 hrs. I, S.
An introduction to the study of children who deviate from the average in mental, physical and social characteristics, including a study of the characteristics of such children and the adaptation of educational procedures to their abilities and disabilities.
528. THE JUNIOR HIGH SCHOOL CURRICULUM. 3 hrs. I, II, S.
Provides for the study of procedures for creating a functional junior high curriculum with emphasis upon the needs of early adolescents.
532. EDUCATION OF EXCEPTIONAL CHILDREN. 3 hrs. II, S.
A study of the social, emotional, physical, and learning characteristics of children having one of the several exceptionalities; methods of diagnosis and differentiation; educational organization and teaching techniques employed for their rehabilitation.
Prerequisite: Education 420 or 520.
535. TESTS AND MEASUREMENTS. 3 hrs. I, II, S.
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.
540. PRACTICUM WITH MENTALLY RETARDED CHILDREN. 3 hrs. II, S.
Supervised experiences directing learning activities with mentally retarded children; emphasis upon the application of research to varied teaching situations.
541. LITERARY MATERIALS FOR ENGLISH AND SOCIAL STUDIES. 3 hrs. I, S.
Reading and evaluation of a variety of literary selections suitable for Grades 7 through 12.
Prerequisite: Enrollment in Education 450.
543. TEACHING OF READING IN ELEMENTARY SCHOOLS. 3 hrs. I, II, S.
Modern techniques and practices in the teaching of reading.
Prerequisite: Enrollment in Education 350.
545. TEACHING OF READING IN SECONDARY SCHOOLS. 3 hrs. I, II, S.
Principles underlying teaching of reading in secondary schools.
Prerequisite: Enrollment in Education 450.

552. **TEACHING MENTALLY RETARDED CHILDREN.** 3 hrs. II, S.
A study of the techniques to be employed in assessing mentally retarded children's preacademic skills, academic abilities, social adjustment, and recreational aptitudes; emphasis on techniques in teaching the skill subjects to mentally retarded children.
Prerequisite: Education 420 or 520.
560. **PHILOSOPHY OF EDUCATION.** 3 hrs. I, II, S.
Basic philosophic schools and concepts and application to educational practice.
Prerequisite: Enrollment in Education 350 or 450.
565. **AUDIO-VISUAL AIDS IN LEARNING.** 3 hrs. I, II, S.
Utilization of audio-visual materials, equipment, and techniques.
Laboratory fee: \$1.00.
Prerequisite: 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. **TEACHING BUSINESS EDUCATION.** 2-3 hrs. I, II, S.
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. **PRINCIPLES AND PRACTICES OF GUIDANCE.** 3 hrs. I, II, S.
Objectives, principles, and practices of guidance.
Prerequisite: Enrollment in Education 450.
595. **CLINICAL PRACTICE IN READING INSTRUCTION.** 3 hrs. S.
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.
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.**
3 hrs. I or II, S.
Basic principles of school finance; taxation for school support; budgeting; accounting and auditing; insurance; extra levies and bond issues.
Prerequisite: Education 601.
603. **GENERAL SCHOOL ADMINISTRATION: PLANT AND EQUIPMENT.**
3 hrs. I or II, S.
Planning buildings; architectural service; maintenance and replacement of equipment; transportation equipment and its maintenance and use.
Prerequisite: Education 601.

604. **THE SCHOOL PRINCIPAL.** 3 hrs. I or II, S.
Duties and responsibilities of elementary and secondary school principals; problems in organizing and directing the school program.
Prerequisite: Education 601.
606. **SUPERVISION OF INSTRUCTION: BASIC COURSE.** 3 hrs. I or II, S.
Principles; procedures used in improving instructional program in schools.
609. **THE TEACHER AND SCHOOL ADMINISTRATION.** 3 hrs. I or II, S.
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 601.
610. **THE CURRICULUM IN THE MODERN SCHOOL.** 3 hrs. I or II, S.
Curricular development in elementary and secondary schools; attention given to procedures for examining, evaluating, and revising existing curricular programs.
611. **PRACTICUM IN THE TEACHING OF READING IN THE SECONDARY SCHOOLS.**
3 hrs. S.
Clinical experience in the teaching of reading for teachers in the secondary schools with special emphasis on skills and understandings necessary for the teaching of remedial reading.
Prerequisite: Education 445 or 545.
612. **AUDIO-VISUAL ADMINISTRATION AND SUPERVISION.** 3 hrs. I or II, S.
Theory and practice related to financing, maintaining, and improving audio-visual programs, and to administrative and supervisory services, training, research, and public relations.
Prerequisite: Education 465 or 565 or a combination of Speech 532, Library Science 510 and Education 466 or 566.
613. **ORGANIZATION AND ADMINISTRATION OF GUIDANCE PROGRAMS.**
3 hrs. I or II, S.
Problems in planning and administering a guidance program in elementary and secondary schools.
614. **COUNSELING TECHNIQUES.** 3 hrs. I or II, S.
Techniques employed by the counselor with emphasis on the place of the interview.
615. **HISTORY OF EDUCATION IN THE UNITED STATES.** 3 hrs.
Development of public and private educational systems in the United States.
616. **ADVANCED STUDIES IN CHILD DEVELOPMENT.** 3 hrs. I or II, S.
Nature of growth and environmental factors affecting it.
- 617-618. **FIELD COURSE IN CURRENT SCHOOL PROBLEMS.** 3-3 hrs.
Investigations in current problems confronting local schools; content determined by needs of students.

620. CONSERVATION EDUCATION. 3 hrs. S.
A course designed for teachers and others to provide basic conservation concepts and course content; the materials and methods for conservation teaching. Elements of conservation education of soil, water, and human conservation are presented.
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.
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.
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 640 permitted.
641. SEMINAR IN EDUCATION. 2-3 hrs.
A guided program of readings, reports and discussions. No student may register for this course a second time.
646. INDIVIDUAL INVENTORY TECHNIQUES. 3 hrs.
Techniques used in collecting data, including test results, recording of data, and interpretation of tests and other data.
Prerequisite: Education 417-517 or 435-535.
647. OCCUPATIONAL INFORMATION TECHNIQUES. 3 hrs. S.
Techniques used in selecting, filing, and using materials pertaining to various occupations and professions.
648. ADVANCED STUDIES IN HUMAN ADJUSTMENT. 3 hrs.
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.
Counseling tools and techniques, with emphasis on problem categories and patterns as related to the psychology of individual differences.
Prerequisite: Consent of instructor.
651. PRACTICUM IN TESTING AND COUNSELING. 3 hrs. S.
Designed to give majors in guidance and counseling an opportunity to gain practical experience in testing and counseling under professional supervision.
Prerequisite: Education 614, 646, 647.
652. INVESTIGATIONS IN TEACHING OF ENGLISH IN SECONDARY SCHOOLS. 3 hrs.
Emphasis on particular problems in teaching of English rather than general techniques.
656. TEACHING OF THE LANGUAGE ARTS. 3 hrs.
Current methods and available materials for teaching handwriting, spelling, and oral and written expression.

657. **TEACHING OF ARITHMETIC.** 3 hrs.
Acquainting students with available materials and giving knowledge of the most widely accepted methods of instruction.
658. **CLINICAL PRACTICE IN ARITHMETIC INSTRUCTION.** 3 hrs.
Working with pupils under guidance; diagnosing, planning and putting into effect an instructional program for a limited number of pupils.
Prerequisite: Education 657.
661. **TEACHING SHORTHAND AND TYPEWRITING.** 3 hrs. S.
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.**
3 hrs. S.
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.** 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.
Various techniques for teaching social studies with suggestions for procurement and use of pertinent materials.
668. **TEACHING THE BIOLOGICAL SCIENCES.** 3 hrs. S.
Methods, materials and techniques for teaching biology with emphasis on using demonstrations and laboratory experiences, projects and reports, planning and using field trips, using audio-visual aids, providing and maintaining equipment in a functional high school biology unit.
670. **TEACHING SOCIAL STUDIES IN ELEMENTARY SCHOOLS.** 3 hrs.
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.
Problems and methods of teaching science. Laboratory fee: \$3.00.
- 672-673-674. **PRACTICE IN SUPERVISION, COURSE I, II, AND III.** 3-3-3 hrs.
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.
Duties and responsibilities of the teacher who directs learning experiences of student teachers.

679. PROBLEM REPORT. 1-3 hrs.

680-681. THESIS. 3-3 hrs.

ENGLISH

Professors Tyson, J. Brown, Mitchell

Associate Professor A. Brown

Assistant Professor Rollins

Graduate courses in English provide detailed consideration of various periods in literary history, types, and authors. Students are expected to acquire a broad acquaintance with authors, works, and trends in the whole range of English and American literature and to become thoroughly familiar with the forms of literature, critical standards, and the materials and methods of research. At the conclusion of the specified number of hours of work for a master's degree, candidates are required to pass a comprehensive examination. During his program of studies each student is expected to select an area as a specialty and concentrate on it as a part of his work. Suggested areas are drama, poetry, novel, American literature, Victorian period, the eighteenth century, etc. He may elect to write a thesis in his chosen area or demonstrate his knowledge by answering questions concerning it in the comprehensive examination.

Students doing a graduate major in English must have an undergraduate background of at least fifteen hours in English and/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.

Preparation of reports, theses, briefs, abstracts, and other expository types. Adapted to the needs of the individual student.

511. CHAUCER. 3 hrs.

512. THE STUDY OF POETRY. 3 hrs.

Theory and prosody, and development of principal types, forms and themes.

544. EMERSON, POE, WHITMAN. 3 hrs.

Poetry and prose of these writers in relation to the intellectual background of their times.

546. DRAMA OF THE RESTORATION AND EIGHTEENTH CENTURY. 3 hrs.

547. THE ENGLISH ROMANTIC POETS. 3 hrs.

555. LITERARY CRITICISM. 3 hrs.
History of literary criticism with application of principles.
560. ENGLISH LITERATURE FROM 1660 TO 1745. 3 hrs.
Dryden, Swift, Pope, and their contemporaries.
561. ENGLISH LITERATURE FROM 1745 TO 1800. 3 hrs.
Major figures of the Age of Johnson.
570. TWENTIETH CENTURY LITERATURE. 3 hrs.
The twentieth century mind, through representative genres of literature, English and American.
- 580-590. SPECIAL TOPICS. 1-4 hrs.
600. SHAKESPEARE. 3 hrs.
Intensive reading of Shakespeare's plays. Problems of Shakespearean scholarship.
601. FOLK AND POPULAR LITERATURE. 3 hrs.
A study of types, backgrounds, and influences.
603. CHILDREN'S LITERATURE. 3 hrs.
Intensive reading of recent works in the field. Evaluation of recent trends.
610. READINGS IN ENGLISH AND AMERICAN LITERATURE. 2-3 hrs.
Opportunity for independent reading in a field not covered by regularly scheduled courses. To be taken toward the end of the work for a master's degree under supervision of a graduate instructor.
613. MILTON. 3 hrs.
614. THE VICTORIAN NOVEL. 3 hrs.
615. VICTORIAN POETRY. 3 hrs.
616. ESSAYISTS OF THE NINETEENTH CENTURY. 3 hrs.
Chief English nonfictional prose writers of the century.
617. ENGLISH DRAMA TO 1642. 3 hrs.
Non-Shakespearean English drama from its beginning to the close of the theatres in 1642.
620. CONTEMPORARY DRAMA. 3 hrs.
Major English and American dramatists of the present day.
621. CONTEMPORARY NOVEL. 3 hrs.
Major twentieth century novelists, principally English and American.
622. CONTEMPORARY POETRY. 3 hrs.
Twentieth century British and American poetry.
630. MATERIALS AND METHODS OF RESEARCH. 3 hrs.
Training in scholarly research. Required of all candidates for a master's degree in English.

631. HISTORICAL ENGLISH GRAMMAR. 3 hrs.
Present-day constructions in the light of historical evolution.
632. HISTORY OF ENGLISH WORDS. 3 hrs.
Historical development of modern vocabulary.
644. THE AMERICAN NOVEL. 3 hrs.
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.

FOREIGN LANGUAGES

Classical Civilization

Professor Whitsel

These courses are given in English and require no knowledge of the languages.

535. GREEK CIVILIZATION. 3 hrs. I.
536. ROMAN CIVILIZATION. 3 hrs. II.

FRENCH

Associate Professor Noble

535. NINETEENTH CENTURY LITERATURE. 3 hrs.
The French romantic movement as exemplified in the poetry, drama, and the novel of the period.
Prerequisite: French 224 or equivalent.
536. NINETEENTH CENTURY LITERATURE. 3 hrs.
Realistic and naturalistic fiction, realism in the theatre, and selected poems of Baudelaire, the Parnassians, and the Symbolists.
Prerequisite: French 224 or equivalent.

GERMAN

Associate Professors Lieberman, Perl

- 507-508. GOETHE'S FAUST. 3-3 hrs. I, II.
Reading of "Faust" parts I and II. A presentation of the Faust legend. Goethe's life and works as related to "Faust".
Prerequisite: Twelve hours of college German or equivalent.

LATIN

Professor Whitsel

501. ROMAN LIFE: PLINY, MARTIAL, JUVENAL. 3 hrs. II.
Prerequisite: Four years high school Latin or equivalent in college courses.
502. VERGIL'S AENEID VII-XII. 3 hrs. II.
Prerequisite: Four years high school Latin or equivalent in college courses.

503. **THE ROMAN STAGE: COMEDIES OF PLAUTUS AND TERENCE.** 3 hrs. II.
Prerequisite: Four years high school Latin or equivalent in college courses.
- 550-551. **SPECIAL TOPICS IN LATIN.** 1-4 hrs. I, II.
Prerequisite: Ten hours of Latin.

SPANISH

Professors Fors, J. Martin

510. **SPANISH LITERATURE FROM THE CID TO THE 17TH CENTURY.** 3 hrs. I.
Reading of significant literary works from the beginning to the 17th century.
Prerequisite: Spanish 204 and permission of the department chairman.
520. **DRAMA OF THE GOLDEN AGE.** 3 hrs. II.
Readings, lectures, discussions and reports in Spanish concerning representative dramatists of the Golden Age.
Prerequisite: Spanish 204.
- 590-591. **SPECIAL TOPICS.** 2-4 hrs. I, II.
Prerequisite: Three hours of literature from courses numbered 320 or above and the permission of the department chairman.

GEOGRAPHY

Professors Clagg, Britton, Davis

The undergraduate prerequisite for a graduate major is twelve semester hours of geography. For undergraduate social science majors three semester hours of work in another field closely related to geography may be accepted toward meeting the twelve-hour requirement for admission.

Graduate work in geography is planned to meet the needs of persons in public school work, those who wish to prepare for work in industry or government service, and for those who plan to continue to the doctoral level.

Before recommending the student for admission to candidacy for the master's degree, the department may require a qualifying examination.

Students who major in geography must complete not fewer than twenty-four hours in the major field. At least one-half of the hours must be earned in 600 series courses.

A major must include:

529 or 530	3 hrs.
505 or 605	3 hrs.
603	3 hrs.
602 or 604 or 608	3 hrs.
620	3 hrs.
606 or 609	3 hrs.

501. HISTORICAL GEOGRAPHY OF THE UNITED STATES. 3 hrs.
Study of coastal settlements, the population spread through Appalachia and the Mississippi Valley, and the development of intermountain and Pacific Coast centers.
503. ECONOMIC GEOGRAPHY OF ASIA. 3 hrs.
Special attention given activities and environment in continental countries and nearby islands.
505. WORLD POLITICAL GEOGRAPHY. 3 hrs.
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.
Regional study of the relation of man's activities to natural environment.
507. GEOGRAPHY OF ARGENTINA. 2 hrs.
Regional study of the relation of man's activities to natural environment.
508. GEOGRAPHY OF MEXICO. 2 hrs.
Regional study of the relation of man's activities to natural environment.
509. GEOGRAPHY OF CANADA. 2 hrs.
Regional study of the relation of man's activities to natural environment.
510. URBAN GEOGRAPHY. 3 hrs.
Study of numerous cities of the world, with local field survey made.
512. GEOGRAPHY OF SOVIET LANDS. 3 hrs.
Russian agriculture, grazing, mining, industry, and transportation explained in environmental terms.
513. GEOGRAPHY OF BRITISH ISLES. 2 hrs.
Climate, minerals, and land forms checked in explaining economic activities.
515. GEOGRAPHY OF INDIA. 2 hrs.
India, Pakistan, Ceylon, and Burma studied to show cultural-environmental relationships.
520. FIELD GEOGRAPHY OF WEST VIRGINIA. 3 hrs.
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.
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.
Consideration of problems in selected countries following a geographical review.
603. PROBLEMS IN GEOGRAPHY OF NORTH AMERICA. 3 hrs.
Relationship of human activities to natural environment in selected regions.
604. PROBLEMS IN GEOGRAPHY OF LATIN AMERICA. 3 hrs.
Problems studied in each country following geographical review.
605. GEOGRAPHY IN WORLD POLITICAL AFFAIRS. 3 hrs.
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.
607. PROBLEMS IN WORLD ECONOMIC GEOGRAPHY. 3 hrs.
Problems of world exchange of outstanding trade items.
608. PROBLEMS IN GEOGRAPHY OF AFRICA AND AUSTRALIA. 3 hrs.
Selected regions studied in both continents.
609. GEOGRAPHICAL RESEARCH. 3 hrs.
Research methods stressed with special attention given to a consideration of the literature of the field.
620. CONSERVATION EDUCATION. 3 hrs.
Presents elements of conservation education in the specific areas of soil, water, and human conservation.
- 680-681. THESIS OR PROBLEM REPORT. 1-3; 1-3 hrs. I and II.

GEOLOGY

Professor Janssen

518. PALEONTOLOGY. 3 hrs. I.
Fossil animal and plant life; its development, evolution and dominance through the geologic ages. Recommended for biological science majors.
Prerequisite: Geology 201 or graduate status.
522. ECONOMIC GEOLOGY. 3 hrs. II.
Nature, origin, distribution, and uses of the world's commercially valuable mineral and rock resources.
Prerequisite: Geology 201 or graduate status.
551. GEOMORPHOLOGY. 3 hrs. II.
Geologic nature and origins of the world's land forms.
Prerequisite: Geology 200 or graduate status.

HISTORY

Professors Toole, Cometti, Heath, Moffat

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, 611, 627, 628, and 678.

- 502. AMERICAN DIPLOMACY. 3 hrs.
- 521. THE ERA OF THE RENAISSANCE AND THE REFORMATION. 3 hrs.
- 522. THE FRENCH REVOLUTION AND THE NAPOLEONIC ERA. 3 hrs.
- 525. EUROPEAN HISTORY. 1814-1914. 3 hrs.
- 526. EUROPEAN HISTORY, 1914 TO THE PRESENT. 3 hrs.
- 527. RUSSIA IN THE 19TH AND 20TH CENTURIES. 3 hrs.
- 532. AMERICAN HISTORY SINCE 1914. 3 hrs.
- 605. SOCIAL AND ECONOMIC PROBLEMS OF AMERICAN COLONIES. 3 hrs.
- 606. SOCIAL AND ECONOMIC PROBLEMS OF EARLY NATIONAL PERIOD IN AMERICA. 3 hrs.
- 607. OLD NORTHWEST. 3 hrs.
- 608. CIVIL WAR AND RECONSTRUCTION, 1850-1877. 3 hrs.
- 610. READINGS IN HISTORY. 2-3 hrs.
- 611. METHODS AND PROBLEMS OF RESEARCH IN WEST VIRGINIA HISTORY. 3 hrs.
- 612. AMERICAN LEADERS TO 1865. 3 hrs.
- 613. HISPANIC AMERICAN HISTORY. 3 hrs.
- 614. AMERICAN REVOLUTIONARY PERIOD, 1760-1789. 3 hrs.
- 615. AMERICAN LEADERS SINCE 1865. 3 hrs.
- 617. TRANS-ALLEGHENY FRONTIER. 3 hrs.
- 621. NINETEENTH CENTURY ENGLAND. 3 hrs.
- 622. FAR EAST IN TWENTIETH CENTURY. 3 hrs.
- 627. PROBLEMS IN EARLY MODERN EUROPEAN HISTORY, 1500-1650. 3 hrs.
- 628. PROBLEMS IN RECENT EUROPEAN HISTORY, 1871-1914. 3 hrs.
- 633. PROBLEMS IN AMERICAN HISTORY, 1877-1917. 3 hrs.
- 634. PROBLEMS IN AMERICAN HISTORY, 1917 TO PRESENT. 3 hrs.
- 678. HISTORICAL RESEARCH. 2-3 hrs.
- 680. THESIS OR PROBLEM REPORT I. 1-3 hrs.
- 681. THESIS OR PROBLEM REPORT II. 1-3 hrs.

HOME ECONOMICS

Associate Professors Burnette, Foose, Gray, Neely, Strouss

See Home Economics-Education Program Listed Under Education

500. **CONSUMER PROBLEMS OF THE FAMILY.** 3 hrs.
Current aspects relating to purchase of goods and services to meet needs and wants of individuals and families.
505. **QUANTITY FOOD SERVICE.** 3 hrs.
Experiences in large-quantity food purchasing, preparation and serving. Laboratory fee: \$2.00.
Prerequisites: Home Economics 110 and 203 or consent of instructor.
506. **METHODS IN ADULT HOME ECONOMICS EDUCATION.** 3 hrs.
Philosophy, promotion, organization, methods and techniques of working with out-of-school groups.
507. **INSTITUTIONAL MANAGEMENT.** 3 hrs.
Organization and administrative problems of food in institutions such as the school lunch, residence halls, hospitals, and cafeterias.
513. **EXPERIMENTAL COOKERY.** 3 hrs.
Experimental study of chemical and physical factors affecting standard food preparation procedures. Laboratory fee: \$5.00.
Prerequisites: Home Economics 110 and 203, Chemistry 103 and 104.
515. **FAMILY RELATIONSHIPS.** 3 hrs.
A study of the interrelationships in the modern family, with emphasis on parent-child, parent-parent, and sibling relationships, in relation to the development of the family. Laboratory fee: \$1.00.
Prerequisite: Home Economics 303 or consent of instructor.
516. **PRENATAL AND INFANT CARE.** 3 hrs.
A study of pre-natal and post-natal care of the mother and needs and care of the infant from birth through its second year. Laboratory fee: \$1.00.
Prerequisite: Junior or senior standing.
519. **TAILORING.** 3 hrs.
Selection, fitting and construction of tailored wool garments. A comparison of time and cost of different methods. Laboratory fee: \$2.00.
Prerequisite: Home Economics 329 or its equivalent.
520. **HOUSEHOLD EQUIPMENT.** 3 hrs.
Principles underlying the selection, use, and care of household equipment. Laboratory fee: \$1.00.
540. **NUTRITION IN THE HOME AND SCHOOL.** 3 hrs.
A study of the fundamental principles of human nutrition and their applications in the home and school. Designed primarily for elementary teachers.

554. **PROBLEMS IN HOME FURNISHINGS.** 3 hrs.
Practical problems relating to modern decorating with consideration given to the selection and use of suitable fabrics and materials for making curtains, draperies, slipcovers, and reclaiming and refinishing furniture.
- 581-585. **WORKSHOP.** 2-3 hrs. in each.
Workshop in selected areas of home economics. Credit for more than two workshops may not be counted for the master's degree.
Prerequisite: Senior or graduate standing.
- 684-685. **SPECIAL PROBLEMS IN HOME ECONOMICS.** 1-3 hrs. in each.
Problems of particular interest to the graduate students. Registration by permission of adviser. Not more than four hours credit in Special Problems may be counted toward a master's degree.
- 690-691. **SEMINAR.** 1-3 hrs. in each.
Extensive readings and reports from current literature in selected areas of home economics. Ordinarily, two hours of credit will be earned in each seminar; not more than four hours of seminar credit may be counted toward a master's degree.

JOURNALISM

Professor Pitt

527. **JOURNALISTIC ENGLISH.** 3 hrs.
A study of modern English used by American newspapers, radio, television. Primarily designed for teachers working toward the master's degree interested in a minor or elective in journalism. (The companion course to form a minor is 528.) No prerequisites.
528. **HIGH SCHOOL NEWSPAPERS.** 3 hrs.
A study of the publication of high school newspapers, including practical experience with *The Parthenon*. Primarily designed for teachers working toward the master's degree interested in a minor or elective in journalism. (The companion course to form a minor is 527.) No prerequisites.

LIBRARY SCIENCE

Associate Professor Locke

Requirements for the curriculum for school librarianship are to be found on page 66 under "Teacher-Education Curricula."

501. **HISTORY OF BOOKS AND LIBRARIES.** 3 hrs. I, II, S.
Overview of library development from classical world to the present as well as a survey of the development of books, printing and writing.
504. **BOOK SELECTION FOR CHILDREN.** 2 hrs. I, II, S.
Evaluation of aids and standards for selection of books and materials with attention being given to children's reading interests; practice in storytelling.

505. **BOOK SELECTION FOR ADOLESCENTS.** 2 hrs. I, II, S.
Survey of books and other materials adapted to the needs of adolescents. Critical evaluation of standard, classic and current books, together with aids and criteria for selection. Reading interests of the retarded and non-reader considered.
510. **FOUNDATIONS OF MASS COMMUNICATIONS.** 3 hrs. I, II, S.
Survey of social and psychological causes and effects of reading and mass communications (newspapers, magazines, radio, motion pictures, television) with reference to their importance to the school librarian.
550. **LIBRARY PRACTICE (FIELD WORK).** 3 hrs. I, II, S.
Practical experience in the application of techniques of library science, adapted as far as possible to the student's needs.
- 582-585. **SPECIAL TOPICS.** 1-4 hrs. S.
604. **READING GUIDANCE.** 3 hrs. S.
Study of current investigations and research concerning reading interests and habits of young people and adults; methods of relating readers and materials.
607. **THE LIBRARY AND THE CURRICULUM.** 3 hrs. S.
A survey of elementary and secondary school curricula with emphasis on materials which can be used to enrich the teaching of the various subjects.
610. **ADMINISTRATION AND OPERATION OF LIBRARIES.** 3 hrs. S.
An introduction to the fundamental processes and activities of various types of libraries, including the purposes and relationships of common routines and records.
615. **ADVANCED REFERENCE.** 3 hrs. S.
A study of specialized reference tools.
Prerequisite: Library Science 315.
620. **ADVANCED CATALOGING AND CLASSIFICATION.** 3 hrs. S.
Study of the Library of Congress and Dewey Decimal classification systems. Practice given in detailed descriptive and subject cataloging of special materials.
Prerequisite: Library Science 320.
621. **INTRODUCTION TO RESEARCH IN LIBRARY SCIENCE.** 3 hrs. S.
Materials and methods of bibliographic research.
625. **THE LIBRARY IN THE COMMUNITY.** 2 hrs. S.
A study of the problems relating to the interpretation of the library to its constituent and methods of handling these problems with emphasis on successful public relations programs.
630. **TECHNICAL PROCESSES.** 3 hrs. S.
Overview of methods of acquisition, processing routines in preparation work, conservation and circulation of materials.

635. GOVERNMENT PUBLICATIONS AND SPECIAL MATERIALS. 3 hrs. S.
The form, production, distribution and subject content of official publications of state and national governments and of international agencies. Emphasis given to selection, acquisition, organization and use of these materials.
Prerequisite: Library Science 615.
640. READINGS IN LIBRARIANSHIP. 1-3 hrs. I, II, S.
Guided reading and reports on outstanding books in the field of library science. Only one registration in Library Science 640 permitted.

MATHEMATICS

Professors Barron, Bauserman
Associate Professors Goins, Hardman

Courses may be taken with approval of student's adviser and instructor in the course.

- 500-501. MODERN MATHEMATICS FOR HIGH SCHOOLS. 3-3 hrs. I, II.
An introduction to materials prepared by the School Mathematics Study Group for grades 9 through 12.
Prerequisite: Consent of instructor.
- 502-503. FOUNDATIONS AND FUNDAMENTAL CONCEPTS OF MATHEMATICS. 3-3 hrs. I, II.
Emphasizes mathematical structure, the mathematical method, and the nature and use of mathematical systems and models.
Prerequisite: Junior, senior, or graduate standing.
527. ADVANCED CALCULUS. 4 hrs.
The number system, limits, sequences, partial differentiation with applications, maxima and minima of functions of several variables.
Prerequisite: Mathematics 221.
528. ADVANCED CALCULUS. 4 hrs.
Theory of definite integrals, multiple integrals, line and surface integrals, improper integrals, infinite series.
Prerequisite: Mathematics 427 or 527.
530. VECTOR AND TENSOR ANALYSIS. 3 hrs. I, II.
The algebra of vectors, the calculus of vectors with applications, introduction to tensor analysis.
Prerequisite: Mathematics 221.
535. ORDINARY DIFFERENTIAL EQUATIONS. 4 hrs. I, II.
An exposition of methods used in solving ordinary differential equations, with applications to geometry, physics, and mechanics.
Prerequisite: Mathematics 221.
536. PARTIAL DIFFERENTIAL EQUATIONS. 3 hrs. I, II.
An exposition of methods used in solving partial differential equations with applications to geometry and topics in mathematical physics.
Prerequisite: Mathematics 435 or 535.

543. NUMERICAL ANALYSIS. 3 hrs. I, II.

The theory and technique of numerical computation involving interpolation methods, solution of systems of equations, and methods of solution of ordinary differential equations.

Prerequisite: Mathematics 435 or 535.

545-546. INTRODUCTION TO THEORY OF STATISTICS. 3-3 hrs. I, II.

Probability spaces, random variables, and algebra of expectations; sampling methods; estimation of parameters; tests of hypotheses; analysis of variance.

Prerequisite: Mathematics 221.

548-549. FUNDAMENTAL CONCEPT OF GEOMETRY. 3-3 hrs. I, II.

A broad study of the development of Euclidean Geometry as a specialization of Projective Geometry using synthetic and algebraic methods.

Prerequisite: Junior, senior, or graduate standing.

550-551. FUNDAMENTAL CONCEPTS OF MODERN ALGEBRA. 3-3 hrs. I, II.

Set theory and logic with applications; number theory; groups; matrices, with applications; determinants.

Prerequisite: Junior, senior, or graduate standing.

560-561. FUNCTIONS OF A COMPLEX VARIABLE. 3-3 hrs. I, II.

Complex numbers, analytic functions, properties of elementary functions, integrals, series, residues and poles, conformal mapping.

Prerequisite: Mathematics 221.

MUSIC

Professors Kingsbury, Gelvin

Associate Professors Creighton, Drescher, Fiser, Lanegger, O'Connell, Pursley

Assistant Professors Davidson, Jones

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 chairman 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, Supervision of Instruction	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, Supervision of Instruction	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

- 601a. **SURVEY OF MUSIC LITERATURE.** 3 hrs.
Comprehensive survey of solo, chamber, symphonic and choral literature; special emphasis given to analysis of style.
- 601b. **SYMPHONIC LITERATURE.** 3 hrs.
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.
- 602a. **ANCIENT, MEDIEVAL, AND RENAISSANCE MUSIC.** 3 hrs.
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.
- 602b. **SEVENTEENTH AND EIGHTEENTH CENTURY MUSIC.** 3 hrs.
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.
- 603a. **BEETHOVEN AND THE ROMANTIC MOVEMENT.** 3 hrs.
A study and evaluation of Beethoven's principal works and the life and works of Schubert, Mendelssohn, Chopin, Schumann, Brahms, and their contemporaries.
- 603b. **CONTEMPORARY MUSIC.** 3 hrs.
Musical developments since Wagner. Debussy, Ravel, Stravinsky, Schoenberg, Bartok and their contemporaries. Particular emphasis given to contemporary American music.
- 604a. **KEYBOARD LITERATURE.** 2 hrs.
Survey and study of literature for harpsichord, clavichord and piano, covering their history, structure, interpretation, and aesthetic values.
- 604b. **CHAMBER MUSIC LITERATURE.** 2 hrs.
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.
- 604c. **SONG LITERATURE.** 2 hrs.
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.
- 604d. **CHORAL LITERATURE.** 2 hrs.
A comprehensive study of choral composition beginning with sixteenth century, with special emphasis on music for school organizations.
605. **AESTHETICS OF MUSIC.** 2 hrs.
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.
Basic concepts of music education and their application to problems of music teaching, supervision, and administration.
611. PSYCHOLOGY OF MUSIC. 3 hrs.
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.
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.
Principles and techniques of measurement in music.
614. THE TEACHING OF MUSIC APPRECIATION. 2 hrs.
Advanced methods and materials for teaching appreciation of music in grades 1 through 12.
615. BAND MANEUVERS AND PAGEANTRY. 2 hrs.
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.
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. 3 hrs.
An advanced study of basic concepts of current problems in music education.
- 618a. ADMINISTRATION OF INSTRUMENTAL MUSIC. 3 hrs.
The planning and operation of the instrumental program and the details of programming the work in a school system.
- 618b. ADMINISTRATION OF CHORAL MUSIC. 3 hrs.
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.
- 619a. SEMINAR IN VOCAL PEDAGOGY. 2 hrs.
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.
- 619b. SEMINAR IN PIANO PEDAGOGY. 2 hrs.
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.

620a. INSTRUMENTAL WORKSHOP. 2 hrs.

Problems of the instrumental teacher at all levels; practical work in the techniques of handling beginning classes and ensembles of all types.

620b. CHORAL WORKSHOP. 2 hrs.

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.

625a. WOODWIND TECHNIQUES. 1 hr.

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.

625b. WOODWIND TECHNIQUES. 1 hr.

626a. BRASS TECHNIQUES. 1 hr.

626b. BRASS TECHNIQUES. 1 hr.

627a. STRING TECHNIQUES. 1 hr.

627b. STRING TECHNIQUES. 1 hr.

628. PERCUSSION TECHNIQUES. 1 hr.

629a. CHORAL CONDUCTING AND INTERPRETATION. 2 hrs.

A thorough study and analyzation 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.

629b. CHORAL CONDUCTING AND INTERPRETATION. 2 hrs.

Continuation of 629a covering late Romantic and Modern choral works for the a capella and accompanied choir as well as major choral works with orchestra. Experience gained as assistant conductors with the performing choirs.

630a. INSTRUMENTAL CONDUCTING AND INTERPRETATION. 2 hrs.

The special problems involved in conducting and training instrumental groups at all levels.

630b. INSTRUMENTAL CONDUCTING AND INTERPRETATION. 2 hrs.

A continuation of 630a.

670. ADVANCED MATERIALS AND METHODS (GRADES 1-6). 3 hrs.

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.
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.
- 680-681. THESIS OR PROBLEM REPORT, I AND II. 1-3; 1-3 hrs.

Theory and Composition

- 640a. MUSIC THEORY. 3 hrs.
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.
- 640b. MUSIC THEORY. 3 hrs.
Continuation of Music 640a.
- 645a. ORIGINAL COMPOSITION. 2 hrs.
- 645b. ORIGINAL COMPOSITION. 2 hrs.
- 646a. ADVANCED CHORAL ARRANGING. 2 hrs.
Techniques of choral composition and arranging with emphasis on the mixed choir. Arrangements and original works sung by choral groups and conducted by students.
- 646b. ADVANCED CHORAL ARRANGING. 2 hrs.
Continuation of 646a 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.
- 647a. ADVANCED BAND ARRANGING. 2 hrs.
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.
- 647b. ADVANCED BAND ARRANGING. 2 hrs.
A continuation of 647a.
- 648a. ADVANCED ORCHESTRA ARRANGING. 2 hrs.
- 648b. ADVANCED ORCHESTRA ARRANGING. 2 hrs.
649. DANCE BAND ARRANGING. 2 hrs.
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.
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

- 682a, b, c, d. FLUTE. 1-2 hrs.
 683a, b, c, d. OBOE. 1-2 hrs.
 684a, b, c, d. CLARINET. 1-2 hrs.
 685a, b, c, d. BASSOON. 1-2 hrs.
 686a, b, c, d. FRENCH HORN. 1-2 hrs.
 687a, b, c, d. TRUMPET. 1-2 hrs.
 688a, b, c, d. TROMBONE. 1-2 hrs.
 689a, b, c, d. BARITONE. 1-2 hrs.
 690a, b, c, d. TUBA. 1-2 hrs.
 691a, b, c, d. VIOLIN. 1-2 hrs.
 692a, b, c, d. VIOLA. 1-2 hrs.
 693a, b, c, d. CELLO. 1-2 hrs.
 694a, b, c, d. STRING BASS. 1-2 hrs.
 695a, b, c, d. PIANO. 1-2 hrs.
 696a, b, c, d. VOICE. 1-2 hrs.
 697a, b, c, d. ORGAN. 1-2 hrs.

Miscellaneous

- 572-575. SPECIAL TOPICS. 1 to 4 hrs.
 597. PIANO TUNING AND REPAIR. 2 hrs.
 598. PIANO TUNING AND REPAIR. 2 hrs.

PHILOSOPHY

Professor Beck
 Associate Professor 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.
 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.
 Exposition of Dewey's entire philosophy as a background for his views on education.
519. RELIGIOUS THOUGHT IN WESTERN WORLD. 3 hrs.
 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.

PHYSICAL EDUCATION

Professors Fitch, Josephs, McDonough

560. **EDUCATION FOR PERSONAL AND FAMILY LIFE.** 2-3 hrs.
Development of programs concerned with sex-character education in schools and other agencies.
565. **TESTS AND MEASUREMENTS IN HEALTH AND PHYSICAL EDUCATION.** 3 hrs.
A study of the nature and purpose of measurement and evaluation in the fields of health and physical education. Evaluation of available tests and practice in administration of tests. Lectures and laboratory work.
626. **HISTORY AND PHILOSOPHY OF PHYSICAL EDUCATION.** 3 hrs.
The study of the history and principles of physical education with application to general education, physiology, psychology, health and recreation. An historical analysis of the forces and factors affecting programs of Physical Education. Philosophical bases are developed from which basic principles are evolved to serve as guides in the profession.
630. **PRINCIPLES OF HEALTH AND PHYSICAL EDUCATION.** 3 hrs.
A study of the fundamental principles which have been developed from the basic sciences and the relationship of these principles to the Health and Physical Education programs.
635. **CURRICULUM CONSTRUCTION IN HEALTH AND PHYSICAL EDUCATION IN GRADES 1-12.** 3 hrs.
A study of principles, objectives, and procedures in curriculum construction of a Health and Physical Education program. Typical programs studied and evaluated. Practice in curricula construction for elementary and secondary grade levels in health and physical education.

POLITICAL SCIENCE

Professors Stewart, Harper, Harris

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.

Special consideration given to the rise and development of international institutions, particularly the United Nations.

506. 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.
507. FAR EASTERN POLITICS. 3 hrs.
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.
Detailed examination of the institutions and politics of such states as Egypt, Turkey, Persia, Afghanistan, Iraq, Jordan, Syria and Israel.
509. COMPARATIVE GOVERNMENTS: PARLIAMENTARY DEMOCRACIES. 3 hrs.
Origin, development, structure and current operations of the English, French, Swiss and other selected democratic governments; emphasis on the English system.
510. COMPARATIVE GOVERNMENTS: COMMUNIST DICTATORSHIPS. 3 hrs.
Detailed examination of the ideology, structure, and operations of the modern totalitarian state; emphasis on the Soviet Union.
520. STATE ADMINISTRATION. 3 hrs.
Administrative organization and methods of executing policies in the fifty states.
Prerequisite: Political Science 202.
525. EARLY POLITICAL THEORY. 3 hrs.
Political thought and philosophy from Plato to the 17th century.
526. RECENT POLITICAL THEORY. 3 hrs.
Political thought and philosophy from the 17th century to the present time.
600. TRENDS IN AMERICAN CIVILIZATION. 3 hrs.
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.
Readings to meet the needs and interests of individual students.
603. PROBLEMS IN AMERICAN NATIONAL GOVERNMENT. 3 hrs.
Contemporary problems, procedures, and trends in American National Government. Recommended for teachers.
604. AMERICAN POLITICAL IDEAS. 3 hrs.
Political ideas of representative American thinkers.
605. INTERNATIONAL LAW. 3 hrs.
Legal aspects of the relations between states.
606. AMERICAN CONSTITUTIONAL LAW. 3 hrs.
Study of cases and literature of American constitutional law.
611. LEGISLATIVE PROCESS AND LEGISLATIVE PROCEDURE. 3 hrs.
Principles, procedures, and problems of statute lawmaking in the United States at all levels of government.

615. LABOR LEGISLATION. 3 hrs.
Theory, organizations, procedure, content, and effect of labor legislation in the state, national, and international sphere.
617. NATIONAL ADMINISTRATION. 3 hrs.
Organization and function of national administrative departments, boards and commissions in their relation to other branches of the government.
621. MUNICIPAL ADMINISTRATION. 3 hrs.
Principles and methods of municipal administration in the United States.
623. ADMINISTRATIVE LAW. 3 hrs.
Law of administrative tribunals.
624. ADMINISTRATION OF JUSTICE. 3 hrs.
Organization of courts in the United States, trends in the reorganization of judicial machinery, and improvement of judicial procedure.
648. PROBLEMS IN WEST VIRGINIA GOVERNMENT. 3 hrs.
Readings, lectures, and reports on contemporary governmental problems in West Virginia.
- 650-651. SEMINAR. Credit to be arranged.
To be offered in connection with courses listed above.
- 680-681. THESIS OR PROBLEM REPORT I AND II. 1-3; 1-3 hrs.

PSYCHOLOGY

Professors Loemker, Darbes
Associate Professor Wolf
Assistant Professor Dunn

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 following courses are required: Psychology 611, 612, 623, 680, 681, 690, and one other Seminar (691 to 695). The remainder of the work is planned, with the approval of the adviser, to meet the needs of the student.
3. During regular semesters the graduate student will enroll for Psychology 690 or 691, Seminar, one (1) hour credit. Additional credit for these courses may be earned with the approval of the instructor and adviser.
4. The thesis is a requirement for the master's degree in psychology. Early in his graduate study the student should enroll for Psychology 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, and do extensive reading of related literature. Credit for

Psychology 680 will be determined by the adviser on the basis of accomplishment by the end of the term or semester. During the next term or semester the student will enroll for Psychology 681, Thesis II, 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.

5. In the final comprehensive examination, all candidates will be held responsible for information in the following areas:
 - History and systems of psychology.
 - General methods of psychology: experimental, statistical, clinical.
 - Psychological testing: theory and methods.
 - Basic principles and concepts in psychology.
 6. Under certain conditions a minor may not be required.
506. MENTAL ABILITIES: TEST INTERPRETATION. 3 hrs. I, S.
 The nature of intelligence; interpreting mental test data.
 Prerequisite: Psychology 201, 311, 317; for education majors.
 Education 435 or 535 and consent of instructor.
516. PSYCHOLOGY OF LEARNING. 3 hrs.
 Review and evaluation of experimental studies and theories of learning.
 Prerequisite: Nine hours of psychology, including experimental psychology.
518. PSYCHOLOGY OF PERSONNEL. 3 hrs. I, II, S.
 Psychological principles and methods applied to functions in personnel administration.
 Prerequisite: Psychology 201.
550. PERCEPTION. 3 hrs.
 Experimental studies of and theories of perception, and the significance of perception in human behavior.
 Prerequisite: Nine hours of psychology, including experimental psychology.
560. HISTORY AND SYSTEMS OF PSYCHOLOGY. 3 hrs. I, S.
 Prerequisite: Nine hours of psychology.
606. HUMAN ABILITIES: DEVELOPMENTAL RETARDATION AND SUPERIORITY. 3 hrs.
 Range of ability in human behavior with special emphasis on mental retardation and superiority; conditions, training or education, adjustment.
 Prerequisite: Nine hours of psychology.
608. PSYCHOPATHOLOGY. 3 hrs.
 Minor and major behavior deviations and related phenomena, with special attention to causes and prevention of the development of behavior disorders; survey of current therapeutic methods.
 Prerequisite: Nine hours of psychology.

611. **PSYCHOLOGICAL TESTS I: INDIVIDUAL TESTS.** 3 hrs. I.
Instruction and practice in the use of individual intelligence tests, including the Stanford-Binet and the Wechsler scales; evaluation of test results. Laboratory fee: \$3.00.
Prerequisite: Nine hours of psychology, including Psychology 406 or 506.
612. **PSYCHOLOGICAL TESTS II: GROUP TESTS.** 3 hrs. II.
Instruction and practice in the use of group tests of intelligence and special abilities, and test of interests and personality; evaluation of test results. Laboratory fee: \$3.00.
Prerequisite: Psychology 611.
614. **PSYCHOLOGY OF PERSONALITY.** 3 hrs.
Comparative study of personality structure and dynamics; 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.
A practical laboratory study of mental and behavior cases in the mental hospital. Intensive study and training in the administration and interpretation of clinical tests, psychological diagnosis, and the preparation of clinical reports.
Prerequisite: Psychology 606, 608, 611, 612.
621. **CLINICAL PSYCHOLOGY: NON-INSTITUTIONAL CASE TECHNIQUES.** 3 hrs.
Intensive study and practice in psychological clinic procedures in dealing with the mental and behavior problems of children and non-institutionalized adults; clinical tests, personal and family history data, clinical reports.
Prerequisite: Psychology 606, 608, 611, 612.
623. **SCIENTIFIC METHOD IN PSYCHOLOGY.** 3 hrs.
Critical evaluation of scientific methods in psychology with emphasis on the experimental methods. Laboratory exercises.
Prerequisite: Nine hours of psychology, including statistical methods.
- 680-681. **THESIS I AND II.** 1-3; 1-3 hrs.
- 690-695. **SEMINAR.** 1-3 hrs. each course.
Reports on current problems and literature in psychology and related fields. Ordinarily, two hours credit will be earned in seminars; not more than four hours may be earned in seminars.

SAFETY EDUCATION

Professor Fitch

590. **PROBLEMS AND PRACTICES IN TRAFFIC SAFETY AND DRIVER EDUCATION.** 3 hrs.

A survey course designed for supervisors of traffic accident prevention programs. Examines and evaluates problems, attitudes, philosophies, activities and administrative practices in school, city and state traffic safety programs. Supplements basic teacher training courses in traffic safety.

SCIENCE FOR TEACHERS**General**

Associate Professor Ward

500. **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. Laboratory fee: \$3.00.

583. **DEVELOPMENT OF SCIENTIFIC THOUGHT.** 3 hrs. II, S.

A study of the men who have developed our knowledge of science; the philosophy of their periods; the economic conditions leading to scientific advancement; and the works of the foremost men in this field.

Prerequisite: 12 semester hours of science.

Chemistry

Professors Rumpel, Whelpley, Wotiz

Associate Professor Hoback

Note: The following courses are open to students working for the master's degree in Education. See Program F under Education.

620-621. **FUNDAMENTALS OF CHEMISTRY.** 3-3 hrs. S.

Laboratory fee: \$4.00; deposit \$5.00.

Prerequisite: Chemistry 204 or equivalent.

622-623. **ORGANIC.** 3-3 hrs. S.

Laboratory fee: \$4.00; deposit \$5.00.

Prerequisite: Chemistry 620-621.

624-625. **PHYSICAL.** 3-3 hrs. S.

Laboratory fee: \$4.00; deposit \$5.00.

Prerequisite: Chemistry 620-621.

Physics

Professor D. Martin

Note: The following courses are open to students working for the master's degree in Education. See Program F under Education.

640-641. **FUNDAMENTALS OF PHYSICS.** 3-3 hrs.

A review and extension of basic principles of physics with particular stress on materials and methods of demonstration. Laboratory fee: \$2.00.

642-643. **ELECTRONICS.** 3-3 hrs.

Basic principles of electron tubes and their applications in industry, medicine, and communications, with accompanying laboratory work. Laboratory fee: \$2.00.

644. **ATOMIC PHYSICS.** 3 hrs.

A historical development of the modern theories concerning the structure of matter, electricity, and light, including applications of optical spectra and X rays. Laboratory fee: \$2.00.

645. NUCLEAR PHYSICS. 3 hrs.

Structure and properties of the nucleus of the atom, radioactivity, atomic transmutations, the basic principles of atom smashing machines, and atomic energy. Laboratory fee: \$2.00.

646. SEMINAR ON RECENT DEVELOPMENTS IN THE PHYSICAL SCIENCES. 3 hrs.

Reports from current issues from various periodicals in the field of physical science.

SOCIOLOGY

Professors Richardson, Simpkins

Students admitted to the Department of Sociology for graduate work are requested to meet the following requirements:

1. Must take the Ohio State Psychological Examination or some other test of scholastic aptitude and pass with an acceptable score.
 2. Before being admitted to this department a student must have completed a minimum of twelve semester hours of approved courses in sociology.
 3. Complete eighteen hours of sociology including Sociology 521, 601, 670 and 671. Statistics for Sociology is strongly urged for graduate students.
 4. Complete a minimum of six hours or a maximum of twelve hours in some acceptable field as a minor for the degree being sought.
 5. If the student writes a thesis, thirty-two hours, including the thesis, is required for the master's degree. If the student elects to substitute course work for the thesis, a total of thirty-six semester hours is required.
 6. Pass a comprehensive written examination covering the field of concentration in sociology.
 7. Pass an oral examination in defense of his thesis. The student's adviser will serve as chairman of the committee.
501. POPULATION PROBLEMS. 3 hrs. I.
Growth and distribution of population in the United States.
503. SOCIAL INVESTIGATION. 3 hrs. II.
Methods employed in sociological research with problems.
Prerequisite: Sociology 345.
506. FAMILY LIVING. 3 hrs. I, II, S.
The structure and functions of the family in seminar study.
(Generally presented as a workshop.)
508. THE FAMILY. 3 hrs. I, II, S.
The family as an institution with its role in society.
512. GROUP RELATIONS. 3 hrs. II.
Group participation, tensions, and controls in current times.

-
521. HISTORY OF SOCIAL THOUGHT. 3 hrs. II.
A survey of sociological literature in all periods.
526. THE NEGRO IN AFRICA AND AMERICA. 3 hrs. II.
(Formerly The American Negro.) The Negro and his status in Africa and the Americas.
527. ETHNIC RELATIONS. 3 hrs. II.
(Formerly Race Problems.) The sociology of ethnic relations.
528. MEDICINE IN MODERN SOCIETY. 3 hrs. II.
Changing patterns in medicine.
529. SOCIAL LEGISLATION. 3 hrs. I.
Social insurance as a means of meeting the hazards of life.
530. THE AMERICAN INDIAN. 3 hrs. II, S.
Study of Indian cultures.
531. CLASSROOM AND FIELD STUDIES. 3 hrs. II, S.
Introduction to social casework and counseling.
533. INDUSTRIAL SOCIOLOGY. 3 hrs. II.
Factors that affect human relations in business.
534. RURAL SOCIOLOGY OF THE TRI-STATE AREA. 3 hrs. II, S.
The human and natural resources of the area.
535. PROBLEMS OF JUVENILE DELINQUENCY. 3 hrs. II.
The nature, causes, and extent of juvenile delinquency.
536. AGING IN WESTERN CULTURE. 3 hrs. II.
Maturity and old age in the family and society.
539. SOCIAL STRATIFICATION. 3 hrs. I, S.
Class and caste in large-scale societies.
601. SOCIOLOGICAL THEORY. 3 hrs. II.
Systematic survey of theoretical sociology.
602. CONTEMPORARY SOCIAL CHANGE. 3 hrs. II.
Factors and influences responsible for social change.
611. SOCIAL PATHOLOGY. 3 hrs. II.
A seminar type of course dealing with the ills of society.
612. SOCIAL MOVEMENTS. 3 hrs. II, S.
Natural history and classification of social movements.
620. SEMINAR IN DELINQUENCY AND CRIMINOLOGY. 3 hrs. I, S.
Physical, social, economic and geographic factors in crime.
625. SOCIAL CONTROL. 3 hrs. II, S.
Formal and informal means of social control in society.
632. RURAL SOCIAL ORGANIZATION. 3 hrs. I, S.
Different forms of human associations in rural life.

668. SEMINAR. 1-3 hrs. II.
Topics vary depending on the needs of the student. (Independent research.)
- 670-671. RESEARCH. 2-2 hrs. I, II, S.
Further study of the fundamentals of research. (Independent study.)
Prerequisite: Sociology 345.
- 680-681. THESIS. 1-3; 1-3 hrs. I, II, S.
Theses are written under the guidance of the student's major adviser and a consulting committee of staff members appointed for that purpose.

SPEECH

Professors Hoak, Hope, Ranson
Associate Professors Buell, Garrett, Page
Assistant Professor Paesani

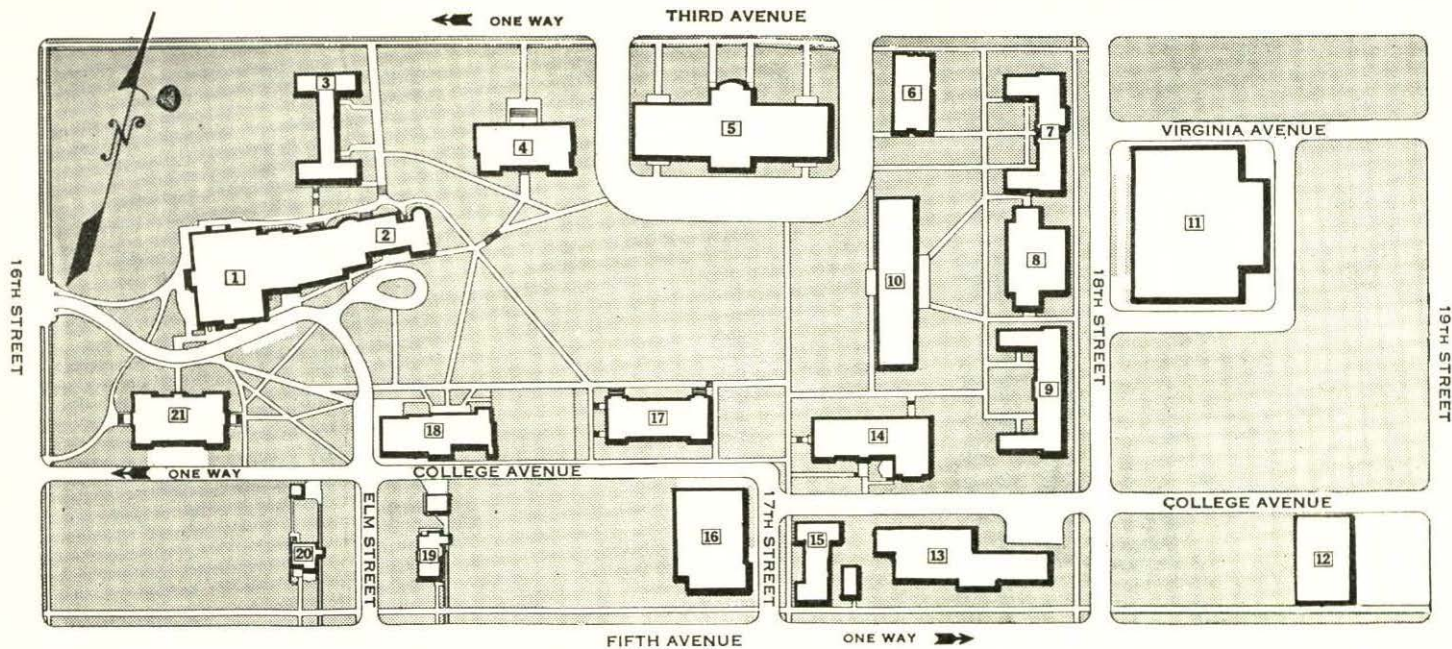
Courses may be taken with approval of student's adviser and instructor in the course.

Candidates for the master's degree in speech will be expected to fulfill the following requirements:

1. Before being admitted to the Department of Speech, a student must have completed a minimum of twelve semester hours of approved courses in this field.
 2. The following courses are required: Speech 601 and at least one course in each of the four areas of the department.
 3. Complete six hours minimum or a maximum of twelve hours in a minor field approved by his Speech adviser.
 4. Write a thesis. In certain cases the thesis may be omitted in lieu of further course work. In such instances the student is expected to have thirty-six semester hours in order to qualify for the master's degree.
 5. Pass a comprehensive written examination.
 6. Pass an oral examination in defense of the thesis.
503. PLAY DIRECTION. 3 hrs. I.
Primarily for those who will produce plays in schools, churches, and communities.
507. PERSUASION. 3 hrs.
A study of persuasive methods with special attention to the techniques of well-known contemporary speakers.
508. DISCUSSION AND CONFERENCE LEADERSHIP. 3 hrs.
Advanced, practical problems in group discussion, symposium, panel, public forum, and conference. The place of public discussion in the democratic process.

518. **SPEECH CORRECTION.** 3 hrs. I, II.
Survey of the field with emphasis on the causes, symptoms, and treatment of articulation and voice disorders.
520. **SPEECH CORRECTION, ADVANCED.** 3 hrs.
Study of the neurophysiological mechanism for speech production; embryology pertinent to cleft lip and palate; speech after laryngectomy.
Prerequisite: Speech 418 or 518.
531. **RADIO AND TELEVISION PRODUCTION.** 3 hrs.
Individual and group instruction in the techniques of radio and television programming, announcing, and acting. For interested students, special emphasis will be placed on sportscasting and on women's programs.
532. **USE OF RADIO AND TELEVISION IN THE CLASSROOM.** 3 hrs.
For those entering public relations, elementary, or high school teaching.
533. **RADIO AND TELEVISION PROGRAM PLANNING.** 3 hrs.
Planning the individual program for radio and television broadcast. A study of the fundamentals of program structure. Analysis of program forms of local and network shows.
540. **PLAY WRITING.** 3 hrs.
Principles of dramatic construction. Writing of one-act plays and sketches for experimental and public performance.
545. **CHILDREN'S THEATRE.** 3 hrs.
Theory, direction, and staging of plays for children. Creative dramatics is included.
546. **THEATRE HISTORY.** 3 hrs.
A survey of mankind's activities in the theatre from primitive times to the present.
547. **SCENE DESIGN.** 3 hrs.
The fundamental aesthetic and technical principles of staging are applied to the educational theatre. Specific attention is given to the generation of a design from the play manuscript. Laboratory work is provided through the University Theatre.
550. **THE DIRECTION OF SPEECH ACTIVITIES.** 3 hrs. II.
For those responsible for extra-curricular speech: debate, extempore speaking, oral reading, discussion, oratory.
560. **AUDIOLOGY.** 3 hrs.
Analysis of hearing losses, including causes, symptoms, accompanying adjustment problems, and retraining principles.
601. **PROBLEMS AND METHODS IN SPEECH RESEARCH.** 3 hrs.
604. **RHETORICAL BACKGROUND OF PUBLIC ADDRESS.** 3 hrs.
The principles of public speaking traced back through the years to the Greek and Roman rhetoricians.

631. SCENERY AND GRAPHIC ARTS FOR TELEVISION. 3 hrs.
Basic principles with actual field work in the studios of area television stations.
634. SEMINAR IN RADIO AND TELEVISION. 1-3 hrs.
Problems in the broadcast field on varied subjects which concern the industry. It may not be taken for credit more than two times.
649. SEMINAR IN THEATRE. 3 hrs.
Seminar in problems of dramatic production with particular stress on phases of play direction.
650. LEADERS AND MOVEMENTS IN SPEECH EDUCATION. 3 hrs.
The important schools of thought, trends in the philosophy of speech, leaders and their influence since the time of Dr. James Rush.
656. SEMINAR IN PUBLIC ADDRESS AND SPEECH EDUCATION. 1-3 hrs.
- 680-681. THESIS OR PROBLEM REPORT. 1-3; 1-3 hrs.



MAP OF

MARSHALL UNIVERSITY

HUNTINGTON, W. VA.

- | | | | |
|---------------------------|---|-------------------------------------|---|
| 1 Old Main Building | 7 Laidley Hall (women) | 12 Engineering Building | 18 Shawkey Student Union |
| 2 University Hall (women) | 8 University Dining Hall | 13 New Residence Hall for Men | 19 Everett Hall (Home Management House) |
| 3 Old Main Annex | 9 Hodges Hall (men) | 14 Jenkins Laboratory School | 20 President's Home |
| 4 James E. Morrow Library | 10 Lucy Prichard Hall (women) | 15 Laboratory School Annex | 21 Northcott Hall |
| 5 Science Building | 11 Health and Physical Education Building | 16 Student Christian Center | |
| 6 Music Building | | 17 Women's Physical Education Bldg. | |

Index

A

- Absences, 23
- Academic Information, 21
- Accreditation, 18
- Administrative Certificates, 60
- Administrative Officers, 5
- Admission, 41
- Adult Education, 33
- Advisers
 - Graduate, 42
 - Undergraduate, 21
- ART, Courses, 47
- Artists Series, 38
- Assignments and Credits, 24
- Athletics
 - Intercollegiate, 40
 - Intramural, 39
- Audio-Visual Program, 37
- Auditing
 - Credit, 24
 - Fees, 30

B

- Band, 38
- BIBLE AND RELIGION
 - Courses, 47
- BIOLOGICAL SCIENCES
 - Courses, 48
 - Master's Degree in, 47
- Biology
 - Program for high school teachers of, 63
- Board, 29
- Board of Education, 5
- BUSINESS ADMINISTRATION
 - Courses, 50
 - Program for Teachers, 64

C

- Calendar, University, 6
- Campus Map, 102

CERTIFICATES

- Administrative, 59
- Advanced Study in School Administration, 60
- Counselor, 61
- County Superintendent, 59
- Elementary Principal, 59
- General Supervision, 60
- Professional Elementary, 62
- Secondary Principal, 60
- Teacher-Counselor, 61
- Change of Schedule, 24

CHEMISTRY

- Courses, 53, 96
- Master's Degree in, 52
- Choral Groups, 38
- Classical Civilization, 75
- Classification of Students, 31
- Conduct, Student, 37
- Community Services, 34

COMMUNICATION ARTS

- Master's Degree in, 55
- Comprehensive Examinations, 46
- Convocations, 38
- Correspondence Directory, 8
- Council, Graduate, 16
- Counseling and Guidance, 42

COURSES

- Auditing of, 24
- Noncredit, 24
- Numbering of, 24
- Withdrawal from, 22

CREDIT

- Semester Hour, definition of, 21
- Semester Load, 24

D

- Dates, see Calendar, 6
- DEGREES, Graduate School
 - Master of Arts, 41
 - Master of Science, 41
- Dining Hall, 35
- Directory, Correspondence, 8
- Divisions of University, 19
- Donald Court, 35

Index—continued

E

- ECONOMICS
 - Courses, 56
- EDUCATION
 - Courses, 68
 - Major in, 57, 96
 - Educational Research, 59
 - Elementary Schools, programs for teachers in, 62
 - Employment, Student, 37
- ENGLISH
 - Courses, 73
 - Master of Arts in, 73
 - Program for teachers of, 64
- Evening School, 33
- Examinations
 - Comprehensive, 46
- Expenses, Estimate of, 29
- EXTENSION CLASSES
 - Admission to, 33
 - Credit for, 33
 - Fees for, 33
 - Graduate Credit for, 34
- Extra-curricular activities, 33

F

- Faculty, 9
- Faculty-Student Advisory Program, 21
- FEES
 - Auditing, 30
 - Board, 29, 35
 - Estimate of Expenses, 29
 - Extension Courses, 33
 - Fractional Hours, 30
 - Refunds, 30
 - Rent
 - Hodges Hall, 28
 - Laidley Hall, 28
 - Prichard Hall, 28
 - Residence Hall for Men, 28
 - Summer Term, 28
 - Summer Workshop, 28
 - University Hall, 28

FEES (Continued)

- Registration Fees
 - Tuition, 27
 - Health Service, 27
 - Full-Time Student, 27
 - Nonresident, 27
 - Part-time Student, 27
 - Resident, 27
- Special Fees
 - Cap and Gown, 28
 - Graduation, 28
 - Laboratory, 28 (see also with course listings)
 - Late Registration, 28
 - Music, 28
 - Summer Workshop, 28
 - When Payable, 27
- Foreign Languages
 - Classical Civilization, 75
- Forums, 38
- French, 75
- Full-time Student, definition of, 24

G

- General Science, Courses in, 96
- GEOGRAPHY
 - Courses, 77
 - Master of Arts in, 76
- GEOLOGY
 - Courses, 78
 - German, 75
 - Grades and Quality Points, 21
 - Graduate Record Examination, 42
 - Graduate Students, 34
- GRADUATE SCHOOL
 - Admission to, 41, 45
 - Admission to candidacy, 45
 - Admission to Extension Classes, 42
 - Advisers, 42
 - Certificates
 - Administrative, 59
 - Advanced Study in
 - School Administration, 60
 - Counselor, 61
 - County Superintendent, 59

Index—continued

GRADUATE SCHOOL (Continued)

Certificates (Continued)

- Elementary Principal, 59
- General Supervision, 60
- Secondary Principal, 60
- Teacher Education
 - Counselor, 61
 - Elementary, 62
 - Professional Elementary, 62
 - Teacher-Counselor, 61

Council, 16

Courses, 41

Credit, Extension, 45

Credit, Transfer, 45

Degrees

- General Requirements, 41
- Requirements of Major Fields
 - Biological Sciences, 47
 - Chemistry, 52
 - Communication Arts, 55
 - Education, 57
 - English, 73
 - Geography, 76
 - History, 79
 - Library Science, 81
 - Music, 84
 - Political Science, 91
 - Psychology, 93
 - Sociology, 97
 - Speech, 99

Educational Research, 59

Examinations

- Aptitude, 58
- Chemistry Entrance, 52
- Comprehensive, 46
- Graduate Record, 41
- Music, 85

Extension Courses, 34

Faculty, 9

General Information, 41

General Requirements, 42

Major Fields, 41

Minor Fields, 41

Objectives of, 41

Part-time Students, 45

Program for School Librarians, 66

GRADUATE SCHOOL (Continued)

Programs for Teachers

- Counseling and Guidance, 61
- In Elementary Schools, 62
- In Secondary Schools, 67
- Of Biological Science, 63
- Of Business Administration, 64
- Of English, 64
- Of Home Economics, 64
- Of Physical Science, 65
- Of Social Science, 66
- Residence Requirements, 45
- Thesis Requirements, 44
- Graduation Fee, 28
- Graduation Requirements
- Quality Point Ratio, 21

H

Health Services, 36

History of University, 17

HISTORY

- Courses, 79
- Master's Degree in, 79

Hodges Hall, 35

HOME ECONOMICS

- Courses, 80
- Program for Teachers of, 64
- Home Economics Education

Courses, 80

Hospitalization, 36

HOUSING

- Family Dwelling Units, 35
- Residence Halls
 - Fees, 28
- Rooming Houses, 35
- Huntington, 19

I

Intercollegiate Athletics, 40

Intramural Athletics, 39

Index—continued

J

Journalism, 81

L

Laboratory Fees, 28 (see also with
course listings)
Languages, Foreign, 75
Latin, 75
Library, 36
Library Science
Courses, 81
Program for School Librarians, 66
Location of University, 19

M

Map, Campus, 102
Master of Arts, 41
Master of Science, 41

MATHEMATICS

Courses, 83

MUSIC

Certificates
Special Supervisor's, 85
Courses, 86
Organizations, 38
Music Education
Courses, 87
Master of Arts in, 84

N

Noncredit Courses, 24
Nonresident Fees, 27, 31
Numbering of Courses, 24

O

Officers of Administration, 5
Orchestra, 38

P

Philosophy
Courses, 90
PHYSICAL EDUCATION
Courses, 91
Physical Science
Program for Teachers, 65
Physics
Courses, 96
Placement and
Student Employment, 37
POLITICAL SCIENCE
Courses, 91
Master's Degree in, 91
Professional Elementary
Certificate, 62
PSYCHOLOGY
Courses, 94
Master's Degree in, 93
Psychological Clinic, 36
Publications
Academic, 25
Student, 39
Purpose of University, 17

Q

Quality Points, 21

R

Radio (see Communication Arts)
Radio Station WMUL, 38
Religion, Bible and, 47

S

Safety Education, 95
Schedule, Change of, 24
SCIENCE EDUCATION
Chemistry, 96
General, 96
Physics, 96

Index—continued

Secondary Schools

- Program for Teachers, 67
- Semester Hour, definition, 21
- Semester Load, 24
- SOCIAL STUDIES**
 - Program for Teachers, 66

SOCIOLOGY

- Courses, 97
- Master's Degree in, 97
- Spanish, 76

SPEECH

- Clinic, 36
- Courses, 99
- Master's Degree in, 99
- Student Conduct, 37
- Student Publications, 39

T

Teachers

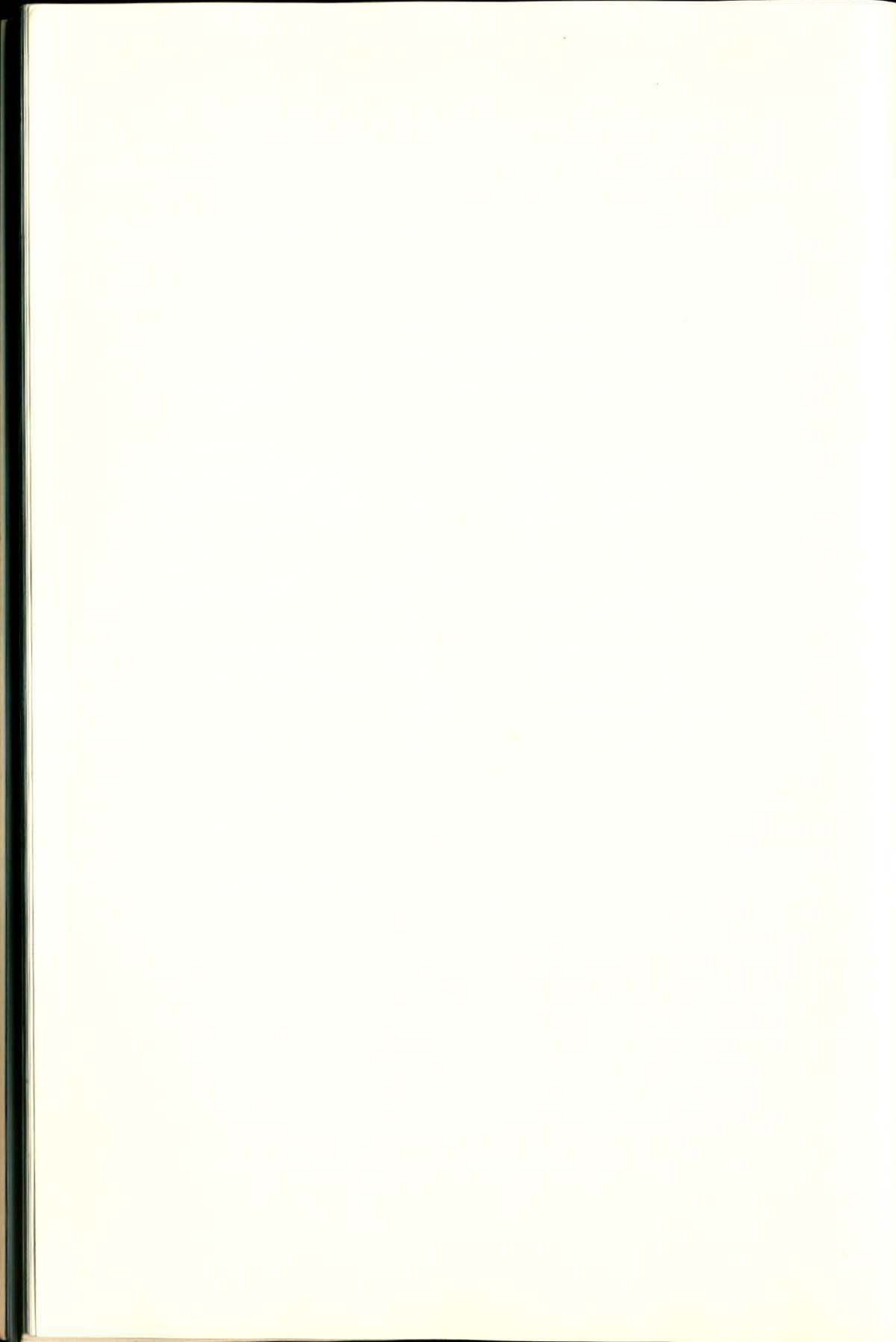
- Program for Elementary, 62
- Program for Secondary, 67
- Television (see Communication Arts and Speech)
- Theatre, 38
- Transcripts, 24
- Transfer Students
 - Graduate Credit, 45

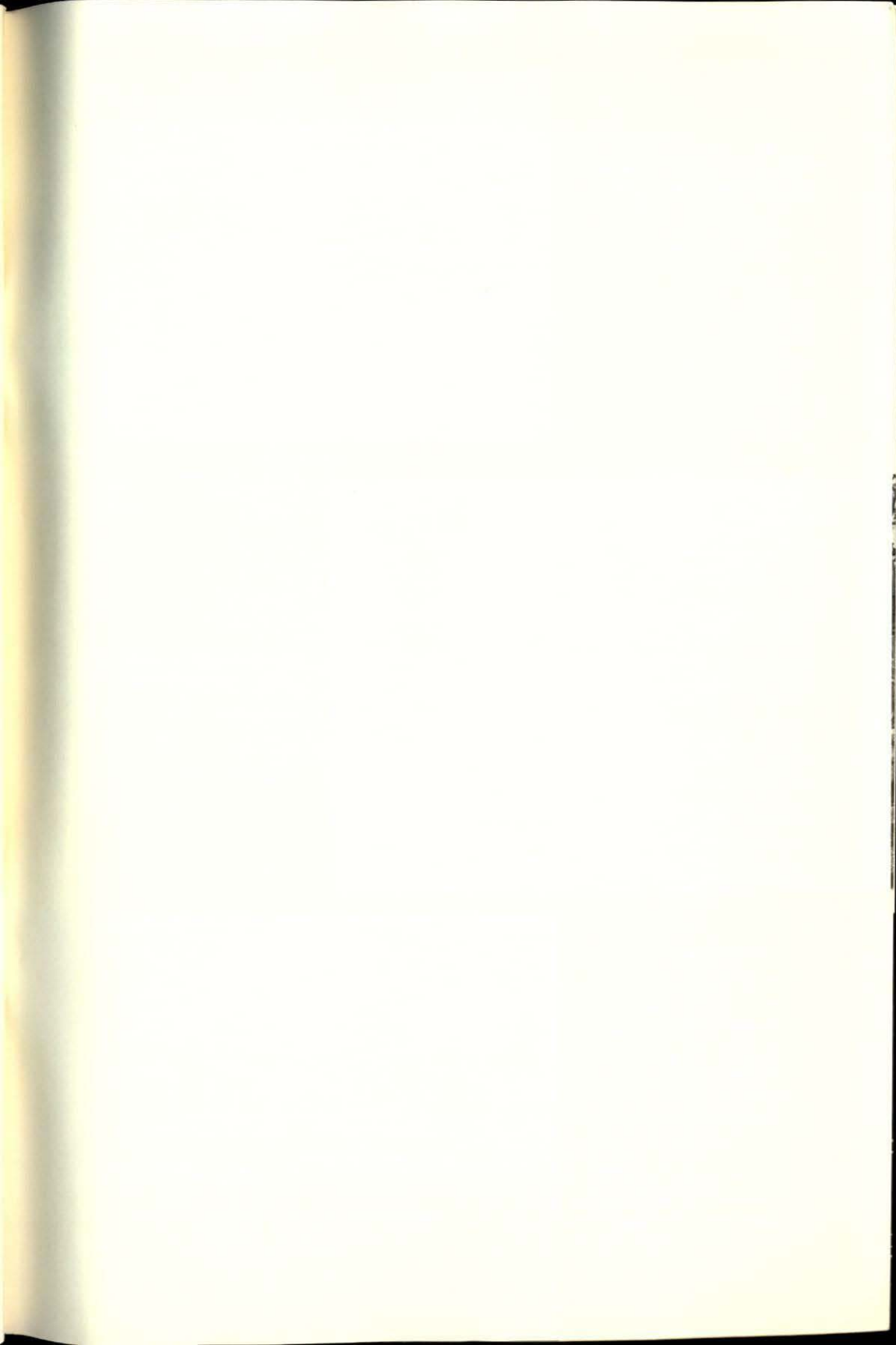
W

- West Virginia Board of Education, 5
- Withdrawal, 22









COLOPHON

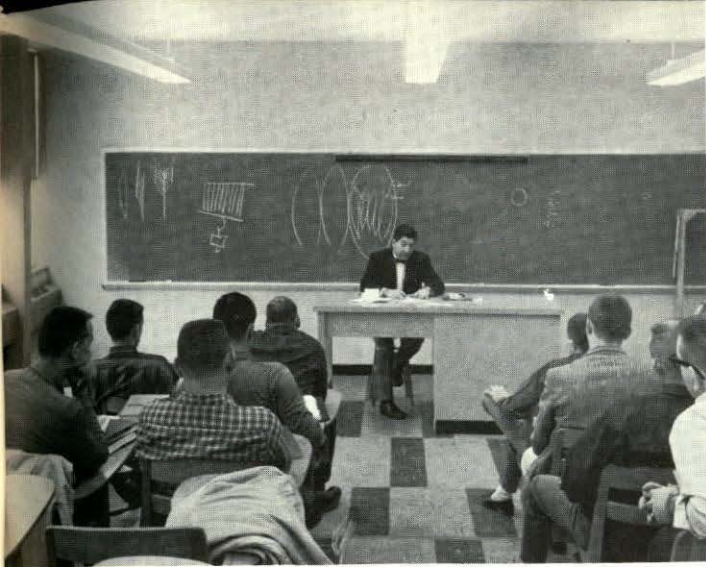
*Body type is 9-point Linotype Bookman.
Other types used are Linotype
Trade Gothic and Ludlow Garamond.*

*Paper is 60-pound Mead Flat White
English Finish.*

*Cover stock is 65-pound Beckett White
Antique Cover.*

*Text printed by letterpress, cover and
photographs by offset lithography.*

*Composition and printing by
Standard Printing & Publishing Company,
Huntington, West Virginia.*



Classroom lectures are supplemented by assigned study, library research, and laboratory practice.

ROTC plays a large part in the lives of many male students.



Relaxation and discussion are often combined in the Student Union.



The Campus Christian Center, above, is a religious and social center for students of all faiths.



Lasting friendships are made in the dormitories.

The Residence Hall for Men, right, and Hodges Hall are men's dormitories.





Shawkey Student Union—
center for social life and
Student Government.



Northcott Hall — home of
the Art, Business Adminis-
tration, and Home Eco-
nomics Departments.



Laidley Hall—one of three
women's dormitories.



The parade of floats plays a major part in the festivities of Homecoming week-end.

The modern Health & Physical Education Building houses the Departments of Men's Physical Education, Military Science, and Athletics, as well as the Health Service.



University Theatre productions are among the many extracurricular activities available.

OFFICE DIRECTORY

(All administrative offices are located in Old Main)

Administrative Assistant to the President	107
Admissions	105
Adult Education	107
Alumni	129
Applied Science College	116
Arts and Sciences College	115
Bookstore	Basement
Buildings and Grounds	Basement
Comptroller	103
Dean of Men	116
Dean of Women	109
Duplicating Department	Basement
Graduate School	111
Mail Room	Basement
News & Publications	112
Placement Office	114
President	108
Registrar	105
Teachers College	113
Treasurer	103
Veterans Office	105
Vice President of Academic Affairs	110
Vice President of Business and Finance	101

MARSHALL UNIVERSITY

Registrar and Director of Admissions
Huntington 1, West Virginia

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