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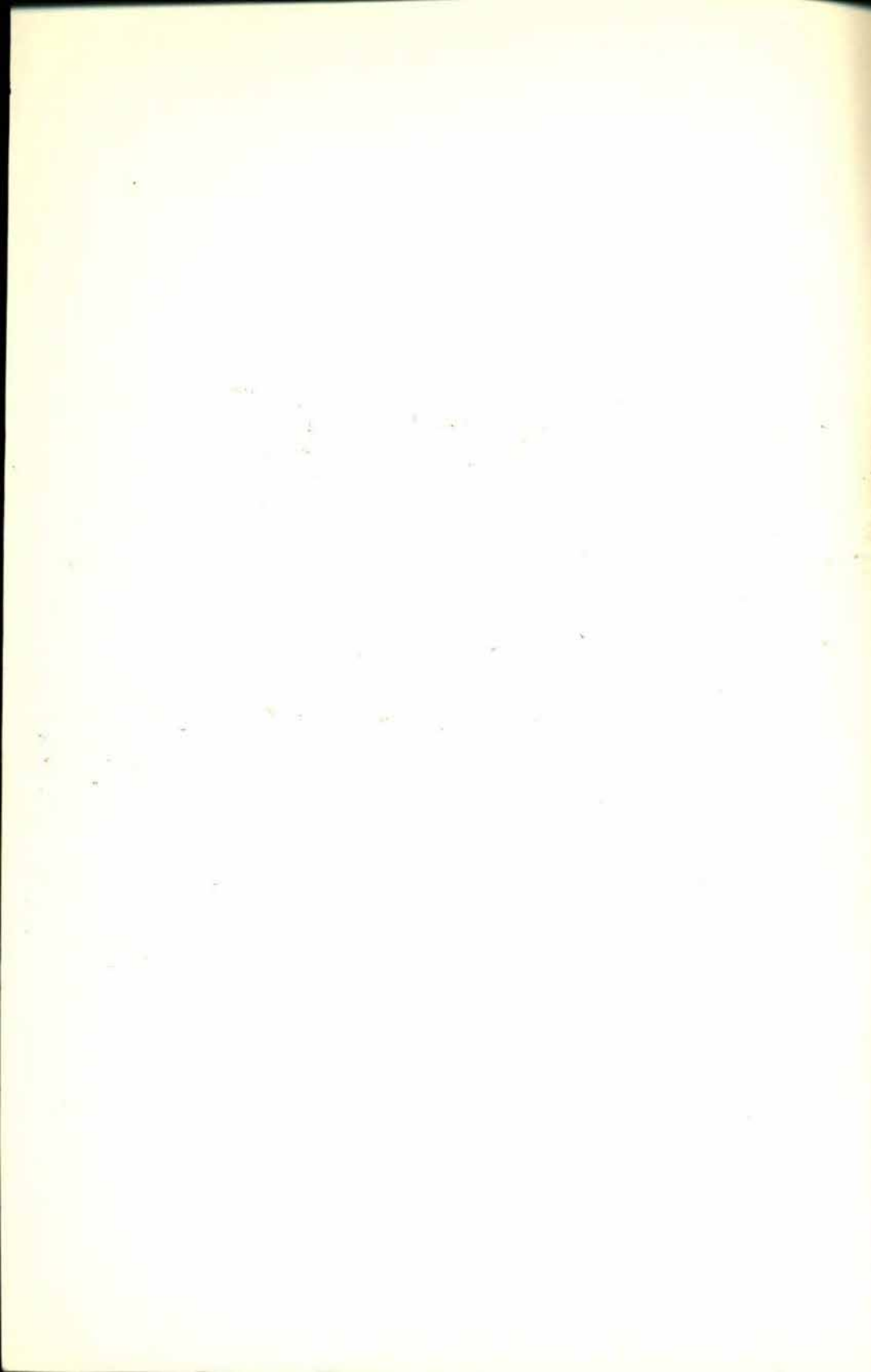
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# **MARSHALL UNIVERSITY**

**Graduate Catalog**

**1971-72**





# **MARSHALL UNIVERSITY**

## **CATALOG OF THE GRADUATE SCHOOL**

**1971 - 1972**

**HUNTINGTON, WEST VIRGINIA**

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

**Admission**

Dean of the Graduate School

**Alumni Affairs**

Director of Alumni Affairs

**Business Matters, Expenses**

Vice President for Business Affairs

**Continuing Education**

Director of Continuing Education

**Employment, Placement**

Director of Career Planning and Placement

**Graduate Study**

Dean of the Graduate School

**Student Affairs**

Vice President for Student Affairs

**Student Housing**

Assistant Dean of Students for Housing

**Scholarships and Loans**

Director of Student Financial Assistance

**Transcripts, Records**

Office of the Registrar

**Veterans' Affairs**

Veterans' Affairs

**Volume 11**

**Number 1**

**April, 1971**

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Huntington, West Virginia 25701**

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

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## FIRST SEMESTER

## SECOND SEMESTER

|                     |   |
|---------------------|---|
| January 11          | Registration  |
| January 11, Evening | Evening Registration  |
| January 12          | Registration Continues  |
| January 13          | Class Work Begins   |
| January 14          | Late Registration   |
| January 17          | Late Registration Closes at 8:00 p.m.                               |
| January 28          | Application for Graduation due at the Office of the Graduate School |
| March 3             | Mid-Semester  |
| March 6-11          | Spring Vacation   |
| March 31            | Good Friday Holiday   |
| April 28            | Last Day to Withdraw With Grade of 'W'                              |
| April 28            | Final Draft of Theses Due in Office of Advisers                     |
| April 29            | Written Examination for Master's Degree                             |
| May 1-13            | Oral Examination for the Master's Degree                            |
| May 5               | Last Day of Classes   |
| May 6-7-8-9         | Study Days  |
| May 10-13           | Final Examinations  |
| May 12              | Approved Theses Due in Office of Graduate School                    |
| May 14              | Commencement  |
| May 16              | Final Grades Due  |

## WEST VIRGINIA BOARD OF REGENTS

|                                |                |
|--------------------------------|----------------|
| Dr. Prince B. Woodard          | Chancellor     |
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| Mr. David B. Dalzell           | Member         |
| Mr. Edward H. Greene           | Member         |
| Mrs. Elizabeth Harden Gilmore  | Member         |
| Mr. Albert M. Morgan           | Member         |
| The Honorable Okey L. Patteson | Member         |

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| Judge Dennis R. Knapp        | Member        |
| Mr. Leonard H. Samworth      | Member        |
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|   |  |
|---|--|
| President                                 | John G. Barker, B.S., M.S., Ph.D.  |
| President Emeritus                        | Stewart Harold Smith, B.S., M.A., Ph.D.,<br>Litt.D., LL.D., L.H.D., L.H.D. |
| Assistant to the President                | Donald K. Carson, B.A., Ph.D.  |
| Vice President for Academic Affairs       | Donald N. Dedmon, B.S., M.A., Ph.D.  |
| Dean of College of Arts and Sciences      | George J. Harbold, B.A., M.A., Ph.D.                                       |
| Assistant Dean                            |  |
| Dean of Teachers College                  | Robert B. Hayes, A.B., Ed.M., Ed.D.  |
| Assistant Dean                            | William S. Deel, B.A., M.S., Ed.D.   |
| Dean of College of Applied Science        |  |
| Dean of School of Business                | R. W. Morell, M.B.A., Ph.B., Ph.D.   |
| Assistant Dean                            | Thomas Bishop, B.S., M.A., Ph.D.   |
| Dean of Graduate School                   | John R. Warren, A.B., M.A., Ph.D.  |
| Director of Institutional Self Study      | A. Mervin Tyson, A.B., M.A., Ph.D.   |
| Director of Continuing Education          | Paul Collins, A.B., M.A.   |
| Registrar                                 | Robert H. Eddins, B.S., M.S.   |
| Librarian                                 | Harold W. Apel, A.B., M.S., in Library Science                             |
| General Manager of WMUL-TV                | Terry M. Hollinger, Met. Engr., M.A.                                       |
| Director of Computer Center               | Karl C. Thomas, B.A.   |
| Vice President for Business Affairs       | Joseph C. Peters, B.S., M.B.A.   |
| Division Director                         | Richard D. Vass, B.B.A.  |
| Director of Plant Operations              | Joseph S. Soto, A.B., B.S., M.A.   |
| Director of Personnel                     |  |
| Director of Purchasing                    | Robert G. Bradley, B.S.  |
| Vice President for Student Affairs        |  |
| Dean of Students (Acting)                 | Frank H. Julian, A.B., J.D.  |
| Assistant Dean of Students                |  |
| for Special Programs                      | Mary Louise Gallagher, A.B., M.Ed.   |
| Assistant Dean of Students for Housing    | Warren S. Myers, A.B., M.A.  |
| Assistant Dean of Students                |  |
| for Activities and Organizations          | Jeffrey G. Nemens, B.A., M.A.  |
| Director of Admissions                    | James W. Harless, B.S. Ed., M.A.   |
| Director of Student Financial Aid         | Richard G. Mund, B.A., M.A., Ph.D.   |
| Director of Counseling Center             |  |
| Director of Special Services              | Ted R. Morford, A.B., M.A.   |
| Director of Student Health Center         | Russell P. Hall, B. A., B.S., M.D.   |
| Director of Development                   | John S. Calles, A.B., M.A.   |
| Director of Alumni Affairs                | Howard B. St. Clair, B.S. in Military Science                              |
| Director of Career Planning and Placement | Reginald A. Spencer, B.B.A.  |
| Director of Information and Publications  | James A. Martin, A.B.  |
| Director of Athletics                     | Joseph H. McMullen, Sc.B., A.B., M.A.                                      |

# The Graduate Council

|  |           |            |
|--|-----------|------------|
| John R. Warren, Ph.D., Dean of the Graduate School           | . . . . . | Chairman   |
| Donald N. Dedmon, Ph.D., Vice President for Academic Affairs | . . . . . | Ex-officio |
| Sara E. Anderson, Ed.D., Professor of Office Administration  | . . . . . | 1972       |
| Thomas S. Bauserman, Ph.D., Professor of Mathematics         | . . . . . | 1973       |
| Edwin A. Cubby, Ph.D., Professor of Social Studies           | . . . . . | 1973       |
| Marvin O. Mitchell, Ph.D., Professor of English              | . . . . . | 1974       |
| Robert D. Olson, Ph.D., Professor of Speech                  | . . . . . | 1972       |
| Bernard Queen, Ph.D., Professor of Education                 | . . . . . | 1972       |
| Walter E. Regula, Ph.D., Associate Professor of Education    | . . . . . | 1972       |
| Howard A. Slaatte, Ph.D., Professor of Philosophy            | . . . . . | 1973       |
| Phil E. Suiter, Ph.D., Associate Professor of Education      | . . . . . | 1974       |

# The Faculty

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

ABBAS, JABIR A., Associate Professor of Political Science, 1962  
Ph.D. 1971, Indiana University

AKKIHAI, RAMCHANDRA G., Associate Professor of Economics, 1968  
Ph.D. 1969, University of Tennessee

ALDRED, FRANCIS K., Associate Professor of History, 1967  
Ph.D. 1967, University of Virginia

ALEXANDER, ROBERT P., Associate Professor of Management, 1958  
Ph.D. 1969, Ohio University

ALMALEL, CORAZON, Associate Professor of Modern Languages (Spanish),  
1970  
Ph.D. 1962, University of Madrid

ALSIP, JONATHAN E., Assistant Professor of Psychology, 1970  
Ph.D. 1969, Iowa State University

ANDERSON, SARA E., Professor of Office Administration, 1966  
Ed.D. 1964, Indiana University

ARHELGER, HOMER, Professor of Education, 1962  
Ed.D. 1962, Indiana University

ASH, STANLEY W., Associate Professor of Biological Sciences, 1956  
M.A. 1954, Marshall University; graduate study, University of  
Pennsylvania, Florida State University

ASHFORD, WILLIAM F., Professor of Marketing, 1970  
Ph.D. 1969, Ohio University

BAILEY, ALAN, Assistant Professor of Geology, 1971  
Ph.D. 1970, Michigan State University

BALSHAW, PAUL A., Associate Professor of Music, 1965  
D.Mus.A. 1963, Eastman School of Music

BARBOUR, RICHARD L., Associate Professor of Music, 1969  
Ph.D. 1968, University of Oregon

BARKER, LAWRENCE W., Assistant Professor of Education, 1970  
Ed.D. 1968, West Virginia University

- BAUER, DARYLL D., JR., Associate Professor of Education, 1970  
Ed.D. 1970, University of Virginia
- BAUSERMAN, THOMAS, Professor of Mathematics, 1955  
Ph.D. 1961, University of Pittsburgh
- BENNETT, GRACE, Professor of Home Economics, 1965  
Ph.D. 1957, Purdue University
- BIRD, MARGARET A., Assistant Professor of Biological Sciences (Zoology), 1970  
Ph.D. 1970, North Carolina State University
- BISHOP, THOMAS S., Associate Professor of Management, 1969  
Ph.D. 1969, University of Iowa
- BLANKENSHIP, MARTHA D., Associate Professor of Home Economics, 1961  
Ph.D. 1970, Pennsylvania State University
- BONNETT, RICHARD B., Assistant Professor of Geology, 1968  
Ph.D. 1970, Ohio State University
- BRITTON, ROBERT L., Professor of Geography, 1930  
M.S. 1930, University of Chicago; graduate study, University of Chicago, Ohio State University, Marshall University
- BROMLEY, NORMAN P., Assistant Professor of Finance, 1969  
J.D. 1962, West Virginia University
- BROWN, JACK R., Professor of English, 1948  
Ph.D. 1937, Northwestern University
- BROWN, MAHLON C., Professor of Social Studies, 1955  
D.S.S. 1959, Syracuse University
- BUELL, STEPHEN D., Director of Educational Radio and TV, and Professor of Speech, 1955  
Ph.D. 1962, Ohio State University
- CAMPBELL, MARGARET C., Associate Professor of Education, 1956  
M.A. 1956, George Peabody College for Teachers; graduate study, George Peabody College for Teachers, Marshall University
- CARPENTER, ARTHUR S., Professor of Art, 1951  
Ed.D. 1958, Pennsylvania State University
- CARSON, DONALD K., Assistant to the President and Assistant Professor of Political Science, 1969  
Ph.D. 1969, University of Kentucky
- CERVERIS, MICHAEL E., Associate Professor of Music, 1969  
D.M.A. 1968, West Virginia University

- CHAKRABARTY, MANOJ R., Professor of Chemistry, 1963  
Ph.D. 1962, University of Toronto
- CHAPMAN, SARA S., Assistant Professor of English, 1967  
Ph.D. 1970, Ohio University
- CHEZIK, DONALD D., Assistant Professor of Psychology, 1970  
Ph.D. 1971, Indiana University
- CHOI, SOO BOCK, Professor of Political Science, 1963  
Ph.D. 1963, University of Maryland
- CHRIETZBERG, AGNES L., Associate Professor of Physical Education, 1969  
Ph.D. 1969, Florida State University
- CLAGG, SAM E., Professor of Geography, 1948  
Ed.D. 1955, University of Kentucky
- COFFEY, WILLIAM E., Associate Professor of Social Studies, 1969  
Ph.D. 1970, West Virginia University
- COLLINS, PAUL H., Director of Continuing Education and Associate Professor  
of Education, 1949  
M.A. 1943, West Virginia University; graduate study, Harvard University,  
University of Virginia
- COMFORT, RICHARD O., Professor of Sociology, 1971  
Ph.D. 1946, George Peabody College
- CORTES, BEVERLY, Associate Professor of Speech, 1969  
Ed.D. 1969, West Virginia University
- CREIGHTON, JOHN W., Associate Professor of Music, 1945  
M.A. 1942, Northwestern University; graduate study, Saint Louis  
University, Juilliard School of Music, Northwestern University
- CUBBY, EDWIN A., Professor of Social Studies, 1949  
Ph.D. 1962, Syracuse University
- CYRUS, PHYLLIS H., Associate Professor of Management, 1960  
J.D. 1938, West Virginia University
- DAVIDSON, WILLIAM R., Associate Professor of Music, 1955  
M.Mus. 1947, University of Illinois; graduate study, University of Illinois,  
Columbia University
- DEDMON, DONALD N., Vice President for Academic Affairs and Professor of  
Speech, 1968  
Ph.D. 1961, University of Iowa
- DOUGLASS, JAMES E., Professor of Chemistry, 1965  
Ph.D. 1959, University of Texas

EAST, N. BENNETT, Assistant Professor of Speech, 1970  
Ph.D. 1970, University of Kansas

FEI, PETER K., Associate Professor of English, 1967  
Ph.D. 1970, University of Michigan

FELTY, WALTER C., Associate Professor of Education, 1950  
M.A. 1950, Marshall University; graduate study, Indiana University,  
Pennsylvania State University

FERGUSON, WILLIAM F., Assistant Professor of Education, 1968  
Ed.D. 1969, University of Mississippi

FISHER, DOROTHY A., Professor of Biological Sciences (Zoology), 1946  
Ph.D. 1942, Cornell University; postdoctoral study, Cornell University,  
University of North Carolina, University of Minnesota, University of  
Michigan

FULKS, DANNY G., Associate Professor of Education, 1968  
Ed.D. 1968, University of Tennessee

GAIN, RONALD E., Assistant Professor of Biological Sciences (Botany), 1969  
Ph.D. 1968, West Virginia University

GARRETT, RUTH C., Professor of Speech, 1953  
Ph.D. 1968, Ohio University

GERKE, ROBERT S., Associate Professor of English, 1968  
Ph.D. 1968, University of Notre Dame

GIBBINS, NEIL L., Professor of Education, 1963  
Ph.D. 1960, Ohio State University

GILLESPIE, JAMES P., Associate Professor of Biological Sciences, 1961  
Ph.D. 1970, George Peabody College for Teachers

GOODWIN, JOHN, Associate Professor of Bible and Religion, 1968  
Ph.D. 1970, Temple University

GORDON, BILL K., Associate Professor of Education, 1967  
Ed.D. 1967, University of Kentucky

GOULD, ALAN B., Associate Professor of History, 1969  
Ph.D. 1969, West Virginia University

GREEN, N. BAYARD, Professor of Biological Sciences (Zoology), 1938  
Ph.D. 1952, Ohio State University; Sc.D. 1967, Davis and Elkins College

HABEL, SAMUEL T., Professor of Sociology, 1964  
Ph.D. 1945, University of Edinburgh; postdoctoral study, University of  
North Carolina

HANRAHAN, EDWARD S., Professor of Chemistry, 1963  
Ph.D. 1959, West Virginia University

HARBOLD, GEORGE J., Professor of Speech, 1947  
Ph.D. 1955, Ohio State University

HARDMAN, D. HUNTER, Professor of Mathematics, 1946  
Ph.D. 1963, University of Pittsburgh

HAYES, ROBERT B., Dean of Teachers College and Professor of Education,  
1965  
Ed.D. 1960, University of Kansas

HEATH, HERSCHEL, Professor of History, 1946  
Ph.D. 1933, Clark University

HESS, CLARKE F., Professor of Education, 1951  
Ed.D. 1958, University of Pennsylvania

HICKS, DOROTHY E., Professor of Physical Education, 1969  
Ed.D. 1964, University of Tennessee

HOAK, EUGENE Q., Professor of Speech, 1960  
Ph.D. 1954, Ohio State University

HOBACK, JOHN H., Professor of Chemistry, 1945  
Ph.D. 1947, West Virginia University

HOGAN, JOHN W., Associate Professor of Mathematics, 1969  
Ph.D. 1969, Virginia Polytechnic Institute

HOPE, BEN W., Professor of Speech, 1947  
Ph.D. 1960, Ohio State University

HOY, LOUISE P., Professor of Classical Languages, 1963  
Ph.D. 1952, Bryn Mawr College

HUNTER, HELEN S., Assistant Professor of Education, 1957  
M.A. 1956, Marshall University; M.A. 1964, Marshall University

IMPERI, LEO V., Associate Professor of Music, 1952  
M.A. 1951, Columbia University; graduate study, Columbia University,  
University of Denver

IRVIN, JAMES E., Professor of Education, 1959  
Ph.D. 1958, Ohio State University

JENKINS, OFFA LOU, Professor of Education, 1965  
Ed.D. 1967, University of Virginia; postdoctoral study, Purdue University

JENNINGS, LOUIS B., Professor of Bible and Religion, 1948  
Ph.D. 1964, University of Chicago

- JERVIS, JACK, JR., Associate Professor of Education, 1964  
Ed.D. 1971, University of Tennessee
- JINKS, WILLARD L., Assistant Professor of Biological Sciences (Zoology),  
1967  
Ph.D. 1968, University of Kentucky
- JONES, CHARLES I., Professor of Education, 1969  
Ed.D. 1967, Florida State University
- JONES, LAVELLE T., Associate Professor of Music, 1947  
M.A. 1942, George Peabody College for Teachers; graduate study,  
Cincinnati Conservatory of Music, George Peabody College for Teachers,  
University of Denver, Temple University, University of Maine, Marshall  
University
- KELLNER, CLARENCE A., Associate Professor of Speech, 1969  
Ph.D. 1969, Ohio University
- KHATENA, JOE, Associate Professor of Education, 1969  
Ph.D. 1969, University of Georgia
- KINGSBURY, C. LAWRENCE, Professor of Music, 1950  
Ed.D. 1945, Indiana University
- KONG, CHANG L., Associate Professor of Chemistry, 1967  
Ph.D. 1967, St. Louis University
- KOONTZ, DAVID E., Associate Professor of Education, 1970  
Ph.D. 1967, Kent State University
- LA CASCIA, JOSEPH S., Professor of Economics, 1969  
Ph.D. 1967, University of Florida
- LANEGGER, ALFRED P., Associate Professor of Music, 1947  
M.M. 1947, Syracuse University; Diploma, State Academy of Music,  
Munich, 1929
- LARSON, JOHN W., Assistant Professor of Chemistry, 1968  
Ph.D. 1968, Carnegie-Mellon University
- LEMKE, THOMAS F., Assistant Professor of Chemistry, 1970  
Ph.D. 1968, Lehigh University
- LEPLEY, ARTHUR R., Professor of Chemistry, 1965  
Ph.D. 1958, University of Chicago
- LICHTENSTEIN, JOSEPH M., Associate Professor of Education, 1946  
M.A. 1940, Fordham University; graduate study, Columbia University,  
Rutgers University, University of Cincinnati, New York University
- LIEBERMAN, JULIUS, Professor of Modern Languages (German), 1946  
Ph.D. 1943, University of Cincinnati

LITTLER, JOHN G. F., Assistant Professor of Chemistry, 1968  
Ph.D. 1966, Nottingham University

LUSTIG, VINCENT F., Assistant Professor of Speech, 1969  
Ph.D. 1970, Ohio State University

McCOY, THOMAS, Assistant Professor of Journalism, 1970  
J.D. 1970, Oklahoma City University

McCOY, ZANE, Associate Professor of Education, 1969  
Ph.D. 1970, Ohio State University

MANAKKIL, THOMAS J., Associate Professor of Physics and Physical Sciences  
(Physics), 1967  
Ph.D. 1967, New Mexico State University

MARTIN, DONALD C., Professor of Physics and Physical Sciences (Physics),  
1943  
Ph.D. 1936, Cornell University; postdoctoral study, Northwestern  
University, University of New Mexico

MARTIN, JOHN L., Professor of Modern Languages (Spanish), 1935  
Ph.D. 1940, University of Pittsburgh

MATZ, CLAIR W., JR., Assistant Professor of Political Science, 1970  
Ph.D. 1970, University of Virginia

MILLER, CARL B., Associate Professor of Marketing, 1946  
M.A. 1942, Northwestern University; graduate study, University of  
Kentucky, University of Colorado, Boston University

MILLS, HOWARD L., Professor of Biological Sciences (Botany), 1951  
Ph.D. 1951, State University of Iowa

MININNI, FRANK J., Associate Professor of Philosophy, 1970  
Ph.D. 1970, University of Innsbruck

MITCHELL, MARVIN O., Professor of English, 1952  
Ph.D. 1953, University of North Carolina

MODLIN, PHILIP E., Assistant Professor of Biological Sciences, 1957  
M.A. 1957, Marshall University; graduate study, West Virginia University

MOFFAT, CHARLES H., Professor of History, 1946  
Ph.D. 1946, Vanderbilt University

MORELL, R. W., Dean of School of Business and Professor of Business  
Administration, 1969  
Ph.D. 1957, St. Louis University; postdoctoral study, Indiana University

MORGAN, RONALD R., Assistant Professor of Education, 1971  
Ph.D. 1970, Arizona State University

MOSHER, MELVYN W., Assistant Professor of Chemistry, 1969  
Ph.D. 1968, University of Idaho

NOVAK, ELAINE A., Professor of Speech, 1956  
Ph.D. 1963, Ohio State University

OBERLY, RALPH E., Assistant Professor of Physics and Physical Sciences  
(Physics), 1970  
Ph.D. 1970, Ohio State University

O'CONNELL, THOMAS S., Associate Professor of Music, 1948  
M.M. 1947, University of Michigan; graduate study, University of Michigan

OLIPHANT, C. A. BILL, Professor of Journalism, 1970  
Ph.D. 1968, University of Iowa

OLSON, ROBERT D., Professor of Speech, 1968  
Ph.D. 1965, Northwestern University

PAGE, CLAYTON R., Professor of Speech, 1946  
M.A. 1939, Pennsylvania State University; M.A. 1940, Baylor University,  
graduate study, State University of Iowa

PARRISH, VIRGINIA N., Associate Professor of Modern Languages (French),  
1947  
M.A. 1940, University of Kentucky, graduate study, University of  
Kentucky

PERL, WALTER H., Professor of Modern Languages (German), 1948  
Ph.D. 1936, University of Zurich

PERRY, SIMON D., Professor of Political Science, 1962  
Ph.D. 1961, Michigan State University

PHILLIPS, EDWARD S., Assistant Professor of Economics, 1971  
Ph.D. 1970, University of Colorado

PITTMAN, PHILIP M., Associate Professor of English, 1968  
Ph.D. 1967, Vanderbilt University

PLOTT, JOHN C., Associate Professor of Philosophy, 1965  
Ph.D. 1956, Banaras Hindu University

PLYMALE, EDWARD L., Professor of Biological Sciences (Botany), 1946  
Ph.D. 1942, State University of Iowa

QUEEN, BERNARD, Professor of Education, 1963  
Ph.D. 1967, Ohio State University

RAILEY, JIMMY H., Associate Professor of Physical Education, 1971  
P.E.D. 1969, Indiana University

- RANSON, A. OTIS, Professor of Speech, 1931  
M.A. 1935, University of Wisconsin
- REGULA, WALTER E., Associate Professor of Education, 1962  
Ph.D. 1965, Ohio State University
- RITCHIE, CHARLES C., JR. Professor of Education, 1959  
Ed.D. 1963, West Virginia University
- ROBERTS, JOSEPH L., Associate Professor of Chemistry, 1966  
Ph.D. 1964, University of Cincinnati
- ROGERS, WILEY S., Professor of Geology, 1969  
Ph.D. 1960, University of North Carolina
- ROSS, WALTER L., Assistant Professor of Psychology, 1969  
Ph.D. 1971, Brigham Young University
- RUNYAN, CHARLES S., Professor of Education, 1953  
Ed.D. 1953, University of Missouri
- SCHLEICHER, JANE E., Associate Professor of Music, 1969  
D.M.A. 1966, University of Illinois
- SCHWENDIMAN, GARY, Assistant Professor of Psychology, 1969  
Ph.D. 1971, Brigham Young University
- SCRUDATO, RONALD J., Assistant Professor of Geology, 1969  
Ph.D. 1969, University of North Carolina
- SHANHOLTZER, WESLEY L., Assistant Professor of Physics and Physical Sciences (Physics), 1966  
Ph.D. 1968, West Virginia University
- SHARMA, CHANDRA B., Associate Professor of Chemistry, 1968  
Ph.D. 1965, Texas A & M University
- SHEPHERD, JANE B., Professor of Music, 1958  
M.M. 1942, Cincinnati Conservatory of Music; graduate study, Juilliard School of Music
- SHOEMAKER, JON P., Associate Professor of Biological Sciences (Zoology), 1964  
Ph.D. 1964, Auburn University
- SILL, MAURICE L., Professor of Sociology, 1969  
Ph.D. 1958, Pennsylvania State University
- SIMAIKA, RAOUF, Associate Professor of Modern Languages (French), 1969  
Dr. of Letters 1962, University of Geneva
- SIMPKINS, O. NORMAN, Professor of Sociology, 1948  
Ph.D. 1953, University of North Carolina

- SINGH, RAM N., Assistant Professor of Sociology, 1969  
Ph.D. 1970, University of Georgia
- SLAATTE, HOWARD A., Professor of Philosophy, 1965  
Ph.D. 1956, Drew University
- SMITH, JOHN E., Assistant Professor of Education, 1969  
Ed.D. 1969, West Virginia University
- STERNS, HARVEY N., Associate Professor of Education, 1969  
Ph.D. 1968, University of Michigan
- STEWART, PAUL D., Professor of Political Science, 1948  
Ph.D. 1948, Duke University
- SUITER, PHIL E., Associate Professor of Education, 1966  
Ph.D. 1969, Ohio State University
- SULLIVAN, WILLIAM P., Professor of English, 1968  
Ph.D. 1961, Columbia University
- TAGGART, JAMES L., Associate Professor of Music, 1970  
Ph.D. 1963, University of Iowa
- TARTER, DONALD C., Associate Professor of Biological Sciences (Zoology),  
1969  
Ph.D. 1968, University of Louisville
- THEIS, ANNA V., Associate Professor of Library Science, 1953  
M.A. 1948, Case Western Reserve University; M.S. in Library Science  
1955, Case Western Reserve University
- THOMPSON, LAYTON O., Associate Professor of Mathematics, 1955  
M.S. 1955, West Virginia University
- TUCKER, GLENN G., Associate Professor of Education, 1969  
Ed.D. 1969, University of Florida
- TURNER, TAYLOR E., JR., Associate Professor of Education and Director of  
Reading Center, 1968  
Ed.D. 1967, University of Virginia
- TYSON, A. MERVIN, Director of Institutional Self Study and Professor of  
English, 1959  
Ph.D. 1952, University of Pennsylvania
- VICKERS, CAROL A., Associate Professor of Home Economics, 1966  
Ph.D. 1969, Ohio State University
- WAITE, RICHARD W., Associate Professor of Education, 1968  
Ph.D. 1968, University of Michigan

- WALLACE, WILLIAM A., Professor of Education, 1967  
Ed.D. 1966, Wayne State University
- WARD, GEORGE II., Professor of Psychology, 1962  
Ph.D. 1961, Ohio State University
- WARD, HAROLD E., Professor of Biological Sciences, 1950  
Ph.D. 1964, Ohio State University
- WARREN, JOHN R., Dean of Graduate School and Professor of Biological Sciences (Botany), 1964  
Ph.D. 1950, Ohio State University
- WEBB, A. BERT, Assistant Professor of Education, 1971  
Ed.D. 1971, University of Tennessee
- WHEAR, PAUL W., Associate Professor of Music, 1969  
Ph.D. 1961, Case Western Reserve University
- WHITLEY, W. THURMON, Assistant Professor of Mathematics, 1970  
Ph.D. 1969, Virginia Polytechnic Institute
- WILLEY, HAROLD L., Professor of Education, 1946  
Ed.D. 1958, University of Tennessee
- WILLIAMS, T. D. DUNCAN, Professor of English, 1966  
M.A. 1956, Oxford University, England
- WILLIAMS, TONY L., Associate Professor of Social Studies, 1970  
Ed.D., 1970, West Virginia University
- WISWELL, MERIDETH P., Assistant Professor of Management, 1970  
J. D. 1948, University of Michigan (Law); Th.M. 1959, Claremont University Center; LL.M. 1960, Yale University (Law)
- WOLF, ELIZABETH B., Professor of Psychology, 1960  
Ph.D. 1946, Case Western Reserve University
- WOLFF, ROBERT D., Professor of Music, 1963  
Ed.D. 1961, Columbia University
- WOODEN, WARREN W., Assistant Professor of English, 1968  
Ph.D. 1971, Vanderbilt University
- WOODWARD, DAVID R., Associate Professor of History, 1970  
Ph.D. 1965, University of Georgia

# General Information

Marshall University, supported by the State of West Virginia, encourages individual growth by offering programs and instruction in the attainment of scholarship, acquisition of skills, and personality development.

The university provides students with opportunities to understand and to make contributions to the culture in which they live; to develop and maintain physical health; to participate in democratic processes; to learn worthwhile spiritual, social and economic values; to develop intellectual curiosity and the desire to continue personal growth; and to share in a varied cultural program.

Professional, technical, or industrial career studies are available through the various departments of the university.

Marshall also recognizes an obligation to the state and community by offering 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 were accepted by the conferences of the Methodist Episcopal Church, South. Educational progress continued under church auspices 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 differences 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, the

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 19th century and the first two decades of the 20th, 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 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 degrees of Associate in Arts and Associate in Science were approved.

A Division of Adult Education was established in 1947 to provide continuing education programs. The division, now the Division of Continuing Education, directs evening courses on the graduate and undergraduate level, offers extension work in various cities, and conducts special workshops, seminars, and institutes.

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 Master of Arts and Master of Science degrees were offered.

The College of Applied Science, established in 1960, offers studies in engineering, medical technology, cytotechnology, nursing, and military science.

West Virginia's first educational FM station, WMUL, began broadcast activities in 1960.

The expanded academic program was officially recognized by the West Virginia Legislature in 1961 when it changed the name of the college to Marshall University. In 1963 Marshall University again enlarged its program by establishing Branches at Logan and Williamson. Two-year programs are available at the Branches with the final studies being taken on the main campus.

In 1966 a new degree program leading to the Master of Business Administration was approved, followed by new degrees of Master of Arts in Journalism, Bachelor of Science in Cytotechnology and Associate in Science in Cytotechnology in 1969.

Closed circuit television was first used for classroom instruction on the main campus in 1968. WMUL-TV began telecasting instructional and educational programs in 1969.

The School of Business was established as a major division in 1969.

## ACCREDITATION

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

The Department of Chemistry is accredited by the American Chemical Society. The Civil Engineering Curriculum is accredited by the Engineer's Council for Professional Development. The Nursing Education program is accredited by the National League for Nursing.

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

The main campus of Marshall University is located in Huntington W. Va. Huntington is located on the Ohio River close to the boundary of Kentucky, Ohio, and West Virginia, and it is served by rail, air, and highway transportation. A second campus, University Heights, is located four miles east of the main campus.

### DIVISIONS

The university functions through six divisions: Teachers College, College of Arts and Sciences, College of Applied Science, Graduate School, Division of Continuing Education, and School of Business.

### COMPUTER CENTER

An IBM 1620 data processing system was installed on the campus in 1964. The Computer Center consists of the 1620 computer unit, plus auxiliary equipment, and several accounting machines. The center is used for university administration, research, and courses of instruction in computer language and computer operation.

### DEVELOPMENT AND ALUMNI AFFAIRS

The Office of Development and the Office of Alumni Affairs coordinate activities of the Marshall University Alumni Association and the Marshall University Foundation, Inc. The alumni association coordinates alumni activities and alumni support for the University; the Marshall University Foundation secures financial aid to supplement state appropriations for general operations and capital improvements.

#### **The Marshall University Foundation, Inc.**

The Marshall University Foundation, Inc., a nonprofit corporation chartered by the state of West Virginia in 1947, receives and holds in trust real and personal property that is given, devised, bequeathed, given in trust, or in any way assigned for use by Marshall University, any student, or any professor to carry out university work, teaching, or research. The corporation invests and dispenses all monies received and manages, administers and controls all property received according to the specifications established by the donors.

The Foundation is governed by a 21-member board of directors which includes representatives of the administration, faculty, alumni, and four members of the community without reference to their affiliation with the university or alumni association.

For purposes of the foundation, university needs are grouped into five

general projects: scholarships and fellowships, library improvements, research, the president's fund for general undesignated aid, and capital funds.

Contributions, which may be made to any of the specific projects, should be made payable to The Marshall University Foundation, Incorporated, and should be sent to the secretary of the foundation, Marshall University, Huntington, West Virginia 25701.

### **The Marshall University Alumni Association**

To provide communication and additional services to university alumni, the Marshall University Alumni Association maintains names and addresses of some 30,000 former students. Alumni publications include *The Marshall Alumnus*, a magazine. The Marshall Loyalty and Development Fund, receiving agency for annual alumni gifts to the university, is centered and serviced here. All Marshall alumni events (Alumni Day and Homecoming), projects and chapter activities are administered through this office.

### **MARSHALL UNIVERSITY LIBRARY**

The Marshall University Library is housed in the James E. Morrow Library Building. Library facilities are open to university students, faculty, and staff. Permission for use of the 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 200,500 volumes, and more than 1,200 current periodicals are received regularly. The library is a designated depository for U.S. Government documents. Several special collections are available for reference use.

### **AUDIOVISUAL CENTER**

The audiovisual program at Marshall University aids the university faculty in selecting and utilizing audiovisual aids, and trains teachers and prospective teachers in the use of all types of audiovisual materials, equipment, and techniques. Courses and workshops in audiovisual education are offered at the university and in extension centers throughout the state.

### **RADIO STATION WMUL**

WMUL, Marshall's educational-FM radio station, began broadcasting in 1961. It is a university-wide activity, operated by a staff of volunteer students who are interested in broadcasting. The radio station is supervised by the Director of Educational Radio-TV, and is the first educational-FM station to operate in West Virginia. WMUL broadcasts on 88.1 Mhz seven days a week during the first and second semesters.

### **WMUL-TV**

Operated by Marshall University and Associates Broadcasting, this non-commercial television station broadcasts educational, cultural, and

entertaining programs on Channel 33. Studios are located on the main campus in the Telecommunications Center and at Nitro, West Virginia.

### **SHAKESPEARE ROOM**

Located in the Marshall University Library, displays feature a model of the "Globe" theater, costumes from Shakespeare's plays, and other artifacts relating to the life of the "Bard".

This facility is unique in the nation, and offers opportunities for study and research.

### **GEOLOGY MUSEUM**

The university geology museum contains a collection of more than 5,000 geological specimens gathered from around the world, state and area. The museum is located in the Science Building, as part of the Department of Geology. It is the only one of its kind in West Virginia.

### **MARSHALL ARTISTS SERIES, INC.**

This non-profit corporation provides for the appearance of artists in the performing arts and lecture authorities. There are four divisions of activity: Community Artists Series, Student Artists Series, Community Forum, and Convocations. Marshall University students with Activity Cards may attend any attraction at no cost. Inquiries should be addressed to: Marshall Artists Series, Inc., Marshall University, Huntington, W. Va. 25701.

# Academic Information

## FACULTY-STUDENT ADVISORY PROGRAM

Each student admitted to Marshall University is normally assigned to a faculty adviser, when possible from the field in which the student has expressed an interest. The adviser renders academic guidance by assisting in the preparation of class schedules, by counseling the student in meeting degree requirements, and by checking with him on his academic progress.

## SEMESTER HOURS

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

Laboratory courses require two or three hours per week for each semester hour of credit.

## STUDENT SCHEDULES AND COURSES

1. **SEMESTER LOAD.** A normal load for a full-time graduate student is nine semester hours. Graduate Assistants take a smaller schedule.

2. **CHANGE OF SCHEDULE.** Adding courses, dropping courses, changing class hours or days, or other changes of any kind after registration must have the written approval of the academic dean prior to making the change.

3. **FULL-TIME GRADUATE STUDENT DEFINED.** A student carrying at least nine semester hours in a regular semester, four semester hours in a single summer term.

4. **COURSES NUMBERED 500-599** are similar to certain 400 series and meet jointly with undergraduate students. Courses numbered 600-699 are open only to graduate students.

## GRADES AND QUALITY POINTS

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

- A. For superior performance. Four quality points are earned for each semester hour with a grade of A.
- B. For performance distinctly above the average in quality. Three quality points are earned for each semester hour with a grade of B.
- C. For performance that is of average quality. Two quality points are earned for each semester hour with a grade of C.
- F. Failure, given for unsatisfactory work. No quality points.
- W. Withdrawn prior to the last week of classes or withdrawn passing during the last week of classes. Not considered in determining the quality point average. (See regulations on withdrawal.)
- WF. Withdrawn failing during the last week of classes. No quality points.
- I. Incomplete, given to students who miss some of the last exercises of class work because of illness or some other valid reason beyond the

control of the student. When the work missed is done satisfactorily, the final grade may be any one of the four passing marks. If a deficiency represented by I is not made up within a calendar year, or if the makeup work is unsatisfactory, the grade becomes an F. I-grade is not considered in determining the quality point average.

### QUALITY POINTS REQUIRED FOR GRADUATION

Quality points are based on the following quality point values for each semester hour of credit: "A"—4; "B"—3; "C"—2; and "F"—. "WF"—0.

The quality point average is computed on all work for which the student has registered with the exception of courses with grades of W, WP or I.

An average of B (3.0) in all graduate work attempted is required for a master's degree.

It is the student's responsibility to keep informed on his quality point standing and his degree requirements. This information can be obtained from the Graduate School Dean.

### REGULATIONS ON WITHDRAWAL FROM COURSES OR FROM THE UNIVERSITY

#### Official Withdrawal From Courses or From the University:

A student who wants to withdraw from one or more courses must apply to the dean of his college for permission. The dean informs the registrar, who in turn informs the instructors concerned.

A student desiring to withdraw from the university must apply to the dean of his college for permission. If permission is granted, the student must secure the approval of the appropriate administrative offices, as listed on the student withdrawal form. When applying for withdrawal whether in person or by mail, the student must turn in his unused meal book tickets, his activity card, and his student identification card. The semester's validation on the I.D. card is voided and the card returned to the student for use in future registration.

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

1. Students withdrawing before the final week of classes or withdrawing passing during the final week of classes will receive a grade of W. Not considered in determining the quality point average.
2. Students withdrawing during the final week of classes will receive a grade of WF if failing. No quality points.
3. Official withdrawals during the last week of classes and the examination period of a regular semester or the last week of a summer term are not permitted except in cases of extreme emergency beyond the control of the student. Withdrawals in this period will be permitted only through personal conference with the academic dean.
4. Men and women called to the armed services of the United States shall be granted full refund of fees, but no credit, if the call comes before the end of the first three-fourths of the term, and full credit but no refund of fees, shall be granted if the call comes thereafter; provided, however, that credit as described above will be granted only in those courses in which the student is maintaining a passing

mark at the time of his or her departure to military service. In recording the final grades for three-fourths of a term or more, both passing and failing grades are to be shown on the student's permanent record card.

### **Irregular Withdrawal From Courses or From the University:**

Students who drop out of one or more courses without permission and who do not follow regulations provided in the preceding paragraphs receive a grade of F at the end of the semester or summer term.

## **ABSENCES FROM EXAMINATIONS**

Students are required to take all regular examinations. If a student attends a course throughout the semester and is absent from the final examination without permission, the instructor counts the examination as zero and reports the final grade of F. If the absence is the result of illness or some other valid reason beyond the control of the student the grade of I is reported, and the student may, upon application, take the examination at a later date. (See "Incomplete" under Grades and Quality Points.)

## **ATTENDANCE POLICY**

A student should recognize that one of the most vital aspects of a college experience is attendance and participation in classes and that the value of this academic experience cannot be fully measured by testing procedures alone.

The members of the student body are considered sufficiently mature to appreciate the necessity of regular attendance, to accept this personal responsibility, and to demonstrate the kind of self-discipline essential for such performances.

It is the responsibility of each individual instructor to evaluate the importance of student class attendance for his classes. Accordingly, each instructor prepares at the beginning of each semester a written statement setting forth his policy for consideration of unexcused absences, make-up examinations, and related matters, which will be in force for that semester. The statement is filed with the chairman of his department and a statement of policy on attendance appropriate to each class is read at the first class meeting.

In those cases where marked violations of class attendance policy occur, the instructor may notify his dean so that every effort can be made to find and counsel the student whose academic prospects are being jeopardized by non-attendance.

Absences such as those resulting from illness, death in the family, or institutional activities (those approved by the academic deans, such as debate, artistic performances and athletics) are to be excused when a student reports and verifies them to his instructor. For such excused absences, the students should not be penalized.

## **AUDIT AND NONCREDIT COURSES**

An audit student is one who enrolls as an observer or listener only. Auditing is allowed only when there is space available in the class and the academic dean having jurisdiction over the course authorizes audit status.

Enrollment for audit is limited to the regular registration period for the semester or term. Students who want to audit classes must enroll and pay fees in the same manner and at the same tuition rate as students enrolling for credit. Audit students receive no credit. Faculty members wanting to audit courses must secure approval of their dean and the instructor of the course or courses desired and must enroll in the regular manner for such courses.

### **TRANSCRIPTS**

Every student is entitled to one free official transcript of his record. Each additional copy costs \$1 in cash or money order. Two to three weeks may be required to process an application for a transcript.

A student who defaults in the payment of any university financial obligation forfeits his right to claim a transcript.

An application for a transcript of credit must furnish the date of last attendance at Marshall University and student identification number. A married woman should give both her maiden and married name.

All requests for transcripts must be sent directly to the registrar.

Transcripts are prepared in the order received.

### **ACADEMIC PUBLICATIONS OF THE UNIVERSITY**

The university issues seven bulletins annually: the General Undergraduate Catalog, the Catalog of the Graduate School, admission bulletin, the schedule of courses for each semester, the summer session bulletin and Research Bulletin. Other special publications are issued from time to time.

## Fees and Expenses

Enrollment fees are due and payable when invoices are rendered to the student from the Office of Business and Finance. Invoices will be sent to the students home address. Payment may be mailed or paid in person to the cashier, Old Main Building. Payment must be received by the cashier by the due date, which is reflected on the invoice. Failure to pay fees by the due date may result in dismissal from the university. Enrollment fees accepted by the cashier after the due date are subject to the late registration fee. Every student who registers incurs a financial obligation to the university. Official withdrawal or administrative cancellation of a registration for nonpayment of fees does not eliminate the obligation. Failure to pay enrollment fees does not automatically relieve the student of his responsibility to withdraw properly and officially from the university through his academic dean or branch college director. Students dropping courses from their original schedule or withdrawing completely from the university will not be allowed to deduct the amount from the original invoice. They must pay the invoice for the original number of hours. Refunds will be granted under the regular university policy for refunding fees. When withdrawals occur without prior payment of fees, a pro-rate percentage of the amount of fees due shall be payable to the cashier on the date of withdrawal. The student must pay for the time incurred in class up until the date of the withdrawal.

Students who are recipients of financial aid through the university's Director of Student Financial Aid, the university's Department of Athletics, a private loan or scholarship or any governmental agency must accept the responsibility of delivering the invoice to their source of financial assistance and providing the cashier with payment or proper arrangements for payment by the due date. If a funding agency requires additional copies of this invoice or a different type of invoice, the student should contact the cashier.

Faculty, staff and graduate assistants, who are eligible for a waiver of tuition should contact the cashier for fee remissions.

Students who receive aid through vocational rehabilitation must obtain an authorization for fees from their funding agency. The authorization must be received by the cashier on or before the due date.

The cashier accepts cash, postal money orders, or personal checks written for the exact amount of the obligations. All checks must be made payable to Marshall University. A student's registration may be cancelled when payment is made by a check which is dishonored by the bank.

A handling fee of \$5.00 may be collected for each check returned unpaid by the bank upon which it is drawn unless the student can obtain an admission or error from the bank.

If the check returned by the bank was in payment of tuition and registration fees, the Office of Business and Finance may declare the fees unpaid and registration cancelled. The return of the check unpaid constitutes late registration, and the applicable late registration fee may be levied. In such case the student may be reinstated upon redemption of the unpaid check, payment of the \$5.00 handling charge and payment of the applicable late fee not to exceed \$15.00.

A student who owes a financial obligation to the university may not be permitted to take final examinations or enroll in subsequent semesters until the obligation is paid.

All fees and expenses are subject to change without prior notice.

## ENROLLMENT FEES

### GRADUATE STUDENTS REGULAR SEMESTER FULL-TIME STUDENTS, MAIN CAMPUS (9 or more hours)

|                               | Resident of<br>West Virginia | Nonresident of*<br>West Virginia |
|-------------------------------|------------------------------|----------------------------------|
| Tuition Fee                   | \$ 40.00                     | \$205.00                         |
| Registration Fee              | 50.00                        | 200.00                           |
| Student Activity-Services Fee | <u>59.50**</u>               | <u>59.50**</u>                   |
| Total Enrollment Fee          | \$149.50                     | \$464.50                         |

### REGULAR SEMESTER, PART-TIME STUDENTS (Less than 9 hours)

#### West Virginia Residents

| Hours | Tuition | Registration | Student Activity Services*** | Total    |
|-------|---------|--------------|------------------------------|----------|
| 1     | \$ 9.00 | \$ 5.00      | \$18.00                      | \$ 32.00 |
| 2     | 18.00   | 10.00        | 18.00                        | 46.00    |
| 3     | 27.00   | 15.00        | 18.00                        | 60.00    |
| 4     | 36.00   | 20.00        | 18.00                        | 74.00    |
| 5     | 45.00   | 25.00        | 18.00                        | 88.00    |
| 6     | 54.00   | 30.00        | 18.00                        | 102.00   |
| 7     | 63.00   | 35.00        | 18.00                        | 116.00   |
| 8     | 72.00   | 40.00        | 18.00                        | 130.00   |

\*NONRESIDENT FEES shall apply to those students who are legally domiciled in states other than West Virginia. The official domicile of a minor is that of his or her parents or legal guardian.

\*\*THE STUDENT ACTIVITY-SERVICES FEES are allocated as follows: Convocations and Forums, \$1.50; Athletics, \$11.90; Artists Series, \$3.75; Chief Justice, \$2.40; University Theatre, \$.50; Parthenon, \$3.00; Student Government, \$3.00; Student Union, \$18.00; Music Organizations, \$1.00; Radio Station WMUL, \$.25; Debate, \$.15; I.D. Card, \$.25; Health Service \$8.50; Women's Intercollegiate Activity, \$.20; Intramural Sports, \$.25; Student Relation Center, \$.25; and Laboratory and Course Fee \$4.60.

A special activity card for the use of the spouse of a full-time student costs \$20.00 and covers: Athletics (\$12.50); Convocations and Forums (\$1.50); Artists Series (\$5.00) and I.D. Card (\$1.00).

\*\*\*I.D. Card \$.25; Student Union \$5.00; Health Service \$8.50; Laboratory and Course Fee \$4.25; a Student Activity Card is available to part-time students for \$40.00.

**Nonresident**

| Hours | Tuition | Registration | Student Activity Services* | Out-of-State | Total    |
|-------|---------|--------------|----------------------------|--------------|----------|
| 1     | \$ 9.00 | \$ 22.00     | \$18.00                    | \$ 13.00     | \$ 62.00 |
| 2     | 18.00   | 44.00        | 18.00                      | 26.00        | 106.00   |
| 3     | 27.00   | 66.00        | 18.00                      | 39.00        | 150.00   |
| 4     | 36.00   | 88.00        | 18.00                      | 52.00        | 194.00   |
| 5     | 45.00   | 110.00       | 18.00                      | 65.00        | 238.00   |
| 6     | 54.00   | 132.00       | 18.00                      | 78.00        | 282.00   |
| 7     | 63.00   | 154.00       | 18.00                      | 91.00        | 326.00   |
| 8     | 72.00   | 176.00       | 18.00                      | 104.00       | 370.00   |

**SUMMER TERM (5 WEEKS) FULL-TIME STUDENTS**  
(3 or more hours)

**West Virginia Resident**

| Hours | Tuition | Registration | Student Activity Services** | Total    |
|-------|---------|--------------|-----------------------------|----------|
| 3     | \$27.00 | \$15.00      | \$12.00                     | \$ 54.00 |
| 4     | 36.00   | 20.00        | 12.00                       | 68.00    |
| 5     | 45.00   | 25.00        | 12.00                       | 82.00    |
| 6     | 54.00   | 30.00        | 12.00                       | 96.00    |
| 7     | 63.00   | 35.00        | 12.00                       | 110.00   |
| 8     | 72.00   | 40.00        | 12.00                       | 124.00   |

**Nonresident**

| Hours | Tuition | Registration | Student Activity Services** | Out-of-State | Total    |
|-------|---------|--------------|-----------------------------|--------------|----------|
| 3     | \$27.00 | \$ 66.00     | \$12.00                     | \$ 39.00     | \$144.00 |
| 4     | 36.00   | 88.00        | 12.00                       | 52.00        | 188.00   |
| 5     | 45.00   | 110.00       | 12.00                       | 65.00        | 232.00   |
| 6     | 54.00   | 132.00       | 12.00                       | 78.00        | 276.00   |
| 7     | 63.00   | 154.00       | 12.00                       | 91.00        | 320.00   |
| 8     | 72.00   | 176.00       | 12.00                       | 104.00       | 364.00   |

\*I.D. Card \$.25; Student Union \$5.00; Health Service \$8.50; Laboratory and Course Fee \$4.25; a Student Activity Card is available to part-time students for \$40.00.

\*\*Summer Assemblies and Forums, \$.50; Student Union, \$5.00; Parthenon, \$.50; Health Services, \$4.00; I.D. Card, \$.25; and Laboratory and Course Fee, \$4.75.

**SUMMER TERM (5 WEEKS) PART-TIME STUDENTS**  
(Less than 3 hours)

**West Virginia Resident**

| Hours | Tuition | Registration | Student Activity Services* | Total   |
|-------|---------|--------------|----------------------------|---------|
| 1     | \$ 9.00 | \$ 5.00      | \$12.00                    | \$26.00 |
| 2     | 18.00   | 10.00        | 12.00                      | 40.00   |

**Nonresident**

| Hours | Tuition | Registration | Student Activity Services* | Out-of-State | Total    |
|-------|---------|--------------|----------------------------|--------------|----------|
| 1     | \$ 9.00 | \$22.00      | \$12.00                    | \$13.00      | \$ 56.00 |
| 2     | 18.00   | 44.00        | 12.00                      | 26.00        | 100.00   |

**DORMITORY FEE**

Students assigned to a university residence hall are required to sign a contract to live and eat in the university facilities for the entire academic year. Because the residence halls have been constructed with borrowed funds, a stability of income must be maintained. The residence hall contract, therefore, is a means of insuring facilities for a large number of students to eat, sleep, study, and benefit from group living at the lowest possible cost.

Residence hall contracts are effective for the full academic year, fall and spring semester, and are binding on all students who sign a contract for this period.

All housing applications and contracts for residential accommodations received prior to July must be accompanied by a non-refundable deposit of \$25.00. The deposit will be credited toward the initial room and board bill. The university's acceptance of a deposit for housing does not constitute a guarantee of admission to the university. In addition, a \$25.00 damage deposit is required of all dormitory residents. The deposit will accompany the first quarterly dormitory payment. All applications received after July 1 must be accompanied by the first quarterly dormitory payment and damage deposit.

Cancellation of a room reservation on or after the first day of classes of any semester will result in the forfeiture of the prepaid quarterly dormitory fee. Cancellation of a room reservation after the payment due date of the second and fourth quarterly dormitory fees will likewise result in the forfeiture of the prepaid quarterly dormitory fee.

Meals are available to students rooming off campus at the same rate as resident students. The food service plan is not valid during vacation periods. If it

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\*Summer Assemblies and Forums, \$.50; Student Union, \$.50; Parthenon, \$.50; Health Service, \$.40; I.D. Card, \$.25; and Laboratory and Course Fees, \$1.75.

is necessary for the student to remain on campus during such periods, meals can be obtained at regular dining hall prices if the dining halls remain open. Food service plans will become effective on the first day of any given semester or summer term. Meals prior to the first day of classes must be paid in cash. Students must present their I.D. card (properly validated) with receipt of dormitory fee payment to the Director of Food Service and their respective dormitory director. Students must take their meals in the dining hall assigned by the Director of Food Service.

NOTE: No deduction or refund is made in food service charges unless the student is absent from the campus for more than a calendar week because of personal illness or a university-approved trip. No deduction or refund is made in room charges for absences. Reservations for housing may be made through the Assistant Dean of Students for Residence Life.

### RATES

#### Regular Semester

Twin Towers (and private rooms in other residence halls.)

\$534.00 (including \$15.55 West Virginia State Consumers Sales Tax) per semester (room and board) or \$267.00 per quarterly installment.

South Hall, Hodges Hall, West Hall, Prichard Hall and Laidley Hall

\$514.00 (including \$14.97 West Virginia State Consumers Sales Tax) per semester (room and board) or \$257.00 per quarterly installment.

#### Summer Terms

Twin Towers (room and board)

\$154.00 (including \$4.49 West Virginia State Consumers Sales Tax) per 5 week term (double room)

Private rooms \$166.00 (including \$4.84 West Virginia State Consumers Sales Tax) per 5 week term.

Note: \$25.00 deposit must accompany applications.

### HOUSING FOR MARRIED STUDENTS

Housing for married students is provided in 84 furnished family dwelling units owned and operated by the university. The units include a wide variety of accommodations. The rents range from \$55.00 to \$120.00 per month. Applications may be procured from the university housing office. To be eligible for married-student housing, students must be enrolled for course work as follows: graduate students, 9 hours; undergraduate students, 12 hours.

Rates are subject to change without prior notice as economic conditions warrant.

### ESTIMATE OF EXPENSES AND DATES PAYMENTS DUE

Estimated semester expenses of a full-time undergraduate student living on campus at Marshall University are in the following table:

|                     | W. Va. Resident | Nonresident       |
|---------------------|-----------------|-------------------|
| * Enrollment Fee    | \$149.50        | \$ 464.50         |
| ** Dormitory Fee    | 514.00          | 514.00            |
| *** Books, supplies | 65.00           | 65.00             |
|                     | <u>\$728.50</u> | <u>\$1,043.50</u> |

Note: Add \$20.00 for students residing in Twin Towers Dormitory or private rooms.

### SPECIAL FEES

#### Late Registration Fee (Nonrefundable)

|  |         |
|--|---------|
| 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 |
|-----------------|-------|

#### Cap and Gown Rental Fee

|                 |      |
|-----------------|------|
| Graduate Degree | 8.00 |
|-----------------|------|

Graduation fees are due and payable on notification from the dean of the student's respective college or school.

#### Parking Fees

|                           | Inside  | Outside |
|---------------------------|---------|---------|
| Per regular semester      | \$25.00 | \$15.00 |
| Per Summer term (5 weeks) | 7.50    | 5.00    |

#### Transcript Fees

Each student receives the first transcript without charge. A charge of \$1.00 is made for each additional transcript.

Handling fee for checks returned by bank unpaid \$ 5.00

Identification card replacement fee \$ 5.00

Postage fee for mailing yearbook to graduating seniors \$ .65

Special fee for activity card for the use of the spouse of a full-time student \$20.00

Key deposit - dormitory rooms \$ 1.50

Reservation deposit dormitory rooms \$25.00

Damage deposit - dormitory rooms \$25.00

Kindergarten enrollment fee \$31.00

\* Enrollment Fee: Payment due when invoice is rendered by the Office of Business and Finance. Invoices are mailed approximately one week after the regular registration date of a given semester.

\*\* Dormitory Fee: Payments may be paid in four equal installment for the academic year. The due date for the first quarterly installment is July 1. All applications and nonrefundable deposits received prior to July 1 will receive \$25.00 credit toward the first quarterly installment. All applications received after July 1 must be accompanied by the entire first quarterly payment. The second, third, and fourth installments are due on September 14, December 1 and February 15. Invoices will be mailed from the Assistant Dean of Students for Residence Life.

Dormitory Fee: per summer term of 5 weeks. The cost of of the dormitory fee per 5 week summer session is \$154.00 (private rooms \$166.00). A \$25.00 deposit must accompany the application. Balance due on notice from the Assistant Dean of Students for Residence Life.

\*\*\* Books - Supplies: Books and supplies may be purchased from the University Bookstore. Payment must be made at the time of purchase.

Nursery School enrollment fee . . . . . \$60.00

**Library charges:**

1. Photographic Services
  - a. Xerox copies 9½" x 14" - per exposure . . . . . \$ .10
  - b. Negative photostat 9½" x 11" - per copy . . . . . \$ 1.00
  - c. Negative photostat 18" x 24" - first copy . . . . . \$ 2.00
    - each additional copy . . . . . \$ 1.50
  - d. Micro Film negative 25mm - per exposure . . . . . \$ .08
    - Minimum charge . . . . . \$ 3.00
2. Overdue books and materials
  - a. Two week books - \$.05 per calendar-day (grace period first five days books are overdue) charge begins with \$.25 on fifth day plus \$.05 per day thereafter.
  - b. Reserve books and reference materials . . . . . \$ .25
    - first hour plus \$.10 per hour or portion of an hour (computed for all hours library is open except Sundays.)
  - c. Lost and damaged books - estimated replacement cost of books (list price of in-print book).

**REMISSIONS OF TUITION AND REGISTRATION FEES**

**1. Full-Time Faculty**

Tuition and registration fees are waived for full-time members of faculties of any accredited college in West Virginia who register for graduate study at Marshall University. Accreditation shall be by the North Central Association of Colleges and Secondary Schools. The graduate courses enrolled for and the request for waiver of fees shall be approved by the Dean of Graduate School. THE STUDENT ACTIVITY-SERVICE FEE IS NOT WAIVED AND MUST BE PAID.

**2. Non-Academic Personnel**

Tuition and registration fees are waived for non-academic personnel at Marshall University and the state colleges who have been in the employ of the institution for 12 months or more at the time of application for admission. This waiver is not to exceed six semester hours, and the request for this work shall be approved by the applicant's immediate supervisor and the appropriate academic dean. THE STUDENT ACTIVITY-SERVICES FEE IS NOT WAIVED AND MUST BE PAID.

**3. Graduate and Teaching Assistants**

Tuition and registration fees are waived for graduate and teaching assistants, approved by the Dean of Graduate School. THE STUDENT ACTIVITY-SERVICES FEE IS NOT WAIVED AND MUST BE PAID.

The cost of the Student Activity-Service Fee applicable to the three foregoing enrollment plans may be obtained from the cashier or by the reference to pages 28, 29, and 30.

**4. Higher Education Personnel**

Full-time employees of the West Virginia Board of Regents and the institutions under its jurisdiction, full-time ROTC personnel assigned to the

institutions, and their spouses and dependent children shall be considered West Virginia residents for the purpose of the payment of tuition and fees.

#### 5. Fees for Auditing Courses

- a. Full-time staff members may audit courses without charge. All full-time staff members wanting to audit courses must secure the approval of their dean and the instructor of the course or courses they want to audit. It will also be necessary for them to enroll in the regular manner for such courses.
- b. Non-staff members who audit classes must enroll and pay fees in the same manner and at the same tuition rate as students enrolling for credit.

### REFUND OF FEES

- I. Withdrawal from the university  
*Enrollment, Tuition and Registration Fees*

Students who withdraw regularly from the university may have a refund on tuition and registration fees in accordance with the following schedule:

|  | Main<br>Campus and<br>Extension<br>Division | Branches |
|--|---|----------|
| <b>First Regular Semester</b>                        |   |          |
| 1st period of refunds-August 24-September 6, 1971    | 90%   | 50%      |
| 2nd period of refunds-September 7-September 20, 1971 | 70%   | 25%      |
| 3rd period of refunds-September 21-October 4, 1971   | 50%   | 10%      |
| After October 4, 1971 - No refund.                   |   |          |
| <b>Second Regular Semester</b>                       |   |          |
| 1st period of refunds-January 11-January 24, 1972    | 90%   | 50%      |
| 2nd period of refunds-January 25-February 7, 1972    | 70%   | 25%      |
| 3rd period of refunds-February 8-February 21, 1972   | 50%   | 10%      |
| After February 21, 1972 - No refund.                 |   |          |

When a student withdraws from the university without prior payment of enrollment fees, a pro-rate percentage of the fees due shall be due and payable to the cashier on the withdrawal date. Pro-rate percentages are: 10%, when withdrawals occur within 1st period of refunds; 30%, when withdrawals occur within 2nd period of refunds; 50%, when withdrawals occur within 3rd period of refunds; 100%, when withdrawals occur after 3rd period of refunds.

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

All refunds are to be calculated from the first day of regular registration of a given semester or term. Every student who registers incurs a financial obligation. Refunds under \$1.00 in amount will not be made except on special request. Refund checks normally mailed within 15 days.

*Dormitory Fee: First Regular Semester:* Cancellation of room reservation prior to August 26, 1971, the first day of classes, will result in a refund of the

dormitory fee less the \$25.00 deposit. Cancellation of a room reservation on or after the first day of classes will result in the forfeiture of the prepaid quarterly dormitory fee. Cancellation of a room reservation on or after September 15, 1971, the payment due date of the second quarterly dormitory fee, will likewise result in the forfeiture of the prepaid quarterly dormitory fee.

*Second Regular Semester:* Cancellation of room reservation prior to January 13, 1972, the first day of classes, will result in the refund of the dormitory fee less the \$25.00 deposit. Cancellation of a room reservation on or after January 13, 1972, the first day of classes, will result in the forfeiture of the prepaid quarterly dormitory fee. Cancellation of a room reservation on or after February 15, 1972, the payment due date of the fourth quarterly dormitory fee will likewise result in the forfeiture of the prepaid quarterly dormitory fee.

II. Withdrawals due to administrative action

When it becomes necessary to cancel a class by administrative and/or faculty action, a student is granted a full refund for the class cancelled unless he registers in another course of like value in terms of semester hours. This action does not apply to withdrawals due to disciplinary action.

III. Food Service Plan

Refunds will be pro-rated on the basis of a full week of 20 meals and not on the total number of meals remaining on the meal plan for the semester.

IV. Refunds to students called to armed services

Men and women called to the armed services of the United States shall be granted full refund of fees, but no credit, if the call comes before the end of the first three-fourths of the term, and full credit by courses, but no refund of fees, shall be granted to men and women called to the armed forces of the United States if the call comes thereafter.

V. Special fee refunds

The I.D. card fee of \$.25 is not refundable. The student activity fee is not refundable unless the activity card is returned to the Office of Business and Finance.

VI. Late fees are nonrefundable

## **POLICY REGARDING CLASSIFICATION OF RESIDENTS AND NONRESIDENTS FOR ADMISSION AND FEE PURPOSES**

The West Virginia Board of Regents at its meeting February 2, 1971 adopted the following regulations governing the classification of students as residents or nonresidents for admission and fee purposes at all institutions under its jurisdiction, effective the Fall semester of 1971:

### **CLASSIFICATION OF RESIDENTS AND NONRESIDENTS FOR ADMISSION AND FEE PURPOSES**

**General** - Students enrolling in a West Virginia public institution of higher education shall be classified as resident or nonresident for admission, tuition and fee purposes by the registrar or other officer designated by the president.

The decision shall be based upon information furnished by the student and all other relevant information. The registrar is authorized to require such written documents, affidavits, verifications, or other evidence as are deemed necessary to establish the domicile of a student, including proof of emancipation, adoption, award of custody, or appointment of a guardian. The burden of establishing that a student is exempt from paying the nonresident tuition and fees is upon the student.

If there is a question as to residence, the matter must be brought to the attention of the registrar and passed upon at least two weeks prior to registration and payment of tuition and fees. Any student found to have made a false or misleading statement concerning his residence shall be subject to dismissal from the college.

For purposes of resident and nonresident classifications, the word "parents" as herein used shall include legal guardians.

**Residence Determined by Domicile** - Domicile within the state means adoption of the state as a fixed permanent home and involves personal presence within the state. West Virginia domicile is presumed to be established upon the completion of at least twelve months of continued residence within the state prior to the date of first registration, provided that such twelve months residency is not for the purpose of attendance as an undergraduate or graduate student at any institution of learning in West Virginia.

Establishment of West Virginia domicile with less than twelve months residence prior to the date of first registration must be supported by proof of positive and unequivocal action such as the purchase of a West Virginia home, establishment of a permanent place of residence, full-time employment within the state, and assessment of property tax. Proof of one or more of these actions shall be considered only as evidence which may be used in determining whether or not a domicile has been established.

There must be no intent on the part of the person involved to return to another state or country.

**Minors** - The residence of a minor shall follow that of the parents at all times, except in extremely rare cases where emancipation can be proved beyond question. The residence of the father, or the residence of the mother if the father is deceased, is the residence of the unmarried or unemancipated minor. If the father and the 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 their domicile is within the state.

An unemancipated minor student loses resident status twelve months after his parents have ceased to maintain a domicile in West Virginia.

**Emancipated Minor** - An emancipated minor may be considered as an adult in determining residence, provided satisfactory evidence is presented that his parents, or legal guardian, if living, do not contribute to his support and do not claim him as a dependent for federal government income tax purposes.

In the event that the fact of emancipation is established, the emancipated minor assumes all of the responsibilities of an adult to establish residence for tuition and fee purposes. Proof must be provided that emancipation was not achieved principally for the purpose of establishing residence for attendance at an institution of higher education.

An emancipated minor, orphan, or abandoned child who has been domiciled in West Virginia for at least one year following his emancipation and

next preceding the date of registration may be classified as a resident for tuition and fee purposes.

**Students Over Twenty-one Years of Age** - A resident student twenty one years of age is (1) one whose parents were residents of the state at the time he reached his majority and who has not acquired a domicile in another state, or (2) who, while an adult, has established a bona fide domicile in the State of West Virginia. Bona fide residence in West Virginia means that the student must not be in the state primarily to attend a college and he must be in the state for purposes other than to attempt to qualify for resident status.

Any nonresident student who reaches the age of twenty-one years while a student at any school or college in West Virginia does not by virtue of such fact attain residence in this state for admission or tuition and fee payment purposes.

A student who is classified as a resident at the time that he reaches the age of twenty-one shall continue to be classified as a resident provided that he retains a domicile in West Virginia and that he does not establish a domicile or legal residence, in another state.

**Marriage** - The residence of a married woman is determined by the rules which would apply to her husband if he were to seek enrollment, except that a woman who would have been classified as a West Virginia resident immediately prior to her marriage may continue to be classified as a West Virginia resident if she continued to be domiciled in the state.

**Military** - An individual who is on active federal military service or an employee of the federal government may be classified as a resident for the purpose of payment of tuition and fees provided he had established domicile in West Virginia prior to entrance into federal service, that he entered the federal service from West Virginia, and that he has at no time while in federal service claimed, or established, a domicile in any other state. Sworn statements attesting to these conditions may be required. The wife and dependent children of such individuals shall also be classified as residents of the State of West Virginia for tuition and fee purposes.

**Aliens** - An alien who has entered the United States on a resident visa, or who has taken out first papers for citizenship, and who has established a bona fide residence in West Virginia by living in the state for at least twelve consecutive months immediately preceding registration may be eligible for resident classification, provided he is in the state for purposes other than to attempt to qualify for resident status as a student.

**Higher Education Personnel** - Full-time employees of the West Virginia Board of Regents and the institutions under its jurisdiction, full-time ROTC personnel assigned to the institutions, and their spouses and dependent children, shall be considered West Virginia residents for the purpose of the payment of tuition and fees.

**Appeal Process** - The decisions of the Registrar or other officer charged with the determination of residence classification may be appealed to the President of the institution. The President may establish such committees and procedures as he determines necessary for the processing of appeals. The decision of the President of the institution may be appealed in writing with supporting documentation to the West Virginia Board of Regents. The appeal will be reviewed by the State Committee on Residency which shall make recommendations to the Board for final decision. The members of the State Committee on Residency shall be appointed by the Board of Regents.

Adopted : West Virginia Board of Regents  
February 2, 1971

# Division of Continuing Education

## EVENING SCHOOL

Marshall University helps meet community needs through the Evening School. Credit and noncredit may be taken for personal, business, cultural, domestic, industrial and recreational improvement or as a refresher of other interests.

Classes are provided for those not interested in college credit but who wish to meet for one or more sessions to discuss some topic of vital interest to them in their daily work. A class of 15 or more students is required to organize a special interest group.

The Evening School serves those who need or want further education for credit or noncredit. It is possible to earn college credit which will serve the needs of those working toward college degrees in various fields of study.

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

1. Undergraduate work for high school graduates 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.

## EXTENSION CLASSES

Extension classes are offered for teachers and others who cannot be in residence. Credit or noncredit courses in several fields are offered on a semester basis. Not more than 12 semester hours are acceptable toward a master's degree. Not more than six semester hours may be earned during a semester nor more than 12 semester hours within one year. (This applies to public school teachers under contract in the state.) The quality of instruction in extension is on the same 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 enrolled for credit in extension courses must do the following before credit can be earned to count toward a degree in Marshall University.

1. File an 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.

Those who wish to earn credit to be transferred to other colleges may enroll for a course by filing a transcript application.

## COMMUNITY SERVICES

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

**Speakers and Programs**—The Office of Information and Publications is glad to receive requests for speakers to appear before school, civic and community organizations, scientific societies, service clubs.

The student Speakers Bureau is an honorary service organization, under the direction of the Department of Speech, which offers to the Marshall-Huntington community programs for social, civic, church and educational organizations. Speakers Bureau programs, provided free of charge, include panel discussions, entertaining oral readings, and informative speeches. A Speakers Bureau brochure, available at the Department of Speech, lists the currently available programs and speakers.

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

**School Surveys and Consultant Services**—The university provides consultant services and assists in surveys in the field of education and other areas. Counties or groups wanting assistance with such problems as transportation, building programs, curriculum development and other problems of similar nature should request such assistance. The Director of Continuing Education should be informed of the needs and desires of a particular organization or county before the beginning of the semester whenever possible.

**Conferences, Workshops, Seminars and Discussion Groups**—Marshall University organizes and conducts conferences, workshops, seminars and discussion groups for industrial, educational and other groups in so far as facilities and availability of staff permit.

# **Student Life**

## **STUDENT LIVING**

Comfortable, healthful, and congenial living conditions contribute much to the success of university life and work. Comfortable living conditions aid students to do their best in their studies and contribute, through the experience of group life, to the building of character and personality. Hence the university is vitally concerned with student housing.

### **UNIVERSITY DORMITORIES**

Seven halls of residence are maintained on the campus by the institution, accommodating approximately 2,300 students. Individual halls accommodate from 180 to 500 occupants, largely in rooms for two persons, although there are a limited number of private rooms. The halls are planned to provide each student with the best possible living and learning conditions. Student Government experiences, social programs, recreational facilities and association with trained residence staff members provide opportunity for sound academic and social development. Most of the halls are relatively new and modern, located at points convenient to most parts of the campus.

### **ROOM APPLICATIONS AND RESERVATIONS**

A university residence hall application is automatically sent to a student after his application for admission to the university has been accepted by the Office of Admissions. Room reservations should be made as early as possible. Contracts for dormitory accommodations are for room and board for the entire academic year. Applications must be made on an official form and must be accompanied by a room deposit of \$25.00 which will be applied to the first term's room and board payment. Room assignments are made without regard to a student's race, religion, or national origin.

### **DORMITORY LIVING EXPENSES**

Board and room costs in university dormitories range from approximately \$470.00 to \$497.00 per semester, depending on the facility--a total of approximately \$990.00 for the academic year. (These figures are tentative and are subject to change without prior notice.) Room rents for each hall are found under the title "Fees."

### **CANCELLATIONS AND REFUNDS**

Failure to pay the balance of the first installment by September 1 will result in an automatic cancellation of the room reservation. Cancellation of a room reservation after the first day of classes of any semester will necessitate the forfeit of the room fee for the respective semester. The \$25.00 room deposit will be refunded if a student is declared ineligible to return.

## ROOMS

Rooms are furnished with study desks, chairs, single beds, chests of drawers and study lamps. Linens, (blankets, sheets, pillows, pillow cases) are provided by the student. Draperies are provided only in Twin Towers Dormitory.

## BREAKAGE

Each resident is required to deposit a \$25.00 damage fee with the university. This fee will be refunded at the end of the academic year if no damages are incurred. Students are expected to exercise reasonable care in the use and custody of university property in the residence halls. The cost of repair (to be determined by the Superintendent of Buildings and Grounds) for any unnecessary or careless breakage or damage to a room or furniture is assessed to the responsible student or students.

## HOUSING FOR MARRIED STUDENTS

Housing for married students is provided in 84 furnished family dwelling units owned and operated by the university. The units include a wide variety of accommodations. The rents range from \$55.00 to \$120.00 per month. Applications may be procured from the university housing office. To be eligible for married-student housing, students must be enrolled for course work, as follows: graduate students, 9 hours; undergraduate students, 12 hours.

The university housing office maintains a list of privately-owned apartments and houses to assist married students and staff. This list contains information regarding rental rates, whether the apartment is furnished or unfurnished, approximate distance from the campus, etc. This is available during the regular office hours. Staff members are available during these same hours for consultation regarding specific listings as well as other related matters.

## STUDENT HEALTH SERVICE

The Student Health Service provides students with outpatient medical care, and in cooperation with a local hospital, provides 24-hour emergency medical care to both full-time and part-time students.

The Student Health Service is located in the basement of Gullickson Hall and is staffed by three physicians, three registered nurses, a laboratory technician and office personnel. The Student Health Service is financed by student fees. For additional information, students should contact the Student Health Service or the Student Personnel Programs Office.

The university's medical examination form completed by the family physician and submitted as part of the admission credentials must be on file the Student Health Service.

## HEALTH INSURANCE

The Marshall University Student Government offers a specially designed student accident and sickness group insurance plan providing coverage for hospital and medical expenses. The plan provides annual coverage, on-campus and away from the university.

Information and application forms can be obtained from the Student Government Office in the University Center.

### **THE SPEECH AND HEARING CLINIC**

The Department of Speech operates a clinic to provide free assistance to any Marshall student who wants help with speech and hearing problems. The clinic also gives training in clinical procedures to future public school speech and hearing therapists.

Consultation, examination, and recommendations are available to the public insofar as time and facilities permit. The clinic is located in Smith Hall.

The Speech Improvement Program. The Department of Speech provides special training for students requiring speech improvement. People who have substandard speech patterns not considered to be clinically significant but which require changes for more effective communication are scheduled in the speech improvement program. Students admitted to the program come from a screening procedure required as a part of courses in education and speech, from self-referral or by request of any course instructor.

### **THE READING CENTER**

The Reading Center provides special reading programs for Marshall University students, who may enroll for periodic short-term intensive reading improvement courses. These courses are available for students who are presently deficient readers and for students competent in reading but who would like to develop greater reading proficiency.

### **OFFICE OF CAREER PLANNING AND PLACEMENT**

Marshall University provides a placement service for all students and alumni. The main function of the office is to assist Marshall students in securing permanent employment.

The facilities of the office also give students the opportunity to receive employment counseling and to meet with employing officials from all areas of business, industry, education, and federal and state government agencies.

This Office is located at 1620 Fifth Avenue.

### **STUDENT CONDUCT**

The faculty and administration of Marshall University recognize fully the rights and responsibilities of students. These include the privilege and obligation of maintaining high standards of social and personal conduct. While encouraging the students to develop independence, the university embraces the concept that liberty and license are not synonymous, and it therefore accepts the obligation to maintain those rules which will provide for the welfare of the individual and the campus community at large.

Students should familiarize themselves with university policies and regulations as expressed in the Student Handbook. The Student Handbook is available from either the Admissions or Dean of Students Office.

## STUDENT GOVERNMENT

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

## LIABILITY

Marshall University, as a state agency, cannot assume responsibility for loss of or damage to the personal property of students. Furthermore, the university cannot assume responsibility for personal injury to students.

Students and their parents are strongly urged to make certain that such matters are covered by their personal insurance.

## CULTURAL LIFE

The performing arts, films, lecture authorities, and art exhibits are offered by the Community Artists Series, Student Artists Series, Community Forum, Convocations, University Theatre, the departments of art, history, music, and speech, the Memorial Center, and by the Marshall Arts and Cinema Society.

## DEBATE, SPEECH CONTESTS, AND THE SPEAKERS BUREAU

Marshall's forensics program, under the direction of the Department of Speech, provides students with opportunities for intercollegiate competition and for appearances before audiences in the Huntington area.

Marshall's debaters meet teams from other colleges and universities through a season which culminates in the regional or national Pi Kappa Delta Meet. Marshall students also compete in intercollegiate contests in oratory, extemporaneous speaking, discussion, after-dinner speaking, and interpretive reading. Tryouts for the debate squad and for the individual speaking events are open to all full-time undergraduates.

Pi Kappa Delta is the national honorary forensics fraternity. Membership is conferred on those achieving distinction in intercollegiate debate and other intercollegiate speaking events.

The Speakers Bureau is an honorary service organization offering to the Marshall-Huntington community programs for social, civic, church, and educational organizations. Speakers Bureau programs, provided free of charge, include panel discussions, entertaining oral readings, and informative speeches. Membership in the Speakers Bureau, open to all Marshall University students, is earned through auditions.

## 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.

## **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, Stage Band, Marshall Community Symphony, Symphonic Choir, Men's Glee Club, A Cappella Choir, Choral Union, Madrigal Singers, Opera Workshops, Wind Ensemble, and the Chamber Brass Ensemble. 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 Department of Music.

## **STUDENT PUBLICATIONS**

The Parthenon, the campus newspaper, is published four times a week by students working in the Department of Journalism.

The Student Handbook is published annually by the Student Senate and the Dean of Students Office and contains general information for all students with particular emphasis on information for freshmen.

The Chief Justice, the University annual, is published by students constituting the Chief Justice Board.

Et Cetera is a campus literary magazine and is published semiannually.

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

## **RELIGIOUS LIFE**

The purpose of the campus ministry is to develop an inclusive, consciously religious fellowship where all persons are welcomed and where each may come to a deeper commitment to God. To accomplish this purpose, the campus ministry constantly strives to include the following emphasis:

A conscious effort to discern God's purpose for each individual especially as it relates to his vocation;

A fellowship of faculty and students joined in common worship and the search for truth;

A concerted appraisal of the needs of the university community in an effort to witness more effectively within it;

A conscious concern for the life and mission of the church and encouragement of responsible participation in it;

A compulsion to relate all areas of life to God in a prophetic way;

This purpose is accomplished by the churches working together in a united effort, promoting study groups, action projects and worship.

## **INTRAMURALS**

The intramural program at Marshall University is a program of competitive athletics and recreational activities promoted for every student on the campus.

The program is sponsored and personally conducted by members of the physical education staff. It includes a variety of activities in every field of athletics and recreational interests designed for lifelong participation.

## INTERCOLLEGIATE ATHLETICS

The Athletic Committee schedules 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 Director of Athletics who reports to the president is responsible for implementing the athletic policy of the university. The athletic program is advised by the Athletic Committee, consisting of five faculty members, an alumnus, the Vice President of Business, the Dean of Students, two student representatives and the Director of Athletics who serves as secretary-ex-officio.

Athletic coaches also serve as academic instructors and are required to have degrees for teaching on a college level.

The university participates in the following intercollegiate sports: football, basketball, baseball, track, cross country, tennis, golf, swimming and wrestling.

## STUDENT ORGANIZATIONS

Dramatic and Forensic Organizations: Alpha Psi Omega—National Honorary in Dramatics; Pi Kappa Delta—National Honorary Debate Society; University Theatre, Speakers Bureau.

Music Organizations: Delta Omicron—National Honorary Society for Women; Phi Mu Alpha Sinfonia—National Honorary for Men.

Religious Organizations: Campus Crusade for Christ; Newman Apostolate (Roman Catholic).

Honor Groups: Alpha Beta Alpha—Library Science; Alpha Delta—Advertising; Alpha Epsilon Delta—Pre-Medical Fraternity; Alpha Kappa Delta—Sociological Society; Alpha Kappa Psi—National Business Administration Fraternity; Alpha Lambda Delta—Scholastic Fraternity for Freshman Women; Chi Beta Phi—National Science Society; D-Rho D-Theta—Engineering; Eta Sigma Phi—Classical Society; Fagus—Leadership for Junior and Senior Women; Theta Sigma Phi—Women Journalism Majors; Gamma Theta Upsilon—National Geography Society; Kappa Delta Pi—Professional Educators; Kappa Omicron Phi—Home Economics National; Kappa Pi—National Art Society; Mu Gamma Sigma—Geology; Omicron Delta Kappa—National Leadership for Junior and Senior Men; Phi Alpha Theta—National Historical Society; Phi Eta Sigma—Scholastic for Freshman Men, National; Phi Mu Alpha Sinfonia—National Honorary for Men; Phi Mu Epsilon—Mathematics; Pi Delta Phi—National French Society; Pi Sigma Alpha—Political Science; Pi Omega Pi—National Society for Business Education Students; Psi Chi—National for Psychology Majors; Scabbard and Blade—Military Science; Sigma Delta Pi—National Society for Spanish Students; The Robe—Leadership Fraternity for Men; Sigma Tau Delta—National English Society; The Order of Omega—Honorary for Fraternity Men.

Special Interest and Professional Groups: Appalachian Interest Group; American Chemical Society; Association of Childhood Education; Black United Students; Chess Club; Chief Justice; Classical Association; 4 H Club; German Club; Home Economics Club; Marshall Arts Cinema Society; Le

Cercle Francais; Marshall University Engineering Association; Marshall University Student Chapter of American Society of Civil Engineers; Marshall University Student Chapter of American Society of Civil Engineers; Marshall Chapter of Young Americans for Freedom; M.U. Action Committee of F.R.E.E.; Pershing Rifles—Military Science; Pershing Ruffles; Student Nurses Association; Students for a Democratic Society; Undergraduate Alumni Association; Veterans Club; Women's Recreation Association; Young Democratic Club; M.U. College Republican Club.

Greek Social: Panhellenic Council (governing body for sororities); Interfraternity Council (governing body for fraternities).

Sororities: Alpha Chi Omega, Alpha Sigma Alpha, Alpha Xi Delta, Delta Zeta, Phi Mu, Sigma Kappa, Sigma Sigma Sigma.

Fraternities: Alpha Sigma Phi, Kappa Alpha Order, Kappa Alpha Psi, Lambda Chi Alpha, Phi Kappa Tau, Pi Kappa Alpha, Sigma Alpha Epsilon, Sigma Phi Epsilon, Tau Kappa Epsilon, Theta Xi (colony) and Zeta Beta Tau.

Greek Interest: Crescent Club, Little Delta Iotas, Little Sisters of Minerva, Sisters of the Golden Heart, Daughters of the Crimson Rose, Sisters of the Laurel.

# **The Graduate School**

In October, 1938, the West Virginia Board of Education authorized Marshall University 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: art, biological sciences, business, chemistry, communication arts, counseling and rehabilitation, economics, English, geography, health and physical education, history, home economics, music, physics, physical science, political science, psychology, social studies, sociology, and speech.

The degree, Master of Business Administration, may be earned with a major in accounting, marketing, management or finance.

The degree program, Master of Arts in Journalism, provides a suitable academic background for careers in professional journalism and other areas of mass communications.

Programs for school personnel leading to the Master of Arts degree and certification are available in: administration (superintendent, general supervisor, elementary principal, and secondary principal) counseling and rehabilitation, reading, and special education (option A).

Special programs are provided for teachers. These programs are outlined in the Department of Curriculum and Instruction section of the catalog.

Fields that offer work for a minor only are anthropology, Bible, French, geology, German, Latin, library science, mathematics, philosophy, and Spanish.

## **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 The Graduate School**

Admission 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 or major department may require.

A minimum quality point average of 2.7 over-all with a minimum of 3.0 in the area of the proposed major is required for unconditional admission.

Applicants who are deficient in undergraduate preparation in the major

field may be granted provisional admission. Grade requirements for provisional admission are the same as those for unconditional admission.

Special admission may be granted to applicants whose undergraduate quality point averages are below those required for unconditional admission when unavoidable circumstances adversely affected the applicant's undergraduate average and if the record indicates progressive improvement. To be eligible to continue in the Graduate School, special admission students must complete the first 15 hours of graduate work with at least a "B" average.

Applicants for admission may be required to take 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. Admission to one department or major does not imply admission to any other department or major. Students who wish to change majors or programs must apply for and be admitted to the new major or program.

Application for admission must be filed in the Office of the Graduate School at least one month prior to the opening of the semester or term of enrollment. Two official copies of the applicant's undergraduate transcript must be mailed from the student's undergraduate college to the Graduate School office when the application is filed. Students with undergraduate degrees from Marshall University must furnish a transcript for the Graduate School office when they submit the application for admission.

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 30 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.

Foreign students are admitted to Marshall when they demonstrate proficiency in written and spoken English by the successful completion of the Test of English as a Foreign Language, administered by the Educational Testing Service of Princeton, New Jersey 08540. Information concerning this test can be secured through U. S. Embassies and Consulates throughout the world or by writing to TOEFL, 1755 Massachusetts Avenue, N. W., Washington, D.C. 20036.

The applicant must also file an application for admission and an official transcript of all academic credits and grades. The transcript must be sent by the institution last attended. The "Application for Admission to an Educational Institution in the United States" may be secured by writing to the Director of Admissions, Marshall University, Huntington, West Virginia. 25701.

Foreign students admitted to the university must have sufficient funds to take care of all expenses.

The International Student Advisor is Dr. Robert P. Alexander. International students at Marshall University should address questions regarding their immigration status to: Office of the United States Immigration and Naturalization Service, Pittsburgh, Pennsylvania.

### **Admission to Candidacy**

Admission to graduate courses does not imply admission to candidacy for the master's degree. The student is admitted to candidacy only after he has proved his ability and fitness to do graduate work.

A student must apply for admission to candidacy in the semester or term immediately following the semester or term in which 15 hours of Marshall University graduate credit is completed. A minimum of 15 hours of credit must be earned after admission to candidacy.

The application, bearing a record of courses completed, must be made on a form secured from the Graduate School. Examinations may be required for admission to candidacy. To be considered for admission to candidacy, a student must have earned a quality point average of 3.0 (B) on all graduate work attempted.

### **The Adviser**

The dean assigns each student an adviser from the major department. The adviser assists the student in planning his program for the master's degree. If the student writes a thesis, the adviser directs 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 result of the examination to the Graduate School office. Admission to candidacy for the master's degree and admission to the comprehensive examination must have 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**

A student whose program requires a thesis must earn 32 hours of credit in graduate courses. Of these 32 hours, credit not to exceed 6 hours may be granted for the thesis. If a thesis is not required, the student must complete 36 hours of graduate course work. Students majoring in chemistry must earn 32 hours of graduate credit. Of these 32 hours, 12 hours must be in Chemistry 682, Research, which includes a thesis.

A minimum of 18 hours must be earned in one subject known as a major and a minimum of 6 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 distributed 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 waived.

At least 12 hours is the undergraduate prerequisite for a graduate major. Six hours is the prerequisite for the minor. Some 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 chairman.

Graduate courses are numbered 500 to 699. Selected courses with 400

series numbers for undergraduate credit have 500 series numbers for graduate credit. A few courses that have 300 series numbers for undergraduate credit have 600 series numbers for graduate credit. In courses open to both graduate and undergraduate students, graduate students are required to do more work than undergraduates. This includes more extensive reading, research papers, and other individual work. At least one-half of the work counted for the master's degree must be taken in courses numbered 600 to 699.

To receive a master's degree, students must have a scholastic average of not less than 3.0 (B). All grades of C or less are counted in computing averages, but no more than six hours of C and no grades below C may be applied toward the degree.

Meeting minimum requirements in hours of credit does not necessarily constitute 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.

## Thesis

### REGULATIONS GOVERNING THESIS REQUIREMENT

A thesis in the major field, completed to the satisfaction of the department, may be submitted. The maximum amount of credit that may be earned for the thesis is 6 hours for all departments. Students who will profit more by doing additional course work in lieu of a thesis must earn 36 course hours of credit. The thesis adviser and student are guided by departmental requirements and the student's needs and interests in determining whether he is to write a thesis.

Students in departments other than chemistry register for thesis 681. Chemistry majors register for research 682. The student continues to register for thesis 681 or research 682 in chemistry, and pay tuition for the minimum number of hours per semester as required by his department until the thesis is accepted and a final grade submitted by the thesis adviser to the Registrar's office. The thesis adviser reports a mark of PR (progress) for satisfactory work at the end of each term or semester for which the student is registered with the total amount of credit to be allowed. The student must be registered for thesis during the term in which the thesis is completed. The adviser may report a final grade of F at the end of any semester or term when in his opinion, because of irregular reports or unsatisfactory progress, the student should not be permitted to continue to register for research.

The mark of PR (progress) may be used only in reporting progress on thesis 681 or research 682 (chemistry). It may not be used in connection with other courses in the Graduate School.

The thesis must be advanced sufficiently one month before graduation to assure the adviser of its acceptability. Three unbound copies of the thesis must be filed with the Dean of the Graduate School not later than two weeks before graduation. The thesis must be prepared according to the form furnished by the Graduate School office. The Graduate School office has three copies of the thesis bound. Two copies of the bound thesis are deposited in the library. The third bound copy is filed in 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 consists of a written interpretation of a body of facts and opinions gained through critical reading and independent study on reports the results of a research project. For teachers, it may be a presentation of a directed learning activity showing the purpose, problems involved, procedure, and effectiveness of the project.

## Residence

At least 36 weeks must elapse between the first registration for graduate courses and graduation. This period may be shortened for students with bachelor's degrees 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 the first enrollment, unless an extension in time not to exceed three years is granted by the dean. Absence in one of the armed services or long serious illness is regarded as a proper reason for an extension of time. Work beyond the minimum course requirements may be prescribed when a portion or all of the credit is more than five years old. Validation by special examination may be required on credit that is more than five years old. This examination is optional with the major department. A student whose time is extended for completion of the degree must meet the requirements 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, or two nine-week summer terms. A minimum of one half of the credit counted toward an advanced degree must be earned on the Huntington campus.

## Part-Time Graduate Students

Teachers in service who are doing graduate work are limited in the amount of credit that may be earned by the regulations of the West Virginia Board of Education or by corresponding regulations of other states in which they may be employed.

Graduate students in other employment are 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 grant to a student the privilege of transferring to Marshall University courses taken in extension and work completed with another

institution if the courses are appropriate in the student's program. The amount of credit earned cannot exceed nine hours in one field or total more than 12 semester hours. Graduate credits transferred from other institutions may be accepted if they are not superannuated for graduate credit toward meeting the requirements for a degree as shown in the current issue of the catalog of the institution from which the transfer of credit is requested.

No extension credit may be transferred from any graduate school other than West Virginia University.

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

At least one-half of all course work counted toward a master's degree must be done on the Marshall University Huntington campus.

Those who wish to begin work for the master's degree in extension courses must do the following before credit can be earned 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 of admission from the Dean of the Graduate School.

Extension students who fail to comply with these regulations within a reasonable time may be withdrawn from courses by administrative action.

### **Comprehensive Examinations**

A comprehensive examination on the major subject must be taken under the direction of the dean after it appears that the course work in progress will be completed successfully. The examination may be oral, written, or both. The examination is not based 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 are prepared by the student's adviser in consultation with other instructors in the major field. The oral examination is conducted by a committee of three appointed by the dean and includes the student's adviser and the head of the major department.

A candidate who fails the comprehensive examination may take a second examination at the discretion of the chairman of the student's major department and the dean of the Graduate School.

### **The Graduate Record Examination**

Recommended for all applicants

Required prior to admission to candidacy for students in education and psychology. Required before admission to the Graduate School in sociology.

The Graduate Record Examination—Aptitude Test will be administered at Marshall University and other testing centers on dates listed in the office of the Graduate School.

The student must contact Educational Testing Service, Princeton, New Jersey, and file application for the test prior to the registration deadline date.

The students in sociology and education are required to take the Aptitude Test only. This is given during the morning sessions. The Aptitude Test score must be filed with the Dean of the Graduate School, Marshall University Huntington, West Virginia 25701.

### **Graduate Assistantships**

Most departments offering the master's degree have funds for graduate assistantships. The amount of the award may vary but includes the waiver of tuition and most fees. Graduate assistants perform duties required and carry a lighter load than do full time students.

Information about graduate assistantships may be secured by contacting the department chairmen.

### **Responsibility**

Students admitted to the Graduate School are assumed to be mature adults and are expected to behave accordingly. The advisory services provided for in the operation of the various graduate programs assist the students. However, the student alone is responsible for following the procedures and completing the steps required in his program. Failure of an adviser to remind a student of a requirement or deadline date is not acceptable as a basis for waiver of the requirement. Requirements of the Graduate School, both procedural and substantive, may be waived only by written request of the student and must have the written approval of the dean.

# Courses of Instruction

## ABBREVIATIONS

PR Prerequisite

CR Corequisite

-lec. -lab-lecture and laboratory hours per week (e.g., 2 lec-4 lab—two hours lecture and four hours laboratory per week)

## ART (ART)

Professor Carpenter

- 501-502. HISTORY OF ART. 3; 3 hrs. I, II.  
A survey of the development of architecture, sculpture, painting and the minor arts to 1400 A.D. and from 1400 A.D. to present.
503. ORIENTAL ART. 3 hrs.  
A historical survey of the architecture, painting, and sculpture of China, Indonesia, and Japan.
504. 20th CENTURY ART. 3 hrs.  
A survey of the development of architecture, painting and sculpture in the western world during the present century.
505. ART IN AMERICA. 3 hrs.  
A survey of the development of architecture, painting, and sculpture from colonial times to the present.
506. FIGURE DRAWING. 3 hrs.  
Practice in drawing from the posed human figure.
- 555-556. PAINTING: ACRYLIC AND OIL. 3; 3 hrs.  
Study and practice of painting in expressing still life, landscape and the human figure.
570. GRAPHIC PROCESSES. 3 hrs.  
Experiments in the media of etching, drypoint, lithography and wood cuts as means of pictorial expression.
601. METHODS IN ELEMENTARY SCHOOL 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.
602. CURRENT PROBLEMS IN ART. 3 hrs.

604-605. MURAL TECHNIQUES. 3; 3 hrs.

650-651-652-653-654-655-656. SPECIAL TOPICS OR PROJECTS IN ART.  
3; 3; 3; 3; 3; 3; 3 hrs.

The student will select special studies from art education, art history, drawing, painting, sculpture, ceramics, graphics, and other related approved projects.

670. SEMINAR. 3 hrs.

Readings and reports in selected areas of art education.

679. PROBLEM REPORT. 1-3 hrs.

681. THESIS. 1-6 hrs.

### BIBLE AND RELIGION (BR)

Professor Jennings  
Associate Professor Goodwin

518. DEVELOPMENT OF RELIGIOUS IDEAS. 3 hrs.

A study of the primary sources of religious thought in western culture.

519. RELIGIOUS THOUGHT IN THE WESTERN WORLD. 3 hrs.

An analysis of the major schools of religious thought as they have developed in the West.

520. RECENT AND CONTEMPORARY RELIGIOUS THOUGHT. 3 hrs.

A survey of the major currents of religious thinking in the twentieth century.

530. ORIGIN AND TRANSMISSION OF THE BIBLE. 3 hrs.

A study of the history of the canonization, textual transmission, and translations of the Bible.

550. SOCIOLOGY OF RELIGION. 3 hrs.

An investigation into the nature of religion as a social phenomenon.

### BIOLOGICAL SCIENCES (BSC)

Professors Ward, Fisher, Green, Mills, Plymale, Warren  
Associate Professors Ash, Gillespie, Shoemaker, Tarter  
Assistant Professors Bird, Gain, Jinks, Modlin

The Master of Arts or the Master of Science degrees with a major in the biological sciences is 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.

Master's degree candidates must 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 are expected to diversify their graduate studies in the biological sciences. A minimum of 18 hours in graduate courses in the biological sciences must be completed.

Selection of the individual's graduate program is determined by a committee composed of the chairman and two other members of the department.

Students who do not have 12 hours of undergraduate work in biology 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 40 semester hours in the life sciences for the master's degree.

The graduate seminar furnishes the student with an 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 will include a seminar in his course of study each semester that he is enrolled on the campus. A student will present at least two hours credit in seminar toward graduation requirements for the master's degree in the biological sciences.

Students interested in the special program for biology teachers should see secondary education under education-curriculum and instruction.

502. VERTEBRATE NATURAL HISTORY. 3 hrs. II, S.

The origin, classification, life histories, habits and distribution of fishes, amphibians, reptiles and mammals. 1lec.-4lab.

503. 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.

504. CELLULAR PHYSIOLOGY. 4 hrs. I, II, S.

The physio-chemical nature of intracellular processes in plant and animal cells with emphasis on the functional significance of microscopic and submicroscopic structure and organization.

PR: 8 hours of biological sciences, 8 hours of chemistry and 8 hours of physics.

505. ECONOMIC BOTANY. 3 hrs. I.

Plants used by man for food, ornamental purposes, building materials, textiles and other industrial purposes; economic importance of conservation. No laboratory.

507. GENETICS. 4 hrs. I, S.

The fundamental principles and mechanisms of inheritance including their human applications. 3 lec.-2 lab.

508. ORNITHOLOGY. 3 hrs. II, S.

Identification, distribution, migration and breeding activities of birds. 2 lec.-2 lab.

513. **PRINCIPLES OF ORGANIC EVOLUTION.** 2 hrs. S.  
The progress of animal life through time with a discussion of known causes.
515. **PLANT MORPHOLOGY.** 4 hrs. I, S.  
Characteristics of the great plant groups. Discussion of the important steps in the development of plants. 2 lec.-4 lab.
516. **PLANT TAXONOMY.** 4 hrs. II, S.  
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, 2 lec.-4 lab.
518. **MYCOLOGY AND PLANT PATHOLOGY.** 4 hrs. II.  
Nature, cause and control of plant diseases. 2 lec.-4 lab.
524. **ANIMAL PARASITOLOGY.** 4 hrs. I, II, or S.  
Morphology, life histories, classification, and host relationships of common parasites. 2 lec.-4 lab.  
PR: Zoology 212 or equivalent.
526. **MEDICAL ENTOMOLOGY.** 4 hrs. I, II, or S.  
The characteristics and control of certain insects and other arthropods which transmit disease-causing organisms. 2 lec.-4 lab.  
PR: Zoology 212 or equivalent.
530. **ECOLOGY.** 4 hrs. II, S.  
The interrelationships of plants and animals. Local and world distribution of biotic communities. 2 lec.-4 lab.
531. **LIMNOLOGY.** 4 hrs. II, S.  
The study of inland waters; ecological factors affecting lake and stream productivity and various aquatic communities. 2 lec.-4 lab.
582. **CONSERVATION OF FORESTS, SOIL AND WILDLIFE.** 3 hrs. I, S.  
Primarily for teachers in the biological sciences, general and applied sciences. Includes fieldwork, seminars, and demonstrations related to conservation. 2 lec.-4 lab.
583. **DEVELOPMENT OF SCIENTIFIC THOUGHT.** 3 hrs. II, S.  
A study of men who have influenced science; their ideas; the philosophy of their periods; and the conditions leading to scientific advancement. Emphasis on biology lecture.
601. **VERTEBRATE EMBRYOLOGY.** 4 hrs. I, S.  
Vertebrate development based on frog, chick and pig embryos. 2 lec.-4 lab.
608. **PLANT PHYSIOLOGY: GROWTH AND DEVELOPMENT.**  
4 hrs. II, S.  
Comprehensive advanced study of correlative growth processes in plants with emphasis on germination, dormancy, growth substances and

physiological phenomena associated with phases of development.  
PR: Cellular physiology or equivalent.

- 613-614. GENERAL ENTOMOLOGY. 2; 2 hrs. S.  
Collection, identification, classification and mounting of insects. 1 lec.-4 lab.
- 620-621-622. TAXONOMY OF VASCULAR PLANTS. 1-2 hrs. II.  
Field studies in the taxonomy of higher plants. (Limited to 4 hours credit per student).
625. HUMAN ANATOMY AND PHYSIOLOGY. 4 hrs. II, S.  
The structure and functions of the human body. 3 lec.-2 lab.
626. PROTOZOOLOGY. 4 hrs. Offered on demand. I, II, or S.  
A study of free-living and parasitic protozoa important to agriculture, wild-life, and man. Morphology, physiology, reproduction, ecology, and life histories of parasitic protozoa will be emphasized.  
PR: Zoology 212.
631. ANIMAL ECOLOGY. 4 hrs. I, S.  
A study of population and behavior ecology; community dynamics and field techniques. 2 lec.-4 lab.
- 650-651-652. SPECIAL PROBLEMS. 1-3; 1-3; 1-3 hrs.  
By permission of adviser.
- 660-661-662. SEMINAR. 1; 1; 1 hr.
679. PROBLEM REPORT. 1-3 hrs.
681. THESIS. 1-6 hrs.  
By permission of adviser.

### **BUSINESS** **(ACC, BED, FIN, MGT, MKT)**

Professors Morell, Anderson, Ashford  
Associate Professors Alexander, Bishop, Cyrus, Miller  
Assistant Professors Bromley, Wiswell

### **Master of Business Administration Program**

Marshall University through its Graduate School and School of Business offers an excellent opportunity for qualified candidates to earn the Master of Business Administration degree. In keeping with its purpose of providing professional preparation and foundation, the M.B.A. program gives emphasis to building a strong fundamental framework and the development of skill in managerial problem-solving and decision-making.

In addition, a degree of specialization is provided for the student through his selection of an area of concentration. To this end, programs are prepared on an individual basis in an attempt to accomplish the student's professional objectives.

### Program Design

Business policies and procedures, reflecting the rapid advances in technology, are subject to change over time. Methods and practices in current use may be totally inadequate for coming decades. For this reason, greater emphasis is placed on sound general principles and decision-making techniques which provide a base for continuous learning.

To accomplish this purpose the program involves:

1. A series of business foundation courses which assist the student with an undergraduate degree in a field other than business to continue his professional development.
2. A broad study of functional areas of business and their interrelationships with emphasis on application of knowledge, concepts, and analytical methods for problem-solving.
3. Elective subject matter areas to provide for each candidate's specific professional objectives. Within the framework of the basic program, each candidate has considerable choice in selecting an area of professional concentration. Areas currently offered are: accounting, marketing, finance, and management.

The program may be completed in four or five semesters, attending on a full-time basis (nine semester hours of graduate credit is considered to be a full-time semester class load) depending on the candidate's previous training, experience, and objectives.

| Business foundation courses required as needed for those lacking: | Hours |
|---|-------|
| In undergraduate background                                       | 18    |
| Functional studies  | 24    |
| Specialization  | 6     |
| Thesis (or electives)   | 6     |

### Admission to the M.B.A. Program

The M.B.A. program at Marshall University provides for the development of professional leaders in business and industry. The program is a demanding one requiring outstanding aptitude, ability, and scholarship of its candidates. Normally, an accumulative quality point average of 2.7 (4.0-A) is considered to be the minimum level of undergraduate academic performance necessary for admission. Undergraduate preparation in business administration is not a prerequisite for admission.

Each applicant is required to submit his test scores on the Admission Test for Graduate Study in Business. The test is prepared by the Educational Testing Service (Princeton, New Jersey) and is given five times yearly at numerous locations throughout the United States and various foreign countries. A total score of at least 500 is expected. Arrangements for taking the A.T.G.S.B. must be made either preceding or concurrently with application to the M.B.A. program.

### Degree Requirements

1. Each candidate is required to complete a minimum of thirty-six semester hours of graduate study. Each candidate must exhibit competence in

the functional studies, and his area of specialization by satisfactory completion of designated courses with a quality point average of 3.0 (4.0-A).

2. Candidates must pass a comprehensive, written examination in their area of specialization. The examinations will normally be given each semester.

## Course Requirements

### BUSINESS FOUNDATION COURSES

It is to be expected that students applying for admission to the School of Business for the M.B.A. degree will hold different undergraduate degrees and have diverse backgrounds. Those with undergraduate degrees other than business administration can be accepted into the program by completing business foundation courses designed to prepare them for graduate level courses in the School of Business. Generally, but not inflexibly, these business foundation courses are:

|   | Hours |
|---|-------|
| Management 320—Principles of Management       | 3     |
| Marketing 340—Principles of Marketing         | 3     |
| Finance 323—Principles of Finance             | 3     |
| Management 600—Analytic Methods and Tech.     | 3     |
| Accounting 610—Financial Accounting           | 3     |
| Economics 648—Economic and Financial Concepts | 3     |

### FUNCTIONAL STUDIES

All students are required to take all courses in this category. They consist of:

|  | Hours |
|--|-------|
| Management 601—Quantitative Controls in Business     | 3     |
| Accounting 612—Accounting Functions in Business      | 3     |
| Finance 620—Financial Management                     | 3     |
| Management 672—Theories of Administration            | 3     |
| Marketing 682—Advanced Marketing Management          | 3     |
| Management 691—Government and Business Relationships | 3     |
| Economics 502—Business Cycles                        | 3     |
| Economics 530—Managerial Economics                   | 3     |

## Areas of Specialization

The student must select six hours in one of the four areas of specialization. Six additional elective hours must be selected from any of the specialization areas, from some area outside the School of Business (with advisory approval), or a thesis may be written.

### ACCOUNTING SPECIALIZATION:

|   | Hours |
|---|-------|
| Accounting 613—Profit Planning and Controls | 3     |

|   |   |
|---|---|
| Accounting 614—Theory of Accounting         | 3 |
| Accounting 615—Auditing Theory and Practice | 3 |

## FINANCE SPECIALIZATION:

|  |       |
|--|-------|
|  | Hours |
| Finance 625—Financial Problems in Business             | 3     |
| Finance 626—Security Analysis and Portfolio Management | 3     |
| Finance 627—Financial Institutions and Markets         | 3     |

## MANAGEMENT SPECIALIZATIONS:

|   |       |
|---|-------|
|   | Hours |
| Management 673—Problems in Personnel Management       | 3     |
| Management 674—Administrative Policies and Planning   | 3     |
| Management 675—Problems in Labor-Management Relations | 3     |

## MARKETING SPECIALIZATION:

|                                    |       |
|------------------------------------|-------|
|                                    | Hours |
| Marketing 685—Marketing Problems   | 3     |
| Marketing 686—Marketing Theory     | 3     |
| Marketing 687—Seminar in Marketing | 3     |

## Courses

600. ANALYTIC METHODS AND TECHNIQUES. 3 hrs.  
Provides competency in some of the basic quantitative skills necessary for analytical work in business administration. Required of all candidates who have had little or no undergraduate background in mathematics.
601. QUANTITATIVE CONTROLS IN BUSINESS. 3 hrs.  
Techniques of systems design, uses of electronic computers, management problems concerned with data processing, and significance for decision-making. Includes Fortran, matrix algebra, linear programming, decisions under uncertainty, and game theory.
610. FINANCIAL ACCOUNTING. 3 hrs.  
Principles, concepts, and problems underlying the evaluation, recording, analysis and interpretation of accounting data. Required of all candidates who have had little or no undergraduate background in accounting.
612. ACCOUNTING FUNCTIONS IN BUSINESS. 3 hrs.  
The meaning, uses, and limitations of the historical and projected quantitative data produced by the accounting process. Emphasis is given to the utilization of accounting information: (1) by marketing, production, and financial executives in planning and controlling business operations and (2) by investors, creditors, governmental agencies, and other external groups having an interest in the operating results and financial position of business firms.
613. PROFIT PLANNING AND CONTROLS. 3 hrs.  
Determination, analysis, and reporting of data for planning and controlling operations. Includes flexible budgets standard costs, and systems of determining historical costs.

614.    **THEORY OF ACCOUNTING. 3 hrs.**  
History and development of accounting principles; intensive study of theoretical problems related to determination of income and presentation of financial conditions.
615.    **AUDITING THEORY AND PRACTICE. 3 hrs.**  
Legal and social responsibilities of the auditor. Verification of financial statements by independent public accountants and internal auditors.
620.    **FINANCIAL MANAGEMENT. 3 hrs.**  
An examination of business corporations practicing at the level of the individual firm with emphasis on quantitative analysis of the variables which affect liquidity and profitability.
625.    **FINANCIAL PROBLEMS IN BUSINESS. 3 hrs.**  
Recognizing and solving financial problems through the use of case presentations and/or corporate annual and interim reports.
626.    **SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT. 3 hrs.**  
Analytical procedures used by institutional portfolio managers to measure both past performance of holdings and anticipated market performance of current offerings. Emphasis in this course may be expected to be more centralized in the area of fundamental analysis.
627.    **FINANCIAL INSTITUTIONS AND MARKETS. 3 hrs.**  
An in-depth study of the flow of funds in the aggregate financial systems, with emphasis on those in the United States. Because interest rates, bank reserve requirements, of Federal Reserve System are all dynamic in character, the content of this course may be expected to vary as financial events of the future dictate.
672.    **THEORIES OF ADMINISTRATION. 3 hrs.**  
The focus of study is the administration of the business firm from the point of view of top management, involving the formulation and administration of policy, the integration of internal operations with each other and the environment, the diagnosis of executive and organizational problems, the evaluation of business risks and strategy alternatives, the development of long range plans and programs, the means of organization and executive control, and the evaluation of administrative strategy for the business corporation.
673.    **PROBLEMS IN PERSONNEL MANAGEMENT. 3 hrs.**  
Principles and procedures of the personnel system in the firm; selected areas of recruitment and selection; training and development; performance appraisal and evaluation; general communications systems; role of government in manpower administration.
674.    **ADMINISTRATIVE POLICIES AND PLANNING. 3 hrs.**  
Managerial organization, identification of major problem areas and development of production concepts and decision processes for problem solving. Includes plant design and layout, effective utilization of resources through various planning and scheduling techniques.

675. PROBLEMS IN LABOR-MANAGEMENT RELATIONS. 3 hrs.  
Comprehensive coverage of the development of the field of industrial relations. The impact of organized labor and federal social legislation of management decisions. Alternative directions for future developments are studied.
681. THESIS. 1-6 hrs.
682. ADVANCED MARKETING MANAGEMENT. 3 hrs.  
An integrated approach to marketing from a managerial point of view-making use of economic, quantitative, and behavioral concepts in analyzing and developing a framework for the decision-making and implementation of the firm's marketing program.
685. MARKETING PROBLEMS. 3 hrs.  
Determination of the marketing mix within the framework of the problem-solving and decision-making process.
686. MARKETING THEORY. 3 hrs.  
Meaning, present state, and sources of marketing theory.
687. SEMINAR IN MARKETING. 3 hrs.  
An analytic framework and its application to decision areas in marketing.
691. GOVERNMENT AND BUSINESS RELATIONSHIPS. 3 hrs.  
Emphasis is placed on preparing business executives for dealing with increasingly complex problems of the firm in its relationships with government at both state and federal levels. Applies economic analysis to three great problems of public policy and suggests policy prescriptions in the three broad categories of antitrust, commission regulation, and economic stabilization.

### Business Education (BED)

The degree, Master of Arts with a major in business, is for business majors interested in teaching in secondary and post-secondary schools or in colleges.

621. PRINCIPLES OF VOCATIONAL BUSINESS EDUCATION. 3 hrs.  
Application of the philosophy and principles of vocational education to the objectives, curriculum, guidance, and teacher preparation aspects of business education, emphasizing the techniques of coordination of federally aided programs in business and office education.
624. ORGANIZATION, ADMINISTRATION, AND SUPERVISION OF BUSINESS EDUCATION 3 hrs.  
Emphasis on problems involving the administration of the business education program in the secondary school and in post-high school institutions; provides fundamentals of school administration for the classroom teacher.

**625. CURRICULUM CONSTRUCTION IN BUSINESS EDUCATION.**

3 hrs.

Basic principles of curriculum and course of study construction in business, especially oriented to the secondary school; particular attention given to study of existing city and state business education programs.

**626. CURRENT PROBLEMS AND ISSUES IN BUSINESS EDUCATION.**

3 hrs.

Individual and group analysis of current problems and issues in teaching business subjects, particularly in the secondary school; identification and clarification of issues significant to the direction of sound business education.

**627. TESTS AND MEASUREMENTS IN BUSINESS EDUCATION. 3 hrs.**

A study of evaluation procedures in business education; survey of standardized and published test material and its utilization in the classroom; a review of basic statistical methods used in test interpretation.

**629. TEACHING TYPEWRITING AND OFFICE MACHINES. 3 hrs.**

Improvement of methods of teaching typewriting and office machines through evaluation of current research, methods, classroom materials, and current trends; discussion of major problems of teachers in these subjects.

**630. TEACHING BASIC BUSINESS AND BOOKKEEPING. 3 hrs.**

A study of the problems and techniques of teaching basic business subjects and bookkeeping; evaluation of major problems facing teachers, including motivation, remedial practices, use of classroom materials.

**631. TEACHING SHORTHAND AND SECRETARIAL OFFICE PRACTICE.**

3 hrs.

Teaching techniques and a study of research in methodology in shorthand and secretarial practice; a review and discussion of the major problems of shorthand teachers; study of testing and grading, use of visual aids, use of materials.

## **CHEMISTRY (CHM)**

Professors Hanrahan, Chakrabarty, Douglass, Hoback, Lepley

Associate Professors Kong, Roberts, Sharma

Assistant Professors Larson, Lemke, Littler, Mosher

Marshall University through its Department of Chemistry provides a balanced curriculum of course work and research leading to the Master of Science degree with a major in chemistry. This degree program is intended primarily for students whose career goals are industrial chemistry, research and teaching above the secondary school level.

### Requirements for a Master of Science Degree

In addition to the general requirements of the Graduate School for the Master of Science degree, students must fulfill the following 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 547, 548, 582, 609, 631, and a minimum of three hours credit in a chemistry laboratory course (Chemistry 510, 556, 563, 566, 576, 616, 617).

2. A maximum of twelve semester hours of research (Chemistry 682) may be applied toward the degree requirements.

3. A reading knowledge of German, French, or Russian is recommended.

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 departments of chemistry, physics, mathematics, and curriculum and instruction offer correlated courses in a cooperative degree plan for the Master of Arts degree with a major in physical sciences. These courses provide a broad base in the physical sciences to meet the needs of teachers in the secondary schools.

### Courses

510. ADVANCED CHEMICAL PREPARATIONS. 3 hrs.  
The syntheses of organic and inorganic compounds which use specialized techniques. 1 lec.-6 lab.  
PR: Chemistry 256.
520. FUNDAMENTALS OF CHEMISTRY. 4 hrs. S. Offered on demand.  
Open only to M.A. candidates. 3 lec.-1 lab.
547. THE NATURE OF CHEMICAL BONDING. 3 hrs. I.  
A modern viewpoint of structural chemistry with examples from organic and inorganic chemistry. 3 lec.  
PR: Chemistry 358.
548. ADVANCED INORGANIC CHEMISTRY. 2 hrs. II.  
2 lec.  
PR: Chemistry 547.
556. INSTRUMENTAL ANALYSIS. 4 hrs. I, S.  
A study of use and application of modern analytical instruments and techniques. 2 lec.-6 lab.  
PR: Chemistry 345, and 357 or 307.
562. NUCLEAR CHEMISTRY AND PHYSICS. 3 hrs. II.  
An introduction to the phenomena of nuclear physics and chemistry. 3 lec.  
PR: Mathematics 221.

563. NUCLEAR CHEMISTRY AND PHYSICS LABORATORY. 2 hrs. II.  
4 lab.  
CR: Chemistry 562.
566. ORGANIC QUALITATIVE ANALYSIS. 3 hrs.  
The identification of organic compounds with the aid of modern instruments. 1 lec.-6 lab.  
PR: Chemistry 256.
575. ADVANCED BIOCHEMISTRY. 3 hrs. I.  
A discussion of energy relationships in biological systems and the mechanism of metabolism. 3 lec.  
PR: Chemistry 300 or consent of instructor.
576. ADVANCED BIOCHEMISTRY LABORATORY. 2 hrs. II.  
Advanced laboratory methods of preparation, purification and characterization of biochemical systems.  
PR: Chemistry 575.
580. QUANTUM MECHANICS. 3 hrs.  
An introductory course in quantum mechanics. 3 lec.  
PR: Mathematics 221.
582. ADVANCED ORGANIC CHEMISTRY. 3 hrs. II.  
3 lec.  
PR: Chemistry 547.
604. THEORIES OF ANALYTICAL CHEMISTRY. 2 hrs. Offered on demand.  
PR: Chemistry 547.
607. THEORETICAL ORGANIC CHEMISTRY. 2 hrs.  
A study of the mechanisms of organic reactions.  
PR: Chemistry 547.
609. THERMODYNAMICS I. 2 hrs. I.  
PR: Chemistry 358.
610. THERMODYNAMICS II. 2 hrs. II.  
PR: Chemistry 609.
613. STEREOCHEMISTRY. 3 hrs.  
The stereochemistry of organic and inorganic compounds. 3 lec.  
PR: Chemistry 547.
616. X-RAY DIFFRACTION. 3 hrs. Offered on demand.  
The properties of X-rays and crystal structure. 2 lec.-3 lab.  
PR: Mathematics 221.
617. SPECTROSCOPY. 3 hrs. Offered on demand.  
A study of emission and absorption spectroscopy. 2 lec.-3 lab.  
PR: Mathematics 221.

618. KINETICS. 3 hrs. II.  
An advanced study of reaction rates and mechanisms.  
PR: Chemistry 547.
626. ORGANIC CHEMISTRY FOR TEACHERS. 5 hrs. S.  
Offered on demand.  
Open only to M.A. degree candidates. 3 lec.-6 lab.  
PR: Chemistry 520 or equivalent.
627. PHYSICAL CHEMISTRY FOR TEACHERS. 5 hrs. S.  
Offered on demand.  
Open only to M.A. degree candidates. 3 lec.-6 lab.  
PR: Chemistry 520 or equivalent.
628. SPECIAL TOPICS (INORGANIC). 1-3 hrs. Offered on demand.
629. SPECIAL TOPICS (ORGANIC). 1-3 hrs. Offered on demand.
630. SPECIAL TOPICS (PHYSICAL). 1-3 hrs. Offered on demand.
- 631-632. SEMINAR. 1; 1 hr. I, II.
639. ADVANCED QUANTUM MECHANICS. 3 hrs. I.  
PR: Chemistry 580 or physics equivalent.
682. RESEARCH. 1-12 hrs. I, II, S.  
Credit in the course is earned by completing a directed original investigation in the field of chemistry. 12 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 of PR may be reported at the close of each term or semester.  
PR: Approval of department chairman.

## CLASSICAL LANGUAGES

Professor Hoy

### Latin (LAT)

501. ROMAN LIFE: PLINY, MARITAL, JUVENAL. 3 hrs.  
PR: Four years high school Latin or equivalent in college courses.
502. VIRGIL'S AENEID. VII-XII. 3 hrs.  
PR: Four years high school Latin or equivalent in college courses.
503. THE ROMAN STAGE: COMEDIES OF PLAUTUS AND TERENCE.  
3 hrs.  
PR: Four years high school Latin or equivalent in college courses.

- 550-551. SPECIAL TOPICS IN LATIN. 1-4; 1-4 hrs. I, II.  
PR: Ten hours of Latin.

**Classics  
(CL)**

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.

**COMMUNICATION ARTS**

An interdepartmental program adaptable to the needs of persons in public relations, journalism, advertising, broadcasting, school library services, audiovisual supervision and administration, and similar fields where a wide knowledge of related communication skills is required.

A committee from the cooperating departments guides 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. A course in research method must be taken for credit. Not more than one will be permitted. For description of courses consult the appropriate departmental listings.

Minimum Requirements . . . . . 33-36 hrs.

GROUP 1 . . . . . 3-9 hrs.

Library Science 510 or Journalism 601  
Speech 532  
Curriculum and Instruction 565

GROUP 2 . . . . . 18-27 hrs.

English 575, 580-590, 603, 610, 630, 631, 632, 679, 681  
Library Science 501, 504, 505, 550, 582-585, 604, 607, 610, 615, 620, 621, 625, 630, 635, 640  
Speech 507, 508, 530, 533, 535, 536, 537, 545, 550, 575, 630, 632, 634, 679, 681  
Educational Administration 601, 606  
Educational Foundations 621  
Curriculum and Instruction 566, 610, 612, 640, 641, 679, 681  
Journalism 527, 528, 530, 531, 602, 603, 604, 605, 606, 607, 608, 609, 611, 612.

GROUP 3 . . . . . 3-9 hrs.

Art 650  
Curriculum and Instruction 543, 545  
Educational Administration 601, 606  
Geography 530

**Sociology 539**

Other courses with consent of adviser

Educational Administration 601 and 606 are open only to students with teacher's certificates based on courses completed in a teacher training institution.

**681. THESIS.**

Credit of 3 hours may be earned by students whose reports in 679 were excellent and are of such a character to warrant further research. Students completing 679 and 681 for a total of 6 hours may qualify for the master's degree by earning an additional 27 hours of credit. Students completing 681 must defend their thesis in an oral examination.

## **ECONOMICS (ECN)**

Professor La Cascia

Associate Professors Akkihal, Westbrook

Assistant Professors Claurette, Pathak, Phillips

The Department of Economics provides advanced study towards the Master of Arts degree with a major in economics for students who are preparing for careers in teaching, research, business, or government.

Courses may be taken with the 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.

PR: Economics 241, 242, 300, or equivalent.

**508. COMPARATIVE ECONOMIC SYSTEMS. 3 hrs.**

Marxism, capitalism, communism, fascism and socialism considered as theories, movements and actual political economies.

PR: Economics 241, 242, 300, or 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.

PR: Economics 241, 242, 300 or equivalent.

**515. REGIONAL ECONOMICS. 3 hrs.**

A study of location theory and regional development within a framework of economic theory.

PR: Economics 241, 242.

**530. MANAGERIAL ECONOMICS. 3 hrs.**

The use of economic principles by management; pricing, sales policies, budgeting, forecasting, inter-firm relations.

PR: Economics 328 or equivalent.

548. AMERICAN ECONOMIC THOUGHT. 3 hrs. II.  
Contributions of American scholars to economic doctrines; emphasis on the institutional and neo-classical schools.  
PR: Economics 241, 242, 300 or equivalent.
561. ECONOMIC EDUCATION WORKSHOP. 3 hrs. S.  
Intensive review of subject matter and teaching methods in economics for elementary and high school teachers.  
PR: Consent of instructor or grant of scholarship.
- 571-572. SEMINAR IN SPECIAL TOPICS. 2-4; 2-4 hrs. I, II.  
Members of the department may teach, when necessary, any economics subject not listed among the current course offerings.  
PR: Nine hours of economics and consent of instructor.
- 581-582. DIRECTED RESEARCH. 2-4; 2-4 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.  
PR: Twelve hours of economics and consent of the instructor and department chairman.
620. INTERNATIONAL ECONOMICS. 3 hrs.  
Evolution of the present international economy, stressing the change in institutional mechanisms as they are adapted to a changing world economy.  
PR: Economics 241, 242, 300, or equivalent.
640. THE EVOLUTION OF ECONOMIC THOUGHT. 3 hrs.  
A survey of the development of economic thought into the present century. Emphasis on Smith, Malthus, Ricardo, Mill, Marx, Marshall, Veblen and Keynes.  
PR: Economics 241, 242, 300, or equivalent.
642. NATIONAL INCOME ANALYSIS. 3 hrs.  
Composition of the national income and its measurement; input-out-put analysis; use of national income data. Problems of economic growth and stabilization, and policy alternatives.  
PR: Elementary statistics and business cycles.
643. ADVANCED ECONOMIC THEORY I. 3 hrs.  
Theory of the firm. Price and production policy, non-price competition, and oligopoly. Cost, theory and empirical measurement. Income distribution, particularly interest theory.  
PR: Economics 328, or equivalent.
644. ADVANCED ECONOMIC THEORY II. 3 hrs.  
Macro-economic theory. The aggregate consumption function; other determinants of the level of aggregate income. Post Keynesian theory. General equilibrium theory, economics of welfare.  
PR: Economics 326, or equivalent.

**646. MONETARY THEORY. 3 hrs.**

Objectives and methods of the Federal Reserve System. Brief historical survey, but principal emphasis on recent and current problems. Also, banking and debt structure, international monetary relations, objectives of fiscal policy or stabilization policies of monetary or fiscal authorities, fiscal formulas, automatic stabilizers, Bank reserves, and open market operations.

PR: Economics 310, or equivalent.

**648. ECONOMIC AND FINANCIAL CONCEPTS. 3 hrs.**

Provides an understanding of the principles of economics which includes micro-economic and macro-economic theory. This course is required of all M.B.A. students not possessing at least six semester hours of undergraduate credit in economics. It is not to be used as credit toward a degree.

**681. THESIS. 3-6 hrs.**

### EDUCATION-ADMINISTRATION (EDA)

Professors Gibbins, Ritchie, Runyan  
Associate Professors Gordon, McCoy, Sterns

In addition to Graduate School requirements, students admitted to these programs must have a professional teaching certificate based upon fifteen semester hours in education and at least one year of teaching experience.

Students seeking special admission may have their quality point average computed upon their last 64 semester hours of course work. A student otherwise ineligible may score well on the GRE and be admitted.

Students with a master's degree who wish to qualify for additional certification must apply for admission to the program. Students with a 3.0 in their master's degree and who have a professional teaching certificate and one year's teaching experience may be admitted to the program.

### Curricula in Administration and Supervision

#### A. PRINCIPAL \*

|  | Hours |
|--|-------|
| Minimum requirements                             | 36    |
| 1. Education                                     | 30    |
| a. Educational Administration 601, 606, 630      | 12    |
| b. Educational Foundations 560, 616, or 648, 621 | 9     |
| c. Curriculum and Instruction 609 or 610         | 3     |
| d. Electives                                     | 6     |

\*These degree programs are for certification in the State of West Virginia. North Central Accrediting Association requirements are greater than this and may be completed by enrolling in the Advanced Study in School Administration program.

2. Electives . . . . . 6  
 (Secondary principals take Curriculum and Instruction 610 and Educational Foundations 648 ; Elementary principals take Curriculum and Instruction 609 and Educational Foundations 616).

### B. SUPERVISOR\*

(Must be employed as a supervisor)

|  | Hours |
|--|-------|
| Minimum requirements . . . . .                                       | 36    |
| 1. Education . . . . .   | 26    |
| a. Educational Administration 606, 622, 671, 672, 673, 674 . . . . . | 14    |
| b. Educational Foundations 560, 616 or 648, 621 . . . . .            | 9     |
| c. Curriculum and Instruction 610 . . . . .                          | 3     |
| 2. Electives . . . . .   | 10    |

(Special supervisors required 12 hours in specialization for certification)

### C. ADVANCED STUDY IN SCHOOL ADMINISTRATION

(North Central Accrediting Association preparation for high school principal, assistant superintendent or superintendent.)

The Certificate in Advanced Study in School Administration is 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 completion of any prescribed list of courses and other experiences does not lead necessarily to the certificate. It can be earned only by demonstrated capacity for original investigation, with 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 24 hours of graduate work with a minimum scholastic average of 3.0 (B) including Educational Administration 601 and 606, Educational Foundations 560 and 621. The remainder of the work required for the certificate must be chosen from the total offerings of the Graduate School to satisfy the needs of the student.

Retention in the program is based on the previous scholarly record of the student, personal references, and standardized tests. Holders of the master's degree with superior qualifications may seek admission to the program. Eligibility for admission is determined by an admissions committee.

The student's work in the two-year program is directed by an advisory committee of three members of the education faculty. The student chooses an adviser who serves as chairman of his committee and with whom he consults 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

\*These degree programs are for certification in the State of West Virginia. North Central Accrediting Association requirements are greater than this and may be completed by enrolling in the Advanced Study in School Administration program.

department, if it is helpful to the student in the attainment of his professional objectives.

Courses and field experiences must be approved by the advisory committee. If courses 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 are accepted as transfer credit. Research ability is one of the important requisites of this program. The advisory committee determines the extent and nature of the research required.

Each candidate must pass a written examination followed by a general oral examination based on his objectives. These examinations are supervised by the advisory committee as the final step in completing the two-year program. Grades of A and B are required in all courses attempted for the certificate.

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

Several positions for which this program prepares are:

School Superintendent (Permanent Professional Administrative Certificate)

Elementary School Principal

Secondary School Principal

School Business Manager

General or Special Supervisor of Instruction

Guidance Counselor

Supervisor of Special Education

Director of Communication Services

Special Education Specialist

Director of Educational Measurement and Statistics.

582-583-584-585. SPECIAL TOPICS. 1-4; 1-4; 1-4; 1-4 hrs. I, II, S.

601. GENERAL SCHOOL ADMINISTRATION: BASIC COURSE.

6 hrs. I, S.

Federal and state participation in school administration; roles of state and county boards of education; relation of schools to other community agencies; organization of staff and selection of personnel.

PR: One year of teaching.

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.

PR: Educational Administration 601.

603. GENERAL SCHOOL ADMINISTRATION: PLANT AND EQUIPMENT.

3 hrs. I, or II, S.

The use of the school building survey and educational specification are studied in relation to how the building may enhance the educational program. Some field trips are taken to exemplary school buildings.

PR: Educational Administration 601.

606. SUPERVISION OF INSTRUCTION: BASIC COURSE. 3 hrs. II, S.

Principles; procedures used in improving instructional program in

schools. Course content is adjusted to the needs of either elementary or secondary school principals.

608. SCHOOL COMMUNITY RELATIONS. 3 hrs. I, or II, S.

Basic principles, rationale and need for a school-community relations program. Roles of the various participants, structure and form of an effective program. Communication theory and practice and community involvement are emphasized.

609. THE TEACHER AND SCHOOL ADMINISTRATION.

3 hrs. I, or II, S.

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 Educational Administration 601.

617-618. FIELD COURSE IN CURRENT SCHOOL PROBLEMS.

2; 2 hrs. I, II.

Investigations in current problems of local schools; content determined by needs of students.

PR: Permission of instructor.

622. GENERAL SCHOOL ADMINISTRATION FOR SUPERVISORS.

3 hrs. I, S.

To provide an overview of the role of the school administrator and to identify the impact of problems of school administration on the role of the supervisor.

625. SCHOOL BUSINESS MANAGEMENT. 3 hrs. I, or II, S.

Development of the basic skills involved in school business management. Includes personnel, finance, budgeting, purchasing, school lunch program, pupil transportation, plant maintenance and operation, and federal programs.

630. STAFF PERSONNEL ADMINISTRATION. 3 hrs. I, or II, S.

Recruitment, selection, orientation, in-service education, professional growth and staff differentiation of personnel will be considered.

PR: Educational Administration 601.

631. ADVANCED LEADERSHIP TECHNIQUES. 3 hrs. S.

An introduction to new techniques of administration and supervision, including interaction analysis, sensitivity training, program and research dissemination, strategies for change, micro-teaching, gaming and related simulation and evaluation.

640. LITERATURE. 1-3 hrs. I, II, S.

A program of reading, either extensive or intensive, and reports on a group of outstanding contributions to education; readings selected with guidance of adviser. Only one registration for Educational Administration 640 is permitted.

PR: Permission of instructor.

641. SEMINAR. 2-3 hrs. I, II, S.

A guided program of readings, reports and discussions. No student may register for this course a second time.

PR: Permission of instructor.

671-672-673-674. PRACTICE IN SUPERVISION. 2; 2; 2; 2; hrs.

Practice of supervisory techniques presented in theory courses; sharing the responsibility for carrying forward a supervisory program in a school system.

PR: Permission of instructor.

675. SCHOOL LAW. 3 hrs. I or II, S.

The legal basis of education in the United States in constitutions, statutes, court decisions, and in administrative rulings and practices with some emphasis on West Virginia.

679. PROBLEM REPORT. 1-3 hrs. I, II, S.

The preparation of a written report on a research problem, experiment or field project in education. This report is not a Thesis.

681. THESIS. 3-6 hrs. I, II, S.

May be taken for 3 hours of credit by students whose reports in 679 were excellent and are of such character as to warrant further research. Students completing 679 and 681 for a total of 6 hours may qualify for the master's degree by earning an additional 26 hours of credit. Students completing 681 must defend their thesis in an oral examination.

## EDUCATION-COUNSELING AND REHABILITATION (CR)

Professors Hess, Wallace  
Associate Professor Dingman  
Assistant Professor McDowell

Courses and programs in counseling and rehabilitation serve the professional needs of those involved in the human consultative services. Curricula are developed for secondary and elementary school counselors, rehabilitation and employment counselors and personnel specialists. All programs are developed in accord with the needs of the student, including state certification requirements.

Students desiring to enter graduate programs in counseling and rehabilitation must indicate a vocational goal consistent with the purposes of the program. Graduates of accredited four year colleges who are eligible for admission to Marshall University Graduate School and who are approved by the admissions committee of the Department of Counseling and Rehabilitation are eligible to pursue a Master of Arts degree with a major in counseling and rehabilitation.

Majors in counseling and rehabilitation plan their programs with the approval of their advisers. Courses may be selected from any graduate department of the university offering appropriate areas of study. It is

recommended that candidates earn credit for at least one course in each of the broad areas:

1. Principles of guidance and rehabilitation
2. Study of the individual
3. Counseling theories and practice
4. Social, educational and occupational information
5. Psychological foundations
6. Research techniques

Following completion of fifteen hours of graduate work, six of which must have been taken in residence at the Huntington campus, the student must apply for admission to candidacy. Failure to do so may delay graduation. Students preparing for counseling positions in schools must complete Counseling and Rehabilitation 590 within the first 12 hours of graduate study. All students must complete courses in research and writing and statistics within the first 12 hours.

The required courses, Counseling and Rehabilitation 649 and 651 usually are taken toward the end of the program and must be taken in residence at the Huntington campus.

582-583-584-585. SPECIAL TOPICS. 1-4; 1-4; 1-4; 1-4 hrs. I, II, S.

590. PRINCIPLES AND PRACTICES OF GUIDANCE. 3 hrs. I, II, S.  
Objectives, principles, and practices of guidance.

605. GROUP GUIDANCE. 3 hrs. I, II, S.  
Gives graduate students an understanding in the use of procedure for guidance and counseling in groups.  
PR: Permission of instructor.

613. ORGANIZATION AND ADMINISTRATION OF GUIDANCE PROGRAMS. 3 hrs. I, S.  
Problems in planning, organizing and administering guidance programs in elementary and secondary schools.

614. COUNSELING THEORIES. 3 hrs. I, II, S.  
Survey of philosophies of counseling as related to the interpersonal relationships involved in the counseling process.  
PR: Permission of instructor

617-618. FIELD COURSE IN CURRENT PROBLEMS IN COUNSELING AND REHABILITATION. 3; 3 hrs. I, II, S.  
Investigations in current problems of counseling agencies; content determined by needs of students.

640. LITERATURE. 1-3 hrs. I, II, S.  
A program of reading, either extensive or intensive, and reports on a group of outstanding contributions to counseling and rehabilitation; readings selected with guidance of adviser. Only one registration for Counseling and Rehabilitation 640 is permitted.  
PR: Permission of adviser.

641. SEMINAR. 2-3 hrs. I, II, S.  
A guided program of readings, reports and discussions. No student may register for this course a second time.  
PR: Permission of adviser.
646. INDIVIDUAL INVENTORY TECHNIQUES. 3 hrs. II, S.  
Techniques of collecting, recording, and interpreting data.  
PR: Educational Foundations 417-517 or 435-535.
647. OCCUPATIONAL INFORMATION TECHNIQUES. 3 hrs. II, S.  
Techniques used in selecting, filing, and using materials pertaining to occupations.
649. SEMINAR IN COUNSELING. 3 hrs. I, II, S.  
The nature of the counseling relationship with emphasis upon self-evaluation.  
CR: Counseling and Rehabilitation 651 and permission of instructor.
650. SEMINAR IN COUNSELING. 3 hrs. I, II, S.  
Counseling tools and techniques with emphasis on problem categories and patterns as related to the psychology of individual differences.  
PR: Permission of adviser.
651. PRACTICUM IN COUNSELING. 3 hrs. I, II, S.  
Practical experiences in counseling under professional supervision.  
CR: Counseling and Rehabilitation 649 and permission of instructor.
653. INTERNSHIP IN COUNSELING. 3 hrs. I, II.  
Supervised on-the-job experiences in counseling. Limited to students employed with full responsibilities as counselors.  
PR: Permission of instructor.
654. SUPERVISION OF COUNSELING. 3 hrs. I, II.  
Supervisory experiences of counselor-candidates in practicum. Limited to students with a masters degree in counseling who are employed as supervisors, expect to be employed as supervisors, or plan to work toward an advanced degree in the field.  
PR: Permission of instructor.
655. ADJUSTMENT PROBLEMS OF THE HANDICAPPED. 3 hrs. I, II.  
Study of the problems faced by the handicapped in making social, vocational and educational adjustment.
679. PROBLEM REPORT. 3 hrs. I, II, S.  
The preparation of a written report on a research problem, experiment or field project in counseling or rehabilitation. This report is not a thesis and students must complete an additional 33 hours unless 679 is followed by 681 for 3 hours of credit.

## 681. THESIS. 3 hrs. I, II, S.

May be taken for 3 hours of credit by students whose reports in 679 warrant further research. Students completing 679 and 681 for a total of 6 hours may qualify for the master's degree by earning an additional 26 hours of credit. Students completing 681 must defend their thesis in an oral examination.

## EDUCATION-CURRICULUM AND INSTRUCTION (CI)

Professors Queen, Jenkins  
Associate Professors Bauer, Campbell, Collins, Felty, Fulks  
Kootz, Jervis, Regula, Tucker, Turner, Suiter, Webb, Wellman  
Assistant Professors Ferguson, Hale, Hunter

The undergraduate prerequisite for a graduate major is 15 semester hours in education. Passing the National Teacher Examination does not exempt the applicant from the undergraduate course requirements. College graduates who do not meet this requirement may take a limited number of graduate courses in education concurrently with the undergraduate courses required for certification.

To be admitted to candidacy for the master's degree students in teacher-education programs must:

1. Earn a B (3.0) average in the first 15 semester hours of graduate work attempted.
  - a. Earn at least six of these semester hours on the Marshall University Huntington campus.
  - b. Complete Educational Foundations 621, or the equivalent as a part of the first 15 hours.
2. Submit to a test of scholastic aptitude. (G.R.E. Examination Aptitude Test. Students must arrange for this examination by writing to Educational Testing Service, Princeton, New Jersey or an application may be secured from the Graduate School office.)
3. Have a professional teaching certificate valid in West Virginia or the equivalent thereto.

Teachers with a master's degree who wish to qualify for additional certification or endorsement must apply for admission to the program selected and meet the admission requirements of that program.

### Teacher Education Curricula

#### A. EARLY CHILDHOOD EDUCATION

For teachers with professional Certificates valid for teaching in grades K-3 or N-K-6.\*

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\*Teachers with professional certificates valid for teaching in grades 1-9 who wish early childhood endorsement will be admitted to these courses only after completing the following courses or their equivalents: Home Economics 431-531, 3 hours; Speech 445-545, 3 hours; Curriculum and Instruction 671, 3 hours; Curriculum and Instruction 630, 3 hours; Speech 418-518, 3 hours.

|   | Hours |
|---|-------|
| Minimum requirements                        | 32-36 |
| 1. Education                                | 21    |
| a. Educational Foundations 616, 621         | 6     |
| b. Curriculum and Instruction 631, 632, 633 | 9     |
| c. Counseling and Rehabilitation 614        | 3     |
| d. Educational Administration 609           | 3     |
| 2. Electives with approval of advisor       | 15    |
| a. Education                                | 6-9   |
| b. Outside of Education                     | 6-9   |

## B. ELEMENTARY EDUCATION

Students in this program may take not more than six hours in counseling and rehabilitation to be chosen from Counseling and Rehabilitation 590, 614, 646.

|  | Hours |
|--|-------|
| Minimum requirements   | 32-36 |
| 1. Education   | 21    |
| a. Educational Administration 609  | 3     |
| b. Educational Foundations 560 (or Curriculum and Instruction 610), 616, 621 | 9     |
| c. Electives   | 9     |
| Select from the following courses:   |       |
| Educational Foundations 515, 535, 560, 615, 619                              |       |
| Curriculum and Instruction 543, 610, 623, 635, 656, 657, 670, 671, 678       |       |
| 2. Electives (must be approved by advisor)                                   | 11-15 |

## C. SPECIAL EDUCATION

The program in special education serves the professional needs of teachers of exceptional children. These areas available at Marshall University include the mentally retarded, crippled and other health impaired (learning disabilities) and emotionally disturbed. The student without background in special education should anticipate two years of graduate study. Prior to admission to the special education graduate program the student must be certificated as a special education teacher or have completed one of the series of courses listed below:

|   | Hours |
|---|-------|
| a. Mentally Retarded: Curriculum and Instruction 520, 533, 540, 553                             | 12    |
| b. Crippled and other health impaired conditions: Curriculum and Instruction 520, 544, 582, 596 | 12    |
| c. Emotionally disturbed: Curriculum and Instruction 520, 582, 583, 585                         | 12    |
| Minimum requirements  | 33-36 |
| 1. Education  | 27-30 |
| a. Educational Foundations 535, 616, 621  | 9     |

|    |  |     |
|----|--|-----|
| b. | Curriculum and Instruction 625, 626, 627, 628, 629     | 15  |
| c. | Curriculum and Instruction 623, 681                    | 3-6 |
| 2. | Electives (outside education with approval of advisor) | 6-9 |

#### D. ART

Admission requires 26 semester hours of art. Deficiencies in undergraduate work must be made up by taking prescribed courses for undergraduate credit.

|  | Hours |
|--|-------|
| Minimum requirements                                       | 32-36 |
| 1. Education   | 6     |
| Select from the following courses:                         |       |
| a. Educational Foundations 560, 616, 621, 648              |       |
| b. Curriculum and Instruction 528, 610, 623                |       |
| c. Counseling and Rehabilitation 590                       |       |
| 2. Art   | 26-30 |
| 3. Exhibit creative work achieved during program of study. |       |

#### E. LIBRARY SCIENCE

Twelve semester hours of library science in areas of school library administration, cataloging and classification, reference, and orientation in school library service are required for admission to the program.

|  | Hours |
|--|-------|
| Minimum requirements                                 | 32-36 |
| 1. Education   | 12    |
| a. Educational Administration 609                    |       |
| b. Curriculum and Instruction 528 or 610, 543 or 545 |       |
| c. Counseling and Rehabilitation 590                 |       |
| 2. Library science, including Library Science 621    | 12-18 |
| 3. Electives   | 6-9   |

Library science as a minor field may be combined with another offering a graduate degree. Courses are to be selected with the 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 is required as a prerequisite to a minor.

#### F. MUSIC

The degree Master of Arts with a major in music education requires a minimum of 32 semester hours of graduate work of which not more than 6 hours may be earned by a thesis or, if a thesis is not submitted, a minimum of 36 hours of course work must be completed. The thesis may be a written report, graduate recital, or music composition of merit. All candidates for the master's degree must participate in a major music ensemble.

The program for the degree must include 18 hours of music education and literature, 6 hours from other fields of music and 6 hours in educational foundations. Six hours may be taken in applied music.

Majors in music education are given 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 these examinations prior to registering for graduate courses.

### INSTRUMENTAL

|                                       | Hours |
|---------------------------------------|-------|
| Minimum requirements                  | 32-36 |
| 1. Education                          | 6     |
| a. Educational Foundations 616 or 648 | 3     |
| b. Educational Administration 606     | 3     |
| 2. Music 601, 610, 611, 615, 630, 676 | 16    |
| 3. Electives in music                 | 10-14 |

### VOCAL

|                                       | Hours |
|---------------------------------------|-------|
| Minimum requirements                  | 32-36 |
| 1. Education                          | 6     |
| a. Educational Foundations 616 or 648 | 3     |
| b. Educational Administration 606     | 3     |
| 2. Music 601, 610, 611, 629, 676      | 14    |
| 3. Electives in music                 | 12-16 |

### G. READING SPECIALIST

For teachers who wish to have a professional certificate endorsed for serving as reading specialist in kindergarten through grade 12.

|                      | Hours |
|----------------------|-------|
| Minimum requirements | 32-36 |

|  | Hours |
|--|-------|
| Education  | 33-36 |
| 1. Educational Administration 609  | 3     |
| 2. Curriculum and Instruction 636, 637, 611 or 638, 639, 642, 681  | 12-15 |
| 3. Educational Foundations 535 or Curriculum and Instruction 635, Educational Foundations 560 or Curriculum and Instruction 610, Educational Foundations 616, 648, 619 | 12-18 |

Secondary teachers must take Curriculum and Instruction 611, elementary teachers must take Curriculum and Instruction 638.

### H. SECONDARY EDUCATION

(For programs in art, music, and special education, refer to Sections D, F, C).

Teachers eligible for the following programs must have, before completing the requirements for the master's degree, professional certificates valid for grades seven through twelve or must be teaching in a junior high school and certified to teach grades one through nine. The latter must complete Curriculum and Instruction 528.

## BIOLOGICAL SCIENCES

Deficiencies in undergraduate preparation may be corrected while taking graduate courses. Students graduating in this program must have a minimum of 50 semester hours of graduate and undergraduate biological science.

|  | Hours |
|--|-------|
| Minimum requirements   | 32-36 |
| 1. Education   | 9     |
| Select from following courses                                    |       |
| a. Educational Foundations 515, 535, 560, 619, 648               |       |
| b. Curriculum and Instruction 528, 565, 610, 623, 640, 641, 668* |       |
| c. Counseling and Rehabilitation 590                             |       |
| d. Educational Administration 609                                |       |
| 2. Biological science  | 18    |
| 3. Electives   | 6-9   |

## BUSINESS

This program provides course work in professional education, business education, and business administration. Selection of courses is based on individual needs.

Students graduating in this program must have a minimum of 40 semester hours of graduate and undergraduate business administration. They must have met the requirements of a professional certificate to teach business in the secondary school. Deficiencies in undergraduate preparation may be corrected while taking graduate courses.

|                                    | Hours |
|------------------------------------|-------|
| Minimum requirements               | 32-36 |
| 1. Education                       | 6     |
| 2. Business education              | 15    |
| Select from the following courses: |       |
| a. 621, 624, 625, 626, 627         | 9     |
| b. 629, 630, 631                   | 6     |
| 3. Business                        | 9     |
| 4. Electives                       | 2-6   |

NOTE: Not to include Business Education 624, 625, 626, 627 or courses in education except Curriculum and Instruction 679 and 681.

## ENGLISH

Undergraduate course requirements are a minimum of 15 hours in English literature and American literature.

A minimum of six hours of college credit in a foreign language (or demonstrated reading ability in a foreign language) is required for unconditional admission to the program. Students who lack this minimum and who are admitted provisionally are required to make up the deficiency prior to admission to candidacy.

\*Must include Educational Foundations 621.

|   | Hours |
|---|-------|
| Minimum requirements  | 32-36 |
| (Students are required to do at least one-half of their work in English). |       |
| 1. Education  | 15    |
| Select from the following courses:  |       |
| a. Educational Foundations 648 and 621 or English 630                     | 6     |
| b. Curriculum and Instruction 541, 545, 652                               | 9     |
| 2. English 555 and one of the following:                                  |       |
| English 575, 604, 605   | 6     |
| 3. Electives in English or education                                      | 11-15 |

## HOME ECONOMICS

|   | Hours |
|---|-------|
| Minimum requirements                                | 32-36 |
| 1. Education  | 12-18 |
| Select from the following courses:                  |       |
| a. Educational Foundations 535, 560, 616, 621*, 648 |       |
| b. Curriculum and Instruction 565, 566, 610, 623    |       |
| c. Counseling and Rehabilitation 590                |       |
| d. Educational Administration 609                   |       |
| 2. Home Economics 506, 600, 601, 602, 603           | 9-12  |
| 3. Electives  | 0-6   |

## PHYSICAL SCIENCE

Teacher with 16 hours of chemistry, 8 hours of physics, and 10 hours of mathematics on the undergraduate level are eligible for this program.

Deficiencies in mathematics may be corrected concurrently with this program. The writing of a thesis is optional.

|  | Hours |
|--|-------|
| Minimum requirements                               | 32-36 |
| 1. Education                                       | 9     |
| Select from the following courses                  |       |
| a. Educational Foundations 560, 619, 621*, 648     |       |
| b. Curriculum and Instruction 528 or 610, 623, 640 |       |
| c. Educational Administration 609                  |       |
| d. Counseling and Rehabilitation 590               |       |
| 2. Chemistry and physics                           | 18    |
| 3. Electives                                       | 5-9   |

## SOCIAL STUDIES

For this program, social studies includes economics, geography, history, political science, and sociology (including anthropology). Only teachers with at least 30 hours of undergraduate work in this area are eligible for unconditional admission to this program.

|                      | Hours |
|----------------------|-------|
| Minimum requirements | 32-36 |
| 1. Education         | 9     |

\*Required

- a. Educational Foundations 616 or 648
- b. Curriculum and Instruction 640, 667, or 670
2. Social studies and electives . . . . . 23-27
  - a. Six semester hours must be selected in each of two of the following fields: economics, geography, history, political science, and sociology (including anthropology).
  - b. The remaining work may be distributed among the five fields provided that: Not more than 15 hours are in any one of the social studies; and, at least 6 hours are earned in each of the social studies fields in undergraduate and graduate work combined.

## SECONDARY SCHOOLS

A program of courses for teachers in junior and senior high schools for whom provisions have not been made in other programs.

|  | Hours |
|--|-------|
| Minimum requirements . . . . .   | 32-36 |
| 1. Education . . . . .   | 12-18 |
| Select from the following courses:                                       |       |
| a. Educational Foundations 515, 517, 535, 560, 615, 621, 648*            |       |
| b. Curriculum and Instruction 528 (or 610)*, 545, 679, 681               |       |
| c. Counseling and Rehabilitation 590, 605, 614                           |       |
| d. Educational Administration 609*, 675                                  |       |
| 2. Electives (must include 12 hours in subject specialization) . . . . . | 12-18 |

## I. TEACHER EDUCATION ASSOCIATE

This endorsement is for the teachers in public schools who are eligible to supervise student teaching. To qualify for the Teacher Education Associate Endorsement, the candidate:

1. Must complete the requirements for the master's degree.
2. Complete the following in meeting the requirements for the master's degree or as credit beyond the master's degree:
  - a. Fifteen (15) or more semester hours of course work in each area of specialization at the secondary level in which he supervises student teachers.
  - b. Any fifteen (15) or more semester hours completed from the required areas on the master's degree program in elementary education at Marshall University (or comparable to the Marshall program if completed at another institution) will suffice for the specialization requirement for the elementary supervising teacher.
  - c. Educational Administration 606 or Curriculum and Instruction 610— 3 hrs.
3. Shall hold a valid professional license endorsed for the specialization(s) in which he supervises student teachers.
4. Shall have five (5) years of successful teaching experience, two of which shall be in the area of specialization and/or at the grade level in which he supervises student teachers.

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\* Required

5. Shall be recommended by the Coordinator of Student Teaching at Marshall University, after he has completed a minimum of six (6) semester hours including Curriculum and Instruction 678.

520. SPECIAL EDUCATION: INTRODUCTION TO EXCEPTIONAL CHILDREN. 3 hrs. I, II, 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.

CR: Educational Foundations 319.

528. SECONDARY EDUCATION: JUNIOR HIGH SCHOOL CURRICULUM. 3 hrs. II, S.

The study of procedures for creating a functional junior high curriculum with emphasis upon the needs of early adolescents.

533. SPECIAL EDUCATION: THE MENTALLY RETARDED CHILD. 3 hrs. I, II, S.

Acquaints teachers with the characteristics and needs of the mentally retarded child. The status of the mentally retarded in our society and the impact of mental retardation on education.

PR: Special Education 420 or 520 or permission of instructor.

540. SPECIAL EDUCATION: STUDENT TEACHING WITH MENTALLY RETARDED CHILDREN. 4 hrs. I, II, S.

All-day supervised teaching in special classes in the public schools. Required of all students who are completing curriculum for teachers of mentally retarded children.

PR: Curriculum and Instruction 520, 533.

541. SECONDARY EDUCATION: LITERARY MATERIALS FOR ENGLISH AND SOCIAL STUDIES. 3 hrs. I, S.

To acquaint teachers of English and social studies with a variety of literary selections suitable for students, grades 7-12.

PR: Educational Foundations 319.

543. ELEMENTARY EDUCATION: TEACHING READING IN ELEMENTARY SCHOOLS. 3 hrs. I, II, S.

Presenting modern techniques and practices in the teaching of reading.

PR: Educational Foundations 319.

544. SPECIAL EDUCATION: CHARACTERISTICS OF CRIPPLED CHILDREN. 3 hrs. I, II, S.

Psychological, social, emotional and educational problems which may accompany crippling conditions.

PR: Curriculum and Instruction 420 or 520.

545. SECONDARY EDUCATION: TEACHING READING IN SECONDARY SCHOOLS. 3 hrs. I, II, S.

Principles underlying the teaching of reading in junior and senior high schools.

PR: Educational Foundations 319 or permission of instructor.

553. SPECIAL EDUCATION: CURRICULUM DEVELOPMENT FOR TEACHERS OF THE MENTALLY RETARDED. 3 hrs. II, S.  
Principles and current trends in curriculum development are reviewed and evaluated toward the development of specific curricula for the mentally retarded. Methods and materials are presented in relation to this development.  
PR: Curriculum and Instruction 420, 520, 433 or 533 or permission of instructor.
565. AUDIOVISUAL AIDS IN LEARNING. 3 hrs. I, II, S.  
Utilization of audiovisual materials, equipment and techniques.  
PR: Educational Foundations 319.
566. PRODUCTION OF AUDIOVISUAL AIDS. 3 hrs. I, S.  
Basic techniques in making slides, photographs, dry and wet mountings, feltboard materials, movies, tape recordings, and similar teaching aids.  
PR: Curriculum and Instruction 465 or 565.
- 582-583-584-585. SPECIAL TOPICS. 1-4; 1-4; 1-4; 1-4 hrs. I, II, S.
596. SPECIAL EDUCATION: STUDENT TEACHING WITH PUPILS WITH CRIPPLING CONDITIONS. 3 hrs. I, II, S.  
Teaching under supervision in cooperating public schools  
PR: Curriculum and Instruction 444 or 544 or consent of instructor.
609. ELEMENTARY EDUCATION: CURRICULUM IN THE MODERN ELEMENTARY SCHOOL. 3 hrs. I, II, S.  
Examination of traditional and current assumptions undergirding the modern elementary school curriculum with emphasis on converting germane theoretical bases into plans for significant curriculum change and modernization.
610. SECONDARY EDUCATION: CURRICULUM IN THE MODERN SECONDARY SCHOOL. 3 hrs. I, II, S.  
Analysis of the sociological and political implications which affect secondary school curriculum with an in-depth analysis on current trends and developments in secondary education today.
611. SECONDARY EDUCATION: PRACTICUM IN TEACHING READING IN SECONDARY SCHOOLS. 3 hrs. S.  
Clinical experience in teaching reading for teachers in the secondary schools with emphasis on skills and understandings necessary for teaching remedial reading.  
PR: Curriculum and Instruction 445 or 545.
612. AUDIOVISUAL ADMINISTRATION AND SUPERVISION.  
3 hrs. I or II, S.  
Theory and practice related to financing, maintaining, and improving, audiovisual programs, and administrative and supervisory

services, training, research, and public relations.

PR: Curriculum and Instruction 465 or 565 or a combination of Speech 532, Library Science 510 and Curriculum and Instruction 466 or 566.

**620. CONSERVATION EDUCATION. 3 hrs. S.**

Basic conservation concepts and course content; the materials and methods for conservation teaching. Elements of soil, water, and human conservation are presented.

**623. INSTRUCTIONAL MODELS AND ASSESSMENT TECHNIQUES.**

3 hrs. I, S.

A study of selected teaching-learning models (Woodruff, Rogers, Skinner, Ausubel) with emphasis on implications for the role of the teacher; assessment and analysis of possible influences of the teacher through a study of interaction analysis, questioning patterns, and teacher appraisal behaviors.

**624. ADVANCED INSTRUCTIONAL STRATEGIES. 3 hrs. II, S.**

Performance-based laboratory experiences in a micro-teaching clinic dealing with such teaching tasks as varying the stimulus situation, using higher order questions, affecting closing, establishing set, and verbal reinforcement.

PR: Curriculum and Instruction 623.

**625. SPECIAL EDUCATION: SUPERVISION. 3 hrs. I, S.**

Problems of supervision of programs for the mentally retarded. Preparation of budgets, state regulations, and school relationship.

PR: Curriculum and Instruction 520, 533, 540, 553.

**626. SPECIAL EDUCATION: DIAGNOSTIC-CLINICAL PRACTICES.**

3 hrs. II, S.

Team approach to diagnosis and treatment of exceptional children.

PR: Curriculum and Instruction 520, 540, 553.

**627. SPECIAL EDUCATION: MEDICAL-PSYCHOLOGY ASPECTS OF EXCEPTIONAL CHILDREN. 3 hrs. I, S.**

Theoretical and practical approaches to identifying programming for atypical children. Community resources, from the medical, clinical, psychological and pathological fields, are utilized.

PR: Undergraduate degree with a major in special education or permission of the Director of Special Education.

**628. SPECIAL EDUCATION: REHABILITATION TECHNIQUES.**

3 hrs. II, S.

Team approach to physical, mental, and emotional rehabilitation. Methods of identification and assessment; case study and referrals; follow-up procedures; vocational placement and VR-public school cooperative endeavors.

PR: Curriculum and Instruction 520, 533 or permission of instructor.

629. SPECIAL EDUCATION: SEMINAR. 3 hrs. I, II, S.  
Research methods and current significant findings in special education. Guest speakers.  
PR: Curriculum and Instruction 520, 533, 540, 553.
630. EARLY CHILDHOOD EDUCATION: PRACTICUM IN KINDERGARTEN EDUCATION. 3 hrs. I, S.  
Supervised experience in teaching kindergarten with a concurrent seminar in organization and administration.
631. EARLY CHILDHOOD EDUCATION: CURRENT INFLUENCES ON EARLY CHILDHOOD EDUCATION. 3 hrs. II, S.  
A study of recent findings in the behavioral sciences and their implications for early childhood education.
632. EARLY CHILDHOOD EDUCATION: EARLY CHILDHOOD PROGRAMS. 3 hrs. I, S.  
An examination of past and present programs for young children with opportunity provided for curriculum development.  
PR: Curriculum and Instruction 631.
633. EARLY CHILDHOOD EDUCATION: ADULT INVOLVEMENT IN EARLY EDUCATION. 3 hrs. II, S.  
Ways of communicating and involving paraprofessionals, parents, volunteers, staff in the education of young children.  
PR: Curriculum and Instruction 632.
635. EVALUATION IN ELEMENTARY AND SECONDARY SCHOOLS 3 hrs. S.  
Procedures for evaluating effectiveness of a school program with emphasis on procedures other than formal tests.
636. ELEMENTARY EDUCATION: MODERN ELEMENTARY SCHOOL READING PROGRAM. 3 hrs. I, S.  
Survey, analysis and evaluation of methodology as related to educational objectives, learning theory and principles of human growth and development.  
PR: Curriculum and Instruction 443 or 543 for elementary teachers.  
PR: Curriculum and Instruction 445 or 545 for secondary teachers.
637. ELEMENTARY EDUCATION: DIAGNOSIS AND CORRECTION OF READING DIFFICULTIES. 3 hrs. II, S.  
Study and the causes of reading difficulties, diagnostic devices and techniques, and remedial methods and materials.  
PR: Curriculum and Instruction 636.
638. ELEMENTARY EDUCATION: PRACTICUM IN DIAGNOSIS AND CORRECTION OF READING DISABILITIES. 3 hrs. I, S.  
Practical experience in diagnosis and corrective treatment of reading disabilities.  
PR: Curriculum and Instruction 637.

639. ELEMENTARY EDUCATION: SEMINAR: PROBLEMS AND ISSUES IN READING INSTRUCTION. 3 hrs. II, S.  
Study of research findings in reading instruction, emphasis given to psychological and sociological implications for specialists and supervisors.  
PR: Curriculum and Instruction 638 or 611.
640. LITERATURE. 1-3 hrs. I, II, S.  
A program of reading, either extensive or intensive, and reports on a group of outstanding contributions to education; readings selected with guidance of advisor. Only one registration for Curriculum and Instruction 640 is permitted.
641. SEMINAR. 2-3 hrs. I, II, S.  
A guided program of readings, reports and discussions. No student may register for this course a second time.
642. ELEMENTARY EDUCATION: SEMINAR: READING INSTRUCTION FOR INDIVIDUALS WITH SPECIAL NEEDS. 3 hrs. I, II, S.  
Study of research findings, methodology and instructional materials for atypical learners, illiterate adults and others.  
PR: Curriculum and Instruction 639.
652. SECONDARY EDUCATION: INVESTIGATIONS IN TEACHING ENGLISH IN SECONDARY SCHOOLS. 3 hrs.  
Emphasis on specific problems in teaching English rather than general techniques.
656. TEACHING LANGUAGE ARTS. 3 hrs.  
Current methods and available materials for teaching handwriting, spelling, and oral and written expression.
657. ELEMENTARY EDUCATION: TEACHING ARITHMETIC. 3 hrs. II, S.  
Acquainting students with available materials and study of the most widely accepted methods of teaching.
658. ELEMENTARY EDUCATION: CLINICAL PRACTICE IN ARITHMETIC INSTRUCTION. 3 hrs. S.  
Working with pupils under guidance; diagnosing, planning and putting into effect an instructional program for a limited number of pupils.  
PR: Curriculum and Instruction 657.
667. SECONDARY EDUCATION: TEACHING SOCIAL STUDIES IN SECONDARY SCHOOLS. 2-3 hrs. S.  
Plans for teaching social studies with suggestions for procurement and use of materials.
668. SECONDARY EDUCATION: TEACHING BIOLOGICAL SCIENCES. 3 hrs. S.  
Methods, materials and techniques for teaching biology using

demonstrations and laboratory experiences, projects and reports, field trips, and audiovisual aids. Providing and maintaining equipment.

670. ELEMENTARY EDUCATION: TEACHING SOCIAL STUDIES IN ELEMENTARY SCHOOLS. 3 hrs. I, II, S.  
Materials and procedures for teaching social studies with emphasis on a survey of successful programs of instruction.
671. ELEMENTARY EDUCATION: TEACHING SCIENCE IN ELEMENTARY SCHOOLS. 3 hrs.  
Problems and methods of teaching science.
678. THE SUPERVISING TEACHER. 3 hrs.  
Duties and responsibilities of the teacher who supervises student teachers.  
PR: Must have been, be, or be nominated as a supervisor of student teaching.
681. THESIS. 6 hrs. I, II, S.  
Students completing 681 must defend their thesis in an oral examination.

### EDUCATION-FOUNDATIONS (EDF)

Professors Willey, Hayes, Arhelger, Irvin  
Associate Professors Khatena, Lichtenstein, Waite, Williams  
Assistant Professors Barker, Broadwater, Morgan, Plymale, Smith

515. HISTORY OF MODERN EDUCATION. 3 hrs. I, II, S.  
Our debt to the ancient Hebrews, Greeks, and Romans. Emphasis also is placed upon the movements since the beginning of the Renaissance.
517. STATISTICAL METHODS. 3 hrs. I, II, S.  
Descriptive statistics, a foundation course in methods and analysis for students in education and social sciences.  
PR: Consent of instructor.
535. TESTS AND MEASUREMENTS. 3 hrs. I, II, S.  
History, philosophy and elementary statistical methods for testing, measuring and evaluating pupil behavior are studied.  
PR: Educational Foundations 319.
560. PHILOSOPHY OF EDUCATION. 3 hrs. I, II, S.  
Surveys basic philosophic schools and concepts and their application to educational practice.  
PR: Educational Foundations 319 or permission of instructor.
- 582-583-584-585. SPECIAL TOPICS. 1-4; 1-4; 1-4; 1-4 hrs. I, II, S.

615. HISTORY OF EDUCATION IN THE UNITED STATES. 3 hrs. S.  
Development of public and private educational systems in the United States.
616. ADVANCED STUDIES IN CHILD DEVELOPMENT. 3 hrs. I, II, S.  
Nature of growth and environmental factors affecting child development.
619. EDUCATIONAL PSYCHOLOGY. 3 hrs. I, or II, S.  
Study of learning theories and their application to teaching.
621. EDUCATIONAL RESEARCH AND WRITING. 3 hrs. I, II, S.  
Investigative methods and techniques and their application.
640. LITERATURE. 1-3 hrs. I, II, S.  
A program of reading, either extensive or intensive, and reports on a group of outstanding contributions to education; readings selected with guidance of adviser. Only one registration for this course is permitted.
641. SEMINAR. 2-3 hrs. I, II, S.  
A guided program of readings, reports and discussions. No student may register for this course a second time.
648. ADVANCED STUDIES IN HUMAN ADJUSTMENT. 3 hrs. I, II, S.  
Psychological foundations of personality development with emphasis on principles of mental health as related to problems of everyday living.
679. PROBLEM REPORT. 1-3 hrs. I, II, S.  
This preparation of a written report on a research problem, experiment or field project in education. This report is not a thesis and students must complete an additional 33 hours unless 679 is followed by 681 for 3 hours of credit.
681. THESIS. 3-6 hrs. I, II, S.  
May be taken for 3 hours of credit by students whose reports in 679 were excellent and are of such character as to warrant further research. Students completing 679 and 681 for a total of 6 hours may qualify for the master's degree by earning an additional 26 hours of credit. Students completing 681 must defend their thesis in an oral examination.

### EDUCATION— VOCATIONAL TECHNICAL (VTE)

Professor Jones  
Assistant Professors Allen, L. Olson

The program for the Master of Science degree with a major in Vocational-Technical Education prepares individuals for an effective role in vocational education. The student's goals, educational and experiential

qualifications, and the nature of vocational education are used to select the courses for each student's program of graduate study. Students admitted must have or qualify for a professional teaching certificate.

The following plan provides a framework for an individualized program of study.

|  | Hours |
|--|-------|
| Minimum requirements . . . . .   | 36    |
| 1. Vocational-technical education and education . . . . .  | 18    |
| (Must include Vocational-Technical Education 500 and 660). The remaining 12 semester hours to be planned to meet the student's professional goals. |       |
| 2. Minor field . . . . .   | 12    |
| A total of nine hours in a single discipline, plus 3 hours of electives, or 6 hours in each of two disciplines.*                                   |       |
| 3. Thesis or electives . . . . .   | 6     |

500. PHILOSOPHY OF VOCATIONAL EDUCATION. 3 hrs.

An overview of the historical origins of vocational education and their relationship to major educational philosophies; study of the philosophical foundations of each area of vocational education; analysis of questions fundamental to an overall philosophy of vocational education.

506. VOCATIONAL EDUCATIONAL LEGISLATION. 3 hrs.

An overview of the historical evolution of vocational education legislation; analysis of the Vocational Education Act of 1963 and the Vocational Amendments of 1968 as they relate to state and local planning of occupational education programs.

510. DEVELOPING INSTRUCTIONAL MATERIALS FOR OCCUPATIONAL COURSES. 3 hrs.

Study of procedures for analyzing an occupation to identify essential knowledge and skills; use of the analysis to develop behavioral objectives and an instructional plan for a specific occupation, with emphasis on innovative and multimedia approaches to facilitate student achievement of the stated objectives to a specified level.

520. PRINCIPLES AND PRACTICES IN COOPERATIVE EDUCATION. 3 hrs.

Study of principles for planning, implementing, and evaluating a cooperative program within the various categorical service areas of vocational education; consideration of factors which must be considered in selection of the cooperative design for certain educational levels and for student groups with special needs.

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\*The minor is to be in a discipline supportive to the field of education, such as sociology, psychology, economics, or political science.

522. COORDINATION OF COOPERATIVE PROGRAMS IN  
VOCATIONAL EDUCATION. 3 hrs.

Study of the types of data needed for planning a cooperative program within one or more service areas of vocational education, operational procedures for implementing the plan, and techniques for evaluating the program and individual progress; each student will conduct a study of the community to identify appropriate work stations for a specified level and develop a detailed plan for utilization of such facilities; for maximum credit, the student will implement and evaluate the program he designed throughout an academic year.

530. OCCUPATIONAL EDUCATION FOR THE DISADVANTAGED.  
2 to 3 hrs.

Study of conditions which mitigate against success in school for students of all ages; emphasis on the potential of occupational education programs for assisting such students to achieve a level of employability and to achieve a higher level of academic achievement through materials related to personal interests and employment goals; emphasis on cooperative planning and teaching involving academic teachers and counselors. Implementation of a plan for maximum credit.

579. PRACTICUM IN OCCUPATIONAL EDUCATION PROGRAMS.  
1-4 hrs.

Individually designed to provide field experience under supervision of the faculty, such experience to be related to the student's projected role in vocational education (instruction, administration, program planning, research).

582-583-584-585. SPECIAL TOPICS IN VOCATIONAL-TECHNICAL  
EDUCATION. 1-3 hrs.

Concentrated study of a special topic in vocational or technical education, to be selected cooperatively by student and faculty adviser; hours of credit to be determined by magnitude of the project and number of hours commitment the student makes to its completion.

600. SUPERVISION OF VOCATIONAL EDUCATION PROGRAMS. 3 hrs.

Study and application of basic principles of supervision to vocational education at the state, system, and institutional levels; identification of specific supervisory responsibilities required at the secondary and postsecondary levels, and functional differences in full-time and part-time types of vocational programs.

602. ADMINISTRATION OF OCCUPATIONAL EDUCATION PROGRAMS.  
3 hrs.

Study of federal and state legislation related to vocational education, to identify those elements which affect local administration of vocational programs; emphasis on administrative responsibilities in relation to planning, implementation, and evaluation of vocational programs.

606. DEVELOPING A LOCAL PLAN FOR VOCATIONAL EDUCATION.  
3 hrs.

Analysis of factors which must be considered in developing a local plan for vocational education, with emphasis on implication of the state plan and federal guidelines; study of factors and influences which impinge upon the program during the implementation phase; development of one or more procedures for evaluating the total program.

640. LITERATURE OF VOCATIONAL-TECHNICAL EDUCATION. 3 hrs.

A program of reading, either extensive or intensive, and reports on specific areas of vocational education or particular problems within an area of vocational-technical education; reading selected cooperatively with adviser. Limited to three semester hours.

660. VOCATIONAL EDUCATION AND MANPOWER NEEDS. 3 hrs.

Study of the sources of data on manpower needs and employment opportunities; relationship to planning techniques for conducting a community survey, organizing data for computer analysis, and applying the findings to the decision-making and planning processes.

662. OCCUPATIONAL EDUCATION AND THE COMMUNITY. 3 hrs.

Study of community organization and the relationship of the vocational education program to the occupational structure of the community; consideration of models for analyzing employment opportunities and occupational training needs and of the processes involved in securing community involvement and commitment.

670. RESEARCH APPLICATION IN OCCUPATIONAL EDUCATION.  
3 hrs.

A study of methodology, application, analysis and synthesis of research in occupational education. A review of current occupational education studies, clustered by areas, with attention to statistical techniques, data collecting, data handling, and the audience and impact of particular projects and research organizations.

674. EVALUATION IN OCCUPATIONAL EDUCATION. 3 hrs.

Study of the concepts and methods of occupational education evaluation, with attention to techniques for determining the extent to which educational goals are being achieved, to locate the barriers to advancement of these goals, and to discover the consequences of educational programs.

681. THESIS. 3-6 hrs.

Individual research on a specific problem of concern to the student and of significance to occupational education.

### ENGLISH (ENG)

Professors Brown, Mitchell, Sullivan, Tyson, Williams  
Associate Professors Fei, Gerke, Pittman  
Assistant Professors Chapman, Wooden

Graduate courses in English provide detailed consideration of authors, literary types, and periods in literary history, as well as English language history

and linguistics. Students are expected to acquire a broad acquaintance with the whole range of English and American literature and the English language and to become thoroughly familiar with the forms of literature, critical standards, and the materials and methods of literary research.

Each student selects an area of literature as a specialty and concentrates on it as a part of his work. Suggested areas are drama, poetry, novel, American literature, Victorian period, the 18th century, etc. He may elect to write a thesis in his chosen area or demonstrate his knowledge of it in the comprehensive examination which is required of all candidates at the conclusion of the specified number of hours of work for the master's degree.

Students who major in English must have at least 15 undergraduate hours in English and 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 as special or provisional admission students but must take undergraduate courses suggested by the department before becoming candidates for degrees.

A minimum of six hours of college credit in a foreign language (or demonstrated reading ability) is required for unconditional admission to graduate study in English. Students who lack this minimum and are admitted provisionally must make up the deficiency prior to admission for candidacy.

English 630 is required for a major in English and is offered twice during each year, once in the regular term, usually in the fall semester, and once in the summer session. This course should be scheduled among the first 12 hours of graduate study.

Graduate students in English should discuss their backgrounds and programs frequently with their advisers.

- 511. CHAUCER. 3 hrs.  
Background and influences, with biographical and critical study.
- 513. ENGLISH NOVEL TO 1800. 3 hrs.  
Defoe, Richardson, Fielding, Smollett, and Sterne, with supporting study of their most important predecessors and contemporaries.
- 514. NINETEENTH CENTURY ENGLISH NOVEL. 3 hrs.  
Austen, Scott, the Brontes, Eliot, Dickens, Thackeray, Trollope, Meredith, Hardy, Butler, Wilde, and their contemporaries.
- 515. VICTORIAN POETRY. 3 hrs.  
Emphasis on Tennyson, Browning, Arnold, Hopkins, Hardy and the pre-Raphaelites.
- 517. ENGLISH DRAMA TO 1642. 3 hrs.  
Non-Shakespearean English drama from its beginnings to the closing of the theatres.
- 533. CONTEMPORARY ENGLISH POETRY. 3 hrs.  
Principal poetry since the Victorian period.
- 534. CONTEMPORARY AMERICAN POETRY. 3 hrs.  
Principal poetry since 1900.

536. EARLY AND MEDIEVAL LITERATURE. 3 hrs.  
Non-dramatic English literature exclusive of Chaucer, including Old English prose and poetry, early ballads and lyrics, metrical and prose romances, and the works of Langland and Malory.
537. ENGLISH NON-DRAMATIC LITERATURE OF THE SIXTEENTH CENTURY. 3 hrs.  
Non-dramatic prose and poetry including Sidney, Spenser, Lyly, Dekker, Lodge, Nash, Greene and Bacon.
538. ENGLISH NON-DRAMATIC LITERATURE OF THE SEVENTEENTH CENTURY. 3 hrs.  
Non-dramatic prose and poetry of the period.
540. AMERICAN LITERATURE FROM 1800 TO 1855. 3 hrs.  
Prose and poetry of Bryant, Irving, Poe, Hawthorne, Emerson, Thoreau, and their contemporaries.
541. AMERICAN LITERATURE FROM 1855 TO 1925. 3 hrs.  
Study of major American poetry and non-fictional prose of the late nineteenth and early twentieth centuries. Whitman, Dickinson, and others.
542. AMERICAN NOVEL TO 1900. 3 hrs.  
Historical and critical study from the beginnings.
546. DRAMA OF THE RESTORATION AND 18TH CENTURY. 3 hrs.  
Trends, movements, and dramatic types in the English theatre of this period.
547. ENGLISH ROMANTIC POETS. 3 hrs.  
Emphasis on Blake, Wordsworth, Coleridge, Byron, Shelley, and Keats.
555. LITERARY CRITICISM. 3 hrs.  
Historical study, 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 literature of the Age of Johnson
575. INTRODUCTION TO LINGUISTICS. 3 hrs.  
The structural and descriptive approach to study of the English language.
576. MODERN GRAMMAR.  
A descriptive analysis of the structure of present day American English, utilizing the basic theory of generative transformational grammar.  
PR: English 475-575.

- 580-581-582-583-584-585-586-587-588-589-590. SPECIAL TOPICS.  
1-4; 1-4; 1-4; 1-4; 1-4; 1-4; 1-4; 1-4; 1-4; 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, variants, backgrounds, and influences.
604. THE ENGLISH LANGUAGE TO THE EARLY MODERN PERIOD. 3 hrs.  
The development of English sounds, grammar, syntax and vocabulary from selected texts. Emphasis is upon middle English and the transitional period to early modern English, especially in the areas of dialect and vocabulary.
605. THE ENGLISH LANGUAGE FROM THE EARLY MODERN PERIOD. 3 hrs.  
An examination of early modern and 18th century English sounds, grammar, syntax and vocabulary from selected texts, illustrating the literary uses of language and the development of grammatical theory.
609. MILTON. 3 hrs.  
Biographical and critical study, including Milton's English poetry and prose, and his literary and intellectual milieu.
610. READINGS IN ENGLISH AND AMERICAN LITERATURE. 2-3 hrs.  
Independent reading in a field not covered by regularly scheduled courses. Limited to English majors who have been admitted to candidacy.  
PR: Prior approval by department chairman.
611. INDEPENDENT READINGS. 3 hrs.  
Independent readings and research. Open only to students with an M.A. degree with a major in English or English Education.
616. ESSAYISTS OF THE 19TH CENTURY. 3 hrs.
620. CONTEMPORARY DRAMA. 3 hrs.  
Major British and American dramatists since 1870.
624. CONTEMPORARY BRITISH NOVEL. 3 hrs.  
Major British novelists of the twentieth century.
625. CONTEMPORARY AMERICAN NOVEL. 3 hrs.  
Major American novelists of the twentieth century.
630. MATERIALS AND METHODS OF RESEARCH. 3 hrs.  
Instruction and practice in scholarly literary research. Required among first 12 hours of course work and prior to admission to candidacy for the M.A. degree with a major in English.

640. TEACHING COLLEGE ENGLISH. 3 hrs.  
Required for graduate assistants in English.
679. PROBLEM REPORT. 1-3 hrs.
681. THESIS. 1-6 hrs.

## GEOGRAPHY (GEO)

Professors Clagg, Britton

The undergraduate prerequisite for a graduate major is 12 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 12-hour requirement for admission.

Graduate work in geography is for people 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 24 hours in the major field. At least one-half of the hours must be earned in 600 series courses.

A major must include:

|                             | Hours |
|-----------------------------|-------|
| Geography 529 and 530       | 6     |
| Geography 505 or 605        | 3     |
| Geography 603               | 3     |
| Geography 602 or 604 or 608 | 3     |
| Geography 620               | 3     |
| Geography 606 or 609        | 3     |

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.

A systematic and regional survey of world political problems and international relations stressing studies of the United States, Europe, and the Soviet Union.

508. GEOGRAPHY OF MEXICO. 3 hrs.

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

509. GEOGRAPHY OF CANADA. 3 hrs.

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

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510. URBAN GEOGRAPHY. 3 hrs.  
Study of city function, patterns, past and current problems confronting the city including planning, zoning, housing, and urban renewal.
512. GEOGRAPHY OF SOVIET LANDS. 3 hrs.  
Russian agriculture, grazing, mining, industry, and transportation examined in environmental terms.
513. GEOGRAPHY OF BRITISH ISLES. 3 hrs.  
Climate, minerals, and land forms considered in explaining economic activities.
520. FIELD GEOGRAPHY OF WEST VIRGINIA. 3 hrs.  
Type areas in lumbering, mining, agriculture, and industry studied through field methods.
525. CLIMATOLOGY. 3 hrs.  
A study of elements of weather and climate, methods of climatic classification, and distribution and characteristics of world climatic regions.
529. MAP INTELLIGENCE AND PROJECTIONS. 3 hrs.  
Principles and practice in construction of map grid, relation of maps to compass, use of drafting equipment, and understanding of earth features as shown on maps.
530. APPLIED CARTOGRAPHY. 3 hrs.  
Map making with regard to projection selection, source materials, compilation, restitution, and air photo interpretation.
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 a 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.

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.
679. PROBLEM REPORT. 1-3 hrs.
681. THESIS. 1-6 hrs.

## GEOLOGY (GLY)

Professor Rogers

Assistant Professors Bailey, Bonnett, Scrudato

Instructor Sanderson

518. INVERTEBRATE PALEONTOLOGY. 3 hrs. I., Alternate years (even numbers)  
Taxonomy and morphology of the major invertebrate phyla with an introduction of biometrics as applied to paleontology. 2 lec.-2 lab.  
PR: Geology 201 and 325 or Zoology 212 and consent.
522. ECONOMIC GEOLOGY. 4 hrs. II., Alternate years (odd numbers)  
Origin, distribution and economics of the metallic and non-metallic ore deposits. 3 lec.-2 lab.  
PR: Geology 201, 314, or consent.
523. SEDIMENTARY PETROGRAPHY. 3 hrs. II., Alternate years (even numbers)  
Megascopic and microscopical identification and a depositional and post-depositional interpretation of the sedimentary rocks. 2 lec.-2 lab.  
PR: Geology 201 and 314.
524. ENVIRONMENTAL GEOLOGY. 4 hrs. I, Alternate years (odd numbers)  
An exposition of selected areas of geology, their effects and solutions, as related to man's physical environment. Attention is given to the application of modern instrumentation as aids to the identification and solution of problems related to the environment. 3 lec.-2 lab.  
PR: Geology 201 or 10 hrs. of Science.

525. **GEOCHEMISTRY.** 4 hrs. I., Alternate years (even numbers)  
Introduction to the principles of geochemistry. The application of elementary chemistry to geologic problems. 3 lec.-2 lab.  
PR: Geology 200, Chemistry 101-102 or permission.
551. **PRINCIPLES OF GEOMORPHOLOGY.** 3-4 hrs.  
Principles of identification and analysis of the world's surficial features in terms of stratigraphy, structure, processes, tectonics and time. 3 lec.-2 lab. (optional)  
PR: Geology 200, Geology 210 or consent.
552. **REGIONAL GEOMORPHOLOGY.** 3 hrs. II., Alternate years (odd numbers)  
Description and classification of North America surface morphology and its relationship to bedrock; climate, processes and history. 3 lec.  
PR: Geography 451 or consent.

## HEALTH, PHYSICAL EDUCATION AND SAFETY EDUCATION (PE, PEW, SED)

Professor Hicks  
Associate Professors Railey, Chrietzberg

### Course requirements for degree

|   | Hours |
|---|-------|
| Minimum requirements                                    | 32-36 |
| 1. Physical education (must include 565, 626, 635, 670) | 18    |
| 2. Educational Foundations 621                          | 3     |
| 3. Electives  | 6-9   |
| 4. Minor field (with approval of Advisor)               | 6     |

531. **CAMP PROGRAMS FOR THE HANDICAPPED CHILD.** 2 hrs. II, S.  
A study of camp procedures for the handicapped and practice in the development of camp programs for atypical individuals.
560. **EDUCATION FOR PERSONAL AND FAMILY LIFE.** 2-3 hrs.  
Development of programs concerned with sex-character education in schools and other community agencies.
565. **TESTS AND MEASUREMENTS IN HEALTH AND PHYSICAL EDUCATION.** 3 hrs. II, S.  
The course includes information which will aid the prospective teacher in the location, evaluation, administration, interpretation, use of test results and test construction in physical education. 3 lec-2 lab.
575. **PRINCIPLES AND TECHNIQUES OF RECREATIONAL LEADERSHIP.** 2 hrs.  
Emphasis will be placed upon methods and materials, applicable to planning and directing various types of activities in recreational situations.

580.    **TRAFFIC LAW ENFORCEMENT.** 3 hrs.  
A course designed to study and evaluate the varied and complex system of laws governing the control of all forms of human traffic and the influences and responsibilities of traffic law enforcement on present and future societies.
- 582-585.   **SPECIAL TOPICS.** 1-3 hrs.  
PR: Approval by department chairman and instructor.
585.    **INDUSTRIAL SAFETY.** 3 hrs.  
Safety functions in industry. Principles of organization and application of safety programs. Prevention, correction and control methods are outlined and evaluated.
- 586-587-588-589.   **WORKSHOP IN PHYSICAL EDUCATION.** Credit to be arranged.  
Areas include physical education, health education, recreation and safety education.  
Subject matter to be determined and described prior to the presentation of each workshop.
590.    **PROBLEMS AND PRACTICES IN TRAFFIC SAFETY AND DRIVER EDUCATION.** 3 hrs.  
A survey course for supervisors of traffic accident prevention programs. Examines and evaluates problems, attitudes, activities, and administrative practices in school, city, and state traffic safety programs. Supplements basic teacher-training courses in driver education.  
PR: Safety Education 235 and 385.
595.    **INDUSTRIAL SAFETY MANAGEMENT.** 3 hrs.  
Concerned with instruction of industrial management personnel interested in accident prevention and safety administration. Emphasis will be on principles, facts and methodology involving safety management.
600.    **DANCE COMPOSITION IN EDUCATION.** 3 hrs.  
Extended work in individual and group composition or choreography. Includes a study of methods, curricular materials and evaluation procedures.
608.    **MOTOR LEARNING AND PERFORMANCE.** 3 hrs. I, II, S.  
Investigation of variables influencing motor behavior and the learning of motor skills. Primary emphasis is on psychological factors influencing motor performance.
621.    **FUNDAMENTAL SCIENCES APPLIED TO PHYSICAL EDUCATION.** 3 hrs.  
Analysis of the sciences in terms of their application to improvement of body functions and general well-being. Emphasis is on interrelation of physics, anatomy, and physiology to better understand body mechanics and posture.

622. PHYSICAL EDUCATION FOR THE ATYPICAL INDIVIDUAL.  
2 hrs.

A study of the principles and philosophies in the general organization and supervision of programs of physical education for the physically handicapped. The course includes field trips to hospitals, clinics, etc.

626. HISTORY AND PHILOSOPHY OF PHYSICAL EDUCATION. 3 hrs.

The history and principles of physical education with application to general education, physiology, psychology, health and recreation.

An analysis of the historical forces and factors affecting physical education. Philosophical bases are developed from which basic principles are evolved as guides in the profession.

630. PRINCIPLES OF HEALTH AND PHYSICAL EDUCATION. 3 hrs.

Principles which have developed from the basic sciences and their relationship to health and physical education.

635. CURRICULUM CONSTRUCTION IN HEALTH AND PHYSICAL EDUCATION IN GRADES 1-12. 3 hrs.

Principles, objectives, and procedures in curriculum construction for health and physical education programs. Typical programs studied and evaluated. Practice in curriculum construction for grades 1-12.

640. ORGANIZATION AND ADMINISTRATION OF PROGRAMS IN HEALTH, PHYSICAL EDUCATION AND RECREATION. 3 hrs.

A study of the responsibility of administrators for the direction, policies, procedures, and supervision of programs in health and physical education. Procedures in organization and administration in the various fields, problems of title, credit, space, classification of activities are considered in relation to various levels of school and the necessary routine procedures for effective administration.

645. PROBLEMS OF SUPERVISION OF HEALTH AND PHYSICAL EDUCATION IN THE ELEMENTARY AND SECONDARY SCHOOLS. 3 hrs.

Analysis of current problems in health and physical education, projects, readings and reports to meet the needs of students having special problems and problems of supervision in city, county, and state school systems.

650. ADMINISTRATION OF SCHOOL AND COMMUNITY RECREATION.  
3 hrs.

The provision of adequate recreation services for schools and communities; standards and qualities of recreation services; methods of measuring existing services and their coordination and community organization procedures.

Theory and practice in the organization and administration of recreation programs with emphasis on supervision, study of facilities, equipment, and program content.

- 655-669. ADMINISTRATION OF SCHOOL ATHLETICS PROGRAMS.  
1-5 hrs.

Interscholastic and intercollegiate sports programs; problems and practices in coaching and administrative procedures in promoting programs; controls; business management; safety responsibilities; and coaching techniques.

This course is divided into five separate one-hour credit units. Students may register for any or all units for one to five hours credit. The five one-hour units cover the following: Administration of athletic programs; methods of coaching; prevention, care and treatment of athletic injuries.

670. METHODS OF RESEARCH IN HEALTH AND PHYSICAL EDUCATION. 3 hrs.

The methods and tools of research and the ability to read, analyze and evaluate research in terms of its contribution to the fields of health and physical education.

681. THESIS. 4-6 hrs.

Guidance and direction for the student in the preparation of an original research project. The development of the problem, the collection, analysis, and interpretation of the data, and the form of the research report are stressed.

PR: Physical Educational 565, 670; Educational Foundations 621.

## HISTORY (HST)

Professor Moffat

Associate Professors Aldred, Gould, Woodward

Assistant Professor Galgano

Students working toward the master's degree with a major in history are required to take History 618. One or more of the following courses which emphasize use of material and methods of research are recommended: 525, 526, 633, 634.

504. AMERICAN DIPLOMACY, 1789-1900. 3 hrs.

American foreign policy from colonial times to 1900 emphasizing the gradual development of the United States and its achievement of membership in the family of nations.

505. AMERICAN DIPLOMACY, 1900-PRESENT. 3 hrs.

American foreign relations in the 20th century. The gradual retreat from isolation in the period between World War I and II and modern American involvement in international commitments will be stressed.

506-507. SPECIAL PROBLEMS. 3; 3 hrs.

518. EUROPEAN DIPLOMACY. 3 hrs.

Particular attention is given to the period since the French Revolution. Diplomatic background of the growth of major continental nations. Diplomatic relations with non-European nations in the twentieth century is emphasized.

521. THE ERA OF THE RENAISSANCE AND REFORMATION. 3 hrs.  
The impact of the Renaissance upon esthetic, economic, and political developments especially in the 15th and 16th centuries. The decline of Catholicism and the growth of the Protestant movement. The influence of the two movements upon each other is stressed.
522. THE FRENCH REVOLUTION AND THE NAPOLEONIC ERA. 3 hrs.  
Society and government in Europe before the French Revolution and the influence of the enlightenment; ideas and changes introduced by the revolution and Napoleon and their effect on the institutions and economy of Europe.
525. EUROPEAN HISTORY 1814-1914. 3 hrs.  
A century of European political, economic, and social history. Its relationship to and influence upon the history of other world areas is noted. The impact of imperialistic rivalry is emphasized.
526. EUROPEAN HISTORY 1914 TO PRESENT. 3 hrs.  
The impact of World War I upon Europe, the era between two wars. The search for world peace, World War II and its aftermath are major topics of consideration.
527. RUSSIA IN THE 19TH AND 20TH CENTURIES. 3 hrs.  
Russia under the Czars, the impact of serfdom, the essential failure of reforms, the revolutions and the Communist era stressing the effect of Communism on the world. Emphasis is on modern Russian foreign policy.
528. INTELLECTUAL AND CULTURAL HISTORY OF MODERN EUROPE. 3 hrs.  
A survey of the main currents in European thought and culture in the nineteenth and twentieth centuries.
532. THE UNITED STATES SINCE 1914. 3 hrs.  
The United States since the outbreak of the First World War in 1914.
605. SOCIAL AND ECONOMIC PROBLEMS OF AMERICAN COLONIES. 3 hrs.  
English colonization in North America during the 17th and 18th centuries, with emphasis on political ideas and institutions, economic developments, social change and conflict.
606. SOCIAL AND ECONOMIC PROBLEMS OF THE NATIONAL PERIOD, 1789 TO 1865. 3 hrs.  
The non-military and non-political aspects of the nation during the early laissez-faire period of the industrial revolution.
607. PROBLEMS IN EUROPEAN HISTORY, 1890-1923. 3 hrs.  
A detailed treatment of European diplomacy both prior to and immediately following the First World War.

608. THE AMERICAN CIVIL WAR AND RECONSTRUCTION. 3 hrs.
610. READINGS IN HISTORY. 2-3 hrs.  
Readings in topics fitted to the need of the individual student. They may deal with any graduate area. This course is ordinarily restricted to off-campus students and is used sparingly.
612. AMERICAN LEADERS TO 1865. 3 hrs.  
A chronological and biographical account of the major political figures of the nation from the organization of the government in 1789 to the end of the war to preserve it in 1865; a study of characters against the background of the events they helped to shape.
613. HISPANIC AMERICA. 3 hrs.  
A detailed history of Hispanic America with emphasis on the economic and cultural relations of the Central and South American countries with the United States and with countries of the eastern hemisphere.
614. AMERICAN REVOLUTIONARY PERIOD, 1760-1789. 3 hrs.  
American society and British policy on the eve of the American Revolution; debates on political principles and growth of revolutionary movements; war and social adjustments; diplomatic problems and the framing of new governments.
615. AMERICAN LEADERS SINCE 1865. 3 hrs.  
A continuation of History 612. The impact of outstanding men upon American history from 1865 to the present.
617. THE TRANS-ALLEGHENY FRONTIER. 3 hrs.  
A survey of the singificance of the frontier in American history.
618. METHODOLOGY. 3 hrs.  
Survey of literature and practical experience in methods and sources of history through bibliographical study and research papers. Required of students beginning graduate work in history.
619. REPRESENTATIVE HISTORIANS AND THEIR WORK. 3 hrs.  
A general study of significant historians and their works from Herodotus to Toynbee.
621. THE VICTORIAN PERIOD IN ENGLAND. 3 hrs.  
The impact of the industrial revolution upon the Victorian compromise, the growth of modern imperialism as exemplified by England and the background of World War I.
622. THE FAR EAST IN THE 20TH CENTURY. 3 hrs.  
Begins with the Sino-Japanese War and stresses the rise of Japan to the position of a world power.
633. PROBLEMS IN AMERICAN HISTORY 1877-1917. 3 hrs.  
A research course in which the student probes a selected problem within the chronological span, 1877-1917.

634. PROBLEMS IN AMERICAN HISTORY SINCE 1917. 3 hrs.  
A research course in which a student probes a selected problem within the period since 1917.
679. PROBLEM REPORT. 1-3 hrs.
681. THESIS. 1-6 hrs.

### HOME ECONOMICS (HEC)

Professor Bennett  
Associate Professors Blankenship, Vickers

See also Home Economics listed under secondary education in Curriculum and Instruction.

502. FOODS OF THE WORLD. 3 hrs.  
Characteristics and cultural aspects of the foods of Europe, Mid East and Far East.  
PR: Home Economics 203 or consent of instructor.
503. ADVANCED NUTRITION. 3 hrs.  
Metabolism of food nutrients as related to nutritional requirements of man. Reports of current research and other topics to add depth and perspective in nutrition.  
PR: or CR: Chemistry 300.
505. QUANTITY FOOD SERVICE. 3 hrs.  
Basic principles of quantity food selection, preparation, and service. Laboratory application in local food institutions.  
PR: Home Economics 110 and 203 or consent of instructor.
507. INSTITUTIONAL MANAGEMENT. 3 hrs.  
Administration of food service in institutions.
513. EXPERIMENTAL FOODS. 3 hrs.  
Experimental study of chemical and physical factors affecting food preparation.  
PR: Home Economics 110 and Chemistry 204.
515. FAMILY RELATIONSHIPS. 3 hrs. I.  
Relationships in the family during its life cycle, with some consideration of family life in other cultures.
516. PRENATAL AND INFANT CARE. 3 hrs. II.  
Prenatal and postnatal care for mothers, development of the fetus and care of the infant to two years of age.
519. TAILORING. 3 hrs.

Contemporary methods of custom tailoring with emphasis on suitable fabric and construction processes for particular styles.

PR: Home Economics 213 or consent of instructor.

520. HOUSEHOLD EQUIPMENT. 3 hrs. I, II.

Principles underlying the selection, care and use of household equipment.

527. HOME MANAGEMENT LABORATORY. 3 hrs. I, II.

Home management laboratory to develop competencies in decision making, activity analyses, use of limited resources, and work simplification through individual and group analysis.

PR: Home Economics 358.

531. DEVELOPMENT AND GUIDANCE OF THE YOUNG CHILD. 3 hrs.

Techniques of guidance of young children with emphasis on adult child interaction.

540. NUTRITION IN THE HOME AND SCHOOL. 3 hrs. I, S.

Fundamental principles of human nutrition and their application in the home and school. Designed primarily for elementary teachers. (Not open to home economics majors.)

561. THE FAMILY AS CONSUMERS. 3 hrs.

Analysis of economic factors related to provision of consumer goods and services; investigation of sources of consumer information; and means of providing economic security for families.

581-582-583-584-585. WORKSHOP. 2-3; 2-3; 2-3; 2-3; 2-3 hrs. S.

Workshop in selected areas of home economics. Credit for more than two workshops may not be counted for the master's degree.

600. PHILOSOPHY AND TRENDS IN HOME ECONOMICS. 3 hrs.

Major contemporary educational theories and their relationship to trends in the field of home economics.

PR or CR: Educational Foundations 621.

605. RECENT DEVELOPMENTS IN CLOTHING. 3 hrs. S.

Survey of recent literature and theory in the field of clothing.

606. RECENT DEVELOPMENTS IN FOODS. 3 hrs. S.

Survey of recent literature and theory in the field of foods.

661. FAMILY ECONOMICS. 3 hrs.

Factors affecting material level of living of families, expenditure patterns, and impact of social change on resource allocation.

PR: Home Economics 461-561 or 3 hrs. economics.

665. HOME MANAGEMENT THEORY AND RESEARCH. 3 hrs.

Analysis of home management theory and concepts as revealed through current research in the field.

PR: Home Economics 358, 427-527.

679. PROBLEM REPORT. 1-3 hrs.

681. THESIS. 1-6 hrs.

**684-685. SPECIAL PROBLEMS IN HOME ECONOMICS**

1-3; 1-3 hrs. I, II, S.

Problems of particular interest to the graduate student. 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; 1-3 hrs.

Extensive readings and reports from current literature in selected areas of home economics. Not more than four hours of seminar credit may be counted toward a master's degree.

**Home Economics Education**

506. METHODS IN ADULT HOME ECONOMICS EDUCATION. 3 hrs.

Vocational home economics at the secondary, post secondary and adult levels with emphasis on types and organization of programs, legislation, and groups served.

601. EVALUATION IN HOME ECONOMICS. 3 hrs.

Procedures for appraising student progress in the attainment of objectives; construction of evaluation instruments; analysis and interpretation of data.

602. CURRICULUM DEVELOPMENT IN HOME ECONOMICS. 3 hrs.

Examination of bases for home economics curricula; development of curricula for junior and senior high school programs utilizing various organizational patterns.

**JOURNALISM  
(JRN)**

Professor Oliphant  
Associate Professor Jenson  
Assistant Professor Al-Gailani

The program for the Master of Arts in Journalism provides courses and experiences to strengthen and enlarge skills and knowledge in mass communication (newspapers, radio-television, advertising, public relations, industrial editing, and journalism education).

All students in the program are required to complete Journalism 601 and 602 to provide a foundation of theory and research methods as applied in mass communications.

A student may specialize in an area of mass communications by enrolling in the professional media internship and depth reporting courses. The selection of courses in the minor fields of study must complement this specialization.

Students who do not wish to specialize may select courses leading to a general knowledge and skill in mass communications.

If a student has considerable professional experience in mass communications, he most likely will complete the minimum number of hours required in his major (18 hours) and, should he not undertake a thesis, most of the remaining course work will be in minor fields of study. If he has little or no professional experience in mass communications, courses in his major field of study will predominate.

527. JOURNALISTIC ENGLISH. 3 hrs. I, II, S.

A study of the language of mass communications in contemporary society. Designed primarily for Teachers College English majors, but open to students of all colleges.

528. HIGH SCHOOL PUBLICATIONS. 3 hrs. I, II, S.

A study of high school newspapers and yearbooks; practical experiences in writing for school publications. Designed primarily for Teachers College English majors but open to students of all colleges.

530. MAGAZINE ARTICLE WRITING. 3 hrs. I.

Fundamentals of researching and writing popular, factual magazine articles; techniques of selling articles to magazines.

531. MAGAZINE ARTICLE WRITING. 3 hrs. II.

Advanced magazine writing.

PR: Journalism 530.

601. THEORY OF MASS COMMUNICATIONS. 3 hrs. I, S.

Major theoretical concepts in mass communications are studied as a basis for understanding the communications process and the institutional impact of the mass media on the individual and on society. Required of all majors.

602. MASS COMMUNICATIONS RESEARCH AND METHODOLOGY.

3 hrs. II.

Research techniques applied to problems of mass communications including computer applications, with emphasis on mastery gained by participation in specialized research projects. Required of all majors.

603. PROFESSIONAL MEDIA INTERNSHIP I. 3 hrs. I, II, S.

For those with no professional experience in mass communications, an internship will be arranged to provide a minimum of 16 hours of professional experience per week. For those with professional experience, the internship will be a specialized study or research project.

604. PROFESSIONAL MEDIA INTERNSHIP II. 3 hrs. I, S.

PR: Journalism 603.

605. INTERNATIONAL COMMUNICATIONS. 3 hrs. I, S.

Overview of mass media internationally; comparative evaluation of free, authoritarian and communist communications systems, with special attention given to the underlying theories which have produced them.

606. DEPTH REPORTING I. 3 hrs. I, II, S.  
In-depth reporting of social and environmental activities and problems, with emphasis on thorough research and documentation. Stories will be submitted for publication.
607. DEPTH REPORTING II. 3 hrs. I, II, S.  
An advanced course which provides opportunities for students to specialize as environmental reporters and as writers in science, education, religion, business and finance and other areas. Directed reading will supplement reporting and writing projects.  
PR: Journalism 606.
608. SEMINAR IN ADVERTISING RESEARCH. 2 hrs. I or S.  
Lectures, readings, and discussions relating to all media advertising. Students may select special areas of interest.
609. SEMINAR IN PUBLIC RELATIONS. 3 hrs. II, or S.  
Theoretical and practical aspects of public relations, with special projects and readings to provide skills and insights requisite to success in the profession. Seminar discussions and research projects.
611. MOTION PICTURE PRODUCTION AND EDITING. 3 hrs. I or II.  
Planning and production of motion picture segments.  
PR: Journalism 350, 351, and 360 or equivalents.
612. HISTORY OF MASS COMMUNICATIONS, SPECIALIZED STUDY.  
3 hrs. I, II.  
Analysis of mass media development in the United States and of current media problems, with emphasis on research.  
PR: Journalism 300 or equivalent.
681. THESIS. 1-6 hrs.  
PR: Consent of the advisor.

### LIBRARY SCIENCE (LSC)

Associate Professor Theis  
Assistant Professor Terry

Requirements for the school librarianship curriculum are listed under Teacher Education Curricula in Curriculum and Instruction.

501. HISTORY OF BOOKS AND LIBRARIES. 3 hrs. S.  
Overview of library development from the classical world to the present and a survey of the development of books, printing, and writing.
504. BOOK SELECTION FOR CHILDREN. 3 hrs. I, S.  
Survey of the development of children's literature with emphasis on modern books; evaluation of the aids and standards for selection of books and materials in this area; techniques of determining reading

levels and study of reading skills; study and comparison of the work of illustrators of children's books and various editions of individual titles with emphasis on story-telling.

505. **BOOK SELECTION FOR ADOLESCENTS.** 3 hrs. II, S.  
Survey of books and other materials adapted to the needs of adolescents and young adults correlated with the school program in all subject areas; critical evaluation of standard, classic and current books with aids and criteria for selection; techniques of reading guidance, including determination of reading levels and study of reading skills; book talks, book reviews and book notes.
510. **FOUNDATIONS OF MASS COMMUNICATIONS.** 3 hrs. 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.  
Experience in the application of techniques of library service, adapted as far as possible to the student's needs.  
PR: Fifteen hours of library science.  
Application for permission to enroll in this course must be filed with the Dean of the Graduate School a minimum of five weeks prior to the beginning of the semester or term in which the student wishes to enroll for the course. Accepted applicants will be notified of their acceptance.
- 582-583-584-585. **SPECIAL TOPICS.** 1-4; 1-4; 1-4; 1-4 hrs.
604. **READING GUIDANCE.** 3 hrs.  
Study of current research on reading interests and habits of young people and adults; methods of relating readers and materials.
607. **THE LIBRARY AND THE CURRICULUM.** 3 hrs.  
Survey of elementary and secondary school curricula with emphasis on materials which enrich the teaching of various subjects.
610. **ADMINISTRATION AND OPERATION OF LIBRARIES.** 3 hrs.  
Introduction to the fundamental processes and activities of various types of libraries, including the purposes and relationships of routines and records.
615. **ADVANCED REFERENCE.** 3 hrs.  
Study of specialized reference tools.  
PR: Library Science 315.
620. **ADVANCED CATALOGING AND CLASSIFICATION.** 3 hrs.  
The Library of Congress and Dewey Decimal classification systems. Practice in detailed descriptive and subject cataloging of special materials.  
PR: Library Science 320.

621. INTRODUCTION TO RESEARCH IN LIBRARY SCIENCE. 3 hrs.  
Materials and methods of bibliographic research.
625. THE LIBRARY IN THE COMMUNITY. 2 hrs.  
Study of the problems relating to the interpretation of the library to its constituents and methods of handling these problems with emphasis on successful public relations programs.
630. TECHNICAL PROCESSES. 3 hrs.  
Methods of acquisition, processing routines in preparation work, conservation and circulation of materials.
635. GOVERNMENT PUBLICATIONS AND SPECIAL MATERIALS.  
3 hrs.  
The form, production, distribution and subject content of official publications of state and national governments and of international agencies. Selection, acquisition, organization and use of these materials.  
PR: Library Science 615.
640. READINGS IN LIBRARIANSHIP. 1-3 hrs.  
Reading and reports on outstanding books in the field of library science. Only one registration in Library Science 640 permitted.

### MATHEMATICS (MTH)

Professors Hardman, Bauserman  
Associate Professors Hogan, Thompson  
Assistant Professor Whitley

Courses may be taken with approval of student's adviser and the department chairman.

527. ADVANCED CALCULUS I. 4 hrs. I.  
The number system, limits, sequences, partial differentiation with applications, maxima and minima of functions of several variables.  
PR: Mathematics 221.
528. ADVANCED CALCULUS II. 4 hrs. II.  
Theory of definite integrals, multiple integrals, line and surface integrals, improper integrals, infinite series.  
PR: Mathematics 427 or 527.
530. VECTOR AND TENSOR ANALYSIS. 3 hrs.  
The algebra of vectors, the calculus of vectors with applications, introduction to tensor analysis.  
PR: Mathematics 221.
536. PARTIAL DIFFERENTIAL EQUATIONS. 3 hrs.  
An exposition of methods used in solving partial differential equations with applications to geometry and topics in mathematical physics.  
PR: Mathematics 335.

543.     **NUMERICAL ANALYSIS.** 3 hrs.  
The theory and technique of numerical computation involving interpolation methods, solution of systems of equations, and methods of solving of ordinary differential equations.  
PR: Mathematics 335.
- 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.  
PR: Mathematics 221.
548.     **FUNDAMENTAL CONCEPTS OF MODERN GEOMETRY.** 3 hrs.  
Finite geometries, basic background material for the modern development of Euclidean Geometry, other geometries.
549.     **PROJECTIVE GEOMETRY.** 3 hrs.  
Projective geometry using both synthetic and algebraic methods.  
PR: Mathematics 221.
550.     **FUNDAMENTAL CONCEPTS OF MODERN ALGEBRA.** 3 hrs.  
Structure of the abstract mathematical systems: groups, rings, fields, with illustrations and applications from Number Theory.  
PR: Mathematics 221.
551.     **LINEAR ALGEBRA.** 3 hrs.  
Vector spaces over the real and complex field, the algebra of matrices, linear transformations in a vector space.  
PR: Mathematics 221.
- 560-561.     **FUNCTIONS OF A COMPLEX VARIABLE.** 3; 3 hrs.  
Complex numbers, analytic functions, properties of elementary functions, integrals, series, residues and poles, conformal mapping.  
PR: Mathematics 221.
- 610-611.     **MODERN ALGEBRA.** 3; 3 hrs.  
The structure of semigroups, groups, rings, fields, modules, vector spaces, lattices and related topics.  
PR: Mathematics 450.
- 630-631.     **TOPOLOGY.** 3; 3 hrs.  
General topology including separation axioms, connectedness, compactness, convergence, continuity, metric spaces, product and quotient spaces.  
PR: Mathematics 337 or 428.

### **MODERN LANGUAGES**

Professors J. Martin, Lieberman, Perl  
Associate Professors Almael, Parrish, Simaika

#### **French (FRN)**

535.     **19TH CENTURY LITERATURE.** 3 hrs.

The French romantic movement as exemplified in the poetry, drama, and the novel of the period.

PR: French 224 or equivalent.

536. 19TH CENTURY LITERATURE. 3 hrs.

Realistic and naturalistic fiction, realism in the theatre, and selected poems of Baudelaire, the Parnassians, and the Symbolists.

PR: French 224 or equivalent.

555-556. SPECIAL TOPICS. 2-4; 2-4 hrs. On demand.

A course for advanced students sufficiently prepared to do constructive work in phases of the language or literature of interest to them.

PR: Three hours of literature from courses numbered 327 or above and the consent of instructor.

**German  
(GER)**

507-508. GOETHE'S FAUST. 3; 3 hrs. On demand.

Reading of "Faust" parts I and II. A presentation of the Faust legend. Goethe's life works as related to "Faust."

PR: Graduate standing.

582-583. SPECIAL TOPICS. 2-4; 2-4 hrs. On demand.

PR: Six hours of 300 courses in German literature and approval of the instructor and the department chairman.

**Spanish  
(SPN)**

510. SPANISH LITERATURE FROM THE CID TO THE 17TH CENTURY.  
3 hrs. On demand.

Readings, lectures, reports, and discussions of significant literary works from the Cid to the 17th century.

PR: Spanish 204.

585. THE MODERNIST MOVEMENT. 3 hrs. S.

The precursors of the Modernist Movement, its chief exponents, and its influence on the literature of Spanish America and Spain. Readings, lectures, discussions, and reports in Spanish.

PR: Two courses in Spanish beyond 204, one of which must be a course in Spanish or Spanish American literature.

588. ADVANCED SYNTAX AND STYLISTICS. 3 hrs. S.

A detailed analysis of Spanish syntax and shades of meaning with the writing of original compositions in Spanish to perfect the student's own style.

PR: Spanish 204.

590-591. SPECIAL TOPICS. 2-4; 2-4 hrs.

Independent research in selected areas of Spanish and Spanish

American literature that are not available in other courses in the catalog. The student has the opportunity to become familiar with leading authorities and bibliographies. Conferences and reports in Spanish.

PR: Three hours of literature from courses numbered 320 or above and permission of the department chairman.

610. READINGS IN SPANISH OR SPANISH AMERICAN LITERATURE. 1-3 hrs.

Readings designed for the graduate student who has the interest and the ability to study in depth a certain author, genre, or literary movement.

612. SPANISH AMERICAN POETRY BEFORE MODERNISM. 3 hrs.

Leading poets and trends in thought and versification of the colonial, neoclassic, and romantic periods.

PR: Two courses in Spanish beyond 204, at least one of which must be a literature course.

620. SPANISH ROMANTICISM. 3 hrs.

The trends and characteristics of the Romantic Movement in the writings of its leading exponents in lyric poetry, non-dramatic prose, and the theatre.

PR: Two courses in Spanish beyond 204, at least one of which must be a literature course.

679. PROBLEM REPORT. 1-3 hrs.

681. THESIS. 1-6 hrs.

## MUSIC (MUS)

Professors Kingsbury, Shepherd, Wolff

Associate Professors Balshaw, Barbour, Cerveris, Creighton, Davidson, Drescher, Imperi, Jones, Lanegger, O'Connell, Schleicher, Taggart, Whear

Students must have received a bachelor's degree from a recognized institution with a major in music or the equivalent. A conference may be required with the Chairman of the Department of Music as a part of the admission procedure. At this conference the conditions of admissions are defined. The applicant may submit an audition tape if inconvenient to appear on campus.

The program for a major in music is 32 hours and must include 18 hours in one of the following fields of music: music history and literature, theory and composition, church music, or applied music. A minimum of 6 hours is required in a subject other than music. The student will plan his program with his adviser. (See music listed under Teacher Education Curricula in Curriculum and Instruction.)

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 16th 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. 17TH AND 18TH 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. INTRODUCTION TO MUSICOLOGY. 3 hrs.**

A survey of the various fields of musicology with emphasis on basic research techniques, procedures, evaluation and criticism of styles and periods in music.

606. MUSIC OF THE CHURCH. 2 hrs.  
Survey of the development of church music from early Christian era to present.
607. CONTEMPORARY CHURCH MUSIC. 2 hrs.  
A stylistic study of trends in 20th century church music. Survey of representative composers and repertoire.
608. HYMNOLOGY. 2 hrs.  
A study of the development of the Christian hymns, criteria for evaluation of hymnody, and study of present hymnals.
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. 3 hrs.  
Special problems and projects chosen by the student for investigation. Extensive study of a single problem or project in detail.
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 1-12.
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.

**619c. SEMINAR IN CHURCH MUSIC. 3 hrs.**

A basic course dealing with the problems and practices in Church Music. Projects are assigned to fulfill individual needs of students.

**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 to strengthen the student's playing-teaching knowledge of 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 four 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 analysis of choral works chosen from the

Renaissance, Classical, Baroque and Romantic periods with direct application of choral techniques to actual performance. Mainly a capella music with some emphasis on the madrigal. Rehearsals 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 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.

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.

641. ADVANCED COUNTERPOINT. 3 hrs.

An intensive study of contrapuntal techniques, styles, and forms through composition and analysis.

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.
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 TECHNIQUES AND WRITING. 3 hrs.
679. PROBLEM REPORT. 1-3 hrs.
681. THESIS. 1-6 hrs.

### 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

572-573-574-575. SPECIAL TOPICS. 1-4; 1-4; 1-4; 1-4 hrs.

**PHILOSOPHY  
(PHL)**

Professors Slaatte, Jennings  
Associate Professors Choi, Mininni, Plott

Courses may be taken without prerequisites with approval of the instructor.

510. PHILOSOPHICAL SOURCES OF AMERICAN CULTURE. 3 hrs.  
Alternate years, S.  
Attention to thinkers most influential on American ideals and beliefs in religion, science, morality, politics, economics and education.
511. JOHN DEWEY: PHILOSOPHER AND EDUCATOR. 3 hrs. Alternate years, S.  
Exposition of Dewey's philosophy and a comparative approach to his educational theory and influence.
519. RELIGIOUS THOUGHT IN THE WESTERN WORLD. 3 hrs. II, S.  
An historical approach to the philosophies of religion in the western world, including a comparative analysis of leading contemporary types.
520. RECENT AND CONTEMPORARY RELIGIOUS THOUGHT. 3 hrs.  
A survey of the major currents of religious thought in the 20th century.
- 521-522. SEMINAR. 3; 3 hrs. I, II.  
Shared study and research on a special topic as announced.  
PR: Permission of the chairman.
525. ANCIENT AND MEDIEVAL POLITICAL THOUGHT. 3 hrs.  
Selective study of classics of Western political theory from earliest times through the 15th century, such as that of Plato, Aristotle, the Romans, Augustine, and Aquinas.
526. MODERN POLITICAL THOUGHT. 3 hrs.  
Selective study of classics of Western political theory from the 16th through the 18th century, such as that of Machiavelli, Bodin, Hobbes, Locke, Rousseau, Hume, and Burke.
551. PHILOSOPHY OF HISTORY. 3 hrs. II.  
Comparative survey and research on the theories of the meaning of history and culture from ancient to contemporary philosophers; including cyclical, progressive, economic, dialectical and eschatological types.  
PR: 12 hours of history courses.

**553. PHILOSOPHY OF SCIENCE. 3 hrs. II.**

Crucial concepts in modern science relevant to contemporary philosophical issues concerning man and the universe; special attention to epistemological and ethical implications of natural law, induction, mathematical theory and the new physics.

**555. PHILOSOPHY OF RELIGION. 3 hrs. II.**

A survey of the major classical and modern arguments for theism, special attention given to modern philosophies of man's religiosity, ranging from Kant and Schleiermacher to Personalism and Existentialism.

**598. DIRECTED READINGS IN PHILOSOPHY. 3 hrs. I or II.**

Advanced research adaptable to the needs of students. Regular consultations with the chairman and staff.

### **PHYSICS (PHY)**

Professor D. Martin

Associate Professors Dumke, Manakkil

Assistant Professors Oberly, Shanholtzer

Marshall University through its Department of Physics provides a balanced curriculum of course work and research leading to the Master of Science degree with a major in physics. The courses available provide a sufficient flexibility to permit the structuring of degree programs to meet the needs and educational goals of students on an individual basis.

This degree program is primarily for students whose career goals are research in industrial and governmental laboratories or college teaching.

Entering students seeking a Master of Science degree with a major in physics must have a Bachelor of Science or Bachelor of Arts degree preferably with a major in physics. Deficiencies must be removed by taking the appropriate undergraduate courses for no graduate credit.

An entrance examination, which consists in part, of the examination of the undergraduate record, is required of all students seeking graduate credits. This examination covers the field of general physics and course material in mechanics, electricity, and modern physics. The results of these examinations are used to guide the student in his course of study.

### **Requirements for a master of science degree**

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

1. The program for the degree will be developed with the help and approval of an adviser from the staff of the department.
2. A minimum of 4 and a maximum of 6 semester hours of research (Physics 682) must be applied toward the degree requirements.

Students must present five 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 Departments of Physics, Chemistry, Geology, Mathematics, and Curriculum and Instruction offer correlated courses in a cooperative degree plan for the Master of Arts degree with a major in physical science education. These courses provide a broad base in the physical sciences to meet the needs of teachers in the secondary schools. See Physical Science listed under Teacher Education Curricula in Curriculum and Instruction.

562. NUCLEAR CHEMISTRY AND PHYSICS. 3 hrs. II.  
An introduction to the phenomena of nuclear chemistry and physics. 3 lec.  
PR: Physics 203, 204 and Mathematics 221.
563. NUCLEAR CHEMISTRY AND PHYSICS LABORATORY. 2 hrs. II.  
Laboratory course to accompany or follow Physics 562. 4 lab.  
PR: Physics 203, 204 and Mathematics 221.
570. MATHEMATICAL METHODS OF PHYSICS. 3 hrs. Offered on demand.  
Applications of advanced topics in mathematics to problems in physics.  
PR: Physics 203 and Mathematics 335.
576. SOLID STATE PHYSICS. 3 hrs. Offered on demand.  
A study of such topics as the crystalline state, specific heats, electronic properties, superconductivity, and related properties of solids. 3 lec.  
PR: Physics 320 or Chemistry 447 and Mathematics 221.
580. QUANTUM MECHANICS. 3 hrs. Offered on demand  
Mathematical formalism of quantum mechanics, particles in potential fields, perturbation theory and other approximation methods, scattering, applications to simple systems. 3 lec.  
PR: Physics 331 and Mathematics 335.
- 601-602. ADVANCED MECHANICS. 3;3 hrs. Offered on demand.  
Variational principles and Lagrange and Hamilton's equations; rigid body dynamics; special relativity; canonical transformations; Hamilton-Jacobi theory; Lagrangian and Hamiltonian formulations for continuous systems and fields.  
PR: Physics 331 and Mathematics 335.
- 603-604. ADVANCED ELECTROMAGNETIC THEORY. 3;3 hrs. Offered on demand.  
Electrostatics and magnetostatics; Maxwell's field equations; interaction between the electromagnetic field and matter; radiation theory; relativistic electrodynamics.  
PR: Physics 302 and Mathematics 335.
609. THERMODYNAMICS. 3 hrs. Offered on demand.  
Properties of gases, thermal properties of solids and liquids;

thermodynamic theory; elements of kinetic theory and statistical mechanics.

PR: Physics 203, 204 and Mathematics 335.

616. X-RAY DIFFRACTION. 3 hrs. Offered on demand.  
A study of the properties of X-rays, X-ray diffraction, and crystal structure. 2 lec.-3 lab.  
PR: Physics 320 or Chemistry 547 or equivalent.
617. SPECTROSCOPY. 3 hrs. Offered on demand.  
A study of emission and absorption spectroscopy. 2 lec.-3 lab.  
PR: Physics 320 or Chemistry 547 or equivalent.
624. MAGNETIC RESONANCE. 3 hrs. Offered on demand.  
A course in nuclear and electron spin resonance. 3 lec.  
PR: Physics 480 or 580 or equivalent.
639. ADVANCED QUANTUM MECHANICS. 3 hrs. Offered on demand.  
Advanced applications including complex atoms and molecular states; symmetry properties; introduction to relativistic quantum mechanics, particles, and fields. 3 lec.  
PR: Physics 489 or 580 or Chemistry 480 or 580.
658. ADVANCED NUCLEAR PHYSICS. 3 hrs. Offered on demand.  
Theoretical description of nucleons and nuclear forces. Nuclear transformations. Introduction to fundamental particles and their properties. 3 lec.  
PR: Physics 562.
- 661-662. SPECIAL TOPICS. 1-3; 1-3 hrs. Offered on demand.  
PR: Permission of department chairman.
- 661-672. SEMINAR. 1; 1 hr. I, II.
682. THESIS RESEARCH. 1-6 hrs. I, II, S.  
PR: Graduate status and approval of adviser.

### Physical Science-Education

The following courses are open only to students working for the master's degree with a major in physical science education.

640. FUNDAMENTALS OF PHYSICS. 4 hrs. S. Offered on demand.  
A course in fundamental concepts of physics to be studied in depth as required to teach properly a modern high school physics course. Lecture and laboratory.
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.

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.
646.    **SEMINAR ON RECENT DEVELOPMENTS IN THE PHYSICAL SCIENCES.** 3 hrs. Offered on demand.
647.    **MECHANICS FOR TEACHERS.** 5 hrs. Offered on demand.  
          A course designed to provide additional depth in mechanics for high school teachers. Lecture and laboratory.
648.    **MODERN PHYSICS FOR TEACHERS.** 5 hrs. Offered on demand.  
          A course designed to provide additional background material in atomic and nuclear physics for high school teachers. Lecture and laboratory.
649.    **ELECTRONICS FOR TEACHERS.** 5 hrs. Offered on demand.  
          A course in basic theory of electronics for high school teachers. Lecture and laboratory.

### **PHYSICAL SCIENCE (PS)**

500.    **ASTRONOMY.** 3 hrs.  
          A study of the stars and planets and galaxies, planetary motion, cosmology and cosmography. Designed to assist teachers and others to develop an interest in astronomy.  
          PR: Physics 200 or 203 or Physical Science 109.
583.    **DEVELOPMENT OF SCIENTIFIC THOUGHT.** 3 hrs.  
          A study of the men and ideas which have influenced science; the philosophy of their periods; the economic conditions leading to scientific advancement; and the works of the foremost men in the field.

### **POLITICAL SCIENCE (PSC)**

Professors Stewart, Choi, Perry  
Associate Professor Abbas  
Assistant Professor Carson, Matz, Feuerle

Graduate work in political science is for people 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 with a major in political science must have completed a minimum of 12 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.

**500-501-502-503-504. SELECTED TOPICS. 3; 3; 3; 3; 3 hrs.**

To offer a course, seminar or workshop on some special topic in the field of political science which is not adequately treated in the regular course offerings.

**505. INTERNATIONAL ORGANIZATIONS. 3 hrs.**

Study of world and regional organizations as reflections of world politics, as instruments of foreign policies, and as forces for change and order, with emphasis on their role as channels for management of cooperation and conflict.

**506. INTERNATIONAL POLITICS. 3 hrs.**

Study of major issues in world politics, with emphasis on theoretical approaches, problems of war and peace, and contemporary trends.

**507. ASIAN POLITICS. 3 hrs.**

Study of such nations as India, China, Japan, and Korea in the contemporary setting.

**508. MIDDLE EASTERN POLITICS. 3 hrs.**

Study of the Arab States and such nations as Israel, Iran and Turkey in the contemporary setting.

**509. WESTERN DEMOCRATIC POLITICS. 3 hrs.**

Study of such nations as Canada and those of Western Europe, particularly Great Britain and France.

**510. EUROPEAN COMMUNIST POLITICS. 3 hrs.**

Study of the Soviet Union and Eastern Europe.

**511. LATIN AMERICAN POLITICS. 3 hrs.**

Study of selected Latin American nations in the contemporary setting.

**515. INTERNATIONAL LAW. 3 hrs.**

Study of theories, origins, sources, development, present state, and trends of international law as a factor in various aspects of international politics.

**518. FOREIGN POLICIES OF WESTERN NATIONS. 3 hrs.**

Study of the formulation, implementation, and consequences of the foreign policies of selected Western nations such as the U. S., Great Britain, and France, with consideration of variables influencing the content and direction of their international behavior.

**519. FOREIGN POLICIES OF COMMUNIST NATIONS. 3 hrs.**

Study of the formulation, implementation, and consequences of the foreign policies of selected Communist nations such as the Soviet Union and China, with consideration of variables influencing the content and direction of their international behavior.

521. FOREIGN POLICIES OF DEVELOPING NATIONS. 3 hrs.  
Study of the formulation, implementation, and consequences of the foreign policies of selected developing nations such as India, Nigeria, and Brazil, with consideration of variables influencing the content and direction of their international behavior.
525. ANCIENT AND MEDIEVAL POLITICAL THOUGHT. 3 hrs.  
Selective study of classics of Western political theory from earliest times through the 15th century, such as that of Plato, Aristotle, the Romans, Augustine, and Aquinas.
526. MODERN POLITICAL THOUGHT. 3 hrs.  
Selective study of classics of Western political theory from the 16th through the 18th century, such as that of Machiavelli, Bodin, Hobbes, Locke, Rousseau, Hume, and Burke.
527. RECENT POLITICAL THOUGHT. 3 hrs.  
Selective study of political thought of the 19th and 20th century, such as the philosophy, theory and ideology of democracy, socialism, elitism, communism, and facism.
529. THE POLITICS OF CONFLICT AND REVOLUTION. 3 hrs.  
Study of major theories of conflict and revolution, and analysis of conflict-inducing and conflict-inhibiting factors related to system maintenance, with emphasis on the relevance of the literature in this area to the black community.
533. PUBLIC ADMINISTRATION AND POLICY DEVELOPMENT. 3 hrs.  
Study of economic, sociological, psychological, and political factors in the shaping of public policy and planning, with stress on interrelationships between politics, administration, and planning.
540. POWER IN AMERICAN SOCIETY. 3 hrs.  
A study of the distribution of power in American society at the community and national levels with emphasis on the methods employed by social scientists to portray the community and national power structures.
561. THE FUNCTIONAL DIMENSIONS OF URBAN POLITICS. 3 hrs.  
Study of policy problems of metropolitan political systems in terms of the functional requirements of a viable urban community, with emphasis on problems having special relevance to the black community.
585. AMERICAN CONSTITUTIONAL LAW: POWERS AND RELATIONSHIPS. 3 hrs. I.  
The basic structural and functional principles of American constitutional government with emphasis on leading cases relative to judicial, congressional, and presidential powers; separation of powers; and federalism.
586. AMERICAN CONSTITUTIONAL LAW: CIVIL LIBERTIES. 3 hrs. II.  
The basic substantive and procedural principles of American

constitutional liberty, with emphasis on leading cases and readings relative to the freedoms, equality, and due process of law.

601. READINGS IN POLITICAL SCIENCE. 2-3 hrs.  
Readings to meet the needs and interests of individual students.
602. RESEARCH DESIGN AND METHODOLOGY. 3 hrs.  
Study to give the student a working knowledge of various forms of empirical and quantitative research in political science, treating such topics as concept formation, experimental method, data-collection techniques, measurement, probability and statistical inference, correlation and regression, scaling, and survey research.
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.
606. SEMINAR IN AMERICAN CONSTITUTIONAL LAW. 3 hrs.
609. SEMINAR IN INTERNATIONAL RELATIONS THEORY AND METHODOLOGY. 3 hrs.
611. SEMINAR IN THE AMERICAN LEGISLATIVE PROCESS. 3 hrs.
614. COMPARATIVE POLITICS. 3 hrs.  
Critical consideration of key concepts in the contemporary comparative study of politics, such as political cultures, sub-cultures, and socialization; elite recruitment; and interest articulation. Exploratory testing of the utility of such concepts through their applications to selected political systems and phenomena.
621. URBAN ADMINISTRATIVE PROBLEMS. 3 hrs.  
Principles and methods of urban administration in the U. S.
624. SEMINAR IN THE AMERICAN JUDICIAL PROCESS. 3 hrs.
629. SEMINAR IN POLITICAL THOUGHT. 3 hrs.
633. ADMINISTRATIVE ORGANIZATION AND BEHAVIOR. 3 hrs.  
Study of some contributions of the behavioral sciences to the study of organizations, with stress on such concepts as leadership, motivation, conflict, power, role theory, organizational design, and decision-making.
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.

675. LEGISLATIVE INTERNSHIP. 6 hrs.  
Intensive work experience in the West Virginia legislative processes coupled with a seminar involving directed reading and the preparation of a paper. This is a cooperative program with West Virginia University and the Office of Legislative Services with only selected students participating.

PR: One semester of graduate work and recommendation of department chairman.

681. THESIS. 1-6 hrs.

## PSYCHOLOGY (PSY)

Professors G. Ward, Wolf  
Assistant Professors Alsip, Chezik, Schwendiman

Applicants for admission to graduate study in psychology must present a minimum of twelve hours in undergraduate psychology courses, including psychological statistics and laboratory experimental psychology. Scores on the Graduate Record Examination aptitude and advanced tests and letters of recommendation will usually be required prior to admission.

In addition to the general requirements of the graduate school, all students majoring in psychology must fulfill the following departmental requirements:

- a. Take or present transfer credit for Psychology 502, 516, 560, 614, 623, 624 and 690. A written comprehensive examination covering the content of these courses must be passed.
- b. Complete a research-based thesis (Psychology 681), including its defense in an oral examination before a departmental committee.

502. ADVANCED SOCIAL PSYCHOLOGY. 3 hrs.  
Advanced study of selected topics in social psychology.

506. MENTAL ABILITIES: TEST INTERPRETATION. 3 hrs. I, S.  
The nature of intelligence; interpreting mental test data.  
PR: Psychology 223, 311; for education majors, Educational Foundations 435 or 535 and consent of instructor.

508. PSYCHOLOGY OF ABNORMAL BEHAVIOR. 3 hrs. II.  
A bio-social approach to the nature, conditions, and modification of ineffective human behavior.  
PR: Psychology 311.

516. PSYCHOLOGY OF LEARNING. 3 hrs. II.  
Critical study of the major theories of learning and related research.  
PR: 12 hours of psychology, including Psychology 323 or its equivalent.

517. PSYCHOLOGICAL STATISTICS. 3 hrs. II.  
An intermediate level presentation of descriptive and inferential statistics as applied in behavioral research. 2 lec.-2 lab.  
PR: Psychology 323, 324, 406-506 and Mathematics 120, or consent of instructor.
518. PSYCHOLOGY OF PERSONNEL. 3 hrs. I, II.  
Psychological principles and methods applied to functions in personnel administration.  
PR: Psychology 201.
560. HISTORY AND SYSTEMS OF PSYCHOLOGY. 3 hrs. I.  
PR: 12 hours of psychology.
606. HUMAN ABILITIES: DEVELOPMENT, RETARDATION AND SUPERIORITY. 3 hrs.  
Range of ability in human behavior with special emphasis on mental retardation and superiority; conditions, training or education adjustment.  
PR: 12 hours of psychology.
611. PSYCHOLOGICAL TESTS I. 3 hrs. I.  
Instruction and practice in the use of individual intelligence tests, including the Stanford-Binet and Wechsler scales; evaluation of test results.  
PR: 12 hours of psychology including 406-506 or its equivalent.
612. PSYCHOLOGICAL TESTS II. 3 hrs. I.  
Instruction and practice in the use of tests of intelligence, aptitude, interest, and personality; evaluation of test results; selection of tests.  
PR: 12 hours of psychology including Psychology 406-506 or its equivalent.
613. PSYCHOLOGICAL TESTS III. 3 hrs.  
Instruction and practice in the administration, scoring, and interpretation of standard projective devices.  
PR: Psychology 408-508, 611, and 612.
614. PSYCHOLOGY OF PERSONALITY. 3 hrs. I.  
The nature of personality structure and dynamics.  
PR: 12 hours of psychology.
620. CLINICAL PSYCHOLOGY I. 3 hrs. II.  
Counseling of individuals presenting normal developmental problems. Techniques of appraisal. Preparation of written and oral staff reports.  
PR: Psychology 408-508, 611, 612, 613.
621. CLINICAL PSYCHOLOGY II. 3 hrs.  
Appraisal and counseling of individuals presenting abnormal adjustments.  
PR: Psychology 408-508, 611, 612, 613.

623. **EXPERIMENTAL DESIGN.** 3 hrs.  
An introduction to the design and interpretation of psychological research. Emphasis is upon tests of significance and assumptions governing their application.  
PR: 12 hours of psychology including statistics equivalent to Psychology 417-517.
624. **CORRELATION ANALYSIS.** 3 hrs.  
Correlation analysis in psychological research including theory and practice in test development, correlation and regression applications and factor analysis.  
PR: Psychology 623 or consent of instructor.
681. **THESIS.** 1-6 hrs. I, II, S.
- 690-691-692-693-694-695.SEMINAR. 1-3; 1-3; 1-3; 1-3; 1-3; 1-3 hrs.  
Reports on current problems and literature in psychology and related fields; professional ethics.

## **SOCIOLOGY AND ANTHROPOLOGY**

Professors Simpkins, Habel, Sill  
Assistant Professor Singh

Applicants for admission to graduate study in sociology must present: (1) a minimum of twelve hours of undergraduate sociology courses including three hours of statistics; (2) Graduate Record Examination combined score of at least 950.

Applicants for admission to candidacy must have completed satisfactorily fifteen hours of resident graduate sociology courses and have obtained approval of their thesis proposal.

### **Anthropology (ANT)**

505. **COMMUNITY DEVELOPMENT.** 3 hrs.  
Principles of applied anthropology in community development.  
PR: 6 hours of anthropology or sociology.
526. **AFRICAN CULTURES.** 3 hrs.  
Comparative analysis of the tribal cultures of Africa.  
PR: 6 hrs. of anthropology or departmental permission.
527. **ETHNIC RELATIONS.** 3 hrs.  
Analysis of cultural contact situations with emphasis on the role of western European cultures.  
PR: 6 hrs. of anthropology or departmental permission.
530. **THE AMERICAN INDIAN.** 3 hrs.  
Comparative analysis of Indian tribal cultures of the Americas.  
PR: 6 hrs. of anthropology or departmental permission.

555. APPALACHIAN CULTURE. 3 hrs.  
Analysis of the culture of Appalachia.  
PR: 6 hrs. of anthropology or departmental permission.
556. APPALACHIAN FIELD EXPERIENCE I. 6 hrs.  
Supervised field work in an Appalachian community studying the social and cultural characteristics of the area. Four afternoons each week plus one class hour.  
PR: Anthropology 455.
630. CULTURE AND PERSONALITY. 3 hrs.  
Analysis of the relations between cultural, social, and personality systems.  
PR: 6 hrs. of anthropology or sociology; 6 hrs. of psychology; or departmental permission.

**Sociology  
(SOC)**

500. HUMAN ECOLOGY. 3 hrs.  
Study of the ecological structure and processes of human communities, regions, and areas.  
PR: 6 hrs. of sociology.
501. POPULATION PROBLEMS. 3 hrs.  
Study of population characteristics, growth and trends with emphasis on the social and cultural implications.
503. SOCIAL RESEARCH II. 3 hrs.  
Intermediate social research methodology with emphasis on research design. 2 lec.-2 lab. (Required of all M.A. candidates).  
PR: Sociology 345.
508. THE FAMILY. 3 hrs.  
Theoretical analysis of the family as a primary social institution.  
PR: 6 hours of sociology.
512. SMALL GROUPS. 3 hrs.  
Study of the dynamics of small groups with emphasis on role theory.  
PR: Psychology or Sociology 302 or Sociology 310 and Sociology 300.
513. COLLECTIVE BEHAVIOR. 3 hrs.  
Analysis of uninstitutionalized social behavior.  
PR: Six hours of sociology or permission of department.
521. SOCIOLOGICAL THEORY I. 3 hrs.  
The development of social thought and early sociological theory.  
PR: 6 hours of sociology or permission of department.
533. INDUSTRIAL SOCIOLOGY. 3 hrs.

Study of the organization and structure of the workplant as a social system; the meaning and organization of work; managerial functions; management-labor relations; and human relations in industry.

PR: Sociology 412-512.

539. SOCIAL STRATIFICATION. 3 hrs.  
Analysis of various theories of stratification, with emphasis on the American class system.  
PR: 6 hours of sociology or departmental permission.
542. METROPOLITAN COMMUNITIES. 3 hrs.  
Sociology of metropolitan communities.  
Sociology 300.
545. SOCIAL STATISTICS II. 3 hrs.  
Intermediate level statistical analysis, including analysis of variance and covariance. 2 lec.-2 lab. (Required of all M.A. candidates.)  
PR: Sociology 345.
550. SOCIOLOGY OF RELIGION. 3 hrs.  
An investigation into the nature of religion as a social phenomenon.  
PR: 6 hours of sociology.
601. SOCIOLOGICAL THEORY II. 3 hrs.  
Contemporary sociological theories and their relation to research in human behavior (Required of all M.A. candidates).  
PR: Sociology 421 or 521.
602. CONTEMPORARY SOCIAL CHANGE. 3 hrs.  
Theories of social change and their uses in analyzing social change of today.  
PR: 12 hours of sociology or departmental permission.
- 603-604. BEHAVIORAL SCIENCE I and II. 3; 3 hrs.  
Seminar in behavioral science theory.  
PR: 12 hrs. in any combination of sociology, psychology, anthropology, political science or economics, or departmental permission.
611. SOCIAL PATHOLOGY. 3 hrs.  
Seminar in social maladjustment and disorganization and their consequences.  
PR: 12 hours of sociology or departmental permission.
612. SOCIAL MOVEMENTS. 3 hrs.  
Seminar in social movements and other collective phenomena with analysis of selected examples.  
PR: 12 hours of sociology or departmental permission.
620. CRIMINOLOGY. 3 hrs.  
Seminar in crime and delinquency.  
PR: 12 hours of sociology or departmental permission.

633. FORMAL ORGANIZATIONS. 3 hrs.  
Seminar in formal organization with special attention given to bureaucratic organization.  
PR: 12 hours of sociology or departmental permission.
668. SEMINAR. 1-3 hrs.  
Topics vary from semester to semester.  
PR: 12 hours of sociology or departmental permission.
679. PROBLEM REPORT. 1-3 hrs.  
The preparation of a written report on a research problem or field study in sociology.  
PR: Departmental permission.
681. THESIS. 1-6 hrs. I, II, S.  
Individual research in a selected field of sociology under the direction of a member of the department. (Required of all M.A. candidates).  
PR: Admission to candidacy and staff approval of thesis proposal.

### SPEECH (SPH)

Professors Buell, Dedmon, Garrett, Harbold, Hoak, Hope,  
Novak, Olson, Page, Ranson  
Associate Professors Cortes, Kellner  
Assistant Professors East, Lustig

Students seeking a graduate degree in the Department of Speech may select a major program which emphasizes a broad background in general speech or a specialized program in speech pathology and audiology or in broadcasting. Before being fully admitted for any of these programs a student must have completed a minimum of 18 hours of appropriate undergraduate work in speech. Students lacking such undergraduate preparation may receive provisional admission which permits them to enroll for graduate classes while completing the undergraduate prerequisites.

Each departmental major will have a graduate committee consisting of his adviser, the chairman of the department and other staff members.

A written comprehensive examination is required; in addition, an oral comprehensive examination may be required. All members of a candidate's committee will grade (pass/fail) the examination(s). A unanimous pass is required.

In addition to the comprehensive examination(s), a candidate who writes a thesis will be required to pass an oral examination on the thesis. A unanimous pass is required.

All graduate students in speech will take the course Speech 601: Problems and Methods in Speech Research. Special provisions of each of the programs of emphasis are:

### Major in Speech

The student choosing a general speech program may take a broad selection

of courses in all departmental fields or may choose to emphasize work in public address, broadcasting, or theatre. He must take one course in each of the above areas plus one graduate course in speech pathology and audiology.

### **Specialization in Speech Pathology and Audiology**

Emphasis in speech pathology and audiology will follow a prescribed program leading to eligibility for certification by the American Speech and Hearing Association.

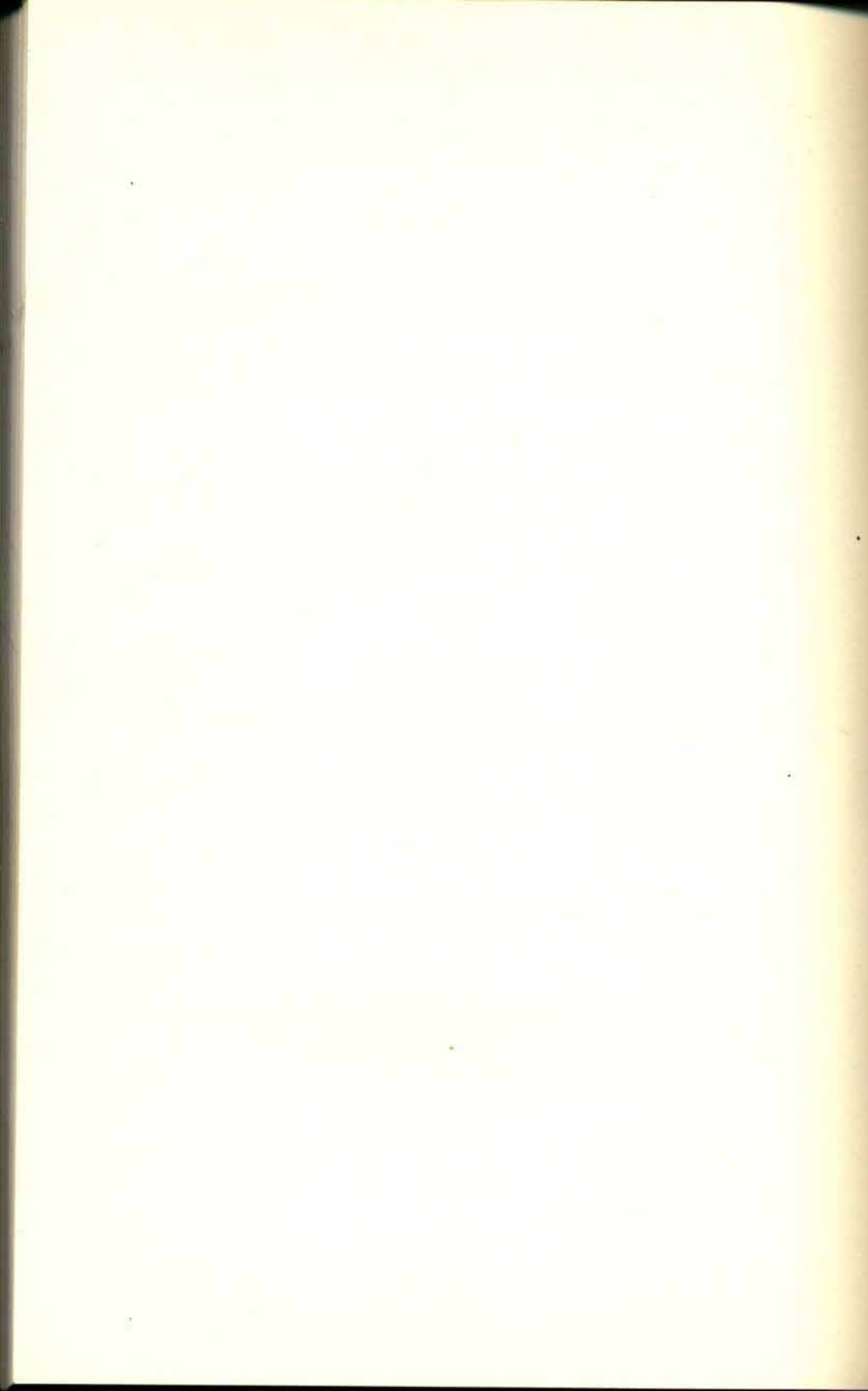
Students without the minimum of 30 semester hours of undergraduate course work in speech pathology, audiology, psychology and related areas, which are specified as a part of certification requirements, should plan to earn the additional credits during their graduate enrollment.

503.    **PLAY DIRECTION.** 3 hrs. I.  
        Primarily for those who will produce plays in schools, churches, and communities.  
        PR: Speech 210, 312, and 313.
507.    **PERSUASION.** 3 hrs.  
        A study of persuasive methods with special attention to the techniques of well-known contemporary speakers.  
        PR: Five hours of public address.
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.    **COMMUNICATION DISORDERS OF SCHOOL CHILDREN.** 3 hrs.  
        A survey of the causes, symptoms, and treatment of communication disorders encountered in the classroom. Not open to speech pathology majors.
530.    **BROADCAST DOCUMENTARY AND DRAMATIC WRITING.** 3 hrs.  
        Writing techniques for preparing scripts for the documentary, film and dramatic show.  
        PR: Speech 332.
531.    **ADVANCED TELEVISION PRODUCTION.** 3 hrs.  
        Advanced theory and practice in the elements of producing the complete television program  
        PR: Speech 233.
532.    **USE OF RADIO AND TELEVISION IN THE CLASSROOM.** 3 hrs.  
        Development of instructional broadcasting; production and utilization of instructional programs.
533.    **RADIO AND TELEVISION PROGRAMMING.** 3 hrs.  
        Analysis of the structure and format of individual programs and program schedules as they relate to the social, economic, literary, and political impact of the medium.  
        PR: Speech 231 or 332 or 431-531.

535. BROADCAST LAW AND REGULATIONS. 3 hrs.  
Development and present status of the legal structure of broadcasting in the United States.  
PR: Speech 230.
536. COMPARATIVE SYSTEMS OF BROADCASTING. 3 hrs.  
Development of various systems of broadcasting practiced in other countries of the world and comparison with our own. Including recent trends in international broadcast systems and communications satellites.  
PR: Speech 230.
537. BROADCAST MANAGEMENT AND ECONOMICS. 3 hrs.  
Problems and practices in the organization of and operation of radio and television stations, including study of the economics of the broadcast industry.  
PR: Speech 230.
540. PLAYWRITING. 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.
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.  
PR: Speech 312 and Speech 313.
548. ADVANCED TECHNICAL THEATRE. 3 hrs.  
Advanced work in technical phases of mounting a stage production.  
PR: Speech 312-313.
550. THE DIRECTION OF SPEECH ACTIVITIES. 3 hrs.  
For those responsible for extra-curricular speech: debate, extempore speaking, oral reading, discussion, oratory.  
PR: Fifteen hours of speech.
575. SEMINAR IN SPEECH EDUCATION FOR SECONDARY TEACHERS. 6 hrs.  
A seminar in speech education for secondary and future teachers; a joint teacher-student program where theories and techniques can be studied, applied, and evaluated through practical experiences with high school students.  
PR: One year teaching experience.

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.  
PR: Five hours of public address.
620. SEMINAR ON VOICE DISORDERS. 3 hrs.  
Detailed evaluation of theories of voice production and voice disorders; critical analysis of research literature; individual projects.
621. SEMINAR ON CLEFT PALATE. 3 hrs.  
Intensive study of communication problems and treatment associated with the cleft palate; critical analysis of research literature; individual projects.
622. SEMINAR ON ARTICULATION. 3 hrs.  
Intensive study of characteristics of speech sounds and their production; critical analysis of research literature; individual projects.
623. SEMINAR ON STUTTERING. 3 hrs.  
Detailed evaluation of theories of stuttering and relevant therapies; critical analysis of research literature; individual projects.
624. SEMINAR ON CEREBRAL PALSY. 3 hrs.  
Intensive study of neuro-muscular diseases and related communication disorders; critical analysis of research literature; individual projects.
625. SEMINAR ON APHASIA. 3 hrs.  
Intensive study on language disorders in children and adults; critical analysis of research literature; individual projects.
626. SEMINAR ON COMMUNICATION SCIENCE. 3 hrs.  
Intensive study of physical, physiologic, and perceptual properties of speech signals; instrumentation; critical analysis of research literature; individual projects.
630. SEMINAR IN BROADCAST CRITICISM. 3 hrs.  
Intensive critical analysis of broadcast programs and programming procedures from the socio-cultural, literary, political and industry points of view.
632. PROBLEMS IN EDUCATIONAL BROADCASTING. 3 hrs.  
Examination and evaluation of the techniques, utilization procedures, and problems involved in educational and instructional broadcasting for the public school, higher education, industry and the public.  
PR: Speech 432-532 or experience in ETV.
634. SEMINAR IN RADIO AND TELEVISION. 3 hrs.  
Problems in the broadcast field on varied subjects which concern the industry.

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649. SEMINAR IN THEATRE. 3 hrs.  
Seminar in problems of dramatic production.  
PR: Speech 403 and 503.
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.  
PR: 18 hours of speech.
656. SEMINAR IN PUBLIC ADDRESS AND SPEECH EDUCATION. 1-3 hrs.  
PR: 18 hours of speech.
660. SEMINAR ON AUDIOLOGY. 3 hrs.  
Detailed evaluation of theories of hearing, hearing measurement, and methods of auditory rehabilitation; critical analysis of research literature; individual projects.
661. CLINICAL AUDIOLOGY. 3 hrs.  
Analysis of specialized tests for hearing evaluations; hearing aid selection; clinical activities.
- 670-671. CLINICAL PRACTICUM IN SPEECH PATHOLOGY. 3; 3 hrs.  
Supervised clinical training in the Marshall University Speech and Hearing Clinic and in associated rehabilitation facilities.
679. PROBLEM REPORT. 1-3 hrs.  
PR: 18 hours of speech.
681. THESIS. 1-6 hrs.



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